# THE FACTORS INFLUENCING CUSTOMER SATISFACTION WITH RETAIL BANKING SERVICES AT COMMERCIAL BANKS IN CAN THO CITY

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> Received: 03/10/2024 Revised: 16/04/2025 Accepted: 25/04/2025

DOI: 10.59266/houjs.2025.562

Abstract: This study analyzes the factors influencing customer satisfaction with retail banking services at commercial banks in Can Tho City. The research data is based on a survey of 150 customers currently using retail banking services in Can Tho City. The study employs Cronbach's alpha to test scale reliability, exploratory factor analysis (EFA), and multiple linear regression analysis. The results indicate that the model has high statistical significance, with R2 = 0,659, demonstrating that the studied factors have a considerable impact. Among them, Technological quality, Assurance, and Rmpathy are the three most influential factors, whereas Responsiveness is not statistically significant. Tangibles and reliability also have an impact, but to a lesser extent. Based on these findings, banks should focus on investing in technology, ensuring transaction security, and improving customer service to enhance customer satisfaction and loyalty.

**Keywords**: Can Tho City, customer satisfaction, retail banking, service quality, technological quality.

#### I. Introduction

In a rapidly developing economy and increasingly fierce competition in the banking sector, ensuring customer satisfaction with service quality has become a key factor for commercial banks to maintain and expand their market share. Particularly for commercial banks (CBs) in Can Tho City providing retail banking services, service quality is not only about financial products but also involves factors such as customer service attitude, transaction processes, work environment, and customer support facilities.

Although banking service quality has been widely studied, specific factors influencing customer satisfaction in the context of commercial banks in Can Tho City remain limited. Can Tho is one of the fastest-growing cities in Vietnam, with an increasing demand for banking services, including retail banking (RB), creating both opportunities and challenges for CBs in the area.

This study aims to analyze and clarify the factors affecting customer satisfaction with the service quality of RB services provided by CBs in Can Tho

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City. Through this research, commercial banks will gain a better understanding of customer needs and expectations, thereby developing appropriate strategies to improve RB services, enhance customer satisfaction, and foster customer loyalty in the future.

## II. Theoretical Framework and Research Methodology

#### 2.1. Literature Review

Retail banking services play a crucial role in the banking industry, offering numerous benefits to both customers and financial institutions. Across the world and in Vietnam, extensive research has been conducted on the factors influencing retail banking service quality, development trends, and service improvement strategies to enhance customer satisfaction.

The study by Parasuraman et al. (1988) on service quality (SERVQUAL) highlighted that service quality is a key determinant of customer satisfaction. According to them, retail banking service quality is evaluated based on factors such as reliability, Responsiveness, Assurance, empathy, and tangibles. These factors directly impact customer satisfaction and loyalty toward the bank.

Nguyen (2014) found that retail banking services in Vietnam have developed significantly in recent years, driven by technological advancements and improvements in service quality. Commercial banks in Vietnam have focused on expanding and enhancing retail banking services, including payment accounts, credit cards, consumer loans, and money transfer services.

Jung et al. (2003) emphasized the crucial role of information technology in enhancing retail banking service quality,

from improving service offerings to providing online banking services, thereby increasing convenience and saving time for customers. Online and mobile banking services are becoming increasingly popular and have a significant impact on customer satisfaction.

Chung and Lee (2005) examined how customer perception factors influence satisfaction and loyalty in retail banking. These factors include staff friendliness, transaction speed and efficiency, as well as customer support services such as aftersales care.

These studies indicate that retail banking service quality is a multidimensional concept, encompassing aspects such as technology, service processes, and employee attitude. These elements interact and influence one another, forming a comprehensive system that strongly affects customer satisfaction and loyalty.

#### 2.2. Theoretical Framework

According to Kohn (2007), retail banking services refer to financial services provided by banks to individuals and households, including savings accounts, consumer loans, and insurance services.

Nguyen and Nguyen (2017) defined retail banking services as financial services designed for individual customers to meet their consumption, savings, and asset protection needs.

#### III. Research Methodology

#### 3.1. Research Model

Based on the theoretical framework of RB and the reviewed empirical research models, the theoretical research model on customer satisfaction with the service quality of retail banking services provided by CBs in Can Tho City is developed with the following factors:

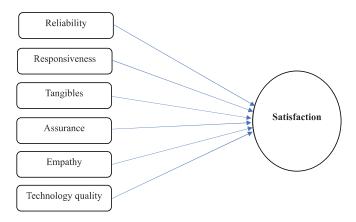


Figure 1. Proposed Theoretical Research Model

#### **Research Measurement Scale:**

The measurement scale for customer satisfaction with the retail banking service quality of CBs in Can Tho City is developed based on a synthesis of relevant studies. The author adopts and modifies certain factors in the scale to align with the content and characteristics of the new research context. Additionally, findings

Source: Compiled by the author, 2025.

from qualitative research are incorporated to supplement some observational variables under the specific conditions of CBs in Can Tho City.

The observational variables in the measurement scales for customer satisfaction with the retail banking service quality of CBs in Can Tho City are presented in Table 1 below.

Table 1. Measurement Scale for Satisfaction with Retail Banking Service Quality

No.	Scale	Code	Source		
I	Reliability	REL			
1	The bank always provides services as committed.	REL1	Parasuraman et al.		
2	I feel that the bank always executes transactions accurately and on time.	REL2	(1988); Chung & Lee (2005)		
3	The bank's products and services meet my needs.	REL3			
4	The bank provides clear and transparent information about its services.	REL4			
II	Responsiveness	RES			
5	Bank staff are always willing to assist me when requested.	RES1	Parasuraman et al.		
6	The waiting time for service at the bank is reasonable.	RES2	(1988); Chung & Lee		
7	When issues arise, the bank responds quickly and effectively.	RES3			
8	The bank always provides emergency services when I need them.	RES4	(2005)		
III	Tangibles	TAN			
9	The bank's facilities are modern and convenient.	TAN1	Parasuraman et al.		
10	Transaction equipment at the bank is well-maintained and functions properly.	TAN2	(1988);		
11	The banking transaction area is always clean and comfortable.	TAN3	Nguyen (2014);		
12	The bank's promotional materials and service guidelines are clear and easy o understand.		Jung et al. (2003)		
IV	Assurance	ASS			
13	I feel secure when conducting transactions at the bank.	ASS1	Dama 23300 00 04 01		
14	Bank staff always have the knowledge and skills to handle my requests.	ASS2	Parasuraman et al.		
15	I trust the bank's ability to protect my personal information.	ASS3	(1988); Chung & Lee		
16	The bank always creates a sense of reliability and security in financial transactions.	ASS4	(2005)		

No.	Scale	Code	Source
V	Empathy	EMP	
17	Bank staff always listen to and understand my needs.	EMP1	Parasuraman et al.
18	The bank always strives to meet customers' special requests.	EMP2	(1988);
19	Bank staff have a friendly attitude and treat me as a valued customer.	EMP3	Chung & Lee
20	The bank always offers services that suit my personal needs.	EMP4	(2005)
VI	Technology quality	TECH	
21	I find it easy to use the bank's online services.	TECH1	
22	The bank's mobile banking application is convenient and user-friendly.	TECH2	Nguyen (2014);
23	The bank provides fast and secure electronic payment and transfer services.	TECH3	Jung et al. (2003)
24	The bank regularly updates new technologies to enhance the customer experience.	TECH4	
VI	Satisfaction with Service Quality	SAT	
25	I am satisfied with the services provided by the bank.	SAT1	
26	I feel that the bank fully meets my financial needs.	SAT2	Parasuraman et al.
27	I will recommend this bank to my friends and family.	SAT3	(1988);
28	I will continue using the bank's services in the future.	SAT4	Nguyen (2014);
29	Customers are satisfied with the attention, care, and empathy that bank staff show to each customer.	SAT5	Jung et al. (2003)

Source: Compiled by the author, 2025.

#### 3.2. Analysis Method

This study employs the Cronbach's alpha reliability test to assess the internal consistency of the measurement scale. Additionally, exploratory factor analysis (EFA) is used to identify the factors influencing customer satisfaction with retail banking service quality. A multiple regression model is then applied to estimate the impact levels of these factors on customer satisfaction with retail banking service quality at commercial banks in Can Tho City.

#### 3.3. Research Data

The minimum sample size for studies utilizing the EFA method is 50, and the ratio of observations to observed variables should be at least 5:1 (Nguyen, 2011). This means that each observed variable requires at least five observations. With 24 observed variables in the independent variable group constructed in the measurement scale, the minimum required sample size is 120

observations. However, to ensure reliability and representativeness, the author surveyed 150 customers currently using retail banking services at commercial banks in Can Tho City. A non-probability sampling method was applied in this study. The survey was conducted by sending the link to 150 customers from the customer lists of commercial banks in Can Tho city, such as Vietcombank, Sacombank, and BIDV bank. In each bank, the author selected 50 customers to conduct the survey.

#### IV. Results and Discussion

## 4.1. Reliability Testing of the Measurement Scale and Exploratory Factor Analysis

After conducting a reliability test on the measurement scale using 24 observed variables, the results indicate that both the scales and the observed variables meet the reliability criteria and are adequate for performing the EFA. The factor rotation results are presented in Table 2 below.

Table 2. Results of factor rotation

Observed variable	Factor					
	F1	F2	F3	F4	F5	F6
TAN1	0.817					
TAN4	0.786					
TAN3	0.768					

Observed variable	Factor					
	F1	F2	F3	F4	F5	F6
REL1		0.775				
REL2		0.718				
REL3		0.563				
ASS1			0.907			
ASS3			0.845			
ASS2			0.826			
ASS4			0.789			
TECH1				0.787		
TECH2				0.687		
TECH3				0.659		
TECH4				0.657		
EMP1					0.889	
EMP2					0.780	
EMP3					0.678	
EMP4					0.655	
RES1						0.874
RES2						0.856
RES4						0.669
Eigenvalue	1.356					
Cumulative (%)	73.426					
KMO	0.748					
Sig. in Bartlett's test	0.000					

Source: Survey data analysis of 150 customers using retail banking services in Can Tho City, 2025.

Table 2 shows that the EFA results eliminated three observed variables—TAN2, REL4, and RES3—due to factor loadings lower than 0.5. As a result, six new factor groups were formed, with 21 observed variables meeting the required criteria.

## 4.2. Regression Model Analysis Results

The multiple linear regression method was used to estimate the factors affecting customer satisfaction with the quality of retail banking services at commercial banks in Can Tho City. The regression results are presented in Table 3 below:

Table 3. Estimated Regression Model Results

Variable	В	Standard error	Beta	Sig.		
F1: Tangibles	0.023	0.027	0.037	0.031**		
F2: Reliability	0.037	0.021	0.041	0.020**		
F3: Assurance	0.265	0.053	0.274	0.003***		
F4: Technology Quality	0.297	0.019	0.301	0.001***		
F5: Empathy	0.181	0.028	0.187	0.002***		
F6: Responsiveness	0.273	0.136	0.291	0.204		
Constant	1.458	0.278		0.000		
F	66.327					
Sig.	0.000					
$\mathbb{R}^2$	0.659					

Source: Survey data analysis of 150 customers using retail banking services in Can Tho City, 2025.

Note: \*\*; \*\*\* correspond to significance levels of 5% and 1% respectively

To ensure the accurate estimation of the regression model, violations of the assumptions of the linear regression model were examined. The test results indicate that the VIF values of all independent variables are less than 2, meaning that multicollinearity is not present. Additionally, the model's F-statistic is 66.327 with a significance level of sig. = 0.000, indicating that the regression model is statistically significant at the 1% level. The  $R^2$  coefficient is 0.659, meaning that the independent variables explain 65.9% of customer satisfaction with the quality of retail banking services at commercial banks in Can Tho City.

The estimation results in Table 3 show that among the six variables included in the research model, five have a statistically significant impact on customer satisfaction with retail banking service quality. Specifically, three variables are statistically significant at the 1% level: F3 (Assurance), F4 (Technology Quality), and F5 (Empathy). The remaining two variables, F1 (Tangibles) and F2 (Reliability), are statistically significant at the 5% level.

A summary of the research model results is illustrated in Figure 2 below.

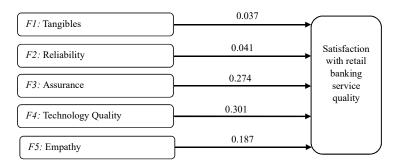


Figure 2. Research Model Results

The variables impact customer satisfaction in increasing order of strength: Tangibles, Reliability, Empathy, Assurance, and Technology Quality. Specifically, Technology Quality has the highest Beta coefficient, indicating that this factor has the strongest impact on customer satisfaction. This result aligns with the study by Jung et al. (2003), which emphasizes the role of technology in enhancing banking service quality.

Next, Assurance has a significant impact on customer satisfaction. This finding is consistent with the research of Parasuraman et al. (1988) and Chung and Lee (2005), highlighting the importance of security and safety in banking transactions. Empathy is the third most influential factor affecting customer satisfaction. This result supports the study of Parasuraman et al. (1988), which underscores the role of customer care and attention in building customer loyalty.

Source: Compiled by the author, 2025.

Reliability has an impact, but its effect is not as strong as other factors. This is in line with the findings of Chung and Lee (2005), which stress that banks must maintain accuracy and transparency in transactions to build customer trust. Tangibles have the least impact but still hold statistical significance in influencing customer satisfaction. This finding aligns with the research of Nguyen (2014), affirming that physical facilities and tangible factors contribute to customer satisfaction but are not the most critical determinants.

#### V. Conclusion

The analysis of factors influencing customer satisfaction with retail banking service quality at commercial banks in Can Tho City indicates that Technology Quality, Assurance, and Empathy are the three most influential factors in customer satisfaction. Meanwhile, Responsiveness is not statistically significant, and Tangibles and Reliability have an impact on customer satisfaction with retail banking services but are not strong determinants.

Based on these findings, banks should focus on investing in technology, enhancing transaction security, and improving customer service to increase customer satisfaction and loyalty. Additionally, maintaining basic service quality, such as reliability and physical facilities, is also essential to establishing professionalism and customer trust.

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### CÁC NHÂN TỐ ẢNH HƯỞNG ĐẾN SỰ HÀI LÒNG CỦA KHÁCH HÀNG VỀ CHẤT LƯỢNG DỊCH VỤ NGÂN HÀNG BÁN LỂ CỦA CÁC NGÂN HÀNG THƯƠNG MẠI TẠI THÀNH PHỐ CẦN THƠ

#### Hồ Phạm Thanh Lan<sup>†</sup>, Nguyễn Minh Tân<sup>†</sup>

**Tóm tắt:** Nghiên cứu này phân tích các yếu tố ảnh hưởng đến sự hài lòng của khách hàng đối với dịch vụ ngân hàng bán lẻ tại các ngân hàng thương mại trên địa bàn thành phố Cần Thơ. Dữ liệu nghiên cứu dựa trên cuộc khảo sát ý kiến từ 150 khách hàng đang sử dụng dịch vụ ngân hàng bán lẻ tại thành phố Cần Thơ. Phương pháp kiểm định độ tin cậy thang đo bằng hệ số Cronbach's alpha, phân tích nhân tố khám phá và hồi quy tuyến tính bội được sử dụng trong nghiên cứu này. Kết quả cho thấy mô hình có ý nghĩa thống kê cao với R2 = 0,659, chứng tỏ các yếu tố nghiên cứu có tác động đáng kể. Trong đó, chất lượng công nghệ, tính đảm bảo và sự đồng cảm là ba yếu tố ảnh hưởng mạnh nhất, trong khi tính đáp ứng không có ý nghĩa thống kê. Phương tiện hữu hình và sự tin cậy có tác động nhưng ở mức thấp hơn. Trên cơ sở này, ngân hàng cần tập trung vào đầu tư công nghệ, đảm bảo an toàn giao dịch và cải thiện dịch vụ khách hàng để nâng cao sự hài lòng và lòng trung thành của khách hàng.

**Từ khóa:** chất lượng dịch vụ, chất lượng công nghệ, ngân hàng bán lẻ, sự hài lòng, thành phố Cần Thơ.

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