

Researching Factors Affecting The Loyalty Of Individual Customers To Capital Mobilization Activities At Bank For Agriculture And Rural Development In Vung Tau

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ABSTRACT:

Capital plays a decisive role in the growth and development of each country's economy. For the cause of industrialization and modernization in Vietnam today, which is an even more essential requirement. In order to meet the capital demand for the economy, Vietnam needs appropriate policies and measures to mobilize idle money among the people. The capital provided for businesses is mostly from banks and credit institutions. In particular, the bank plays a major role. Therefore, the bank's role in mobilizing capital for the economy is extremely important. Recognizing the important meaning of capital mobilization activities, the author chose to study: "Factors affecting capital mobilization activities of individual customers at Vietnam Bank for Agriculture and Rural Development - Vung Tau Branch". The research methods used are mainly qualitative and quantitative methods. In particular, qualitative research methods are conducted by theoretical research and in-depth interviews with experts at the bank, the board of directors, the managers and long-term employees. Theory of service quality scale forming draft scale with 22 observed variables belonging to 5 factors which are independent variables (including: reliability, responsiveness, Empathy, Assurance and tangibles) and 1 element is the dependent variable (Loyalty). Using in-depth interview method, the author adjusted the draft scale into a preliminary scale with 24 observed variables belonging to 5 initial factors. Quantitative (preliminary) methodology is used on the preliminary scale (through a 115 observations) to verify and adjust the scale. Next, quantitative (formal) research is used on a formal scale with a large sample size (425 observations) to test the model and research hypotheses. The results of the study showed that the responsiveness factor has a positive impact on the loyalty of individual customers with a factor of 0.127, followed by the assurance factor with the coefficient of 0.310. Tangibles means with a coefficient of 0.143, finally a level of empathy with the factor 0.121. Reliability factor has a coefficient of 0.270. Based on this result, the author gives some governance implications for bank managers, suggesting some implications for the Bank for Agriculture and Rural Development and local authorities. Finally, because of some objective factors that the study has limitations, it is also the reason why the author presents research directions for similar topics in the future.

Keywords:

Research, banking, capital, capital mobilization, influence, individual customers.

Article Received: 10 August 2020, revised: 25 October 2020, Accepted: 18 November 2020

1. INTRODUCTION

For Vietnamese commercial banks, including the Bank for Agriculture and Rural Development (Agribank), due to the complicated business environment in recent years, the potential risks in business are not only high. in the list of output products but also in the input products is HDV. The complex risk nature also makes it difficult for commercial banks to both raise HDV costs and increase the cost of HDV, which is quite high compared to most commercial banks in the region, making urgent requirements now and in the future. besides seeking measures to expand HDV activities, it is necessary to gradually improve the efficiency of

capital mobilization, thereby helping to improve the business performance of commercial banks. In fact, over time, HDV activities of Agribank basically met the business requirements in each period, and at the same time, served quite well the development strategy of Agribank in the medium and long term. In addition to the achieved results, Agribank's HDV raises a series of issues that need further study and settlement, such as the sustainability of HDV activities, the legitimacy of HDV activities or risk control in operations. this cave. Implementing the policy of pushing back the black credit of the Government, Agribank has implemented a consumer credit program, so far the program loan revenue has reached over VND 7400 billion with

193,000 households and individuals supplemented with recovery capital. legal and urgent needs, improving the lives of people in rural areas ... Thereby, in order to increase the access to bank capital of individuals and families as well as payment services. smartly and modernly in agriculture and rural areas, promoting the development of non-cash payment, contributing to repelling black credit. From the awareness of the importance of capital as well as the difficulties that Agribank is facing in HDV work, plus long-term experience in local banking industry, the author decided to conduct research " factors affecting capital mobilization activities of individual customers at the Bank for Agriculture and Rural Development of Vietnam - Vung Tau Branch ”.

2. THEORETICAL BASIS AND RESEARCH MODEL

2.1. Concept of capital mobilization

The capital of banks is formed through different sources. To start the operation of a bank, the bank owner must have a certain amount of capital, called the initial capital. During its operation, banks increased their capital through HDV activities such as deposit, borrowing and other operations. Deposits are monetary values mobilized by banks. from economic organizations and individuals in society through the process of performing credit, payment and other business operations. The mobilized capital accounts for the largest proportion in the total capital of commercial banks, it plays a very important role in all business activities of the bank. The nature of mobilized capital is assets of different owners, banks only have the right to use without ownership rights and are responsible for repaying both principal and interest on due date (if they are deposits). term deposit) or when the customer needs to withdraw capital (if it is demand deposits). Deposit capital plays an important role in the bank's business activities. Activities used for tour guides include: Receiving deposits (demand deposits, term deposits, savings deposits); Issuance of debt instruments (bills, bonds); and borrowed capital. In addition, the bank's capital is formed through entrustment, agency for domestic and foreign organizations or providing payment facilities such as automatic teller cards from ATMs (Automated). Teller Machine).

2.2. Service

According to the 2013 Law on Prices: Services are intangible goods, production and consumption processes are not separated, including types of services in the Vietnamese product system in accordance with the law. Service concept: "Services are human labor crystallized in the value of the results or in the value of intangible and incomprehensible products". When compared with the interpretation of the Encyclopedia, this explanation clarifies the content of the service - Services are the crystallization of human labor in intangible products.

2.3. Customer satisfaction

There are many different definitions of SHL as well as there is a lot of debate about this definition. Many researchers believe that SHL is the difference between customer expectations and perceived reality. According to Fornell (1995), "Satisfaction or frustration after consumption, is defined as the response of customers to judging by perceiving the difference between pre-consumption expectations and real perceptions. about the product after consuming it ". According to Zeithaml and Bitner (2000), "Customer satisfaction is the customer's evaluation of a product or service that meets their needs and expectations". Kotler (2000), defines "Satisfaction as a feeling of satisfaction or frustration of a person by the result of comparing the actual received product (or result) in the relationship.

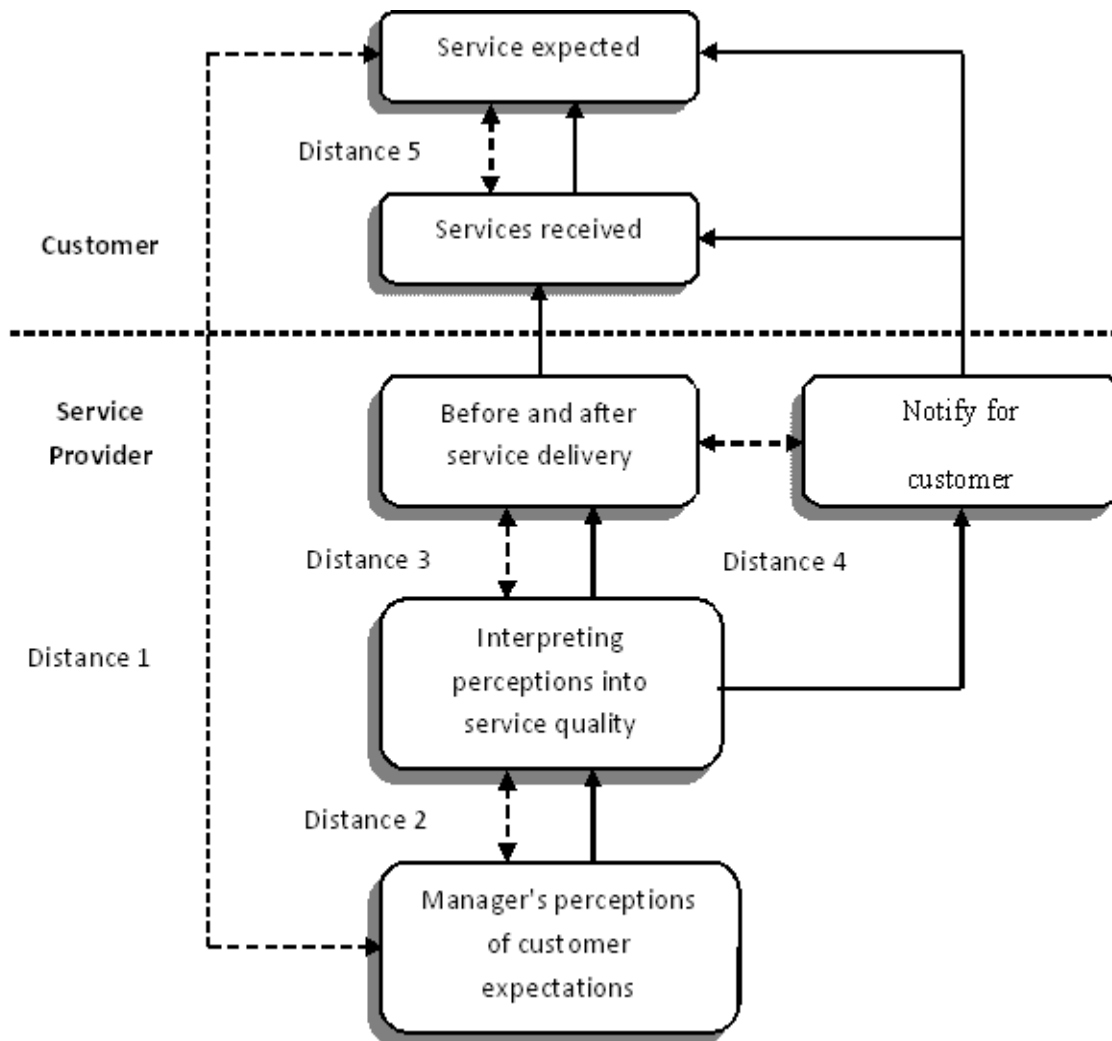
2.4. The relationship between service quality, customer satisfaction and loyalty

LOYALTY is defined as a deep commitment to purchase an organization's products and services (Oliver, 1993), a customer commitment to purchase a favorite product or service (Chaudhuri, 1999), Priority will be given to buying products of a brand in the future (Yoo et al., 2000). Siddiqi (2011) describes that all attributes of SERVICE QUALITY positively affect customer SHL and customer SHL positively influence customer loyalty in NH models. Moreover, Daniel O. Auka (2012) also stated that SERVICE QUALITY will lead to higher customer SHL and increase LOYALTY. Researchers have established a positive perception that "Service quality is the premise for loyal customers". Cronin et al. (2000) found that good customer service leads to retention of existing customers and attract new ones, reduces costs, enhances the image of a company, actively spreads word of mouth to introduce and finalize. The same is to improve profits. Jones and Farquhar (2003) show that QoS affects the customer's subsequent behavior, intentions and interests. Empirical studies show that satisfied customers tend to be more loyal than those who are less satisfied and therefore important to corporate profits (Reichheld and Sasser, 1990) and vice versa. Several other studies have actually found SHL to be a leading factor in determining LOYALTY (He and Song, 2009; Mensah, 2010). According to Kim & Niehm (2003), customer loyalty is not only considered as an invaluable asset to a business's operations but also directs its business towards sustainable development and profitability. In addition, Anderson & Mittal (2000) also found that in the efforts to establish and maintain LOYALTY of customers, satisfaction is evaluated as an important concept in previous marketing and business theories. here. According to Parasuraman et al. (1988), customer perception of website quality is their assessment of the superiority of the service delivery process; meanwhile, SHL is an assessment indicator related to a specific transaction. Lam & Burton (2006) also demonstrate that

SHL is the leading decisive factor in creating LOYALTY of customers.

2.5. Servqual service quality model

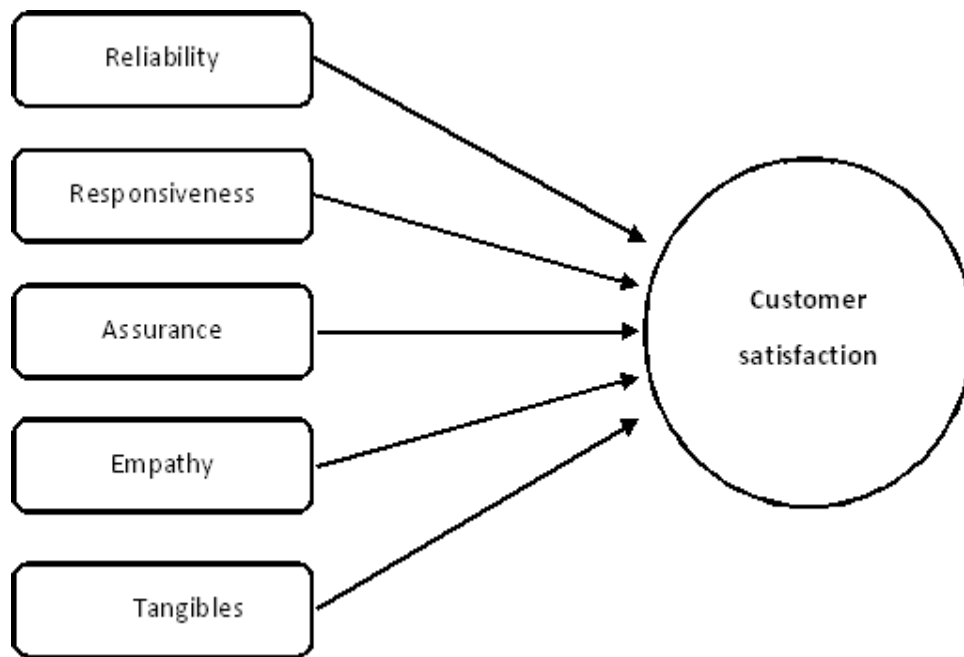
The SERVICE QUALITY Servqual model developed by Parasuraman et al. (1985) provides a model of five quality distances.



Source: Parasuraman et al (1985)
 Figure 2. 1: Gap model of Servqual service quality

The fifth gap appears due to the difference between the expected service and the actual service received. SERVICE QUALITY depends on this fifth gap. Once customers realize that there is no difference between the quality they expect and the quality they feel when consuming a service, SERVICE QUALITY is considered perfect. Parasuraman et al. (1985) suggested that QoS is a function of the fifth distance. This fifth gap depends on the previous distances, ie, the 1st, 2nd, 3rd and 4th spaces. Therefore, to shorten the fifth gap, or to increase the quality of service, administrators must try

to force shortens these distances. The ten-component model of the QoS mentioned above has the advantage of covering almost every aspect of a service. However, this model has the disadvantage of being complicated in measurement. Moreover, this model is theoretical, it is possible that many components of this model will not reach discriminatory value. Therefore, Parasuraman et al. (1988) have repeatedly tested this model and came to the conclusion that QoS consists of five basic components with 22 component variables.



Source: Parasuraman et al (1988)

Figure 2. 2: Component model of Servqual (service quality)

The five-component SERVICE QUALITY model and the Servqual scale completely cover all the issues that characterize the quality of a service. However, each service industry has its own unique characteristics. Many researchers have also tested this model in many service sectors as well as in different markets; Testing results show that service quality is not consistent with each other in each service and each different industry. Therefore, at each research, in different research markets, the authors need to study more specific characteristics of each service combined with the Servqual scale, so the new current research model full and highly practical.

2.7. Assess the reliability of the scale

Using Cronbach's Alpha reliability coefficient to test the reliability of the scale, how closely the relationship between variables in a concept. The Cronbach's Alpha reliability coefficient is from 0 to 1 (the bigger the better). According to Nunnally and Burnstein (1994), a scale to ensure reliability must ensure: (1) Cronbach's Alpha coefficient is conceptually greater than 0.6 (> 0.6) and (2) the correlation coefficient is large. more than 0.3 (> 0.3). A scale with a value of 0.6 to 0.7 is acceptable. A scale of 0.7 to 0.8 is considered good. The scale, which ranges from 0.8 to 0.95, is considered very good. But too high a value of Cronbach's Alpha is not good, if this value is greater than 0.95 then the scale is likely to have high overlap, meaning that the respondents may misunderstand questions or The question is too similar.

2.8. Explore Factor Analysis (EFA)

The exploratory factor analysis is the method used to analyze the correlation between a large number of variables, to explain the initial k variables in the limit of

fewer variables. This involves seeking to condense the information of the initial variable k into a potential set of variables (or factors), the number of factors m must be smaller than the number of variables k ($m < k$) while keeping again maximizes the information from the initial variable k . Exploratory Factor Analysis (EFA) helps to re-evaluate the value of the scale, using the EFA discovery factor analysis method to shorten a set of variables with many measurement variables into a set of cores. Elements are more meaningful and easier to manage.

Statistical parameters used in the EFA discovery factor analysis include:

The Kaiser-Meyer-Olkin (KMO) coefficient was used to consider the suitability of factor analysis. A KMO coefficient value of 0.5 to 1 ($0.5 \leq KMO \leq 1$) is sufficient to conclude that factor analysis is appropriate (Hair et al., 2006), if this value is small. more than 0.5, the data is not suitable for factor analysis. Bartlett's statistical value is used to consider the hypothesis that there are no correlations in the population. Sig value. of tests less than 0.5 (≤ 0.5) are considered appropriate (Hair et al., 2006). The total variance extracted indicates the percentage of variance explained by each factor. That is, if the variation is 100%, this value indicates how much the factor analysis is condensed and how much% is lost. The value of extracted variance must be greater than 50% ($\geq 50\%$) for the new model to be considered suitable. The Eigenvalue represents the variability explained by each factor, factors with values greater than 1 (> 1) will be retained for analysis. The factor matrix contains factor load factors of all variables for extracted factors. Factor load factors are the single correlation coefficients between variables and factors.

Factor load factors with values from -1 to 1, but analytical values which must reach between -1 and -0.5 or 0.5 to 1 are considered satisfactory.

2.9. Regression analysis

Testing the model's suitability by correlation coefficient analysis and linear regression. Linear regression analysis is used to test the linear correlation between variables in the model, between independent variables, between dependent variables and independent variables. perform through the following steps.

Step 1: Check the correlation between independent variables and with dependent variables through the correlation coefficient matrix.

Accordingly, the conditions for regression analysis are independent variables and correlation with dependent variables. However, according to Hoang Trong and Chu Nguyen Mong Ngoc (2008), when the correlation coefficient is <0.85 , it is possible to ensure the value of discrimination between variables. That is, if the correlation coefficient is ≥ 0.85 then the role of independent variables needs to be considered, since multicollinearity can occur (one independent variable can be explained by another).

Step 2: Testing multiple regression models and regression hypotheses:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \dots + \beta_kX_k + \epsilon_i$$

The multiple regression model applied to the study of factors affecting HDV activities of Science and Technology at Agribank CNVT is as follows:

$$\text{LOYALTY} = \beta_0 + \beta_1*\text{REL} + \beta_2*\text{ASS} + \beta_3*\text{RES} + \beta_4*\text{EMPATHY} + \beta_5*\text{TANG} + \epsilon_i$$

This is done through the procedure:

- Select variables to be included in the regression model (the author uses the Enter - SPSS method to handle all input variables at once).

- Assess the model's suitability with the determination coefficient R^2 (R-square). However, R^2 increases as the model has more independent variables, although not the more independent variables the model has, the better it is for the data set. Therefore, Adjusted R-square (R^2) is used instead of R^2 to evaluate the suitability of the multiple regression model, because adjusted R^2 does not depend on the number of variables added to the model.

- Test the suitability of the model to select the optimal model by using ANOVA variance analysis method to test:

Hypothesis H_0 : There is no linear relationship between the dependent variable and the set of independent variables $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$.

Hypothesis H_1 : There is a linear relationship between dependent variables and independent variables $\beta_k \neq 0$

If the F statistic has a very small Sig (<0.05), then the hypothesis H_0 is rejected, then we conclude that the set of independent variables in the model can explain the

variability of the variable. Depends on the model is built in accordance with the data set, so it can be used.

Step 3: Check the violation of regression assumptions

The regression model is considered suitable for the overall study when not violating assumptions. Therefore, after developing the regression equation, it is necessary to check the following necessary hypothetical violations:

- There is a linear relationship between independent variables and dependent variables: The tool to check the linear relationship assumption is a standardized scatter dispersion graph (Scatter) showing the correlation between the standardized residual value (Standardized Residual) and standardized predicted value (Standardized Predicted Value).

- The remainder of the dependent variable has a normal distribution: Use the Histogram frequency graph, or P-P plot frequency graph.

- Variance of constant error: Use the scatter plot of residuals and the predicted value or the Spearman's rho test. The tool used to check the assumption that there is no correlation between the residuals is the Durbin - Watson statistical quantity or the standardized Scatter dispersion graph (Scatter).

- There is no correlation between the independent variables (no multicollinearity phenomenon): Use the acceptability of the variable (Tolerance) or the magnification coefficient VIF (Variance Inflation Factor). According to Hoang Trong and Chu Nguyen Mong Ngoc (2008), the general rule is that $VIF > 10$ is a multicollinearity sign; meanwhile, according to Nguyen Dinh Tho (2011), when $VIF > 2$ it is necessary to be careful of the phenomenon of multi-collinearity.

Step 4: Verify the average

Test the difference in factors affecting LOYALTY of S&T by analyzing variance ANOVA (Analysis of Variance) according to demographic variables, including gender, age and income.

Use the Independent - Sample t-Test for demographic variables with two subgroups or ANOVA variance analysis for demographic variables with three or more subgroups.

2.10. Related studies

2.10.1. Research in Vietnam

Research by Nguyen Huu Manh Cuong (2015), "Analysis of the situation of business loans at Joint Stock Commercial Bank for Foreign Trade of Vietnam, Dak Lak branch", with the specific goal of researching and finding a basis for formulating and proposing solutions to develop business loans and control risks at Joint Stock Commercial Bank for Foreign Trade of Vietnam, Dak Lak branch. By qualitative methods, the study has completed the following contents:

Vietnam Joint Stock Commercial Bank for Industry and Trade, Nam Thua Thien Hue branch is one of the most prestigious banks in the area, HDV performance in recent years has contributed significantly to the business

activities of the Branch. However, there are still some unbalanced aspects between local currency and foreign currency, short-term and medium-term, affecting the business activities of the Branch.

Based on the theory of capital of commercial banks, the main forms of HDV of commercial banks, author Trinh Thi Thanh Ngoc (2016) has implemented a qualitative topic - "Effect of short-term capital mobilization at Joint Stock Commercial Bank for Industry and Trade Vietnam - South Thua Thien Hue Branch ". The thesis has generalized the actual situation of HDV of the Branch, concurrently presented relatively carefully about the achievements and limitations as well as pointed out the causes, proposed solutions and recommendations for banks to improve HDV efficiency. Short term in the present and next time.

The author Le Hoang Son (2019) with the topic "Completing individual lending business activities at the Bank for Agriculture and Rural Development of Vietnam - Branch of Kon Ray District Kon Tum", studied the basis In discussing the lending activities of business individuals, the author went into an analysis of the current situation of individual lending business activities at Agribank - Kon Ray District Branch, Kon Tum. The author also conducted surveys, interviews, actual surveys of bank staff as well as individual business customers who borrowed money at Agribank - Kon Ray District Branch, Kon Tum to evaluate lending activities for individual business customers. . From analyzing the situation, it shows that for lending to individual customers doing business at Agribank - Kon Ray district branch, Kon Tum has some marketing issues; QoS and human resources; diversified loan product packages; improvement in the process, procedures for borrowing loans, interest rates ... based on that, the author has made a number of recommendations to overcome the above-mentioned shortcomings, in order to further improve the lending activities to individual business customers. at Agribank-Kon Ray District Branch, Kon Tum. The solutions are focused on the study of the needs of individual business borrowers to offer flexible, appropriate products and interest rates, improve marketing activities to promote products, improve quality. human resources ... The author's solutions come close to the real situation and have high applicability.

Author Nguyen Thi Hai Anh (2017) with the study "Customer satisfaction and loyalty to banking services in Hau Giang province" has tested the factors of QoS affecting SHL and LOYALTY. In particular, this study also tested a number of impacts regulating customer satisfaction - loyalty relationship for banking services in Hau Giang. The results show that empathy, price are the factors that strongly influence customers' SHL, there is a positive link between SHL and LOYALTY and a negative link between SHL and complaints.

Bui Vinh Thanh and Tran Huu Ai (2019) with the study "Factors affecting loyalty for the bank brand of individual customers' savings deposit" have determined the level of influence of these factors. : Overall QoS, brand reputation, social responsibility, to customer satisfaction, in which overall QoS factor has the strongest impact on SHL, SHL factors have strong and positive influence on brand LOYALTY without the impact of the moderator variable. The two variables regulate conversion costs and commitments from a relationship that have a positive impact on the transition from SHL to brand LOYALTY, including behavioral LOYALTY and LOYALTY attitudes.

The author Do Quang Thang (2018) conducted a study "Assessing customer satisfaction on the quality of retail banking services at Vietnam Joint Stock Commercial Bank for Investment and Development of Vietnam in Vung Tau" to assess SHL of customers about retail banking services. By qualitative and quantitative research, the sample size is 152 customers using the products of BIDV, Vung Tau branch. The research results obtained are as follows:

(1) Identify 5 factors affecting customers' satisfaction at BIDV, Vung Tau branch: (1) Reliability, (2) Satisfaction, (3) Guarantee, (4) Sympathy, (5) The tangibility and the dependent variable are the customer's SHL.

(2) Results of analysis using a linear structure model: Sympathy is the strongest impact factor (standardized regression weight is 0.369); The second is guarantee (standardized regression weight is 0.238); The third is reliability (normalized regression weight is 0.238); The fourth is tangible (standardized regression weight is 0.219); The fifth is response (standardized regression weight is 0.219). Thus, the hypotheses H1, H2, H3, H4, and H5 are accepted at the 5% significance level.

From the results of the research, the thesis has given some administrative implications to improve customer satisfaction of retail banking service through 5 factors mentioned above. In addition, the author has also introduced some limitations of the topic and proposed further research directions in the future.

2.10.2. International studies

Author Avkiran (2014), with the subject "Developing an instrument to measure customer service quality in branch banking", used the SERVICE QUALITY Bankserv measurement model and initially developed it into 6 components with 27 observed variables on the basis of the Servqual model. to measure MSW in Australia. The study results showed that 4 factors affecting the quality of retail banking services are: Service personnel, information, credit, access to cash withdrawal services, but not yet clearly showing the importance of each factor. . In addition, the research results show that the measurement model of Banks service quality has not been studied on the basis of

customer segmentation according to customer needs, combined with economic and social factors.

Aldlaigan and Buttle (2015), with the theme "SYSTRA-SQ: A new measure of bank service quality" based on the Nordic model of Gronroos (1984), used and developed the SYSTRA-SQ model of 21 observation variables to measure the quality of retail banking services in the UK. The author applied the method of analyzing factor of EFA and analysis of variance (ANOVA), the research results found that there are 4 factors affecting quality of service including: Quality of behavior, quality of service system, accurate transactions, equipment quality. The scale of this model is sufficiently reliable and is used to measure the quality of banking services. However, the scale set was built at UK retail banks so it may not be suitable in other contexts.

Blanchard and Galloway (2014), with the theme "Quality in Retail Banking", conducted a survey of 439 customers using banking products and services and 39 NH employees in the UK. The research results show that among components, the Response component has the most important level in determining quality of service, and the author also concludes that bank employees recognize the approach to measurement quality of service. and provide some support for the application of the Servqual model in the retail banking industry in the UK.

Kumar et al. (2018), with the topic "Determining the relative importance of critical factors in delivering service quality of banks: An application of dominance analysis in Servqual model", assessed the quality of banking service through the relationship survey relationship between SERVICE QUALITY and SHL customers in Malaysia. The author uses the SERVICE QUALITY Servqual measurement model of Parasuraman et al. (1988) with the original 5 factors as tangible, reliable, service, responsive, sympathetic and more convenient factors. The author surveyed 56 customers using services at Islamic banks, 231 customers using services at normal banks, after analyzing factors of EFA discovery and regression analysis, there were 4 factors. affecting service quality of banks in Malaysia including reliability, tangible facilities, convenience, service capacity. However, the author's research results do not reflect which factors are the most influential factors or the degree of influence of factors on quality of service but only explain the expected difference of the two factors: convenience and capacity. serve between Islamic and ordinary banks.

Yavas et al. (2014), with the theme "Relationships between service quality and behavioral outcomes: A study of private bank customers in Germany", conducted a study on the relationship between SERVICE QUALITY, satisfaction and behavioral outcomes based on Survey of 226 customers who are using banking products and services at private banks in

a German city. The research results show that QoS is the origin of SHL and has a link with behaviors such as complaints, word of mouth, recommendations and conversions of customers, besides, the factor "Tangible medium" is the most important of the factors affecting customers' satisfaction, since banks in Germany want to improve service quality with the purpose of improving customers' satisfaction, banks need to improve factors such as improving facilities, employee photos, working environment conditions ..

2.11. Proposed research model and hypotheses

Through a review of relevant domestic and foreign studies, along with reference to the service quality model of Parasuraman's SERVQUAL, the author proposes a model to study the factors affecting the HDV activities of Science and Technology at Agribank CNVT.

Thereby, the research will test the following hypotheses:

Hypothesis H1: Reliability positively (+) affects the loyalty of science and technology using HDV services at Agribank CNVT. That is, the higher the reliability of HDV service at Agribank CNVT, the higher the LOYALTY of Science and Technology here.

Hypothesis H2: Responsiveness positively (+) affects the loyalty of science and technology using HDV services at Agribank CNVT. That is, the higher the KNDU of HDV services at Agribank (the more the requirements), the higher the LOYALTY of Science and Technology will be.

Hypothesis H3: Assurance positively impacts (+) on the loyalty of science and technology using HDV services at Agribank CNVT. That is, the better the assurance of employees at Agribank (or Agribank CNVT can provide all HDV services), the higher the LOYALTY of Science and Technology will be.

Hypothesis H4: The level of empathy positively (+) affects the loyalty of science and technology using HDV services at Agribank CNVT. That is, the higher the MDDC of employees in HDV service at Agribank, the higher the LOYALTY of Science and Technology will be.

Hypothesis H5: Tangibles positively (+) affects the loyalty of science and technology using HDV services at Agribank CNVT. That is, the better the image of Agribank CNVT in the eyes of science and technology, the higher their LOYALTY.

3. RESEARCH METHODS AND MEASUREMENT

3.1. Research Process

After reviewing the theoretical basis and related studies, the author built a draft questionnaire (draft scale) and adjusted it to suit the survey subjects (S&T) who have been using HDV service. at Agribank CNVT. Next, the qualitative research was conducted by group discussion with a number of experts who are directors, deputy directors, managers, employees who have worked for a

long time at Agribank CNVT ... with the purpose of adjusting and adding ladders. measure. Based on that, the author built a preliminary survey questionnaire. Using the preliminary questionnaire, the author conducted a survey with 115 science and technology using convenient sampling methods. After collecting data of 115 science and technology, quantitative research was conducted, the author conducted reliability analysis Cronbach's Alpha and EFA analysis. The research results are the official questionnaire (or official scale) sent to the survey to collect 425 science and technology at Agribank CNVT. The author expected the survey to send out 500. The collected data will be encoded before importing the data for processing by SPSS 20.0 software. Continue to conduct reliability analysis of Cronbach's Alpha and EFA for the official

scale, the goal is to re-test the scales in the research model. If the scale is appropriate, then the analysis results will be used for regression analysis and ANOVA variance analysis in the next step.

3.2. Draft scale

Based on the SERVICE QUALITY SERVQUAL scale of Parasuraman et al, the author built a draft scale with 22 questions (observed variables).

3.3. Preliminary scale

The draft scale was taken for in-depth interviews with experts who are the Board of Directors, managers, employees who have worked for a long time at Agribank CNVT. Results of correcting words and sentences, adding some observed variables are presented in Table 3.1.

Table 3. 1: Results of calibration of scales

Out	Draft scale	Edit / Add
Rel1	When Agribank CNVT promises to do something at a certain time then they will.	When Agribank CNVT promise to you, they will follow the promised time.
Rel2	When Agribank CNVT promise to you, they will follow the promised time.	When facing difficulties, Agribank CNVT creates favorable conditions to help you overcome it.
Rel4	Agribank CNVT provides the service exactly as they promised.	Agribank CNVT provides the same services as agreed with you.
Rel6		Agribank CNVT has a very low rate of default compared to other banks.
Ass1	Agribank staff tell me when to perform the service.	Agribank staff in charge of IT always informs the time of service implementation for you.
Res1	Behavior of Agribank CNVT employees causes confidence for you.	Behavior of Agribank CNVT employees creates confidence for you.
Empathy1	Agribank CNVT always pays special attention to you.	Agribank CNVT always pays special attention to you.
Emphathy2	Agribank has staff who know how to care for you ..	Agribank has staff who specializes in answering your questions.
Emphathy4	Agribank CNVT works at convenient hours.	Agribank's working hours are convenient for you.
Tang4		Extensive ATM network.

Source: Survey results of the author 2019

According to suggestions of experts and long-term working experience in aerospace technology, the author added the observation variable DTC6 "Agribank CNVT has very low defaults rate compared to other banks" and PTHH4 "Wide ATM network throughout ". Results of editing and supplementing the draft scale are presented in Appendix 3 - Preliminary scale with 24 observed variables belonging to 5 independent factors and 1 dependent element (LOYALTY). This preliminary scale is used to interview 30 science and technology by convenient methods to verify the scale.

3.4. Results of preliminary scale analysis

3.4.1. The results of the preliminary reliability analysis of the scale

The results of the reliability analysis of the preliminary scale by Cronbach's Alpha coefficients are presented in the following table. All concepts of the preliminary scale have a Cronbach's Alpha reliability coefficient greater than 0.6 and the total correlation coefficient of all variables is greater than 0.3.

Table 3. 2: Results of the reliability analysis of the preliminary scale

Factors	Number of Observation	Cronbach's Alpha
REL	5	0.880
ASS	4	0.796
RES	4	0.848
EMPATHY	5	0.940
TANG	5	0.872
LOY	5	0.883

Source: Survey results of the author 2019

3.4.2. Results of factor analysis of the preliminary scale

The EFA analysis results of the preliminary scale including 24 observed variables of 5 independent scales and 1 dependent scale are presented in the following table. KMO coefficient reaches 0.878 (> 50%), Sig

value. of Barlett's test reached 0,000 (<0.05) satisfactory to conduct discovery factor analysis. There are 5 extracted factors (with Eigenvalue value greater than 1) with a total variance of 70,602% (> 50%). Factor load factor of all variables greater than 0.5 is satisfactory.

Table 3. 3: Results of factor analysis

	Component					
	1	2	3	4	5	6
Rel1		.811				
Rel2		.661				
Rel3		.711				
Rel4		.813				
Rel5		.718				
Tang1				.830		
Tang2				.769		
Tang3				.815		
Tang4				.796		
Res1					.714	
Res2					.790	
Res3					.750	
Res4					.729	
Ass1						.798
Ass2						.806
Ass3						.772
Ass4						.685
Empathy1	.839					
Empathy2	.861					
Empathy3	.823					
Empathy4	.854					
Empathy5	.851					
Loy1			.557			
Loy2			.577			
Loy3			.776			
Loy4			.717			
Loy5			.747			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.						.878
Bartlett's Test of Sphericity		Approx. Chi-Square				5049.160
		df				231
		Sig.				.000

3.5. Research sample

3.5.1. Sample selection basis

According to Hair et al. (1998), in order to be able to analyze well examination factors (EFA), data sets with at least 5 samples per observed variable and at most 10 samples per observed variable should be collected. Meanwhile, Gorsuch (1983) suggested that the number should be at least over 100 observations for such studies. Comrey and Lee (1992) do not give a fixed number but give different numbers with corresponding statements: 100 observations are not good, 100-200 is relatively good, 200-300 is good, 300 - 500 is very good, 500-1000 is the best.

3.5.2. Sample size

The reliability of the information depends on the sample size selected, as the sample size increases, the reliability of the information increases. In practice, however, the choice of sample size depends on the very important factor that the researcher's cost and time is. According to Hair et al. (1998), the minimum number of samples must be 220. According to Hair et al. (2006), the size $n = 50 + 8 * m$, where n is the required sample size, m is the number. independent element. This study has all 5 independent factors, the sample size for the study is 90. According to Nguyen Dinh Tho (2011), the number of samples $n \geq 5 * k$, in this formula, n is the required sample size, k is the number of observed variables. The study of the preliminary scale has 24 observed variables (5 independent elements) so the minimum number of samples $n = 220$. Combining the above quantitative criteria with the qualitative criteria of Comrey and Lee (1992), will There are invalid questionnaires due to lack of information, lack of answers, the author decides the sample size will be 425.

4. RESEARCH RESULTS

4.2. Results of capital mobilization activities

Customers using products and services: Customers opening personal payment accounts have a relatively stable growth rate, on average about 4-5% / year. Number of customers using additional products and services of the Bank such as Cards, SMS Banking (deposits, debt reminders), state budget collection, services connecting with customers, payment of salaries via accounts, payments international payment, other ... account for about 80-90% of the total number of customers opening payment accounts ... The mobilized capital of Agribank CNVT always grows steadily over the years in the period of 2013 - 2019, however, the situation The epidemic in early 2020 was quite unstable, leading to the situation of capital surplus and interest rate reduction in large banks which are causing difficulties for Agribank CNTT in particular and Agribank in general. This means that the total outstanding credit activities over the years 2013 - 2019 also increased. The NPL ratio has always been guaranteed to be below 3% over the years, but the good news is that the NPL ratio has decreased significantly in

this period and almost zero in 2019. Compared to the plan, actual bad debt recovery rates reach a few hundred percent each year. This shows the careful, careful HDV policy of Agribank CNVT. However, the ability to mobilize additional capital is still in the capacity of the branch, Agribank CNTT needs to maximize, seek more potential factors to take advantage of all available resources for HDV work, expand the rules. tissue.

In addition, revenue from the provision of products and services also increased over the years, bringing stable profits in the period of 2019-2020. Statistics of the HDV situation in 2019 of commercial banks The state that is operating in the province has been summarized, showing that Agribank CNVT has good HDV ability (ranked 4/12 banks). However, compared to the mobilization value of banks in the first position is quite far. That is the reason, Agribank needs to review its strategy, capabilities and performance right now and in the future.

4.3. Descriptive statistics survey sample

Subjects of the survey are S&T who have been using HDV services through sending questionnaires directly and via email. The author sent 500 questionnaires (estimated 10% of 300 questionnaires. After eliminating invalid questionnaires, the number of questionnaires included in the official study was 425. For gender, the number The number of science and technology interviewed is more than 83.9% of the total 425 interviewed people and 16.1% of women. Men are often the breadwinner, often taking initiative in mastering jobs. Therefore, the survey results are somewhat consistent with reality. For the age group, the age structure of the science and technology group is from 25 to 39 years old (39.3%), followed by the science and technology group from 40 to 40 years old. 55 (30.2%), these two groups of customers are in working age and have a lot of experience in work so the ability to save and do business is quite likely, so it accounts for Most of them are easy to understand, followed by science and technology group under 25 years old (21.3%) and over 55 years old (9.2%). For income, the group with income from 5 to less than 10 million VND / month accounts for the majority (53.8%), followed by the group with income from 10 to less than 20 million / month (22.6%), followed by the group with income of 20 million / month or more (16.4%), accounting for the lowest rate of less than 5 million / month (7.2%).

4.4. The results of reliability analysis and the official discovery factor

4.4.1. The reliability analysis results of the official scale

The results of the reliability analysis of the official scale by Cronbach's Alpha coefficient are presented in the table below. All concepts of the preliminary scale have a Cronbach's Alpha reliability coefficient greater than 0.6 and the total correlation coefficient of all variables is greater than 0.3.

Table 4.1: Results of reliability analysis of the official scale

Yếu tố	Số biến	Hệ số Cronbach's Alpha thang đo
REL	5	0.882
ASS	4	0.877
RES	4	0.837
EMPATHY	5	0.915
TANG	5	0.840
LOY	5	0.869

Source: Survey results of the author 2019

4.4.2. Results of factor analysis discover the official scale

When the scale is reliable after testing Cronbach's Alpha, the scale will be used for EFA discovery factor analysis. The EFA analysis results of the official scale including 24 observed variables of 5 independent scales

are presented in the following table. KMO coefficient reaches 0.898 ($> 50\%$), Sig value. of Bartlett's test reached 0,000 (< 0.05) satisfactory to conduct discovery factor analysis. There are 6 extracted factors (with Eigenvalue value greater than 1) with a total variance of 69,996% ($> 50\%$).

Table 4.2. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.898
Bartlett's Test of Sphericity	Approx. Chi-Square	6417.005
	df	351
	Sig.	.000

Table 4.3. Rotated Component Matrix

	Component					
	1	2	3	4	5	6
Rel1		.820				
Rel2		.735				
Rel3		.780				
Rel4		.841				
Rel5		.752				
Tang1					.793	
Tang2					.794	
Tang3					.822	
Tang4					.746	
Res1						.710
Res2						.850
Res3						.804
Res4						.742
Ass1				.823		
Ass2				.840		
Ass3				.824		
Ass4				.773		
Empathy1	.817					
Empathy2	.849					
Empathy3	.847					
Empathy4	.870					
Empathy5	.841					
Loy1			.698			
Loy2			.693			
Loy3			.699			
Loy4			.771			
Loy5			.788			
Initial Eigenvalues	8.13	3.04	2.496	2.235	1.604	1.393

Cumulative %	30.111	41.371	50.616	58.895	64.836	69.996
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Source: Survey results of the author 2019

Factor load factor of all variables greater than 0.5 is satisfactory.

Conclusion: All variables are retained for multivariate regression analysis in the next step.

Table 4. 4: Results of correlation analysis

Correlations							
		Loy	Rel	Tang	Res	Ass	Empathy
Loy	Pearson Correlation	1	.481**	.357**	.388**	.500**	.313**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	425	425	425	425	425	425
Rel	Pearson Correlation	.481**	1	.282**	.284**	.301**	.274**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	425	425	425	425	425	425
Tang	Pearson Correlation	.357**	.282**	1	.402**	.183**	.209**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	425	425	425	425	425	425
Res	Pearson Correlation	.388**	.284**	.402**	1	.279**	.268**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	425	425	425	425	425	425
Ass	Pearson Correlation	.500**	.301**	.183**	.279**	1	.159**
	Sig. (2-tailed)	.000	.000	.000	.000		.001
	N	425	425	425	425	425	425
Empathy	Pearson Correlation	.313**	.274**	.209**	.268**	.159**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.001	
	N	425	425	425	425	425	425

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Survey results of the author 2019

Results of performing linear correlation analysis between the dependent variable LOYALTY and independent variables, as well as the correlation between the independent variables to test Check out the connection between them. The correlation value used is the Pearson correlation. Sig value. between the independent factors are equal to 1,000 (> 0.05) and the correlation value between the elements is equal to 0,000 so there is no correlation between the independent elements. Of course, the correlation between the factors and itself is 1. The value of Sig. between the dependent variable Loyalty and the factor Reliability is 0.481 (Sig < 0.05) so there. The significant value between the dependent variables and independent variables (Tang,

Res, Ass, Empathy) are all less than 0.05, the correlation and Pearson correlation coefficients are 0.357, 0.388, 0.500 and 0.313 respectively. The correlation coefficient values of all pairs of these variables are positive, so it can be confirmed that the correlation between them is positive.

4.4. Regression analysis results

4.4.1. Evaluate and verify model suitability

The adjusted R2 coefficient reaches 0.437, meaning the model explains 43.7% of the overall variation in the relationship between the factors affecting HDV activities (Table 4.5). The remaining 56.3% is due to un-studied variables and random errors.

Table 4.5: Results of evaluation of model conformity

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.661 ^a	.437	.430	.67496	1.817

a. Predictors: (Constant), Empathy, Ass, Tang, Rel, Res
 b. Dependent Variable: Loy

Source: Survey results of the author 2019

The Durbin-Watson test result with a value of 1,817 is approximately 2,000, indicating no first-order correlation in the model (Hoang Trong & Chu Nguyen Mong Ngoc, 2008). However, the adjusted R2 value only represents the model's suitability and sample data (but does not guarantee the level of representation for

the whole crowd), so the F test is used to see Considering the suitability of the overall regression model. Sig value. of test F reaches 0,000 (<0.05, Table 4.6), so the linear regression model was built in accordance with the overall ($k \neq 0$).

Table 4.6: Results of ANOVA analysis

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	148.036	5	29.607	64.989	.000 ^b
	Residual	190.886	419	.456		
	Total	338.922	424			

a. Dependent Variable: Loy
 b. Predictors: (Constant), Empathy, Ass, Tang, Rel, Res

Source: Survey results of the author 2019

4.4.2. Regression coefficient

Table 4.7: Regression coefficient results

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.208	.227		-.917	.359		
	Rel	.286	.043	.270	6.637	.000	.810	1.234
	Tang	.161	.046	.143	3.487	.001	.802	1.246
	Res	.152	.050	.127	3.012	.003	.759	1.317
	Ass	.310	.036	.338	8.571	.000	.866	1.155
	Empathy	.134	.043	.121	3.092	.002	.879	1.138

a. Dependent Variable: Loy

Source: Survey results of the author 2019

The regression analysis results presented in Table 4.7 show that the regression coefficients of all independent variables are all greater than the value of 0 (> 0.000) so these factors have the influence. in the same direction to the LOYALTY factor. The larger the regression coefficient β_k , the higher the effect of the independent variables on the dependent variable. The factor The response level of ASS has the most influence on the LOYALTY of science and technology with $\beta = 0.338$, followed by the factor REL with $\beta = 0.270$, followed by the TANGIBLE elements with $\beta = 0.143$, RES with $\beta = 0.127$ and the lowest is EMPATHY factor with $\beta = 0.121$. In addition, the constant of angle value of -2,08 has no regression significance when Sig value. larger than 0.05 (>0.05).

The linear regression equation for the study is as follows:

$$\text{LOYALTY} = 0,270*\text{REL} + 0,143*\text{TANG} + 0,127*\text{RES} + 0,338*\text{RES}+0,121*\text{EMPATHY}+\square\square$$

4.4.3. Detect violations of assumptions

Because linear regression models are implemented with a number of assumptions and the model only really

makes sense when these assumptions are guaranteed. Therefore, to ensure the reliability of the model, the author conducted Violation detection necessary assumptions in linear regression.

The linear relationship test through Scatterplot scatter chart analysis shows that the residuals are randomly dispersed in an area around the zero degree line (standardized residual on the vertical axis), combining the residual value and The estimated value from the regression equation is that it does not form any rule, this suggests that the linear violation assumption is not violated.

Testing the standard distribution of residues through analyzing the histogram of the Histogram residuals. The remainder may not follow the normal distribution for reasons such as using the wrong model, the variance is not constant, the number of residuals is not sufficient for analysis. Therefore, we need to carry out many different surveys. And in this analysis, the author uses the frequency chart of the Histogram residuals.

Testing the standard distribution of the remainder using Histogram has the average value of the residual approximately 0 (5.23E-17), and the standard deviation

of approximately 1 (0.992) should be based on the conclusions of the distribution. Therefore, it can be concluded that: The standard distribution assumption of residuals is not violated.

The independence of the remainder is expressed through the Durbin-Watson statistical quantity. Based on Table 4.6, the Durbin-Watson coefficient is valued at 1,817 (approximately 2,000), it can be concluded that the independence of the Surplus is guaranteed, the remainder is positively correlated.

Testing multi-collinear violation, the regression coefficient results show that the magnification coefficient (VIF) of the independent variables are equal to 1,000. Therefore, it can be concluded that the model does not have multi-collinear phenomenon.

Thus, with the results of the detection and violation of assumptions, it is shown that the linear regression model built does not violate the necessary assumptions in linear regression and can be used to test hypotheses. Being mention.

Table 4. 8: Hypothesis test results

Hypothesis	Content	Result
H ₁	Reliability positively (+) impacts on LOYALTY of science and technology using HDV services at Agribank CNVT.	Accept
H ₂	Responsiveness positively (+) affects LOYALTY of science and technology using HDV services at Agribank CNVT.	Accept
H ₃	Assurance positively impacts (+) on LOYALTY of Science and Technology using HDV service at Agribank CNVT.	Accept
H ₄	Empathy positively (+) affects LOYALTY of science and technology using HDV services at Agribank CNVT.	Accept
H ₅	Tangibles positively (+) affect LOYALTY of science and technology using HDV services at Agribank CNVT.	Accept

Source: Survey results of the author 2019

The regression results in Table 4.7 show that Sig value. of independent variables are smaller than 0.05 (significance level of 5%), so it is reasonable to conclude that these independent variables have a significant impact on the LOYALTY of science and technology tools of HDV at Agribank CNVT.

4.6. Testing for variance

4.6.1. Testing variance of gender variables

The average results of LOYALTY testing of science and technology by gender are presented in Tables 4.9 and 4.10.

Table 4. 9: Statistics describing satisfaction by gender

Sex	N	Medium	Standard deviation	Average error
Male	256	3,00	0,888	0,055
Female	169	3,04	0,763	0,109

Source: Survey results of the author 2019

The average statistics by gender show that men and women have an average score on LOYALTY is equal to 3.00 and 3.04 (Table 4.12).

Table 4. 10: Average test results by gender

	Levene variance test		Test t-Test			
	F	Sig.	t	df	Sig. (2-tailed)	Average difference
Equal variance	1,334	0,249	-0,330	303	0,742	-0,045
Variance is different			-0,366	75,179	0,716	-0,045

Source: Survey results of the author 2019

As a result of testing the equality of the overall variance Levene reaches Sig value = 0.249 > 0.05, there is no difference in variance of the two population, so the result of t-test will be used in the variance is equal. In the mean test, the value of Sig. = 0.742 > 0.05, so with 5% significance level, there is no statistically significant

difference in EE between science and technology is male and female (Table 4.10).

4.6.2. Testing age variance

The average results of LOYALTY testing of science and technology by age are presented in Tables 4.11, 4.12 and 4.13.

Table 4. 11: Statistics describing satisfaction by age

	N	Medium	Standard deviation	Standard error
< 25	105	2,78	0,893	0,111

25 to 39	145	3,08	0,846	0,077
40 to 55	105	2,99	0,845	0,088
> 55	70	3,21	0,917	0,173
Total	425	3,00	0,868	0,050

Source: Survey results of the author 2019

Descriptive statistics of LOYALTY by age (Table 4.11) shows that the average LOYALTY of the age groups ranges from 2.78 to 3.21, of which the age group below 25 has the lowest average score with 2.78, continued The group from 40 to 55 years old with an average of

3.33. Next, the group from 25 to 39 years old and over 55 years have a high average score with 3.08 and 3.21. The testing of variance shows the value of Sig. = 0.607 > 0.05 so the variance of age groups for LOYALTY of science and technology is not different (Table 4.15).

Table 4. 12: Results of Levene test of age variables

Kiểm định Levene	df1	df2	Sig.
0,613	3	422	0,607

Source: Survey results of the author 2019

ANOVA variance test results show (Table 4.13), with Sig. = 0.077 > 0.05, so with 5% significance level, there

is no significant difference in LOYALTY of science and technology among age groups.

Table 4. 13: Results of analysis of age variance

	Tổng bình phương	Df	Bình phương trung bình	F	Sig.
Giữa các nhóm	5,142	3	1,714	2,305	0,077
Nội bộ nhóm	223,855	422	0,744		
Tổng	228,997	425			

Source: Survey results of the author 2019

4.6.3. Testing variance of income variable

The average results of LOYALTY testing of science and technology by income are presented in Tables 4.13, 4.14 and 4.15.

Table 4. 13: Descriptive statistics according to income

	N	Medium	Standard deviation	Standard error
Less than 5 million / month	83	3,27	0,767	0,164
From 5 to less than 10 million / month	144	2,99	0,883	0,069
From 10 to less than 20 million / month	189	3,00	0,857	0,103
From 20 million / month or more	9	2,92	0,877	0,124
Total	425	3,00	0,868	0,050

Source: Survey results of the author 2019

LOYALTY average of income groups with certain fluctuations. The lowest average income group is from 20 million / month or more with an average of 2.92, followed by the group from 5 to less than 10 million. / month, with an average score of 2.99. The remaining two groups from 10 to less than 20 million / month and

less than 5 million / month with higher average scores of 3.00 and 3.27 respectively. Testing the variance in Table 4.18 shows the value of Sig. = 0.848 > 0.05 so the variance of income groups for LOYALTY of science and technology is not different.

Table 4. 14: Results of Levene test of income variable

Levene test	df1	df2	Sig.
0,269	3	422	0,848

Source: Survey results of the author 2019

ANOVA test result of variance in Table 416 shows with Sig. = 0.445 > 0.05, so with 5% significance level, there

is no significant difference in LOYALTY of science and technology among income groups.

Table 4. 15: Results of analysis of income variance

	Sum of squares	Df	Square squared	F	Sig.
Between groups	10,959	3	0,653	0,866	0,459

Internal group	227,038	422	0,754		
Total	2280,997	425			

Source: Survey results of the author 2019

4.7. Discuss the research results

4.7.1. The impact of these factors on the loyalty of individual customers using capital mobilization services

The author based on the model of five factors affecting LOYALTY of science and technology using HDV services at Agribank CNVT including: Reliability, Responsiveness, Empathy level, Assurance and Tangibles. The research results show that the factors of quality service have positive impact on the loyalty of customers. Results of regression analysis with adjusted R2 value of 0.437 or linear regression model explained 43.7% of the overall model. The results also showed that, in addition to the influencing factors already in the study. Agribank's staff, senior management and managers need to consider other factors such as corporate image (Agibank CNVT), employee morality, leadership style, and promotion ability ... The influence of Assurance factor has the strongest impact on with coefficient ($\beta = 0.338$). This result reflects the diversity of HDV activities at Agribank CNVT with the ability to meet apply for most services such as HDV from deposit account, HDV by issuing valuable papers, borrowing from the SBV or credit institutions others ... The reliability is the second most influential factor on the LOYALTY of S&T using HDV services at Agribank CNVT. The impact level of the third strong tangibles on the LOYALTY of science and technology using HDV services. As a state-owned commercial bank, Agribank's face partly reflects the face of the State, so Agribank's equipment looks very modern, facilities and facilities ... Empathy level is the factor has the smallest impact on the loyalty of Science and Technology. Empathy is also an expression of Agribank CNVT employees to science and technology, which is directly controlled by humans, so it depends a lot on professional and cultural training enterprise. Agribank CNVT needs to pay more attention to these two factors to take advantage of empathy from science and technology. Although the reliability does not make sense in the linear regression model studied, it is possible that most banks have invested in computer systems, developing software with increasing security. No longer feel the reliability level at Agribank CNVT in particular.

4.7.2. The difference between demographic variables to individual customer loyalty

Results of testing the variance of demographic variables indicate that there is no difference in the LOYALTY of S&T using HDV services at Agribank CNVT between male and female S&T, between S&T of different ages, between S&T different income. However, there are also other components that are likely to affect the

LOYALTY of science and technology using HDV epidemic in Agribank CNVT need to be researched by the board of directors and senior management.

5. MANAGEMENT AND CONCLUSIONS

5.1. The proposed basis for governance

Through the regression analysis results and the proposed research model, the author synthesizes the research model:

Regression coefficient β of reliability factor to LOYALTY of Science and Technology using HDV service at Agribank CNVT is 0.270, meaning that if all other factors remain unchanged, reliability increases by 1 unit, LOYALTY of Science and Technology uses translation HDV service at Agribank CNVT will increase by 0.270 units. Regression coefficient β of responsiveness to LOYALTY of Science and Technology using HDV service at Agribank CNVT is 0.127, meaning that if all other factors are unchanged, responsiveness increases by 1 unit, LOYALTY of Science and Technology uses translation HDV service at Agribank CNVT will increase by 0.127 units. Regression coefficient β of the factor assurance to LOYALTY of S&T using HDV service at Agribank CNVT is 0.338, meaning that if all other factors remain unchanged, assurance increases by 1 unit, then LOYALTY of S&T uses the service HDV service at Agribank CNVT will increase by 0.338 units. This is the factor with the largest impact on LOYALTY of Science and Technology. Regression coefficient β of the empathy to LOYALTY of science and technology using HDV service at Agribank CNVT is 0.121, meaning that if all other factors have not changed, the empathy increased by 1 unit, then the LOYALTY of Science and Technology use the service HDV service at Agribank CNVT will increase by 0.121 units. This is the factor with the lowest impact on LOYALTY of Science and Technology. Regression coefficient β of tangibles to LOYALTY of Science and Technology using HDV service at Agribank CNVT is 0.143, meaning that if all other factors are unchanged, MDDC increases by 1 unit, LOYALTY of Science and Technology uses translation HDV service at Agribank CNVT will increase by 0.143 unit.

5.2. Administration implication

5.2.1. As for the Reliability factor

To ensure reliability, first, Agribank CNVT should pay attention to the following:

- Agribank CNVT needs to follow the promise at the promised time with customers.
- When facing difficulties, Agribank CNVT needs to create favorable conditions to help customers overcome it.

- Agribank CNTT needs to perform the service right from the first time.
- Agribank CNVT needs to provide the right service as agreed with the customer.
- Agribank CNVT should note that no mistakes will occur.
- Agribank CNTT should be cautious in investment transactions, lending with large limits, limiting activities that may cause losses for customers and the state.

Modernizing banking technology and considering this as a strategic goal to compete with other banks, improve business efficiency and attract more customers. Especially the payment mechanism, must be fast, safe, convenient and systematic and synchronized. Investing in modern technology can increase initial costs, but will reduce business costs in the long run, attract more customers, manage risks due to rapid information, effective and effective management. Especially Agribank CNVT will mobilize a lot of payment deposits (low interest rates) due to easy, convenient payment and expanding distribution channels.

5.2.2. For the Response level factor

This is the most powerful factor affecting LOYALTY of Science and Technology, so Agribank CNTT should pay special attention to, preserve and develop strongly. To ensure MDDU, Agribank CNVT needs to meet the following requirements:

- Behavior of Agribank employees need to create trust and safety for customers.
- Agribank employees are always warm to customers.
- Agribank employees must have sufficient knowledge to answer all customer questions.

Strengthening the mobilization in the local area, especially mobilizing term deposits to create more initiative for banks in business activities. In addition, encourage customers to open payment accounts, although this source of funding is not as stable as term deposits, but offset low mobilization costs. In order to entice customers, Agribank CNTT not only attracts with interest rates but also creates convenience and safety, simultaneously with many new forms of HDV. It is necessary to offer some products and services to eliminate the habit of leaving money at home of customers, mainly farmers. Farmers have a habit of leaving money at home, on the one hand, due to the needs of daily life, on the other hand, because of the more active use of money at home, and finally, the fear of sending money. Therefore, banks need to promote the development of non-cash payment facilities so that people can see that cashless payments are more advanced, more convenient and less dangerous than cash payments. .

5.2.3. For the element of assurance

To ensure the assurance, Agribank CNTT should ensure the following requirements:

- Agribank employees must always inform the time of service implementation to customers.
- Agribank employees need to quickly perform service for customers.
- Agribank staff are always ready to help customers.
- Agribank Employee Agents is never too busy to meet customer requirements.

Arranging a contingent of enthusiastic cadres, in addition to strong professional competence, there must also be a mass character to work in the departments directly dealing with customers. Strengthen the inspection of the placing of departmental and professional signs, notice boards detailing all necessary procedures related to depositing, withdrawing money, making money orders, reports on lost books ... For customers to learn, master and prepare well, avoid customers asking for more explanations, less time consuming for both banks and customers. Banks need to improve the leaflets to introduce their products and services, the leaflets need to provide service fee tables to help customers easily find out, compare and select the services. The bank also needs to have policies to encourage all employees in the bank to participate in finding new customers for banks in their existing market. Banks need to create motivation to motivate enthusiastic employees in HDV work. In order for employees in the Bank to be motivated, they need to ensure their life needs, there are incentive policies for employees such as rewarding and taking care of the material and spiritual life of employees.

5.2.4. For the empathy level factor

To ensure empathy, Agribank CNTT needs to meet the following requirements:

- Agribank CNVT always pays special attention to customers.
- Agribank CNVT needs a staff to answer customer questions.
- Agribank CNVT always takes the interests of customers as its mind.
- Agribank employees need to understand the needs of customers.
- Agribank working hours need to be convenient for customers.

Whenever offering new forms of HDV, banks should clearly notify all relevant factors including time limits, interest rates, procedures for capital withdrawal, interest payment ... and must be posted in places where people can read. At the same time, it is advisable to arrange a regular staff to answer questions, guide or directly do some things to help customers quickly be served. Regularly open training courses to improve the qualifications of HDV staff so that they can master the aspects deeply to answer customers that they do not understand. With the enthusiastic guidance of NH staff, it will help customers feel they are interested in relieving the anxiety and make them come to NH in a natural, open and friendly way.

For customers with long-term relationship with banks, it is necessary to:

+ Maintain good relationship with customers through credit activities, creating a close two-way relationship between banks and economic organizations. Business banks lend money to businesses, when the results are obtained, in addition to paying debts to banks, they will use additional bank services such as international payment, payment of wages to workers, foreign trade. bad ...

+ Regularly find out the needs, tastes of customers, in order to offer new products, attractive but not too complicated.

+ In the occasion of festivals, New Year, anniversary NH need to give gifts, flowers to congratulate to strengthen relationships increasingly stronger. This is also a gesture to show the concern and hospitality of the NH to customers.

+ For first time customers to do business with NH, creating a good first impression for customers is very necessary.

+ Employees who regularly interact with customers require professional training, enthusiasm, fun and dedication to customers.

5.2.5. For element Tangibles

To ensure the process of information technology, Agribank CNTT needs to meet the following requirements:

- Agribank CNVT needs to update equipment to ensure it meets customer requirements.

- The facilities of Agribank CNVT must look very eye-catching.

- Agribank staff need to dress very well.

- Develop an extensive ATM network.

Consider changing outdated and outdated equipment and machinery instead of modern machines to accelerate the working speed of employees in the bank, saving time for customers and saving at the same time. time for NH. Make the most of the advantages that new technology brings. At the same time, each NH employee needs a certain amount of time to adapt to the new technology, NH management needs to take measures to encourage, encourage and even require, each employee must make efforts. to the best of our ability to adapt soon. The machinery performed for payment services needs to be regularly inspected and repaired promptly. Additional ATMs are needed to match the number of cards issued to customers. Modern and spacious facilities have a significant impact on customer psychology because it will create peace of mind when customers come to trade at the branch. Therefore, NH must pay attention to this issue.

5.2.6. The difference in loyalty of individual customers

The research results showed that there is no difference in LOYALTY of science and technology using HDV services at Agribank CNVT. However, the average

level of loyalty of science and technology is moderate, meaning that science and technology are still not really dedicated, considering Agribank to be a place of full confidence. senior managers need to make efforts to improve the working environment, improve relationships with customers, making Agribank CNVT a strong and long-term branch in the near future.

5.2.7. General management implications

Expanding to serve credit packages for personal needs such as:

- Lending for purchasing consumer goods, household appliances;

- Lending for new construction, repair, renovation, upgrade, purchase of houses for residents;

- Installment loan with interest rate of 0%;

- Lending for buying vehicles;

- Lending by credit line;

- Loans for mortgage of valuable papers;

- Providing short-term loans for production, business and services.

Currently, commercial banks hold a lot of customer data and can use this abundant resource to segment customers for the purpose of care and development. Alerts include artificial intelligence, blockchain, chatbox, and mobile apps to put customers at the center of innovation strategy and create a personalized banking experience. NH need to use more social media platforms. such as Facebook Messenger and Wechat to provide more effective NH services to customers. Well implemented the process of lending and controlling lending activities. Accordingly, credit officers must follow the process, especially in the evaluation process. However, credit officers also need to be flexible in applying this process in each specific case, creating favorable conditions for customers, ensuring safety and profitability for banks, improving credit quality. use. In addition, it is necessary to develop policies to control lending activities of science and technology to ensure the payment on time or take timely measures.

5.3. Conclude

The objective of the study is to identify and evaluate the impact of factors affecting the HDV activities of Science and Technology at Agribank CNVT. From there, find solutions and administrative implications to improve LOYALTY of Science and Technology, help branches in particular and Agribank in general to enhance competitiveness in the future. Based on the theory of SHL and LOYALTY of customers, along with relevant domestic and foreign studies and related theories, the author proposes models and research hypotheses that need to be tested. The model consists of five elements, including Reliability, Response Level, Assurance, Empathy Level, and Tangible Media. The results of the reliability test of the scale by Cronbach's Alpha coefficient, EFA's factor analysis showed that the model result has 24 observed variables and five independent factors combined with an LOYALTY

dependent element. The analysis results show that all scales and observed variables meet the reliability requirements with five factors extracted and one factor is dependent variable. The regression analysis results show that there are four independent variables that positively impact the LOYALTY dependent variable of Science and Technology using HDV services at Agribank CNVT, including: Response level, Service capacity, Copper level feel, Tangible medium. ANOVA variance test results indicate that there is no statistically significant difference between gender groups, age groups and income groups with LOYALTY of Science and Technology using HDV services at Agribank Vung Tau.

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