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EFFECT OF SERVICE QUALITY ON CUSTOMER LOYALTY: THE MEDIATION OF CUSTOMER SATISFACTION, AND CORPORATE REPUTATION IN BANKING INDUSTRY

Ho Dinh Phi

Phan Thiet University, Vietnam
Email: dinhphiho@gmail.com

Dien Pham Huong 

Corresponding author: Banking University of Ho Chi Minh City, Vietnam
Email: dienph@hub.edu.vn

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Abstract

This study devotes to investigate the reciprocal relationship between service quality, reputation, satisfaction, and loyalty in the banking sector. Data served the research objectives are collected by a comprehensive survey on 400 customers of the Bank for Investment and Development of Vietnam, Binh Thuan province, Vietnam. The data are then analyzed using the Partial Least Squares-Structural Equation Model (PLS-SEM) approach to examine the above-mentioned complex relationship. The findings confirmed an indirect relationship between service quality and customer loyalty. Particularly, satisfaction, and bank reputation are mediating factors in the relationship between service quality and customer loyalty. Components of service quality include the responsiveness; the tangibles; the assurance; the reliability, and the empathy. The study contributes to enriching the theoretical framework of customer relationship management in the banking sector by its empirical insights. Further studies can invest in other cases of commercial banks in Vietnam, especially in investigating more factors that also play important roles in customer loyalty.

Keywords: Service Quality, Customer Satisfaction, Customer Loyalty, Corporate Reputation, Commercial Banks in Vietnam, Structural Equation Model

1. Introduction

Attracting customers and making them satisfied are a must in any business sector including banking. However, in order to maintain a sustainable market share, it is necessary to have loyal customers. Although an increasing number of studies has been investing in the relationship between satisfaction and service quality, the relationship between service quality, satisfaction, reputation, and loyalty remains little known. This fact leaves a big room for coming studies to

support bankers to tackle the challenges in the context that Vietnam integrates into the global market with aggressive competition in the banking industry.

This research aims at finding out the interrelationship among service quality, customer satisfaction, reputation, and customer loyalty. Particularly, the current study intends to build up a quantitative model for that relationship. To do so, the study employs data collected by a survey on 430 respondents at the Bank for Investment and Development of Vietnam (BIDV), Binh Thuan branch, Vietnam. Bank for investment and development of Vietnam is one of the best retail banks in Vietnam with a large business network expanding across the country and recently they are expanding their business to some other countries including Laos, Cambodia, Myanmar, the Czech Republic, Russia, and Taiwan (BIDV, n.d.). That provides a suitable case for this study as well as to represent the banking sector in Vietnam.

The research expects to enrich the empirical evidence to the related research scheme. The results are expected to shed light on the mediating role of customer satisfaction and corporate reputation in the relationship between customer quality and customer loyalty. The findings will provide useful insights into understanding the customers mind for the banks to improve their level of customer satisfaction, thereby enhancing their business performance. The rest of the paper will be presented as follows. The literature review and research hypotheses are introduced in Section 2. The research model and the methods of data collection and analysis are stated in Section 3. Section 4 presents the research results. Finally, Section 5 concludes the paper.

2. Literature review

2.1. Related theories

In this section, several theories explaining the customer behaviors are introduced. These theories are relevant to this study in clarifying the nature of service quality, satisfaction, reputation, and customer loyalty. They include the theory of service quality (Oliver, 1980), the theory of dissonance (Cardozzo, 1965; Yi, 1990), the theory of corporate reputation (Levitt, 1965; Fombrun, 2000), and the theory of customer loyalty in Sun *et al.* (2013).

When a service does not meet customer expectations, customers will rate the corporate as low quality; and if the corporate's services exceed the customer's expectations, the customer will rate the corporate as high quality (Oliver, 1980).

A person who expects a product of high value and receives a product of low value will perceive difference and experience dissonance (Cardozzo, 1965). That is, unconfirmed expectations create a state of dissonance or psychological discomfort (Yi, 1990). According to this theory, the existence of dissonance creates or relieves pressure, which can be achieved by correcting cognitive disparities. Furthermore, this theory suggests customer satisfaction is the result of assessing the difference between customer expectations and the quality of service received.

Reputation can be defined in terms of a number of attributes that shape buyers' perception of whether the corporation is famous, good or bad, trustworthy, reputable (Levitt, 1965). Corporate reputation is concerned with how people feel about a company based on any information (or misinformation) they have about the corporate's activities, workplace, performance, past performance, and prospects (Fombrun, 2000).

Loyalty is a central concept in customer behavior research (Dimanche and Havitz, 1995). Although customer loyalty has been introduced a long time ago (Sun *et al.* 2013), it remains a controversial and well-known topic among scholars (Kim and Brown, 2012; Weaver and Lawton, 2011) because this concept is considered one of the most important indicators of business success. The definition of customer loyalty is based on two main components, namely, attitudes and behaviors (Hughes, 1991). A loyalty attitude refers to an individual's desire to continue a relationship with a service or product supplier, while loyalty behavior reflects the continued patronage of an individual for a place or product (Morais and Lin, 2010). According to Oliver (1999), customer loyalty is a profound commitment to repurchase or re-patronize a preferred product/service consistently in the future. Loyalty is also considered an important trait for marketers because it is connected to many desires at a lower cost, including retaining existing customers rather than attracting new customers (Loureiro and González, 2008).

2.2. Service quality and customer satisfaction

Oliver (1980) affirmed that if a business fails to serve their customers' needs, they must face the negative judgment from their customers but if their service can meet the customer expectations exceeded, the quality of the service is confirmed by their customers. Service quality is an obligation to verify that the requirements and expectations of the customers are met, and the customers are satisfied. According to Parasuraman *et al.* (1985), customers are the ones who decide whether the service is qualified or not. Those authors introduced five dimensions of service quality including:

- (i) Tangibles refers to facilities such as symbols, features, availability, capaciousness, hygiene, tools, or equipment that are used to deliver the service and the appearance of employees as learned from previous studies for examples Rad *et al.* (2010) and Caruana and Berthon (2002).
- (ii) Reliability indicates the ability to provide dependable and precise services as customers expect such as on time delivery, accurate information, or reliable promises adopted from previous studies such as Crompton and Mackay (1989) and Kondasani and Panda (2015).
- (iii) Responsiveness concerns the willingness of the providers to offer services swiftly to the customers (Calisir *et al.* 2011; Modding, 2016).
- (iv) Assurance refers to the knowledge, consideration, confidence, and ability of the company and their staff to connect with their customers (Kitapci *et al.* 2014).
- (v) Empathy describes the extent in which the service providers can understand and concern their customers' needs and interests (Zarei *et al.* 2015).

SERVQUAL stands for service quality, which is a measurement model that is widely used among the researchers. It provides a comprehensive concept of measuring service quality. A number of studies have employed the concepts of service quality and research models that have been done for various developing countries in previous studies, for example Kondasani and Panda (2015) and Anjalika and Priyanath (2018). Similarly, many studies have been conducted for the banking sector, for instance, the study of banks in Penang, Malaysia applies the SERVQUAL model to measure service quality (Kheng *et al.* 2010). Similar studies have been conducted for other cases in the banking sector, for examples, Anjalika and Priyanath (2018), Aggarwal (2019) and Farzana *et al.* (2022). Based on the above-mentioned background, this study is going to employ the five components of service quality including Tangibles, Reliability, Responsiveness, Assurance, and Empathy to investigate the chosen case study.

According to Oliver (1980), customer satisfaction is the emotional status representing the difference between the feeling before and after using a product or service. Customer satisfaction results from the marketing efforts of a business. It assesses customer attitudes from the purchase of a product or service that relates to after-sales services (Patterson, 2000; Lim and Tang, 2000; Wirtz and Lee, 2003; Jamal and Naser, 2003; Mishra, 2009). Customer satisfaction can be at different levels including either a satisfying feeling or an unpleasant feeling that is created by the gap between what the customers expected and what they really experienced (Brady and Robertson, 2001). It is extremely crucial to have a high level of customer satisfaction for any kind of business as the same as in the banking sector. Therefore, making customers more satisfied is beneficial for the banks. Otherwise, if a bank fails to satisfy their customers, it can harm its profitability (e.g., Hennayake, 2017).

Customer loyalty is the individual attitude of the customers that leads them to buy certain products or services often. The ultimate goal of doing business is to reach out to more customers to make them satisfied and loyal that make them not only buy more but also to recommend it to others (Oliver, 1999). Customer loyalty indicates the tendency in which a customer buys and uses a particular brand's product or service among other alternatives in the market and inclination to repeat that behavior that determines the attachment attitudes or behaviors to a product or service provider (Chaudhuri and Holbrook, 2001). Therefore, there are two dimensions based on them to measure customer loyalty as followed:

- (i) The first approach is to examine loyalty by the repeated purchasing behaviors of the customers, or it can be observed by the frequency that the customers use a product or a service. According to this approach, loyalty is considered as the commitment that a customer will buy or will use a product or service given that the fluctuated market situations affected by different factors lead to changes in behaviors of those customers.
- (ii) The second approach is to measure customer loyalty by interpreting customers' attitudes. Customers' attitude is the intention to consume or to use a product or service (Kabiraj and Shanmugan, 2011). To be more specific, customer loyalty is conveyed by the customers' supportive attitude towards a product or service and their intent to use it over time (Javalgi and Moberg, 1997).

Loyalty of customers brings benefits to the company by reducing costs and enhancing the production - business progress of the business (Rundle-Thiele and Russell-Bennett, 2001). According to Bloemer and Kasper (1995), loyalty is not just about repeating the purchases but it's the achievement of a brand of making customers truly loyal. Donio *et al.* (2006) affirm that customer loyalty can be measured by surveying the following questions: how much the customers like the brand, how much do they feel attached to it, will they recommend it to others, and do they have positive feelings about it? Having loyal customers can help companies to save costs of attracting new customers. Furthermore, loyal customers accept to pay higher price for a product and a loyal customer spreads word-of-mouth effect effectively (Gee *et al.* 2008). Therefore, Walsh *et al.* (2005) point out the importance of taking care of the existing customers even more than acquiring new customers because it's more costly to obtain new customers than to retain existing and loyal customers.

2.3. Relationship between service quality and satisfaction

There is an increasing number of studies paying attention to service quality and customer satisfaction in business. Many of them found a positive relationship between customer satisfaction and service quality (e.g., Budianto, 2019; Jamal and Naser, 2003; Tseng, 2019; Aggarwal, 2019; Zameer *et al.* 2019; Afthanorhan *et al.* 2019). Factors that intervene the relationship between satisfaction and service quality is little known that leaves room for study efforts.

Customer satisfaction has a broader meaning while service quality plays just a partial role in that (Alan *et al.* 2016). Besides there are other factors that contribute to customer satisfaction including service delivery and customer experience. Satisfaction is the post-consumed experience and the comparison of perceived quality with the expected quality, while service quality refers to the overall evaluation of a service delivery system (Anderson *et al.* 1994). The current competitive trend in the banking sector demonstrates that customer satisfaction increases the performance of a bank (Siddiqi, 2010). Therefore, commercial banks need to control the quality of their services on a regular basis to satisfy customers better and to improve customer retention and thereby enhance their loyalty (Khan and Fasih, 2014). To achieve a better level of service quality, bank managers develop services whose service quality is assured to increase customer satisfaction (Ladeira *et al.* 2016). Indeed, many studies found a positive relationship between service quality and satisfaction in the banking industry, for instance Islam *et al.* (2021) and Supriyanto *et al.* (2021). Based on the abovementioned literature review, the following hypotheses in this study are proposed:

H₁: Tangibles factor has a significant and positive impact on customer satisfaction.

H₂: Reliability has a significant and positive impact on customer satisfaction.

H₃: Assurance has a significant and positive impact on customer satisfaction.

H₄: Responsiveness has a significant and positive impact on customer satisfaction.

H₅: Empathy has a significant and positive impact on customer satisfaction.

2.4. Relationship among service quality, reputation, and loyalty

When the service quality of a bank cannot be directly observed, consumers rely on its reputation for their decision - making (Chang and Lee, 2020). Szwajca (2018) found banks with high reputation ratings have poor customer loyalty in the Polish banking context. On the other hand, Ozkan *et al.* (2020) found that corporate reputation increases customer loyalty in the Turkish banking context. The study of the banking sector in Indonesia by Darmawan *et al.* (2017) and Burhanudin (2022) found service quality impacts a bank's reputation and this reputation leads to customer loyalty. The study of the banking sector in Pakistan by Ali *et al.* (2014) indicated bank reputation impacted loyalty. When the bank has a high reputation, customers will probably be committed to that bank (Bartikowski *et al.* 2011). It is because the bank's reputation can prevent negative attitudes and behavior from customers, including in times of crisis and more significant uncertainty (Ruiz *et al.* 2014). Loyalty is considered an important outcome in corporate reputational studies, both in general (Bartikowski *et al.* 2011) and in the banking industry (Ruiz *et al.* 2014). The study on the case of banks in Penang, Malaysia asserted the positive impact of customer satisfaction on customer loyalty (Kheng *et al.* 2010; Anjalika and Priyanath, 2018). Similarly, research on the case of the private banking industry in Bangladesh, Pakistan indicated that service quality impacts satisfaction positively, and thereby affects customer loyalty (Zafar *et al.*, 2012; Hafeez and Muhammad, 2012; Karim, 2019; Supriyanto *et al.* 2021). Based on the above-mentioned literature review, the following hypotheses in this study are proposed:

- H₆: Tangibles positively impact the bank's reputation.*
- H₇: Reliability positively impacts the bank's reputation.*
- H₈: Assurance positively impacts the bank's reputation.*
- H₉: Responsiveness positively impacts the bank's reputation.*
- H₁₀: Empathy impacts positively the bank's reputation.*
- H₁₁: The bank's reputation significantly affects customer loyalty to the bank.*
- H₁₂: Customer satisfaction significantly impacts customer loyalty.*

3. Research model and data collection

The following is the research model proposed in this study to obtain the objectives above-mentioned objectives by testing the hypotheses from 1 to 12 as illustrated in Figure 1.

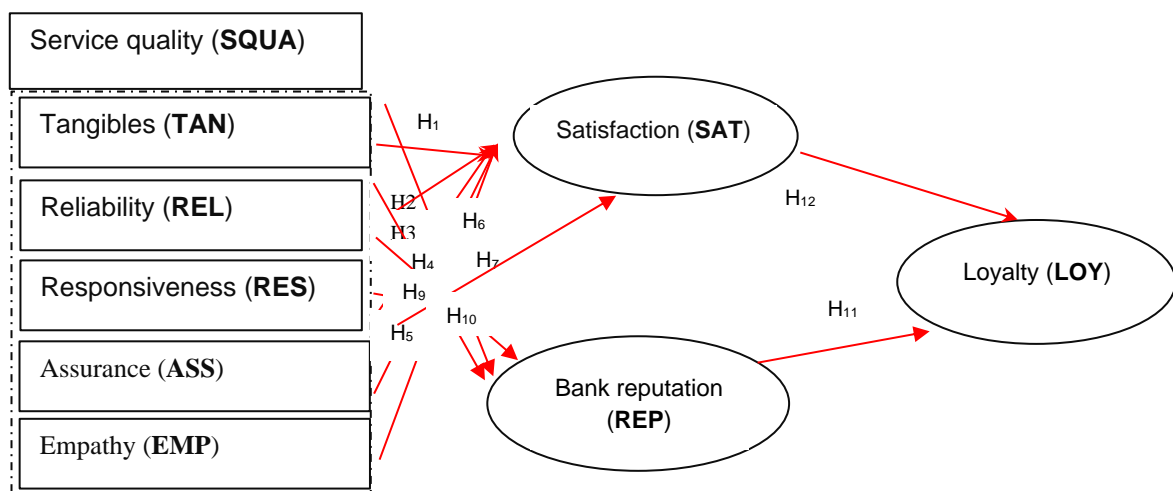


Figure 1. Proposed research model

Theoretical review and empirical research are needed for further research to extend the theory, provide more empirical evidence and policy implications related to service quality, satisfaction, reputation, and customer loyalty. Previous studies highlight insights into the impact of the above relationships and measure relationships using different quantitative models, independent metrics such as exploratory factor analysis or separate regression models, but do not provide an adequate basis for a comprehensive analytical framework on loyalty. Therefore, the aim of this study is to extend the findings from previous studies on the above relationship and integrate analysis of the relationships in the structural equation model. In line with the literature study conducted, the research model was developed to meet the objectives of this study. The model proposed in this study is summarized in Figure 1.

All scales are adjusted from previous studies with some adjustments to suit the research context in Vietnam. Particularly, the scales were adopted from Karim (2019) who conducted a related study on the case of Bangladesh banks. We designed three processes to conduct surveys. First, we surveyed using the expert method to discuss with banking industry experts, including 10 experts with at least five years of experience working at the banking management Department in Phan Thiet City. They then suggested some adjustments to ensure that the questionnaire is relevant to the banking industry in Vietnam. Second, a pilot survey with 20 respondents who are BIDV's customers to check the survey questionnaire was free of errors and the content was appropriate. The survey sample was selected based on the respondents' willingness to participate in the study. Finally, a total of 430 respondents from BIDV is the study sample selected.

A five-point Likert scale was used to measure all items in the survey questionnaire. The scale ranges from 1 meaning "strongly disagree" to 5 meaning "strongly agree". There are 25 items in the questionnaire used to measure customer loyalty. Those scales were adopted from the study done on the banking industry in Bangladesh by Karim (2019). This study contributes to the extent to which new items were added based on the result of focus group discussions (details of the measurement items can be provided upon requests).

The survey was conducted at the Bank for Investment and Development of Vietnam, Binh Thuan branch. All respondents were found to be customers who had transactions with BIDV. At first, the questionnaires were delivered to approximately 430 observations. It took two months to complete this data collection process. The data were after that cleaned to find 400 observations that are valid for the data analysis in the next steps.

This study used the Partial Least Squares-Structural Equation Modeling (PLS-SEM) approach with support from SPSS and AMOS 21.0 to validate the research hypotheses. PLS-SEM is a suitable method for testing a complicated model with many simultaneous identifications of multiple drivers (Anderson and Gerbing, 1988). The processing procedure includes four steps including testing the scale reliability, conducting an exploratory factor analysis as well as a confirmatory factor analysis and finally employing Structural Equation Model to test the research hypotheses (Hair *et al.* 2006; Kline, 2011).

4. Research results

4.1. Sample description

The sample includes 400 observations who are customers of the BIDV, Binh Thuan branch. Based on the data collected from the comprehensive questionnaire, some characteristics of the respondents are summarized in Table 1.

Table 1 shows that among the 400 respondents, the male gender accounts for 54%. The majority of respondents have college degrees (53%). Regarding customer age and occupation, the age mainly is 31-45 years (45%). The occupation is mainly agency staff (40%). Regarding customer income, the income of the respondents is mainly from 10-20 million VND/Month (35%).

Table 1. Descriptive statistics

GENDER	Freq.	Percent	Cum.
Female	183	45.75	45.75
Male	217	54.25	100.00
AGE	Freq.	Percent	Cum.
<=30	71	17.75	17.75
31-45	180	45.00	62.75
46-55	89	22.25	85.00
>55	60	15.00	100.00
CAREER	Freq.	Percent	Cum.
Agency staff	159	39.75	39.75
Managers	128	32.00	71.75
Workers	69	17.25	89.00
Students	44	11.00	100.00
QUALIF	Freq.	Percent	Cum.
High school	51	12.75	12.75
University and Postgraduate	137	34.25	47.00
College	212	53.00	100.00
INCOME	Freq.	Percent	Cum.
<10 million VND	43	10.75	10.75
10-20 million VND	140	35.00	45.75
21-30 million VND	112	28.00	73.75
>30 million VND	105	26.25	100.00

Source: Authors' calculations

4.2. Reliability analysis

The scale reliability tests show that among the initiated 35 observed variables were used to measure research concepts. Some items including TAN5, RES5, ASS5 must be eliminated due to low item-total correlation (smaller than 0.3). There are 32 variables that satisfy the conditions in the reliability analysis with the Cronbach Alpha coefficients larger than 0.6 and the variable-total correlation is larger than 0.3 (Nunnally and Burnstein, 1994).

Table 2. Cronbach Alpha coefficients

No.	Scales	Disqualified variables	Alpha coefficient	Results
1	TAN	TAN5	0.799	Satisfied
2	REL	None	0.867	Well-satisfied
3	RES	RES5	0.843	Well-satisfied
4	ASS	ASS5	0.830	Well-satisfied
5	EMP	None	0.842	Well-satisfied
6	SAT	None	0.852	Well-satisfied
7	REP	None	0.839	Well-satisfied
8	LOY	None	0.856	Well-satisfied

Source: Authors' calculations

4.3. Exploratory factor analysis

Results described in Table 3 demonstrated that all variables meet requirements for validity. Particularly, measuring items of service quality are extracted to five factors corresponding to measured variables of five concepts. The cumulative variance is 65.430% at an Eigenvalue of 1.763. The measuring items of customer satisfaction form 3 factors with the variance of 77.145% at an Eigenvalue of 2.314. The measuring items of the reputation are extracted into 3 factors with the variance of 75.665% at an Eigenvalue of 2.270. The measuring items of loyalty are extracted into 4 factors with an average variance extracted of 69.961% at an Eigenvalue of 2.798. The results of Exploratory Factor Analysis results below were created by using the promax rotation method.

Table 3. Results of exploratory factor analysis

Component	1	2	3	4	5	6	7	8
REL5	0.835							
REL3	0.830							
REL2	0.815							
REL1	0.798							
REL4	0.758							
EMP4		0.803						
EMP3		0.792						
EMP5		0.790						
EMP2		0.785						
EMP1		0.734						
RES3			0.857					
RES4			0.831					
RES2			0.800					
RES1			0.780					
ASS3				0.824				
ASS4				0.822				
ASS2				0.810				
ASS1				0.774				
TAN4					0.816			
TAN2					0.798			
TAN3					0.781			
TAN1					0.744			
SAT2						0.901		
SAT1						0.870		
SAT3						0.864		
REP3							0.883	
REP1							0.879	
REP2							0.846	
LOY3								0.868
LOY4								0.837
LOY2								0.836
LOY1								0.803
Kaiser-Meyer-Olkin Measure					0.848	0.722	0.721	0.814
Bartlett test (sig.)					0.000	0.000	0.000	0.000
Eigenvalues					1.763	2.314	2.270	2.798
% of Variance					65.430	77.145	75.665	69.961

Note: According to Hair *et al.* (2006), $0.5 < KMO < 1$; Bartlett has the level < 0.05 ; Factor loading > 0.3 , % of variance $> 50\%$ and Eigenvalue > 1 .

Source: Authors' calculations

4.4. Confirmatory factor analysis

Figure 2 presents the results of Confirmatory Factor Analysis (CFA). Basically, the results confirm the research hypotheses on the formation of the factors in the research model. The measurement model that is consistent with the actual data must be consistent with five measures: (i) Cmin/df; (ii) TLI, (iii) CFI, (iv) NFI; and (v) RMSEA (Gefen *et al.* 2011).

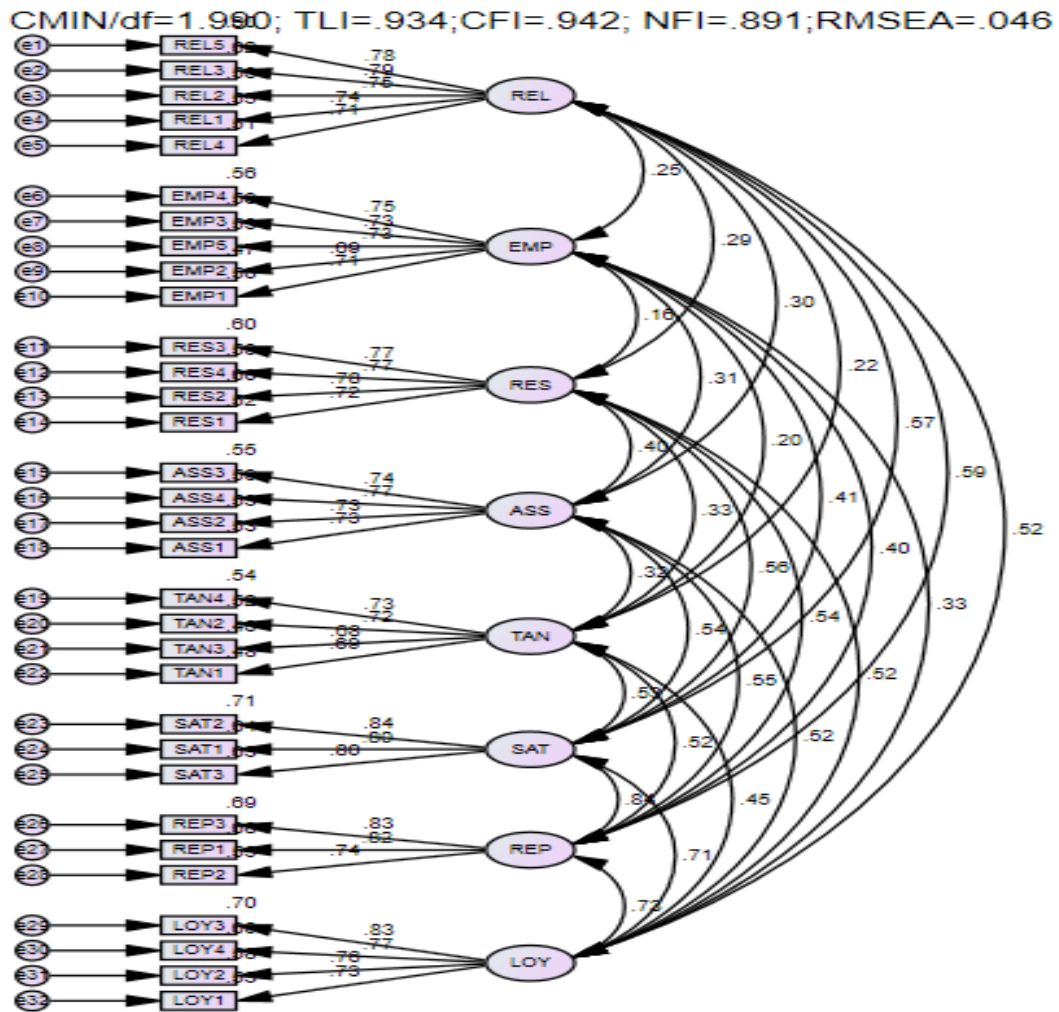


Figure 2. Confirmatory factor analysis results
Source: Authors' calculations

Table 4 shows that the measurement model is in line with the actual data.

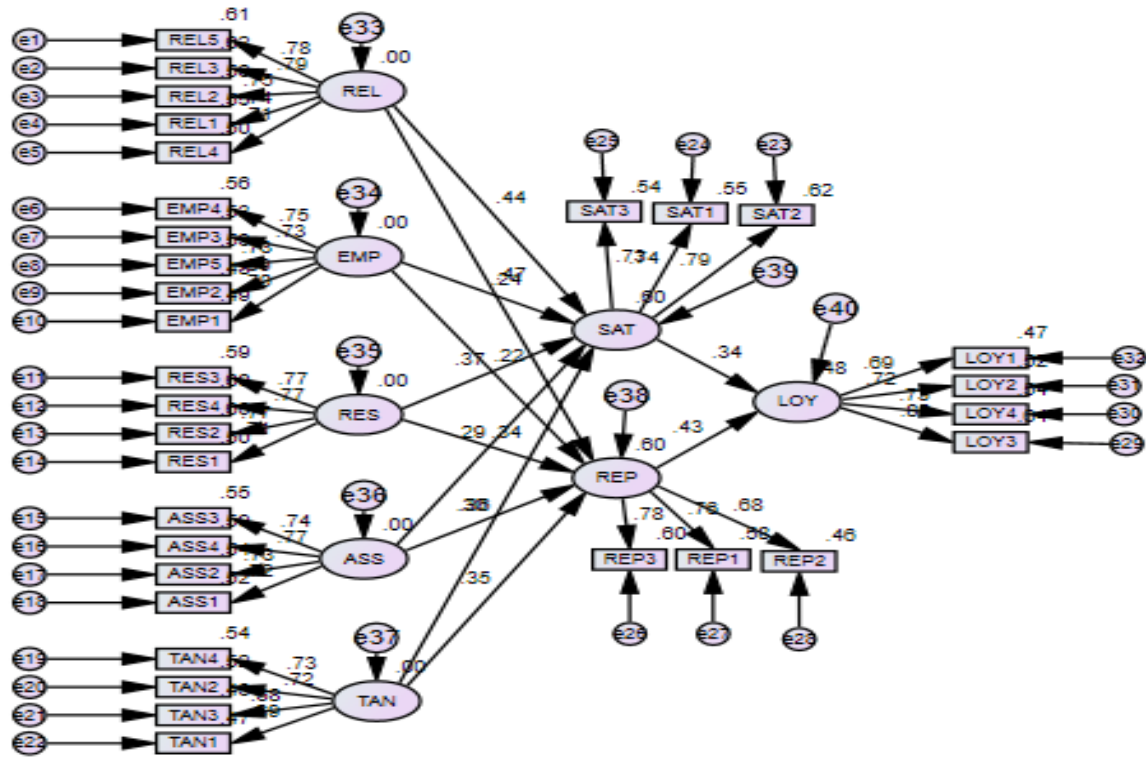
Table 4. The fit indices of the CFA

No.	Measure	Standard value	Model value	Result
1	Chi-squared adjusted for degrees of freedom (Cmin/df)	TLI, the closer it is to 1, the more appropriate; TLI > 0.90 Consistent; TLI ≥ 0.95 is in good agreement (Bentler and Bonett, 1980; Bagozii and Jy, 1988).	1.990	Good
2	Tucker-Lewis Index	The closer the TLI is to 1, the more appropriate; TLI > 0.90 Consistent; TLI ≥ 0.95 in good agreement (Hu and Bentler, 1998).	0.934	Good
3	Comparative Fit Index	CFI > 0.90; 0 < CFI < 1, The closer to 1, the more suitable (Hu and Bentler, 1998).	0.942	Good
4	Normal Fit Index	NFI, the closer to 1, the more suitable; NFI close to 0.90, accepted; NFI > 0.95 Good fit (Chin and Todd, 1995; Hu and Bentler, 1998).	0.891	Accept
5	Root Mean Square Error Approximation	RMSEA < 0.05, the model fits well; RMSEA < 0.08, accepted; The smaller the better (Browne and Cudeck, 1993).	0.046	Good

Source: Authors' calculations

4.5. Structural equation analysis

Results of Figure 3 show that the model has Cmin/df = 2.512; TLI = 0.900; CFI = 0.909; NFI = 0.858; and RMSEA = 0.057. This proves that the integrated model is in line with the actual data.



CMIN/df=2.512; TLI=.900;CFI=.909; NFI=.858;RMSEA=.057

Figure 3. Results of the structural equation modeling

Source: Authors' calculations

In Table 5, all hypotheses are accepted with 95% confidence level or higher (P_value ≤ 0.05).

Table 5. Hypothesis test result

Hypothesis	Impact		Estimate	S.E.	C.R.	P	Results
H2	SAT	<--- REL	0.394	0.043	9.158	***	Accepted
H5	SAT	<--- EMP	0.233	0.044	5.286	***	Accepted
H3	SAT	<--- RES	0.388	0.049	7.870	***	Accepted
H4	SAT	<--- ASS	0.295	0.048	6.208	***	Accepted
H1	SAT	<--- TAN	0.378	0.051	7.418	***	Accepted
H7	REP	<--- REL	0.415	0.043	9.654	***	Accepted
H10	REP	<--- EMP	0.207	0.043	4.821	***	Accepted
H8	REP	<--- RES	0.340	0.047	7.166	***	Accepted
H9	REP	<--- ASS	0.302	0.047	6.445	***	Accepted
H6	REP	<--- TAN	0.358	0.050	7.215	***	Accepted
H12	LOY	<--- SAT	0.343	0.066	5.167	***	Accepted
H11	LOY	<--- REP	0.442	0.070	6.291	***	Accepted

Note: *** (Sig. = 0.000).

Source: Authors' calculations

In Table 6, factors affecting “Customer satisfaction” are in order of influence: REL, RES, TAN, ASS, and EMP. Factors affecting “Reputation” are in order of influence: REL, TAN, RES, ASS, and EMP. Factors affecting “Loyalty” in the order of influence: SAT, and REP.

Table 6. Impacts of the factors

Impacts on SAT			Estimate	%	Position
SAT = f(TAN, REL, ASS, RES, EMP)					
SAT	<---	REL	0.394	23.3	1
SAT	<---	EMP	0.233	13.8	5
SAT	<---	RES	0.388	23.0	2
SAT	<---	ASS	0.295	17.5	4
SAT	<---	TAN	0.378	22.4	3
Total			1.688	100	
Impacts on REP					
REP = f(TAN, REL, ASS, RES, EMP)					
REP	<---	REL	0.415	25.6	1
REP	<---	EMP	0.207	12.8	5
REP	<---	RES	0.340	21.0	3
REP	<---	ASS	0.302	18.6	4
REP	<---	TAN	0.358	22.1	2
Total			1.622	100	
Impacts on LOY					
LOY = f(SAT, REP)					
LOY	<---	SAT	0.343	44	2
LOY	<---	REP	0.442	56	1
Total			0.785	100	

Source: Authors' calculations

5. Discussion

According to the abovementioned empirical results, some important insights can be concluded. First, the results confirmed the appropriate scales used to measure various factors of customer satisfaction with the bank's service quality including the reliability of the bank and its services, the ability to respond to customers' demands, the tangible assets to serve customers, the assurance of providing services and finally the empathy that bank's employees showing to their customers. The results are aligned with previous studies in the banking industry in other countries that were found by previous studies, for example, with the results from the study done in Bangladesh by Karim (2019). Second, the novel of this study added new items to the measurement of the factors including the professional manner of the staff, the convenience and completeness of the services, the agility of serving customers and responding to the customers' complaints, the security of customers' data, and the promptness of serving customers' urgent events via phone. Those items particularly fit in the situation of the banking sector in Vietnam.

Furthermore, the results shed light on the positive impact of the abovementioned factors on the bank's reputation. As a result, together with enhancing customer satisfaction, the bank can improve their reputation by boosting the factors such as their tangible assets, reliability, responsiveness, assurance, and empathy that they offer to their customers. Additionally, the study affirms that customer satisfaction positively affects customer loyalty. That finding agrees with the findings about the banking industry in Sri Lanka of Anjalika and Priyanath (2018). Thus, in order to maintain customer loyalty, banks must improve customer satisfaction. Lately, the result asserts that reputation is positively correlated with customer loyalty. This result approves the finding of a previous study on banks in Turkey of Ozkan *et al.* (2020). That finding suggests that bankers should take reputation into account to improve customer loyalty because it can be approved in the results that reputation plays a crucial role in the customers' retention.

6. Conclusion

The current study obtains its target on extending the theoretical framework of the related research area to strengthen the methodology in the field. It also provides important empirical evidence of the relationship among service quality, satisfaction, reputation, and their impact on customer loyalty, illustrated by the case of the BIDV in Vietnam, one of the biggest banks in Vietnam. The findings of this study therefore can be considered by other commercial banks in Vietnam and other similar countries. It highlights a strong mediating role of satisfaction and reputation in the interrelation between service quality and customer loyalty. Hence, this study provides some insights into the current research about the relationship between service quality and loyalty in the banking sector.

Beside its above crucial contributions, there are still some limitations in this study that leaves room for future studies. This study has its limit to the case study of the Bank for Investment and Development of Vietnam. Furthermore, the sample is limited to one branch of the bank. Further studies can extend the sample size or invest in a pooled sample including customers from different banks to empower the study findings. Finally, the target of the current research is the relationship between service quality, satisfaction, reputation, and loyalty; whereas there might be more factors that also have impacts on customer loyalty which were not included in the research model. Further studies can invest in extending the research model to increase its explanation power to bring more insights into practices in the banking business sector, not only in Vietnam but also in other countries alike.

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