FACTORS AFFECTING SERVICE QUALITY OF COMMERCIAL BANKS IN DONG NAI PROVINCE

Phan Thanh Tam*, Le Thu Thuy, Huynh Thi Tuyet Thanh, Le Minh Duy, Le The Hung

Lac Hong University, No. 10 Huynh Van Nghe St., Biau Long ward, Bien Hoa, Dong Nai, Vietnam

*Corresponding Author: tampt@lu.edu.vn

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ABSTRACT

Advanced technology platform towards customer satisfaction. To improve the competitiveness of commercial banks and integrate into the international economy, banks are currently focusing on developing banking services in general and the quality of banking services in particular on the Internet. Therefore, the research objective is to identify the factors affecting the quality of banking services of commercial banks in Dong Nai province. On that basis, the authors propose that governance improves the quality of high-quality banking services. The quantitative method was carried out with a sample of 500 customers and obtained 415 valid votes; with the support of SPSS 20.0 software, the authors analyzed multivariate linear regression and identified five factors that influence the impact on banking service quality at the 5% significance level. The authors have proposed the managerial implications in priority: tangible, responsiveness, empathy, competence, and reliability.
1. INTRODUCTION

From 2020 to now, the world economy, including Vietnam, has been seriously affected by the Covid-19 pandemic. Implementing social distancing to prevent and control the Covid-19 epidemic has partly influenced enterprises' production and business process and reduced commercial banks' business performance. In addition, the demand for banking services is increasing, especially the quality of banking services. The target of banking services is individual customers, households, and small and medium enterprises, so the services are usually simple, easy to implement, and regular, focusing on savings, payment services, loans, credit cards, and debit cards...

Commercial banks provide various financial services, such as credit, savings, payment, etc., to expand their business activities, especially in fierce competition with many large-scale domestic and foreign banks in Vietnam [1-2, 6]. Commercial banks in Dong Nai province are also not out of that trend. To meet the increasing demand for banking services customers, try to diversify retail products and improve service quality towards customer satisfaction. In addition, banks always target two essential objects: business organizations and individual customers, especially in the retail market, which has a strong potential for development and indirectly influences the banking industry and the economy. It shows that to satisfy and best serve customers' requirements, banks need to improve the quality of banking services.

2. LITERATURE REVIEW AND RESEARCH MODEL

2.1 Literature review

The concept of banking services: Banking services are products and services provided by the bank to individual customers, households, and small and medium enterprises through a network of branches, or customers can directly access those products and services through the means of information technology, electronics, and telecommunications [1-2].

Service quality concept: Service quality is the customer's assessment of an entity's superiority and overall greatness. It is a form of attitude and consequences from comparing what we expect and our perception of what we receive. Service quality must be evaluated on two aspects, the service delivery process and service results [4-6].

Thus, service quality is a form of attitude, a comparative perception of customers (between customers' expectations about the service and customers' perceptions of what they receive from the service provider and service level). Banking service quality: Banking service quality is the customer's perception of the gap between the expectation of the banking service that will be provided and their perception when using it [1-2].

A group of American authors developed the SERVQUAL service quality model, highlighting the main components of service quality [4, 6-8]. In 1988, the researchers re-tested the model. They concluded that service quality consists of 5 primary components: Customer-perceived service quality can be measured by 5 components: (1) Reliability: Refers to the ability to provide accurate, punctual, and reputable services. (2) Responsiveness: Expressed through the desire and willingness of service staff to provide timely service to customers. (3) Service capacity (Assurance): Expressed through professional qualifications to perform services. The ability to serve manifests when employees interact with customers, employees directly perform services, and the ability to research to capture relevant information necessary for serving customers. (4) Reliability: The ability to create trust for customers makes customers trust the bank. This ability is reflected in the bank's name and reputation and the service staff's personality, who directly communicate with customers. (5) Tangibles: Shown in appearance, the dress of service staff and facilities, and service equipment [4, 6-8].

Measuring service quality related to the banking sector: a case study of the Hong Kong banking industry [4]. The author team released a survey of 150 customers through questionnaires. The results of the regression analysis show that 05 factors affect customer satisfaction on service quality, with the importance of the factors identified as follows: (1) Service capacity, (2) Reliability, (3) Responsiveness, (4) Empathy, (5) Tangible Means. Thus, the above five factors positively impact customer satisfaction with service quality. Therefore, the authors apply a service quality model with five factors, which are: (1) Service capacity, (2) Reliability, (3) Responsiveness, (4) Empathy, and (5) Tangible [4].

Research on the topic of banking service quality of Vietnamese commercial banks. Research results show that for the current system of Vietnamese commercial banks, improving the quality of products and services is a crucial issue that needs to be focused on to best meet customers' needs and the development of society. Service quality is one of the critical factors contributing to enhancing competitive advantages for banks. The research objective is to study the scientific arguments to build the theoretical and practical basis for the solution system to improve service quality [7].

2.2 Research model

Based on the model that has been calibrated together with studies on enterprises, bank lending services [1-2, 5-7], and the impact of the factors constituting service quality, the authors propose a research model of factors affecting the quality of banking services, including the following components:

Factors include: The first is reliability: Expressed through the ability to perform the service appropriately and on time right from the first time. The second is responsiveness: Service staff are willing and ready to provide customer service. The third is service capacity: Shown through professional qualifications, service style, professionalism, enthusiasm, and hospitality of employees towards customers. The fourth is empathy: Shown through each customer's care and concern. The fifth is the tangible means: Shown through the clothes, employees' appearance, equipment, and physical means of providing services.

Reliability is understood that the bank performs reliable transactions, making precise and accurate statements, always advises information for the benefit of customers, and helps customers avoid risks. This requires consistency in service performance and honoring commitments and promises to customers. Thus, reliability has a positive relationship with banking service quality.
RESEARCH RESULTS

The factors. Multiple regressive variables have a positive significant factors. Therefore, among the factors is ≥ 0.3 to create a search through each analyzed, the proposed model is based on the indicators of reliability, service satisfaction, tangibles, readiness of the bank, technical readiness of the bank and the quality of banking services. Reliability was associated with the quality of banking services, and empathy has a positive relationship with the quality of banking services.

**H2: Empathy has a positive relationship with the quality of banking services of commercial banks in Dong Nai province.**

The level of responsiveness is reflected in the desire and readiness of the bank staff to promptly respond to customer inquiries. Measure your ability to quickly solve problems, effectively handle complaints, be willing to help customers, and respond to customer requests. Responsiveness is the desire and willingness of employees to provide timely service to customers. Thus, the level of responsiveness has a positive relationship with the quality of banking services.

**H3: Responsiveness has a positive relationship with the quality of banking services of commercial banks in Dong Nai province.**

Service capacity is demonstrated through professional qualifications and polite, professional, and welcoming customer service. Service capacity is expressed through professional qualifications to perform services. Service capacity has a positive relationship with banking service quality.

**H4: Service capacity has a positive relationship with the quality of banking services of commercial banks in Dong Nai province.**

Tangible means are physical facilities, external and internal images of the bank, technical means, tangible manifestations of employees, clothing, appearance... in the bank's retail space. Thus, tangible means have a positive relationship with the quality of banking services.

**H5: Tangibles have a positive relationship with the quality of banking services of commercial banks in Dong Nai province.**

With the above analysis, the proposed model is based on the study of Parasuraman et al. (1998) and is shown in the proposed research model as follows.

![Figure 1. Research model of factors affecting the quality of banking services](Source: compiled by the authors)

3. RESEARCH METHODS

3.1 Qualitative research

Qualitative research is used in the preliminary research phase, including analysis, synthesis, specialized documents, books, and the Internet... to provide a scale model, thereby adjusting the scale and setting up a questionnaire for formal research to assess the factors affecting the quality of banking services. In this study, the group of authors carried out by group discussion according to pre-prepared content. Qualitative research was conducted through focused discussion and consultation with 07 managers at commercial banks in Dong Nai to adjust the scale and build the questionnaire.

3.2 Quantitative research

Formal quantitative research tests the scale, research model, and hypotheses. Descriptive statistics for quantitative and qualitative variables will be conducted first, followed by scale testing. A good scale needs to meet reliability and effectiveness. Reliability was assessed through Cronbach's Alpha reliability coefficient and adjusted total variable correlation value [3]. The significance of the scale was obtained through EFA exploratory factor analysis and, finally, multiple linear regression analysis. Quantitative research through a convenient sampling method, a survey by a questionnaire sent directly to 500 banking customers (n = 500) from 05 banks: VCB, ACB, SHB, BIDV, and HDbank from December 2022 to February 2023, but 415 valid votes were processed, the pass rate was 83%, because 85 votes lacked information. The data collected from the survey questionnaire was processed using Excel for raw data and then analyzed with SPSS 20.0 software. After encryption and cleaning, the data will go through analysis steps [3].

After removing the variables with low reliability, the remaining variables will continue to be used for factor analysis. The EFA method is used to reduce a set of k observations into a set of F (F<k) more significant factors. This reduction is based on the linear relationship of factors with primitive variables (observed variables). The criterion used to consider the suitability of the factor analysis method is the result of KMO analysis. To use EFA, the KMO must be greater than 0.5. The larger the KMO, the better. Extracting coefficients is a Principal component with Varimax rotation and stops when extracting factors with Eigenvalue >1 [3]. The scale is accepted when the total variance extracted is > 50%. Variables with Factor loading less than 0.5 will be excluded because this variable does not measure the concept we need to measure. At the same time, the difference between the factor loading coefficient of an observed variable among the factors is ≥ 0.3 to create a different value between the factors. Multiple regression analysis: The study was carried out using least square regression - OLS (Optimal Least Square): the independent variables are included in the regression model, and the statistical results are considered related to the regression model variables included in the model [3].

In this study, the authors use a regression model including 05 independent variables: Reliability, service efficiency or responsiveness, tangible means (tangibles), assurance Assurance and empathy affect the dependent variable banking service quality.
The total number of questionnaires collected was 415 valid votes, a rate of 83%. After the authors checking, there are 85 unsatisfactory votes excluded (mostly incomplete information). Thus, a total of 415 survey questionnaires with complete answers were included in the analysis. The sample included in the formal analysis had the following results:

Customers are male 178, accounting for 42.9% and 57.1%, respectively; the rest are female out of 415 valid votes. In addition, customers with monthly income below 5 million VND accounted for 4.6%, respectively 19 people; this rate is the lowest. Next, customers with monthly payments from 10 million VND to less than 15 million VND have been accounted for the highest, 39.3%, respectively 163 people. This is the highest rate in the sample of 500 people, but 415 responded correctly. Customers aged from 18 to 25 years old have a rate of 6.7%. Customers aged 35 to under 45 accounted for the highest proportion of 53.3%, corresponding to 221 people, followed by the number of customers aged 25 to under 35, accounting for 23.9%, respectively. There are 99 people. Over 55 years old accounted for the lowest proportion, equivalent to 4.1% in the sample of 500 people, but 415 people answered validly.

### Table 1. Summary of Cronbach’s Alpha results of factors

<table>
<thead>
<tr>
<th>No.</th>
<th>Variables</th>
<th>Initial variable number</th>
<th>Number of remaining variables</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reliability</td>
<td>5</td>
<td>5</td>
<td>0.966</td>
</tr>
<tr>
<td>2</td>
<td>Empathy</td>
<td>4</td>
<td>4</td>
<td>0.922</td>
</tr>
<tr>
<td>3</td>
<td>Responsiveness</td>
<td>4</td>
<td>4</td>
<td>0.917</td>
</tr>
<tr>
<td>4</td>
<td>Tangibles</td>
<td>5</td>
<td>5</td>
<td>0.906</td>
</tr>
<tr>
<td>5</td>
<td>Assurance</td>
<td>3</td>
<td>3</td>
<td>0.900</td>
</tr>
<tr>
<td>6</td>
<td>The quality of banking services</td>
<td>3</td>
<td>3</td>
<td>0.667</td>
</tr>
</tbody>
</table>

(Source: the authors synthesized and processed from SPSS 20.0)

Table 1 shows that for the "Banking service quality (CSQ)" factor with a Cronbach's Alpha coefficient of 0.667 and all observed variables are more significant than 0.6. The above result is excellent, so we accept it. So, the authors did not remove any variable in the factor "Banking service quality (CSQ)" because the scale coefficient is above the allowable level [3].

In general, Cronbach’s Alpha coefficients of the scales after the first run are relatively significant and satisfactory, with no variables in the scale. The larger the Cronbach's Alpha coefficient, the more reliable the scale is. Next, these variables will be included in exploratory factor analysis (EFA).

The results show that the KMO coefficient is 0.812, and the significance level (Sig) is 0.000 and 0.5 KMO ≤ 1: The KMO coefficient (Kaiser-Meyer-Olkin) is the index used to consider the appropriateness of the analysis factor accumulation. A considerable KMO value means that factor analysis is appropriate, indicating that factor analysis is suitable for survey data of 500 customers but 415 valid respondents.

The results show that Eigenvalues = 1,647 > 1, and the total variance extracted is 81,785% > 50, so the variance is standard. This indicates that 81,785% of the variation of the observed variables is explained by the five factors drawn. There were 21 observed variables in the independent factor and 03 in the dependent variable. The results show that the data can be included in the analysis of multiple linear regression models.

### Table 2. Analysis of multiple linear regression results

<table>
<thead>
<tr>
<th>Factors</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Sig.</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(C)</td>
<td>0.669</td>
<td>0.113</td>
<td>0.000</td>
<td>1.105</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.107</td>
<td>0.019</td>
<td>0.177</td>
<td>0.000</td>
</tr>
<tr>
<td>Tangibles</td>
<td>0.292</td>
<td>0.019</td>
<td>0.470</td>
<td>0.000</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.129</td>
<td>0.013</td>
<td>0.314</td>
<td>0.000</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.213</td>
<td>0.016</td>
<td>0.425</td>
<td>0.000</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.086</td>
<td>0.014</td>
<td>0.205</td>
<td>0.000</td>
</tr>
<tr>
<td>R</td>
<td>R Square (R^2)</td>
<td>Adjusted R^2</td>
<td>Std. Error of Estimate</td>
<td>Durbin-Watson</td>
</tr>
<tr>
<td>Model</td>
<td>0.800</td>
<td>0.640</td>
<td>0.636</td>
<td>0.315</td>
</tr>
</tbody>
</table>

(Source: the authors synthesized and processed from SPSS 20.0)

Table 2 shows that the regression coefficients are positive and statistically significant at 5%. This means that the effects of the independent variable are in the same direction as the quality of banking services, and the adjusted coefficient of determination reaches 63.6%.

The results of the autocorrelation test are as follows: With the regression results, the Durbin - Watson stat index = 1.722 indicates no autocorrelation. According to the principle of experience, the Durbin - Watson criterion with a value between 1 and 3 does not violate the phenomenon of autocorrelation.

Table 2 shows that the variance magnification factor VIF is less than 2. VIF is the variance magnification factor. When the value exceeds 10, it shows signs of multicollinearity. Meanwhile, the results of Table 2 confirm no correlation between the independent variables in the equation. There is no multicollinearity because the VIF values are less than 10.

From the above research results, the authors can easily see that, with a total of 415 valid questionnaires, survey opinions of 500 customers are currently using the services of the 5 banks mentioned above. The results show that the research objective has been achieved, and five factors affecting the quality of banking services have been identified in Dong Nai province. The study's hypotheses have no defects and are accepted, but the explanatory significance level of the model is 63.6%.

All five research variables have explanatory significance for the regression model at the 5% level. However, the normalized beta reflects the priority when implementing the governance implications. Tangible media (0.470); response level (0.425); empathy (0.314); service capacity (0.205), and reliability (0.177). This result suggests improving the quality of banking services.
5. CONCLUSIONS AND MANAGERIAL RECOMMENDATIONS

5.1 Conclusions

The study has identified 5 factors affecting the quality of banking services at commercial banks in Dong Nai province. The proposed research model includes five factors affecting the quality of banking services: tangible means; the level of response; empathy; service capacity, and reliability. The study was conducted with a sample size of 415 banking service customers through 2 phases: preliminary and formal research. In evaluating the quality of banking services, the study has conducted exploratory factor analysis (EFA) and regression analysis. The test results show that tangible means; the level of response; empathy; service capacity, and reliability affect the quality of banking services. Based on the research results, the study proposes many governance implications to help managers adjust appropriate policies in the new situation at the bank accordingly and aim to improve high-quality service. Here are five suggestions for governance implications of having a standardized Beta coefficient from low to low.

5.2 Managerial recommendations

First, tangible means has the highest standardized Beta coefficient (0.470) and prioritizes the implementation of the governance implications first. Therefore, banks should take the following measures: (1) Employees should have a very professional demeanor and dress neatly and politely when communicating with customers. To strengthen the material and technical foundations by building, renovating, and upgrading. (2) The bank needs to supplement with modern equipment and machines and arrange a reasonable and convenient transaction counter for customers when they make transactions. Papers, forms, and transaction vouchers should be designed simply and clearly. (3) The transaction process is simple, convenient, fast, and accurate. Transaction vouchers are designed to obtain information in the system about customers, minimizing information that customers must fill out and sign often. Finally, banks need to improve the quality of high-quality human resources in banking technology and ensure that they have professional ethics, love for their jobs, passion for work, discipline, and responsibility for their jobs, employment, can adapt to new technologies and be highly flexible in professional work, can be creative in work. When the quality of human resources is improved, it will have a positive impact, making customers feel confident and satisfied with the quality of banking services.

Second, regarding responsiveness, there is the second highest standardized Beta coefficient (0.425) and the second priority of implementing governance implication. Therefore, banks need to enforce the following policies: (1) Banks need to satisfactorily handle all customer difficulties, questions, and complaints. Procedures for making transactions should be simple at the bank and need to improve the usefulness of the online transaction site. Banks should have a hotline. (2) The time the customer waits for the transaction is as short as possible. Banks should improve their ability to respond to information, respond to customer requests quickly by using an automatic email response system, and design a hotline to serve customers quickly, every time. Anytime, anywhere. (3) All customer feedback should be appreciated, preferably with a thank you letter/email thanking the customer. (4) Recording and responding to customer information: customer complaints and suggestions will help the bank objectively view its operations and maintain its image of customers. Finally, banks need to ensure that customer information is not wrong and not misused; they strictly comply with the process of using customers' personal information. Banks must rigorously and promptly handle irresponsibility cases, causing customers difficulties and troubles when using the service.

Third, empathy has the third highest standardized Beta coefficient (0.314) and the third governance implication performance preference. Therefore, banks need to implement the following policies: (1) Banks should have a policy of asking, congratulating, and giving gifts to customers every holiday or personal event, such as a birthday or wedding ask. Employees need to be enthusiastic and friendly with customers. (2) The bank needs to design a comment box or organize a monthly survey of customer service attitudes so that employees know their duty to serve customers. Every day is a better one. At the same time, through customers' opinions, the leadership will reward employees who perform well. (3) These employees not only have good looks and are active in communication but also have good presentation and persuasion skills, know how to behave skillfully, and especially must always keep a smile on their lips. Finally, employees always seek to improve themselves, improve their knowledge and professional skills, enthusiastically advise, and find optimal solutions for customers' requirements in the digital banking era growing as fast as it is now. Serve customers in the best way and treat customers like family members.

Fourth, regarding service capacity, there is the fourth highest standardized Beta coefficient (0.205), and the fourth priority is the administrative implication. Therefore, banks must do the following: (1) Employees must be polite, considerate, and welcoming to customers. Employees must have sufficient knowledge and expertise to advise and answer customer inquiries. (2) Employees must improve their ability to respond quickly to information and customer requests by using an automatic email response system and designing a hotline to serve customers quickly, anytime, anywhere. (3) Employees must handle business quickly and efficiently for customers. Always ready to listen, meet new needs, and understand customers' needs. Finally, banks can offer negotiable interest rates for traditional, meaningful, and large customers to retain and attract more customers. For customers who are import-export enterprises in the area, have a solid foreign currency income, and have short-term loan needs, the bank can apply for a loan with a preferential interest rate.

Finally, regarding reliability, it has the lowest standardized Beta coefficient (0.177) and prioritizes the implementation of the last governance implication. Therefore, banks need to do the following: (1) Banks need to create trust for customers to feel secure when using bank credit services. Banks need to keep good customer information. (2) The Bank executes the transaction accurately and without errors. Developing policies to apply to customers assessed as potential, the bank can send staff directly to serve at home or the office because they will
bring significant revenue to the bank. (3) The bank needs to develop a set of indicators to measure the quality of customer service and set up a department to closely monitor the quality of customer service in the unit; plan to implement a customer relationship management system, perfect and develop customer care service channels, consult, provide accurate, consistent, and fast information to improve service quality, promote the brand and reputation of the bank. Finally, banks must regularly organize online customer satisfaction information collection to listen to customers' opinions on products, services, and arising problems. Thereby helping the bank improve the product supply process and customer care policy towards satisfaction and improving banking services' quality.

With the above analysis problems, the study still has certain limitations, such as the research model is only tested with 500 customers using banking services representing customers in Dong Nai province, compared to the total number of customers, is still tiny compared to the overall, and many other factors have not been included in the research model, such as organizational culture and marketing activities... Therefore, for the research results to be meaningful and highly representative, the study needs to increase the number of customer survey samples and add many new variables to the model.

6. REFERENCES