



Received: 22-10-2025  
Accepted: 02-12-2025

## International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

### Study on Factors Affecting E-Mobile Banking Service Quality at Vietnam Bank for Agriculture and Rural Development - Nam Trung Yen Branch

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DOI: <https://doi.org/10.62225/2583049X.2025.5.6.5352>

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#### Abstract

In the context of economic integration, especially after Vietnam became the 150th member of the World Trade Organization (WTO), enterprises and financial institutions such as commercial banks are facing tremendous challenges. These challenges require significant changes and reforms to maintain and enhance competitiveness amid the increasing pressure from foreign credit institutions entering the Vietnamese market with advanced technologies and modern banking services. Vietnamese commercial banks must adopt

appropriate development strategies to keep pace with the market and capture the full potential and opportunities of the Vietnamese banking sector. This study identifies the key factors influencing the quality of E-Mobile Banking services at the Vietnam Bank for Agriculture and Rural Development – Nam Trung Yên Branch. It assesses the extent to which these factors affect service quality and proposes solutions to improve the quality of E-Mobile Banking services at the branch.

**Keywords:** E-Mobile Banking, Agribank, Service Quality, Commercial Bank

#### 1. Introduction

Based on the technological advancements of the Fourth Industrial Revolution and the development of banking technology, Vietnam has set a strategic direction for promoting digital banking in alignment with Industry 4.0. This orientation follows Resolution No. 52-NQ/TW (2019) and Decision No. 479/QĐ-TTg (2020). By 2025, at least 20% of banking operations are expected to be fully digitalized, increasing to 70% by 2030. Customer transactions via digital channels are projected to reach 70% by 2025 and 80% by 2030. Small and retail loans disbursed through digital platforms are expected to reach 50% by 2025 and 70% by 2030.

As the leading bank in providing credit and banking services to the agricultural and rural sector, Agribank defines its core mission as leveraging its extensive network, diversifying retail banking products and services, and delivering high-quality services based on modern information technology to meet customers' increasingly diverse needs. However, preliminary findings indicate that at Agribank Nam Trung Yên Branch, electronic banking services have not yet developed sufficiently to become a competitive advantage of the branch.

#### 2. Theoretical Framework and Literature Review

##### 2.1 Theoretical Basis of E-Mobile Banking Service Quality

The International Mobile Telecommunications Journal defines mobile banking as: *“a modern banking service that enables customers to conduct remote transactions with banks using mobile devices connected to wireless telecommunications networks. Through this service, customers can perform fund transfers, check account balances and transaction histories, pay bills, and manage their financial portfolios directly on their personal mobile devices—anytime and anywhere—without having to visit a bank branch.”*

According to Lin (2011), *“mobile banking is achieving meaningful milestones that contribute significantly to the growth of the modern banking services sector.”* Mobile banking provides unprecedented benefits and user experiences compared with traditional banking services. E-Mobile Banking allows customers to use mobile devices or smartphones to execute banking transactions anytime and anywhere, without visiting a physical branch. Smartphones with internet connectivity are sufficient for conducting various transactions.

E-Mobile Banking not only delivers practical benefits to customers but also enhances banks' competitive advantages. Through

E-Mobile Banking, banks can reach customers more quickly, share and update information in real time, and leverage technological capabilities to satisfy personalized customer needs (Berraies, 2020).

## 2.2 International Studies Related to E-Mobile Banking Service Quality

According to Mehmet (2019), in the study titled *"The Intention to Use Electronic Banking Services in Lebanon,"* the findings indicate that the key factors affecting customers' mobile banking service quality include perceived usefulness, perceived reliability, compatibility, ease of use, user experience, confidence, safety, and security. The study also points out that factors such as cost and social influence do not significantly affect customers' intention to use mobile banking.

Bhatt *et al.* (2019), in their study *"Customers' Intention to Use Mobile Banking Services in India,"* employed a quantitative approach by surveying 200 customers using services at commercial banks in India. The results show that factors such as speed, convenience, security, simplicity of operation, and ease of navigation have a positive impact on customers' intention to use mobile banking in India.

Masoud *et al.* (2020), in the work *"E-Banking Service Quality for Customers in Jordan,"* conducted a survey of 450 individual users of electronic banking services. The results from the multiple regression model reveal that ease of use, security, efficiency, website design, and reasonable cost have a positive impact on customers' perceived service quality.

Xiao *et al.* (2020) examined *"Customers' Intention to Use Electronic Banking Services at Commercial Banks in Shandong Province, China"* through a survey of 200 individuals using the services. The findings indicate that perceived usefulness, ease of use, trust, and cost positively influence customers' intention to use electronic banking services.

Priya *et al.* (2021), in the study *"Mobile Banking Adoption in an Emerging Economy: An Empirical Analysis of Young Consumers in India,"* surveyed 269 customers under the age of 30 using mobile banking services. Employing quantitative methods and a multivariate regression model using the OLS approach, the study finds that perceived usefulness, perceived ease of use, perceived reliability, and structural assurance are key determinants that positively influence user satisfaction and behavior related to mobile banking service quality.

Kwateng *et al.* (2022) examined *"Acceptance and Use of Mobile Banking: An Application of UTAUT2"* by surveying 300 individual mobile banking users in Ghana. Using quantitative methods and a multivariate regression model (OLS), the study demonstrates that social habits, value cost, and brand trust are the primary drivers positively influencing mobile banking adoption and usage in Ghana.

## 2.3 Domestic Studies Related to E-Mobile Banking Service Quality

Truong Thi Thu Yen (2018) conducted a study titled *"Factors Affecting the Intention to Use Electronic Banking Services at BIDV – Quảng Ngãi Branch."* Findings from the multiple linear regression analysis reveal that five factors—perceived risk, perceived usefulness, perceived behavioral control, bank image, and subjective norms—positively influence customers' intention to use electronic banking

services at BIDV Quảng Ngãi.

Pham Minh Trung (2019), in the study *"Factors Influencing Customers' Electronic Banking Service Quality in Đồng Nai Province,"* identifies several factors affecting service quality: perceived usefulness, perceived ease of use, bank image, subjective attitudes, subjective norms, behavioral control, and perceived risk.

Nguyen Dinh Yen Oanh and Pham Thuy Bich Uyên (2020) investigated *"Factors Influencing Consumers' Intention to Use Mobile Commerce Services in An Giang Province."* The study identifies five factors—flexibility, perceived usefulness, perceived credibility, perceived ease of use, and service diversity—that positively influence consumers' intention to use mobile commerce services. Among these, flexibility exerts the strongest influence.

Dao My Hang *et al.* (2021), in their research on *"Factors Affecting Fintech Service Quality in Payment Activities of Individual Customers in Vietnam,"* reveal six influential factors: ease of use, convenience, safety and security, usefulness, attitudes, and autonomy.

Pham Tien Dat *et al.* (2024) conducted a study titled *"Customers' Intention to Use E-Banking Services at Vietnamese Commercial Banks During the Covid-19 Pandemic."* Using quantitative methods and survey data from 700 customers, analyzed through multiple regression, the study confirms six factors—usefulness, ease of use, trust, social influence, innovation, and communication—positively affect customers' intention to use e-banking services.

## 2.4 Research Model and Hypotheses on E-Mobile Banking Service Quality at Agribank Nam Trung Yên Branch

Based on the actual conditions at Agribank Nam Trung Yên Branch and grounded in the theoretical framework, relevant research models, and expert perspectives in the field, the author proposes a research model synthesized from various previous studies. These studies have identified factors that influence the quality of E-Mobile Banking services. Accordingly, the proposed model for Agribank Nam Trung Yên Branch consists of six hypotheses:

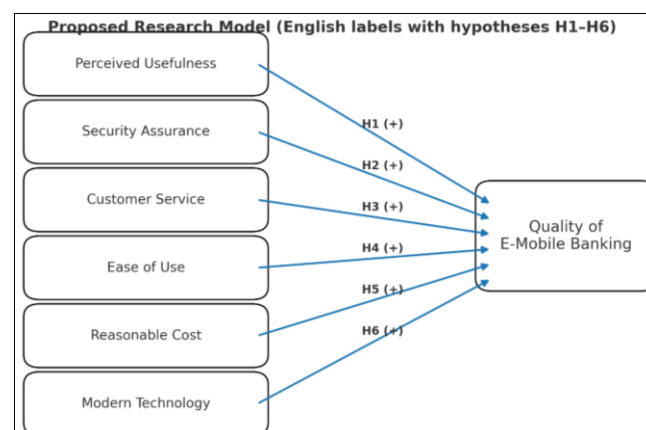


Fig 1: Proposed Research Model

The research model is established with the following hypotheses:

**H1:** Perceived usefulness is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.

**H2:** Ensuring customer security is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.

**H3:** Customer service is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.

**H4:** Ease of use is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.

**H5:** Reasonable cost is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.

**H6:** Modern technology is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.

### 3. Data and Research Methods

The study employs a mixed-methods approach combining both qualitative and quantitative techniques. A five-point Likert scale is used for survey items measuring the factors affecting consumer satisfaction, with the following levels: (1) Strongly disagree; (2) Disagree; (3) Neutral; (4) Agree; (5) Strongly agree. A nominal scale is applied to questions related to respondents' demographic information such as gender, age, educational level, and income.

Quantitative data are collected using a convenience sampling method. The survey participants include customers using the E-Mobile Banking service at Agribank Nam Trung Yên Branch. Primary data are obtained through interviews and questionnaire surveys conducted from April 2025 to May 2025. In addition to direct distribution of questionnaires at the branch, indirect online surveys via a digital questionnaire link are also employed.

To optimize time and cost, the study adopts non-probability convenience sampling. The measurement scale comprises 31 observed variables, including 06 independent variables and 01 dependent variable.

- Population (N): The number of customers using the E-Mobile Banking service at Agribank Nam Trung Yên Branch is 400.
- Sampling error (e): Acceptable margin of error.
- Sample obtained: Based on the applied sampling method, the resulting sample size is  $n = 393$ .

Several sample size guidelines from prior studies are referenced:

Harris (2001):

- Required sample size:
  - $N \geq 104 + m$  ( $m$  = number of independent and dependent variables), or
  - $N \geq 50 + m$  if  $m < 5$ .
  - Required minimum sample size according to Harris:  $N \geq 111$ .
- Hair *et al.* (2006):
  - Minimum sample size:  $N \geq 5n^*$  ( $n$  = number of observed variables).
  - Recommended minimum is 50, preferably 100, with a measurement ratio of 5 observations per variable.
  - Therefore, required sample size:  $N \geq 155$ .
- Tabachnick and Fidell (2007):
  - For optimal regression analysis:
  - $N \geq 8n + 150^*$  ( $n$  = number of independent variables).
  - Required minimum sample size:  $N \geq 198$ .

## 4. Research Findings

### 4.1 Descriptive Statistics of the Research Sample

After processing the survey data using SPSS, the following results were obtained:

**Table 1:** Descriptive Statistics of the Research Sample

Criteria	Frequency	Percentage (%)
<b>Gender</b>		
Male	162	41.9%
Female	225	58.1%
<b>Age group</b>		
23–28 years old	53	13.7%
29–36 years old	278	71.8%
37–50 years old	51	13.2%
Above 50 years old	5	1.3%
<b>Educational level</b>		
High school	10	2.6%
College/vocational degree	83	21.4%
Bachelor's degree	233	60.2%
Postgraduate	61	15.8%
<b>Frequency of service usage per week</b>		
Below 2 times	37	9.6%
2–5 times	243	62.8%
6–9 times	49	12.7%
More than 10 times	58	15.0%
<b>Monthly income</b>		
Below 10 million VND	8	2.1%
10 to below 15 million VND	220	56.8%
15 to below 20 million VND	114	29.5%
Above 20 million VND	45	11.6%

**Source:** Results of survey data processing using SPSS 22

Among the 387 surveyed customers, 162 respondents were male, accounting for 41.9%, while 225 respondents were female, representing 58.1%. Regarding age distribution, 53 respondents (13.7%) were between 23 and 28 years old; the majority, 278 respondents (71.8%), were between 29 and 36 years old; 51 respondents (13.2%) were within the 37–50 age group; and only 5 respondents (1.3%) were above 50 years of age.

In terms of educational level, 10 respondents (2.6%) had a high-school education; most respondents held a bachelor's degree, accounting for 233 individuals (60.2%); 83 respondents (21.4%) had a college or vocational qualification; and 61 respondents (15.8%) had a postgraduate degree.

With respect to monthly income, the majority earned between 10 and below 15 million VND (56.8%), followed by those earning between 15 and below 20 million VND (29.5%).

Considering service usage frequency per week, most customers used the E-Mobile Banking service from 2 to 5 times (62.8%); 49 respondents (12.7%) used the service 6–9 times; and 58 respondents (15.0%) used it more than 10 times.

Regarding duration of service usage, most respondents had used the service for less than 1 year (50.6%), while those using the service from 1 to 2 years accounted for 45.2%.

### 4.2 Research Results

#### \*Reliability Coefficient - Cronbach's Alpha

The analysis results presented in Table 2 indicate that all constructs achieve high reliability, with Cronbach's Alpha coefficients exceeding 0.7, specifically ranging from 0.873 to 0.978. Composite Reliability (CR) values for all

constructs also meet the required threshold, with CR > 0.7 and ranging from 0.913 to 0.984. Finally, the Average Variance Extracted (AVE) values for all constructs are above the acceptable minimum of 0.5, ranging from 0.724 to 0.938 (Hair *et al.*, 2014).

These findings confirm that the measurement scales used in the study are appropriate and reliable. All constructs meet both convergent and discriminant validity requirements according to the theoretical framework, ensuring their suitability for subsequent statistical analyses and hypothesis testing.

**Table 2:** Summary of Scale Reliability Indicators

**Perceived Usefulness (Cronbach's Alpha = 0.895)**

Observed Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item–Total Correlation	Cronbach's Alpha if Item Deleted
HI1	13.92	18.351	0.699	0.881
HI2	13.58	17.814	0.795	0.860
HI3	13.58	18.969	0.746	0.872
HI4	14.03	18.077	0.682	0.886
HI5	13.87	17.387	0.796	0.859

**Security Assurance (Cronbach's Alpha = 0.766)**

Observed Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item–Total Correlation	Cronbach's Alpha if Item Deleted
DB1	9.90	3.528	0.682	0.644
DB2	10.10	4.110	0.537	0.726
DB3	10.02	4.181	0.548	0.721
DB4	9.65	3.995	0.508	0.744

**Customer Service (Cronbach's Alpha = 0.885)**

Observed Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item–Total Correlation	Cronbach's Alpha if Item Deleted
DV1	13.71	18.208	0.672	0.872
DV2	13.37	17.602	0.775	0.848
DV3	13.30	19.132	0.744	0.858
DV4	13.85	17.881	0.664	0.875

**Ease of Use (Cronbach's Alpha = 0.896)**

Observed Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item–Total Correlation	Cronbach's Alpha if Item Deleted
DD1	14.49	15.515	0.731	0.877
DD2	14.47	15.612	0.732	0.876
DD3	14.40	15.603	0.724	0.878
DD4	14.21	15.775	0.717	0.879
DD5	14.38	14.993	0.817	0.857

**Reasonable Cost (Cronbach's Alpha = 0.910)**

Observed Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item–Total Correlation	Cronbach's Alpha if Item Deleted
CP1	14.68	15.530	0.758	0.893
CP2	14.63	15.493	0.771	0.890
CP3	14.68	15.652	0.732	0.898
CP4	14.68	15.063	0.761	0.893
CP5	14.70	14.816	0.842	0.875

**Modern Technology (Cronbach's Alpha = 0.885)**

Observed Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item–Total Correlation	Cronbach's Alpha if Item Deleted
CN1	12.30	7.867	0.773	0.851
CN2	12.25	7.363	0.761	0.852
CN3	12.19	7.697	0.663	0.875
CN4	12.19	7.979	0.614	0.886
CN5	12.21	7.338	0.824	0.837

**Customer Decision (Cronbach's Alpha = 0.822)**

Observed Variable	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item–Total Correlation	Cronbach's Alpha if Item Deleted
CL1	6.39	2.342	0.674	0.757
CL2	6.73	2.255	0.715	0.714
CL3	6.65	2.694	0.647	0.786

**Source:** Results from the author's survey data processed using SPSS 22

The results of the Cronbach's Alpha reliability test indicate that all measurement scales in the model meet the required reliability standards, with Alpha coefficients ranging from 0.766 to 0.910, all of which exceed the minimum threshold of 0.7 as recommended by Nunnally & Bernstein (1994). All item–total correlation coefficients are greater than 0.3, demonstrating that the observed variables are strongly correlated with the scales to which they belong.

No observed variables were eliminated during the reliability assessment. This implies that the designed scales are appropriate, highly stable, and possess strong measurement capability for the research constructs. Therefore, all variables were retained for subsequent analysis, specifically the exploratory factor analysis (EFA).

**\*Exploratory Factor Analysis (EFA)**

*EFA for Independent Variables*

**Table 3:** Results of EFA for Measurement Constructs

Factor	Eigenvalue	% of Variance Explained	Cumulative % of Variance
1	5.040	18.000%	18.000%
2	3.920	14.000%	32.000%
3	3.080	11.000%	43.000%
4	2.520	9.000%	52.000%
5	3.208	11.455%	63.455%
6	1.577	5.632%	69.087%

**Source:** Results from the author's survey data processed using SPSS 22

The Exploratory Factor Analysis (EFA) was conducted using the Principal Component extraction method and Varimax rotation. The results indicate that the KMO coefficient reaches 0.845, which is greater than the minimum threshold of 0.5, confirming that the dataset is suitable for factor analysis. Additionally, Bartlett's Test of Sphericity yields a significance level of Sig. = 0.000, which is lower than 0.05, demonstrating that the observed variables are linearly correlated within the population and that factor analysis is appropriate.



The factor extraction results show that six factors were retained with Eigenvalues greater than 1. The smallest factor has an Eigenvalue of 1.577, exceeding the Kaiser criterion threshold. The total variance explained is 69.087%, which surpasses the minimum acceptable level of 50%. This indicates that the six extracted factors account for 69.087%

of the total variance in the dataset, reflecting strong statistical significance and robust explanatory power of the model.

#### *EFA for the dependent variable*

**Table 4:** Assessment of the explanatory power of observed variables for the representative factors of the dependent variable

Factor	Initial Eigenvalues – Total	Initial Eigenvalues – % of Variance	Initial Eigenvalues – Cumulative %	Extraction Sums of Squared Loadings – Total	Extraction Sums of Squared Loadings – % of Variance	Extraction Sums of Squared Loadings – Cumulative %
1	2.214	73.806%	73.806%	2.214	73.806%	73.806%
2	0.444	14.803%	88.609%	—	—	—
3	0.342	11.391%	100.000%	—	—	—

**Source:** Results from the author's survey data processed using SPSS 22

The results of the exploratory factor analysis (EFA) indicate that the dataset fully satisfies the requirements for factor extraction. The KMO coefficient reaches 0.713, which falls within the range of 0.7 to 0.8 and is considered “good” according to Kaiser's scale. This demonstrates that the sampling adequacy is acceptable and the correlations among the observed variables are sufficiently strong to form latent factors. In addition, Bartlett's Test of Sphericity yields a Chi-Square value of 418.963 with a significance level of Sig. = 0.000, confirming that the correlation matrix is not an identity matrix and that statistically significant linear relationships exist among the variables. These results affirm that applying factor analysis in this study is appropriate and justified.

The EFA was conducted using the Principal Component extraction method combined with Varimax rotation. The findings show that a single factor is extracted with an Eigenvalue of 2.214, which is greater than the threshold value of 1 based on Kaiser's criterion. This factor accounts for 73.806% of the total variance, far exceeding the minimum requirement of 50%, indicating strong explanatory power and stability. The remaining two factors have Eigenvalues below 1 and were therefore excluded in accordance with Kaiser's rule.

#### **\*Correlation Analysis**

**Table 5:** Correlation Matrix of the Factors

Variables	CL	HI	DB	DV	DD	CP	CN
<b>CL</b>	Pearson Correlation	1	0.469**	0.508**	0.439**	0.543**	0.474**
	Sig. (2-tailed)	—	0.000	0.000	0.000	0.000	0.000
	N	387	387	387	387	387	387
<b>HI</b>	Pearson Correlation	0.469**	1	0.273**	0.046	0.269**	0.173**
	Sig. (2-tailed)	0.000	—	0.000	0.362	0.000	0.001
	N	387	387	387	387	387	387
<b>DB</b>	Pearson Correlation	0.508**	0.273**	1	0.160**	0.359**	0.342**
	Sig. (2-tailed)	0.000	0.000	—	0.002	0.000	0.000
	N	387	387	387	387	387	387
<b>DV</b>	Pearson Correlation	0.439**	0.046	0.160**	1	0.286**	0.348**
	Sig. (2-tailed)	0.000	0.362	0.002	—	0.000	0.000
	N	387	387	387	387	387	387
<b>DD</b>	Pearson Correlation	0.543**	0.269**	0.359**	0.286**	1	0.365**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	—	0.000
	N	387	387	387	387	387	387
<b>CP</b>	Pearson Correlation	0.474**	0.173**	0.342**	0.348**	0.365**	1
	Sig. (2-tailed)	0.000	0.001	0.000	0.000	0.000	—
	N	387	387	387	387	387	387
<b>CN</b>	Pearson Correlation	0.353**	0.214**	0.176**	0.244**	0.152**	0.117*
	Sig. (2-tailed)	0.000	0.000	0.001	0.000	0.003	0.022
	N	387	387	387	387	387	387

**Source:** Results from the author's survey data processed using SPSS 22

The results of the Pearson correlation analysis indicate that the dependent variable—service quality (CL)—exhibits positive and statistically significant linear relationships with all independent variables in the model. Specifically, CL shows the strongest correlation with Ease of Use (DD), with a coefficient of  $r = 0.543$ , followed by Security Assurance (DB) at  $r = 0.508$ , Reasonable Cost (CP) at  $r = 0.474$ , and Perceived Usefulness (HI) at  $r = 0.469$ . All these relationships have significance levels of Sig. = 0.000 (<

0.01), confirming their high statistical significance.

The correlation between CL and Customer Service (DV) is also moderate, with  $r = 0.439$  (Sig. = 0.000). Meanwhile, CL has a lower, yet still statistically significant, correlation with Modern Technology (CN) at  $r = 0.353$ , significant at the 1% level (Sig. = 0.000). These findings suggest that all factors in the model initially exert a positive influence on service quality.

In addition, the independent variables are positively correlated with one another, although the strength of these correlations is generally modest (most  $r < 0.40$ ). This indicates that multicollinearity is not a concern, as no correlation coefficient exceeds the commonly accepted threshold of 0.80. Some noteworthy correlations include DD–CP ( $r = 0.365$ ), DD–DB ( $r = 0.359$ ), and DV–CP ( $r = 0.348$ ), all of which are statistically significant at the 1% level (Sig. = 0.000), reflecting interconnected aspects of customer service experience.

## 5. Discussion of Research Findings

### **Hypothesis H1: Perceived usefulness is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.**

The regression analysis indicates that the variable HI exerts a positive influence on the dependent variable CL, with a correlation coefficient of 0.273. This finding confirms that perceived usefulness positively affects the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.

### **Hypothesis H2: Security assurance is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.**

The regression results reveal that the variable DB has a positive impact on CL, with a correlation coefficient of 0.230. This demonstrates that security assurance contributes positively to the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.

### **Hypothesis H3: Customer service is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.**

The regression analysis shows that the variable DV influences CL with a correlation coefficient of 0.229. Accordingly, customer service is confirmed to exert a positive effect on E-Mobile Banking service quality at Agribank Nam Trung Yên Branch.

### **Hypothesis H4: Ease of use is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.**

The regression results indicate that the variable DD has a positive impact on CL, with a correlation coefficient of 0.241. This suggests that ease of use positively enhances the service quality of E-Mobile Banking at Agribank Hanoi Branch.

### **Hypothesis H5: Reasonable cost is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.**

The regression analysis shows that the variable CP affects CL positively, with a correlation coefficient of 0.164. This confirms that reasonable cost has a positive influence on the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.

### **Hypothesis H6: Modern technology is positively correlated with the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.**

The regression results indicate that the variable CN exerts a positive effect on CL, with a correlation coefficient of 0.143. This implies that modern technology also contributes positively to the service quality of E-Mobile Banking at Agribank Nam Trung Yên Branch.

## 6. Policy Implications

### **Policy Implications for Improving Customer Perceptions of Costs**

Research findings indicate that cost is the factor exerting the strongest influence on the quality of E-Mobile Banking services at Agribank Nam Trung Yên Branch. Therefore, it is essential to enhance customers' understanding and perceptions of the fee structure associated with E-Mobile Banking. Agribank should communicate clearly about its competitive, economical, and reasonable fee policies, including free intra-bank transfer services. Additionally, frontline staff must proactively promote the advantages of the fee structure to customers at transaction counters, while the bank simultaneously disseminates information through mass media channels and social networks to strengthen transparency and customer awareness.

### **Policy Implications for Enhancing Tangible Facilities**

To strengthen the quality of E-Mobile Banking services, Agribank Nam Trung Yên Branch needs to upgrade and improve its tangible facilities as follows:

- (i) Redesign transaction counters and offices to be spacious, clean, and aesthetically appealing;
- (ii) Add dedicated customer reception and guidance points to enhance customer experience;
- (iii) Provide eye-catching, clear, and easy-to-understand brochures placed in strategic locations;
- (iv) Install automated queue management systems to improve professionalism and convenience;
- (v) Regularly collect and analyze customer feedback to promptly adjust and optimize the service environment.

### **Policy Implications for Increasing Customer Trust**

The study shows that trust is the third most influential factor positively affecting E-Mobile Banking service quality at Agribank Nam Trung Yên Branch. Recommendations include:

- (i) Ensuring timely processing by simplifying procedures and reducing transaction time;
- (ii) Providing enthusiastic guidance and offering clear explanations for potential system failures;
- (iii) Publicly displaying transaction procedures and timelines for transparency;
- (iv) Strengthening complaint-handling mechanisms, including hotline support;
- (v) Preparing reports and proposing improvements to enhance E-Mobile Banking service quality;
- (vi) After receiving customer complaints, the Accounting–Treasury Department should report to management and propose solutions within its authority or escalate to Agribank Binh Duong or Agribank Vietnam's headquarters when necessary.

### **Policy Implications for Improving Staff Competence**

Employee competence plays a crucial role in building customer trust. To enhance this capability, Agribank Nam Trung Yên should implement the following policies:

- (i) Strengthen training programs on professional knowledge and customer service skills;

- (ii) Establish specialized personnel dedicated to E-Mobile Banking operations;
- (iii) Implement performance evaluations and staff restructuring when necessary to ensure service quality.

### **Policy Implications for Promoting Ease of Use and Service Utilities**

To increase customers' familiarity and satisfaction with the E-Mobile Banking platform, the branch should expand communication activities, including advertising, seminars, demonstrations, and personalized consultation. It is also important to engage in two-way dialogue with customers to identify additional needs and propose the development of advanced utilities tailored to customer expectations.

### **Policy Implications for Ensuring Safety and Risk Reduction**

The branch should guide customers on installing and using Soft OTP and provide essential security recommendations to minimize transaction risks. When customers report unsafe transactions or related issues, staff must promptly escalate the matter to the branch director for timely resolution and further improvement.

### **Policy Implications for Strengthening Market Research**

Market research activities are essential for enhancing customer understanding and identifying needs, target segments, and potential user groups for E-Mobile Banking services. The Accounting – Treasury Department should collaborate with the Business Department to advise management on implementing market research tasks, including:

- (i) Conducting surveys to better understand customer preferences and promote E-Mobile Banking services;
- (ii) Assigning staff responsible for research and marketing activities, updating customer databases, inviting customers to use services, and maintaining customer care programs.

## **7. Acknowledgments**

The article was conducted under the research support of the topic "*Study on factors affecting E-Mobile banking service quality at Vietnam bank for Agriculture and rural development – Nam Trung Yen branch*". Subject code: **2025.TĐHHN.06.11** Hosted by **Hanoi University of Natural Resources and Environment**.

## **8. References**

1. Ajzen I. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. 1991; 50(2):179-211.
2. Davis FD. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*. 1989; 13(3):319-340.
3. Fornell C, Larcker D. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*. 1981; 18(1):39-50.
4. Hair JF, Black WC, Babin BJ, Anderson RE. *Multivariate data analysis* (8th ed.). Cengage Learning, 2019.
5. Zeithaml VA, Bitner MJ, Gremler D. *Services marketing: Integrating customer focus across the firm* (7th ed.). McGraw-Hill, 2018.