

DEVELOPING THE QUALITY OF INTERNATIONAL PAYMENT SERVICES OF VIETNAMESE COMMERCIAL BANKS

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ABSTRACT

In the rapid development and integration of internationalism at the moment, payment activities have become an indispensable part, contributing to promoting trade transactions to take place quickly and conveniently. Especially, in the context of the 4.0 industrial revolution, the explosion of information and communication technology, forcing banks to compete directly with non-banking international payment service providers, Fintech financial technology companies such as: VN Pay, Viet Union, VNPT Epay, This article aims to assess the factor impact on the quality of international payment services of Vietnam's commercial bank in recent times, from the results of which the author will make proposals to come up with solutions to develop the quality of international payment services of Vietnam's commercial bank.

Keyword: *quality, international payment services, commercial banking, Vietnam.*

1. LITERATURE REVIEW

The study of Eduard Cristobal et al (2007) is a quantitative study in which the author studied to develop a scale to measure the quality of online banking services and the effect of perceived quality on consumer satisfaction and loyalty levels. The online service quality scale proposed by the author consists of 4 components: Website quality, customer service, assurance, implementation process. Among these factors, the website quality is the most appreciated by customers.

Study of Chien-Ta Bruce Ho and Wen-Chuan Lin, 2009 in Taiwan market aimed to develop a scale of Internet Banking service quality based on the PeSQ model, the quality of Internet Banking services includes customer service factors, website design, safety assurance, and easy to use process. In their study, the author explored the factor which is the cost-effectiveness when customers use Internet Banking services. In this study, the cost savings and safety assurance factors are highly appreciated by customers because the cost that customers spend to use the service is also the competitive factor of banks, customers will prioritize the use of banks with more reasonable costs. In addition to the modern technology era, the possibility of information theft and taking advantage of the loopholes of banking technology, hackers can steal customers' money or hinder transactions through banks; therefore customers often prioritize banks with modern

technology or links with high technology companies.

In the study of Kumar and Garg (2012) in India, the author looked at the quality of Internet Banking service from a customer perspective, the results of which show that factors of ease of use, efficiency and customer care are the main factors. Moreover, there are also factors of reliability and security, accessibility, and problem solving. Specifically, the author recommends that banks should seek to strengthen the customer base using Internet Banking services by addressing the ease of using Internet Banking services and contacting customers to solve problems arising with customers during internet banking use.

Lin and Nguyen's (2011) study has explored the factors that influence e-payment acceptance in Vietnam and Taiwan through service quality factors. The authors proposed the theoretical model of service quality assessment consisting of four factors: Two factors - usefulness perception and ease of usefulness perception from the TAM model. Perceived and informational risks as factors affect the use of electronic payments. In addition, the willingness of individuals to innovate technology is incorporated into the model as a regulatory variable.

At the same time, the study of FeDBherman and Pavlou (2002) used and expanded the TAM model with the inclusion of a "risk-sensing" variable into the model to explain the customer's assessment of

the quality of the service accepting online transactions. This study analyzed the impact of the types of perceived risks, including performance risk, financial risk, social risk, time risk, personal risk, and general risk (Teoh & Mohan, 2004) to measure the service quality assessed by customers. The model studied includes awareness of usefulness, awareness of ease of use and perceived risks all affecting the quality of service of online transactions.

2. STUDY MODEL

Based on reasons, related studies, the author decided to use and develop the model of Ho and Lin (2009) in the study "Measuring the quality of

international payment services online banking: Developing the scale and confirmation of banks" because it has factors suitable to the economic circumstances as well as the operation of Vietnam's commercial banks, favorable for the author to assess the quality of international payment services at Vietnam's commercial banks. Therefore, the author offers an experimental study model on factors affecting the quality of international payment services through commercial banks to create conditions to provide solutions to develop the quality of international payment services of Vietnamese banks in the coming time:

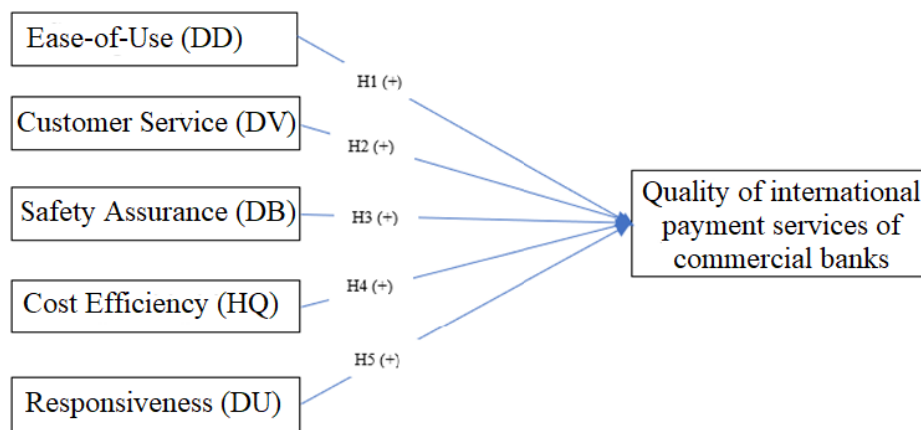


Figure 1: Study model

3. STUDY METHODS

The quantitative study was conducted after completing the qualitative study; the results obtained from the qualitative study are the basis for adjusting the observed variables of the survey factors. From there, developing a questionnaire to conduct an official survey of customers over the age of 18 in all fields of work, industry, business who are using international payment services at Vietnam commercial banks.

The quantitative method is carried out to analyze the data collected with the help of SPSS 22.0 software.

The sample is selected by the convenient sample selection method. The sample size was 500 observations. The author surveyed the audience of customers using international payment services at commercial banks in Ho Chi Minh City such as Agribank; Vietcombank; Vietinbank; BIDV;

Techcombank; ACB; Sacombank; VP Bank; TP Bank; VIB.

Interviews were realized to collect survey data for the analysis of factors that have affected the quality of international payment services of Vietnamese commercial banks collected from April 2021 to May 2021.

4. DATA ANALYSIS RESULTS

Multivariable regression analysis was carried out later to identify factors that had influenced the quality of international payment services of Vietnam's commercial banks and to test the study hypotheses.

To identify the factors that have affected the quality of international payment services of Vietnamese commercial banks (CL), the model of multiple regressions is built as follows:

$$CL = \beta_0 + \beta_1 \times DD + \beta_2 \times DV + \beta_3 \times DB + \beta_4 \times HQ + \beta_5 \times DU + \varepsilon_i$$

Table 1: Regression coefficient

		Un standardized regression coefficient		Standardized regression coefficient	t	Sig.	Correlation statistics	
		Coefficient	Standard error				Tolerance	VIF
Factors	Constant	-.487	.187		-2.598	.010		
	DD	.251	.029	.326	8.736	.000	.814	1.228
	DV	.219	.038	.205	5.722	.000	.880	1.136
	DB	.181	.025	.256	7.143	.000	.881	1.135
	HQ	.211	.036	.203	5.882	.000	.947	1.056
	DU	.241	.042	.216	5.754	.000	.799	1.251

(Source: Results were calculated through SPSS 22.0 software)

In Table 1, the Sig. meaning level column shows the regression coefficient of all variables DD; DV; DB; HQ; DU have a significance level Sig. less than 0.05. Thus, the regression coefficient of DD; DV; DB; HQ; DU variables have statistical significance or DD; DV; DB; HQ; DU variables influence CL dependency variables.

The model of factors that have influenced the quality of international payment services of Vietnamese commercial banks is built in form as follows:

$$CL = -0.487 + 0.326 \times DD + 0.205 \times DV + 0.256 \times DB + 0.203 \times HQ + 0.216 \times DU + \varepsilon_i$$

Table 2: The important position of the factors

Independent variable	Standardized regression coefficient	Percentage of contributions
DD	0.326	27.03 %
DV	0.205	17.00 %
DB	0.256	24.95 %
HQ	0.203	16.83 %
DU	0.216	17.91 %
Total	1.206	100%

(Source: The author summarized)

Model comments:

- Based on the beta coefficient of the impact factors, the survey subjects assessed the importance of low to high factors as Ease-of-Use (0.326); Safety Assurance (0.256); Responsiveness (0.216); Customer Service (0.205); Cost Efficiency (0.203). From there, there will be a shaping step for the author in terms of building governance implications according to the degree of emphasis on under-rated factors and promoting the factors that are being appreciated.

- The beta coefficients are positive or in other words, the factors are positively correlated with the quality of international payment services in commercial banks and banks that want to develop the quality of international payment services, the only way is to increase these following factors:

- If the Ease-of-Use factor increases by 1 unit, the assessment of the quality of international payment services will increase by 0.326 units.
- If the Customer Service factor increases by 1 unit, the assessment of the quality of international payment services will increase by 0.205 units.
- If the Safety Assurance Factor increases by 1 unit, the assessment of the Quality of International Payment Services will increase by 0.256 units.
- If the Cost Efficiency factor increases by 1 unit, the assessment of the quality of international payment services will increase by 0.203 units.
- If the Responsiveness factor increases by 1 unit, the assessment of the quality of international payment services will increase by 0.216 units.

Table 3: Model summary

Model	R	R ²	Calibrated R ²	Error of estimate	Durbin-Watson
1	.739 ^a	.546	.541	.50724	1.932

(Source: Results were calculated through SPSS 22.0)

According to table 3 results, the R2 determination coefficient is 0.546. As such, 54.6% of changes in dependency variables are explained by the independent variables of the model or in other words, 54.6% of changes in the quality of international payment services are explained by factors in the model.

5. CONCLUSION OF THE STUDY HYPOTHESIS

- **H1 hypothesis:** The Ease-of-Use factor impacts in the same direction as the quality of E - mobile banking service of the Agribank, Vinh Cuu Branch, Dong Nai Province.

The results of regression analysis show that the DD variable influences the CL dependency variable. This means that the easy-to-use factor affects the quality of international payment services in commercial banks. At the same time, the regression coefficient of the DD variable has a positive mark, i.e., the easier the easy-to-use factor increases, the higher the quality of international payment services in commercial banks. Thus, the H1 hypothesis is supported.

- **H2 hypothesis:** Customer Service factor affects the same direction as the quality of international payment services at commercial banks.

The results of the regression analysis show that the DV variable influences the CL dependency variable. This means that the Customer Service factor has an impact on the quality of international payment services in commercial banks. At the same time, the D variable was 0.205 carries a positive mark, i.e. The better customer service, the quality of international payment services at commercial banks will be highly appreciated. Thus, the H2 hypothesis is supported.

- **H3 hypothesis:** The Safety Assurance factor impacts in the same direction as the quality of international payment services at commercial banks.

The results of the regression analysis show that the DB variable affects the CL dependent variable. This means that the safety factor affects the quality of international payment services in commercial banks. At the same time, the DD variable 0.256 carries a positive mark, i.e., the safety assurance is well implemented, and the quality of international payment services in

commercial banks will be highly appreciated. Thus, the H3 hypothesis is supported.

- **H4 hypothesis:** The Cost Efficiency factor affects the same direction as the quality of international payment services at commercial banks.

The results of the regression analysis show that the HQ variable affects the CL dependency variable. This means that the Cost Effectiveness factor affects the quality of international payment services in commercial banks. At the same time, the regression factor of the DD variable has a value of 0.203 carries a positive mark, i.e. The better the cost effectiveness, the quality of international payment services in central banks will be highly appreciated. Thus, the H4 hypothesis is supported.

- **H5 hypothesis:** The Responsiveness factor impacts in the same direction as the quality of international payment services in commercial banks.

The results of regression analysis show that the DU variable affects the CL dependent variable. This means that the Responsiveness factor affects the quality of international payment services in commercial banks. At the same time, the regression factor of the DD has a value of 0.216 carries a positive mark, i.e. The better the responsiveness, the quality of international payment services in commercial banks will be highly appreciated. Thus, the H5 hypothesis is supported.

6. CONCLUSION

With the study and analysis of data collected through questionnaires, by the EFA discovery factor analysis method combined with multiple regression analysis, the author found a statistically significant effect of factors such as Ease-of-Use; Customer Service; Safety Assurance; Cost Efficiency and Responsiveness are reliable to the quality of international payment services in Vietnam's commercial banks. The standardized regression factor shows the important position of specific factors: The Ease-of-Use factor has the highest percentage of contribution of 27.03% to affecting the quality of international payment services in Vietnam's commercial banks. The remaining factors include Customer Service; Safety Assurance; Cost Efficiency; Responsiveness is 17%; 24.95%; 16.83%; 17.91%, respectively, affecting the quality of international payment

services in Vietnam's commercial banks. At the same time, the Beta coefficients are positive, so these factors are positively correlated with the quality of international payment services in Vietnam's commercial banks.

7. POLICY IMPLICATIONS

7.1. For the Ease-of-Use factor

According to the analysis results, the average value of the Ease-of-Use factor is 3.59 and the average value of DD3; DD4; DD5 observations is greater than the average value of these factors that means currently for Vietnamese commercial banks, customers comment that transactions are being made with very easy-to-understand operations; quickly completed, time saving, and the interface of online services is easy to use.

However, the average value of DD1; DD2 observations is smaller than that of these factors, proving that customers who are commenting on international payment services via online with web login or application are not really satisfied and making transactions is not easy still has some problems.

Therefore, the author proposes some policy implications as follows:

- Staff need to guide the customer in more specific details in logging in, performing payment operations quickly and accurately.
- Websites and interfaces need to be built and enhanced quality so that customers can easily name and set passwords during checkout.

7.2. For the Customer Service factor

According to the analysis results, the average value of the Customer Service factor is 3.68 and the average value of DV4; DV5; DV6 observations is greater than the average value of these factors which means that currently with the quality of international payment services in Vietnam's commercial banks, customers commented that the online payment system has provided accurate information to customers; customer's questions are always supported by banks and especially the service system always guides links for customers to solve problems.

However, the average value of DD1; DD2; DD3 observations is smaller than the average value of these factors, indicating that customers are

commenting that this online payment service still has errors that make the transaction still inaccurate; Website links have not yet gained confidence in customer safety; the interface's website has not yet achieved the download speed as quickly as the desired customer.

Therefore, the author proposes some of the following policy implications:

- Head office needs to fix errors caused by transmission lines, faster maintenance time.
- Staff need to inform customers how to handle problems, hotline information 24/24 so that customers can contact to handle problems or error transactions promptly.

7.3. For the Safety Assurance factor

According to the analysis results, the average value of the Safety Assurance factor is 3.54 and the average value of DB2; DB3 observations is greater than the average value of these factors, which means that currently with the quality of international payment services in Vietnam's commercial banks, customers comment that the payment system at banks, customers' information is securely secured, no problems and the website is rated a high level of safety, stability.

However, the average value of DB1 observations is smaller than the average of this factor, indicating that customers do not really trust the website or interface when paying online or it still has errors that make customers not fully trust.

Therefore, the author proposes the following administrative implications:

- The customer's information needs to be more visible on the interface screen to avoid the case of the customer mistaking the error leading to errors.
- Notifying the customer after each transaction needs to be more specific so that the customer knows if the transaction is successful or not.

7.4. For the Cost Efficiency factor

According to the analysis results, the average value of the Cost Efficiency factor is 3.04 and the average value of HQ2; HQ3 observations is greater than the average value of this factor which means that currently with the quality of international payment services in Vietnam's commercial banks, customers comment that the customer's

transaction cost for online payment is acceptable, saving money and time.

However, the average value of HQ1 observations is smaller than the average value of this factor, proving that customers think that interest rates and transaction costs are not really the best and attract customers.

Therefore, the author proposes the following administrative implications:

- Banks need to review the management fees for services to better serve customers, as the current fees are a bit high for large-sum transactions.
- Consider the factor of serving customers who have regular, continuous transactions to have preferential policies on fees for that customer.

7.5. For the Responsiveness factor

According to the analysis results, the average value of the Responsiveness factor is 3.22 and the average value of DU1 observations is greater than the average value of this factor means that currently with the quality of international payment services in Vietnam's commercial banks, customers comment that it meets their basic expectations.

However, the average value of DU2; DU3 observations is smaller than the average value of this factor, proving that customers think that they are not really satisfied with the quality of international payment services in Vietnam's commercial banks and are not ready to introduce their friends and family to use international payment services at banks.

Thus, the author proposes the following administrative implications:

- Staff need to market advice to customers more widely, giving customers a better understanding of the benefits of the product from which they will easily introduce to friends and relatives.
- In addition to the IT system platform available from the main offices of banks, it is necessary to develop more highly specialized human resources that understand all applications and operations to deploy to customers fully and quickly.
- In addition, the Board of Directors needs to provide policies and strategies for customer care to develop better e-banking, in addition to having a policy of gratitude to customers and promotions.

8. RECOMMENDATIONS TO THE STATE BANK

With the increasingly strong development of Internet Banking services, the State Bank also needs to improve the legal document system in banking activities, especially the legal document system related to professional innovation to suit the development of information technology to help products, Internet Banking services quickly reach and serve customers.

Developing and perfecting the system of legal documents, and decrees to manage the business process on the network, is the basis for resolving disputes between banks and customers when there is a problem of transactions on online payments.

The Vietnamese State Bank should have the policy to guide the development of e-banking services in general and online international payment services in particular in the direction of regulating technical standards for terminals, payment gateways to create a common technical foundation for banks to easily link together to help customers make fast and exact transactions.

The State bank regularly organizes training courses and seminars on e-banking with the participation of foreign experts. This will improve knowledge, experience, update new information from abroad, help commercial banks perfect and develop this service in a scientific and modern but still safe way. Develop common standards and legal basis for electronic documents, electronic signatures, and electronic certifications. To facilitate electronic documents to come to life, it is necessary to build a system of organizations, agencies that manage, provide, and notarize electronic signatures and electronic certifications. Build a central data management center to help the electronic confirmation and authentication is fast and accurate.

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