“THE FACTORS AFFECTING THE CUSTOMER LOYALTY USING BANK SERVICE

CASE STUDY: VIETINBANK, CANTHO BRANCH”

By

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PANEL OF EXAMINERS APPROVAL SHEET

The Panel of examiners declares that the Skipsi entitled “The factors affecting the customer loyalty using bank service. Case study: Vietinbank, Cantho Branch, Vietnam” that was submitted by Nguyen Thi Huynh Nhu major in Banking and Finance from the faculty of Business was assessed and approved to have passed the Oral Examiners on January, 2014

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DECLARATION OF ORIGINALITY

I declare that this skipsi, entitled “The factors affecting the customer loyalty using Bank service. Case study: Vietinbank, Cantho Branch, Vietnam” is, to the best of my knowledge and experience, an original piece of work that has not been submitted, either in whole or in part and to another university to obtain a degree; except where reference is made in the text of the skipsi. No other person’s work has been used without due acknowledgement in the main text.

Cikarang, Indonesia, January 2014

Nguyen Thi Huynh Nhu
ABSTRACT

This research investigates the factor affecting the customer loyalty using bank service at Vietinbank. A survey was conducted on 309 individual clients who are using the Vietinbank’s service in Cantho City, Vietnam. Results of the multiple regression analysis for the total sample indicate that the bank choice decision is based on primarily on four selection criteria. “Customer’s need”, “Marketing”, “Technology” and “Staff” has positive effect on customer loyalty. The research aims to bridge the existing gap in nationwide banking literature and gives some suggestion which are expected to have an impact on customer loyalty in Vietinbank (Cantho branch) in particular and Vietnamese banks in general. Some policy implications to retain old customers and attract potential customers have been discussed.

Key words: Customer’s need, Customer Loyalty, Marketing, Technology, Staff.
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# Contents

PANEL OF EXAMINERS APPROVAL SHEET .......................................................... ii  
SKIPSI ADVISER RECOMMENDATION LETTER ........................................... iii  
DECLARATION OF ORIGINALITY ................................................................. iv  
ABSTRACT ....................................................................................................... v  
ACKNOWLEDGEMENTS ............................................................................... vi  
LIST OF FIGURE ............................................................................................. x  
LIST OF TABLE ............................................................................................... xii  
CHAPTER I ....................................................................................................... 1  
INTRODUCTION ............................................................................................. 1  
  1.1. Research Background .............................................................................. 1  
  1.2. Problems identification ........................................................................... 8  
  1.3. Statement of problem ............................................................................ 9  
  1.4. Research Objective ............................................................................... 9  
  1.5. Scope and Limitations of study .............................................................. 10  
  1.6. Definition of terms .............................................................................. 10  
  1.7. Significance of study .......................................................................... 12  
CHAPTER II ..................................................................................................... 14  
LITERATURE REVIEW ................................................................................ 14  
  2.1. Theoretical review ............................................................................... 14  
  2.1.1. The Function of Bank service ......................................................... 14  
  2.1.2. Bank Service Networks .................................................................. 15  
  2.1.3. Customer Loyalty .......................................................................... 16  
  2.1.4. Factors Affecting Customer Loyalty .............................................. 20  
  2.2. Theoretical Framework ........................................................................ 24  
  2.3. Hypotheses .......................................................................................... 26  
  2.4. Previous research ................................................................................ 26  
CHAPTER III ................................................................................................... 31  
RESEARCH METHODOLOGY ....................................................................... 31
3.1. Research Method ................................................................. 31
3.2. Operational Definition ......................................................... 32
  3.2.1. Customer’s need ................................................................. 32
  3.2.2. Marketing factors ................................................................. 33
  3.2.3. Technology factors ............................................................... 34
  3.2.4. The serving attitude of the staff ............................................ 34
  3.2.5. Customer loyalty ................................................................. 35
3.3. Research Instrument ............................................................... 37
  3.3.1. Data collection method ......................................................... 37
  3.3.2. Research Procedure ............................................................. 38
  3.3.3. Questionnaire .............................................................. 39
  3.3.4. Measurement scale ............................................................. 40
  3.3.5. Validity test ...................................................................... 40
  3.3.6. Reliability test .............................................................. 41
3.4. Sampling Design ................................................................. 43
  3.4.1. Sample size ................................................................. 43
  3.4.2. Margin of Error ............................................................... 43
  3.4.3. The Actual Sample Size ................................................... 43
  3.4.4. Sampling technique applied .............................................. 43
3.5. Data Analysis and Testing Hypothesis .................................... 44
  3.5.1. Data Analysis ................................................................. 44
  3.5.2. Testing Hypothesis ............................................................ 44
CHAPTER IV ................................................................................. 53
ANALYSIS & INTERPRETATION .................................................... 53
  4.1. Company Profile ................................................................. 53
    4.1.1. Organization Structure .................................................. 56
    4.1.2. Vision and Mission ......................................................... 57
  4.2. Data Analysis ................................................................. 57
    4.2.1. Respondent’s Profile ...................................................... 57
    4.2.2. Validity and Reliability .................................................. 63
LIST OF FIGURE

Figure 1: Debit card market share and international card in Vietnam, 2010..................................................................................................................4

Figure 2: Customer satisfaction on Vietinbank card service ranking by satisfaction level.................................................................5

Figure 3: Trouble in transaction.................................................................................6

Figure 4: Factor affecting customer loyalty.........................................................22

Figure 5: Theoretical Framework.........................................................................24

Figure 6: Research framework..............................................................................38

Figure 7: Likert Scale..............................................................................................40

Figure 8: Organization of chart in Vietinbank banking.......................................56

Figure 9: Gender of Respondent’s Profile..............................................................58

Figure 10: Age of Respondent’s Profile.................................................................59

Figure 11: Occupation of Respondent’s profile...................................................60

Figure 12: Education Level....................................................................................61

Figure 13: Salary of Respondent’s profile.............................................................62

Figure 14: Customer’s need Variable Frequency................................................68

Figure 15: Marketing Variable Frequency.............................................................70

Figure 16: Technology Variable Frequency........................................................71

Figure 17: Staff Variable Frequency.....................................................................73

Figure 18: Customer Loyalty Variable Frequency..............................................75

Figure 19: Normal P-P plot of regression Standard Residual.............................76

Figure 20: Histogram – Regression Standardized Residual................................77

Figure 21: Heteroscedasticity Test.......................................................................78

Figure 22: Partial Regression plot Customer Loyalty by Customer’s need...........80
Figure 23: Partial Regression plot Customer Loyalty by Marketing..............81
Figure 24: Partial Regression plot Customer Loyalty by Technology........82
Figure 25: Partial Regression plot Customer Loyalty by Staff.................83
LIST OF TABLE

Table 1: Items of customer’s need factor influencing customer loyalty.................34
Table 2: Items of marketing factor influencing customer loyalty...........................35
Table 3: Items of technology factor influencing customer loyalty.........................36
Table 4: Items of staff factor influencing customer loyalty....................................37
Table 5: Items of customer loyalty factor influencing customer loyalty................38
Table 6: Interpretation for Cronbach’s Alpha value being proposed by Uman Sekaran (2003)…………………………………………………………… ……………..…42
Table 7: Gender of respondent..............................................................................57
Table 8: The Age of Respondents.......................................................................58
Table 9: Occupation respondent.........................................................................60
Table 10: The Level Education of Respondent......................................................61
Table 11: Salary of respondent............................................................................62
Table 12: Result of Reliability test of variable......................................................63
Table 13: The Result of 31 Items for Validity Test...............................................65
Table 14: Multicollinearity Test...........................................................................78
Table 15: Interpretation for value “r” being proposed by Sekaran (2003)..............85
Table 16: Interpretation for value “r” being proposed by Sekaran (2003)..............85
Table 17: Interpretation of r value.......................................................................87
Table 18: Coefficient Determinant (R2)...............................................................88
Table 19: F-Test.................................................................................................89
Table 20: t-test...................................................................................................90
Table 21: Descriptive Statistics..........................................................................97
Table 22: Ranking importance of customer loyalty factor based on Descriptive Statistics.........................................................................................98
Table 23: Ranking importance of customer loyalty factors based t-test..............98
CHAPTER I

INTRODUCTION

1.1. Research Background

Vietnam is a country of which the economy is growing rapidly although the banking system in Vietnam is still regarded as one of the youngest system in the world; Vietnam has been considered a great potential market for finance and banking industry recently.

Vietnam’s banks has witnessed a lot of shifts and changes such as the difficulties in the late 1980s and the credit breaking down in the beginning of the 1990s during this tow decades and has met a great challenging from 1992 to 1997 of all, when the state banks developed rapidly along with the appearance of a lot of holding commercial banks as well as the branches of foreign banks. Then, the banking system in Vietnam should meet the strong need of developing in the private economic sector.

This situation has change the operating environment which they were used been for the entire bank in Vietnam. In the past, the traditional banks such as Vietcombank, Agribank, or Vietinbank, etc., have operated in a pretty stable environment, which has changed remarkable for many decades. Nowadays, along with the appearance of many more commercial banks, the transitional ones have to cope up with a fierce competition in fact; they have lost a considerable market share to those newly-established banks.

Most people think that all the banks are the same, so it is unable to create difference among them. However, with a view to history, it is easy to recognize that every kind of goods can become unique or special, and become customer’s favourite. For example, in Vietnam, long ago, sugar sold in packets without
label, which made it the same among different sugar manufactories, however, in the last two decades, those manufactories inside and outside Vietnam have started to pack their product in their own designed packets and labels. Then, it has become easier for customers to distinguish the packet of Bien Hoa sugar manufacturer from the other ones.

Consequently, it can be concluded that although the goods are completely the same in terms of components, customers can still recognize the difference. Then, their recognition will affect their decision of purchasing. This case is true for the banks product and service, too. That means, in terms providing product and services to the customers, if any bank can create any difference, that bank can unique more success.

Currently, all the banks in Vietnam are trying to meet the need of their customers and satisfy them with their product and their service as well. Additionally, they have to accept the fact that no bank can supply customer loyalty with all kind of product and that in the view of banking customers, no banking is complete perfect. Each bank is worrying how to have and how to keep their loyal customer. Like (Alrubaiiee, L. & Al- Naizer, N, 2010) said that “the challenge all marketers face today is in finding ways of increasing customer loyalty and retention.” That means they have to try how they can to make good relationship with their customers and can be aware that find a new customer is more costly than keeping an existing, now they are trying the best to become have good the loyalty in their customer through product and service.

In Vietnam, the improvement of technology has contributed good changes to the finance and banking industry. Such as, thanks to the high technology and marketing, a record number of trading as well as other financial activities and services has been carried out easily and conveniently. Therefore, this can not be denied that technology has a good effect on the operation product and services of the bank in the world and also in Vietnam. The effect of technology is demonstrated of great innovations that it has helped creating. Another hand is
the creation of ATM. It’s one of the banking services which are now attracting many a concerns.

Automatic Teller Machine (ATM) and Bank service is a magnetic stripped bank service that was introduced to allow customers to withdraw cash from account without human intervention (economywatch, 2012). Nowadays, there is a great chance that somebody has bank service, which stands for ATM service. This ATM service gives the ability to go a bank and perform transactions. Customers have access to their funds seven days per week (Nakman, 2011). So, it will be easier for everybody, even for the student and for the people doing business. Bank service is one for today’s most financial instruments and perspectives, indentifying the appropriate market for the bank service, interpreting consumers in everyday life activities without many concerning about cash. For the other customers in service, Bank service as basic bank service, debit service, credit service, master service, and visa service) is the great choice on doing business.

Main purpose of bank is currency turnover in order to serve everybody’s business. But, out society is increasing more and more, therefore there are many new commercial banks or private banks building up, it is lead to the competition about service quality and product safely. And the one of popular banking services which are everybody using nowadays is bank service.

Now ATM machine over the world is not strange to the major of the Vietnamese. Such as all the banks in Vietnam have launched ATM service, which it also created a high competition among them. Vietnam Joint Stock Commercial Bank for Industry and Trade (Vietinbank) is one of three biggest banks in Vietnam in terms of capital and revenue. Up to now, the card service has been provided by Vietinbank for 17 years and paid attention in its business strategy in coming time. However, Vietinbank has never measured customer satisfaction even through data collected by the Service Department of Card Centre showed that many customers complained about poor service and
expected quality improvement. In order to better serve customer, Vietinbank need to assess customer satisfaction and look for the opportunity to improve card service quality.

Vietnam Joint Stock Commercial Bank for Industry and Trade (Vietinbank) is one of three biggest banks in Vietnam in term of capital and revenue from 2010. At this moment, Vietinbank is high ranking base on variety of added services as well as rich product lines. Its market share is presented in below figures 1

**Figure 1: Debit card market share and international card in Vietnam, 2010**

![Figure 1: Debit card market share and international card in Vietnam, 2010](image)

Source: (Ngoc, 2007-2009)

Most of the respondents use bank card service of Vietinbank. 90.1% of respondents use ATM Vietinbank card. Vietinbank credit card was chosen by 25.6% of respondents. 26.4% revealed that they use card service of other banks such as Vietcombank, Agribank, BIDV, Techcombank and Dong A bank.

Wide transaction system is the most important factor to choose bank card service. Simple procedure is the second important factor the last three factors are reasonable service fee, plenty of value added service, and bank’s brand name, in turn. Even though Vietinbank have 901% of respondent use ATM card but it still have complain from customer’s satisfaction but the problem is customer still loyalty using ATM service at this bank.
Customers’ perception toward quality of Vietinbank card service is illustrated in figure 2. In this figure, indicators are in ascending rank by sum of very satisfied and very satisfied level.

Figure 2: Customer satisfaction on Vietinbank card service ranking by satisfaction level

Mistake seems to quite often occur with Vietinbank card service. The figure 3 presents this statement. According to result of the survey, one third of respondents revealed they had trouble in transaction so far. Among them, less than 20% are satisfied with solving problem by Vietinbank on solving cost, time and attitude of customer care employees. Problem solving time seems to be the most factors that make customers dissatisfied. 32.5% of respondents those faced problems in transaction revealed they are not satisfied as the long solving time.

Figure 3: Trouble in transaction
Source: (Ngoc, 2007-2009)

Very few are very satisfied with the service quality of Vietinbank card. More than half of the respondents measured card service quality of Vietinbank as on average. They are neutral between feeling satisfied and dissatisfied. The service quality is acceptable but does not impress customers.

In this case, Despite of all the merits of the ATMs, customers still complaint of shortfalls on the use of the system such as; break downs of ATMs, long queues at ATM service points, retention of customers cards, limited knowledge on the use of ATM cards, fraudulent transactions and its operation in just a few languages but they still loyalty with this card. So, the researcher realizes that it should be good topic and interesting to investigate the present problem of bank service of Vietinbank. The researcher would like to analyze about the affecting the loyalty of customer using ATM service at Vietinbank.

However, Can Tho is not a great province, and there are also many other branches of other banks here. Therefore, the competition among these branches to keep their customer is really tense. As (Li- Ting, H., Jun- Dear, L, & Cheng-Kiang, F.) Have stated that “Customer loyalty is a key to increase repurchase-
rates and sales in a supplier & buyer relationship”, it is important to service because customer loyalty always need supplier and buyer, if it have relationship with each other, so it will become good customer loyalty. That’s why it’s key important for them.

As a staff at Vietinbank in Can tho, the author decided to carry out this research, which pays attention to factors affecting the customer’s loyalty when using ATM service at this branch of Vietinbank. The author does hope that the results of this research will help contributing to the operation and the growth of Vietinbank Can Tho

In this research, the researcher will focus on factor affecting the customer loyalty using bank servic at Vietinbank banking. Even though customers still complain about this service but they will loyalty with it. So the researcher decided to give the title of this research as:

“THE FACTORS AFFETCING THE CUSTOMER LOYALTY USING BANK SERVICE AT VIETINBANK BANKING”
1.2. Problems identification

The banking services as bank card services are increase popular in daily life. Such as the bank in over the world develop retail services having remarkable contributions to revenue and profit. Today banks not only concentrate on traditional service as deposit and loan but also develop value added service such as card, internet and mobile banking. But the most friendly and popular with customers today is bank service, and it has become friendly and popular service which everyone can use it, because this service is easily to use with customer, but sometime customer feel uncomfortable when they use bank service as about service quality for example like losing service because of system error, when the customer want to take out cash, they put their service into bank service but the system is error and sometimes they can take out money not only one time but also always error and they feel boring with this service and other problem here is sometime the customer have to wait too long for their turn, because time is very important to doing business if this service have problem about time, so make customer more feel uncomfortable with service or because of delay services, the customer cannot buying, order, or booking anything maybe at that time the process have error or it’s not running well. After show many problems can happen to this service, Vietinbank banking is recognized recent problem and they decided to do regular check and update their system to help customers well uncomfortable when they use bank service and can make customer easy to use bank service

But sometimes the bank service still has some error and some problem that to make customer are not satisfy but they still need to use this service. In Vietinbank banking, the customer using bank service is higher than another bank. Customer believes in this bank and they want to loyalty with this bank. So the researcher realizes that it should be good topic and interesting to investigate the present problem of service of Vietinbank Banking. The researcher will focus on factors affecting the customer loyalty using bank service at Vietinbak
banking. Even problem still happen like customer still complains about this bank service but they will loyalty with it but they still wan to loyalty with this service.

1.3. **Statement of problem**

This research is analyzing the factors affecting the customer loyalty using bank service at Vietinbank Banking. The following problem statements have been used to guide this research work in order to clarify

To answer this research problem, the following questions are being researched:

1. Is there significant relationship between customer’s need, marketing, technology and staff affecting the customer loyalty using bank service?
2. How significant does those factor influence on customer loyalty using bank service?
3. How to determine the factor that customer consider important when selecting a bank and how those factor are prioritized according to their importance?

1.4. **Research Objective**

2. To explore the major factors that are influence on customer loyalty using bank service based on respondent’s feedback with a structured questionnaire
3. To know how significant relationship between customer’s need, marketing, technology and staff affecting the customer loyalty using bank service
4. To determine the factor that customer consider important when selecting a bank
1.5. Scope and Limitations of study

The scope of the research is limited to four factors is customer’s need, technology, marketing and Staff of bank. All factors would have effect on customer loyalty’s Vietinbank selection in Vietnamese period 2010- 2012 and focuses to make the research stay on the right track to avoid the unrelated questions.

It is necessary to recognize the limitations of the current study. Firstly, the research focuses on Vietnamese’s Vietinbank system but because of geographical distance matter, the research has to give some customer in Vietinbank so that the research may have limitations about sample size such as age level. The adults are from forties and above spending less time on internet than the youth there are from around twenties years old. The second limitation is about occupation such as almost the respondents are students, people to do business or employers using Vietinbank service. This has a bit reduced the sample size. Another problem is some distributed questionnaires are left unreturned.

The research results are only form the measurement and finding out the relationship between the affecting factors and the loyalty of customers. So they can only be treated as supporting information for making decisions.

The data collected after 10 days (2th November, 2013 to 12th November, 2013) will be analyzed by multiple regression analysis; because there are four independent variables and one dependent variable

1.6. Definition of terms

BANK service: A plastic service used to withdraw money from a banking institution's automatic teller machine (BANK). Sometimes this service may also be used as a debitservice, but not all BANK services have this capability(Sullivan, Arthur and Steven M. Sheffrin, 2003). The BANK service is a convenient service issued by our banks and credit unions with which we can
access our checking and savings accounts. The BANK service has a number of different applications and is well worth the small effort required to apply for one.

**Service**: Each action or performance offered by a one party to another party which is in principle intangible and does not bring about any transfer of ownership. Its product may and may not be bound to physical product (Susan Fournier & David Glen Mick, 2000)

**Loyalty**: is thus defined as the relationship between an individual's attitudinal predisposition towards an object and the repeat patronage of that object. (Bennett, Rebekah and Bove, Liliana, 2002)

**Customer loyalty** is a composite of a number of qualities. It is driven by customer satisfaction, yet it also involves a commitment on the customer to make a sustained investment in an ongoing relationship with company so loyalty customers are simply more profit than customers who are not loyalty and it is to grow your company when you retain loyal customers. Customer loyalty is reflected by a combination of attitudes and behaviours.

**Customers’ need**: It is said that customer’s need is problems that customers intend to solve with the purchase of a good or service. In order to be successful, it is vital that every business know and understand their customers’ need. Once they know what their customers need, they can make their products or their services be at their customers’ interests

**3-P marketing (place, price, promotion)**

It is widely approved that the three components of marketing, which are Place, Price, and Promotion have particular impacts on the loyalty of customers.

**Place**: is concerned with various methods of transporting and storing goods, and then making them available for the customer
**Price:** Price is the amount of money a customer pays for a product or for using a service.

**Promotion:** promotion consists of the integrated use of advertising, public relations, promotions, media advocacy, personal selling and entertainment and promotion focuses on creating demand for a product or a service.

**Technology:** the technology in businesses applies for services really affects to buy habits of customers. According to the European Central Bank (1999), technology is important strategic tool for banks to safeguard long term competitiveness, cost efficiency and profitability and the influence of technology on the relationship between banks and customers is expressed by Arbussa Reixach (2001). According to her, technology really has a clear impact on social relations and on economic matters.

**Staff** is the entire group of employees who work at company or work under a given supervisor.

### 1.7. Significance of study

The significance of this research is aimed to give a valuable knowledge for:

1. **For Banking Industry**

   In business the customer’s expectations and satisfaction must be out on the top. Bank must pay attention particularly in this issue to keep the customer’s belief and loyalty. Banking also can carry out direct investment in the factor affecting customer’s loyalty and besides, it highly recommended that indirect investment through the satisfaction of customer be carried out and banks can understand and give the solution, recommendation of Bank service which is help bank to know how the bank can get good relationship between customer’s perceptions on bank service of bank Vietinbank. It also is a perspective for bank information to increase their competition with another through a system that will work effectively and to facilitate all transactions.
2. **For the researcher**

Give better and analyze clear about research and can understanding about the research topic. In the future, the researcher expects this research can give knowledge, experience in the working field after being graduated from the university.

3. **For President University**

This research gives a new idea about the factors which may affect the customer’s loyalty in Vietinbank. The result of this research also can be seen a resource for another research that take same field of study.
CHAPTER II

LITERATURE REVIEW

2.1. Theoretical review

2.1.1. The Function of Bank service

One of the most popular forms of consumer credit today is accessed via Bank service cards issued by VISA, MasterCard, Discover, and many smaller card companies. Bank service after their holders access to either installment or non-installment credit because the customer can charge a purchase on the account represented by the card and pay off the charge in one billing period, escaping any finance charge or choose to pay off the purchase price gradually, (Rose & Hudgins, 2001,)

Today, Bankcards have many functions and are very versatile. According to The Functions of a bank Card (James Lemoine, 2008), they can be summarized into the following functions:

The bank card can be used in a variety of ways that include: withdrawing cash at an Bank service card, payment for goods and services purchased at stores and restaurants, payment for goods and services purchased online, checking your account balances at an bank card machine, depositing cash, checks, and pay checks at an bank card machine, withdrawing local currency at a foreign bank's bank card machine at a fair exchange rate. The customer can also paying routine bills, such as utilities, phone and social security fee bills. You can also pay your taxes and legal fees through the card. Getting printed bank statements. Ordering a check book. Updating passbooks. Transferring money from one account to another. Loading money onto your existing value cards, such as the prepaid SIM card. Purchasing postage stamps, lottery tickets, train tickets and concert tickets. Shopping for mall gift certificates. Depositing cash or checks in the account linked to your Bank card. Donating to charities.
Perhaps the most significant fact to emerge from the summary of card functions is that strictly speaking, they are not debit cards. Although they can be used to obtain cash via bank card, the debit will be made from the bank card account and not from the holder's bank account.

The Bank cards discussed above are bank cards. Different bank cards have different card functions. The functions of bank cards really depend on the individual bank itself. Some bank card may have all of the above functions and some may not.

2.1.2. **Bank Service Networks**

Bank Card (including Credit card, Debit card, MasterCard, basic Bank card, VISA card) has the same networks with other card. According to Agnihotri Peeyush (2001) has explained the networking of bank Card of different banks including a computer network, banking systems, websites or electronic networks that connects the Bank in “IT of getting cash”. While interbank networks provide capabilities for all Bankcards within the same network to use other banks' service that belong to the same network, the services vary. For instance, when a person uses their bank card at a Bank that does not belong to their bank, the basic services, such as balance inquiries and withdrawals, are usually available. Participants in bank card networks are primarily comprised of customer, payment place, central processing unit, network switching equipment, and bank system. These participants are involved in series of interrelated bilateral transactions. A bank card transaction involves five parties. The card of bank is connected to the accounting platform of the bank through bank service switches. The customer can use their card in anywhere which is offer card facilities to purchase goods or services. Then the information will directly send to the central processing unit to process the data. From central process, the data one more time send to any bank system through network switching equipment. So the theoretical framework will be like this:
This figure will explain about bank card network. The customer can use their bank card to withdraw their money in bank service system at bank or go to shopping or make a payment at school but they don’t need to bring much of money. The information will process through Central Processing unit and switch through network switching equipment. Then the last information will be send to the bank which BANK SERVICE belongs to. In this research, it is Vietcombank banking.

2.1.3. Customer Loyalty

A. Definition of customer loyalty

ICLP, which is a global loyalty marketing agency and an expert in developing and managing customer loyalty, has defined customer loyalty as following:
“Customer loyalty is the repeated purchasing behavior of the customer from the same company over a considerable period of time” (Tellis, 1988). These feelings define the individual’s cognitive degree of loyalty (Hallowell, 1996)

Customer loyalty can be defined as the totality of feelings or attitudes that would incline a customer to consider the re-purchase of a particular product, service or brand or revisit a particular company, shop or website. Customer loyalty has always been critical to business success and profitability. Loyal customers are important, because they contribute to the bank’s profitability by passing positive words of mouth and also retain their customer ship. Loyalty is predominantly satisfaction driven and therefore customer’s satisfaction measurements are believed to give a better indication of future performance of service firms than, for instance financial and accounting based measures. Customer loyalty is a feeling of commitment on the part of the customer to a product, brand, marketer, or services above and beyond that for the competitors in the market place, which result in repeat purchase. A loyal customer to a bank is thus, one who will say with the same service provider, is likely to take out new products with the bank and is likely to recommend the bank service. The customer’s loyalty towards the banks in the present study is measured on the basic of three statements. (S. Dhandabani, 2010)

A lot of other researchers have several other definitions for customer loyalty. In his view, (Oliver, 1999) defines customer loyalty as “a deeply held commitment to re buy or repatronize a preferred product/service”. Meanwhile, Engel, Kollat, & BLACKWELL (1982), as cited in (Anderson, R. E., & Srinivasan, S.S., 2003), define customer loyalty as “the preferential, attitudinal and behavioral response toward one or more brands in a product category expressed over a period of time by a consumer. “Additionally, Duffy (2003), as cited in (Ismail, 2009), state that customer loyalty is “the feeling that a customer has about a branch which ultimately generates positive and measureable financial results”. Another definition of customer loyalty is
expressed by Prus & Anadall (1995), as cited in (Rossat, J., Larsen, J., Ruta, D., & Wawrzynosek, M, 1998), as:

Customer loyalty is a composite of a number of qualities. It is driven by customer satisfaction, yet it also involves a commitment on the part of the customer to make a sustained investment in an ongoing relationship with a brand or company. Finally, customer loyalty is reflected by a combination of attitudes (intention to buy again and buy additional products or service from the same company, willingness to recommend the company to others, commitment to the company demonstrated by a resistance to switching to competitor) and behavior (repeat purchasing, purchasing more and different product or service from the same company, recommending the company to others).

The term “Customer Loyalty” has also attracted concerns of several other researchers. For example, (Heskett, J. L., Sasser, W. E., & Schlesinger, L. A, 1997) Heskett, Sasser & Schlesinger (1997) regard “customer loyalty” as “one of the major facilities of service quality that emerged from literature” and that it only “happens when there is repeated purchasing by the same customers and their willingness to recommend the product to other customers without outright benefits”. (Bowen, J., & Shoemaker, S, 1998) share the same opinion clarifying that customer loyalty means repeated purchasing by the same customers, and that those customers will make business referrals and provide strong “worth-of-mouth references and publicity”.

**B. Components of customer loyalty: loyal attitude & loyal behavior**

According to (Jacoby, J. and Kyner, D.B, 1973), customer loyalty can be defined in two different ways which are behavioral loyalty and emotional loyalty. This point of view is shared by a lot of other researchers such as (Yi, 1990), (Jones and Sasser, 1995), (Kuusik, 2007), etc. they have the same opinion when defining behavioral loyalty as the action of “using only the certain provider’s services and declare that they will use only this provider in the future
but do not agree to recommend this provider’s services and declare that they will use only this provider in the future and recommend this provider to others’

Kuusik (2007) expresses his view that “behaviorally loyal customers act loyalty but have no emotional bond with the brand other supplier whereas emotionally loyal customers do”.

(Peppers, D. & Rogers, M, 2009) have given their own definitions of loyal attitude and loyal behaviors. According to them, loyal attitude is a “state of mind”, and a customer has loyal attitude to a brand when they have “a positive and preferential attitude toward it”. This, before, can be understood that loyal attitude is the willingness of a customer to buy products or to use services of a particular company. Meanwhile, loyal behaviors are actual actions to buy product or to use services of that company. This is supported by Peppers & Rogers (2009) when they define loyal behaviors as “not the cause, but the result of brand preference”. This can be inferred that a customer is regarded as a loyal one if they but products or use services of a particular company and they continue doing so in the future.

C. Benefits of having customer loyalty

Having customer loyalty is definitely important in doing business. Without it, business will surely encounter with difficulties as Anderson and Srinivasan (2003) state that “without customer loyalty, even the best-designed business model will soon fall apart”. It is estimated that 20% loyal customers can bring about 80%, profits for a company. When having customer loyalty, businesses do not have to increase their cost as loyal customer are used to being served in a familiar routine, and they do not inquire too much from business. They can also propose a lot of effective ideas and say good things about their favorite business. Having customer loyalty means having more profits and developing more stably. Consequently, any businesses have to pay attention to building the loyalty in their customer, bearing in their mind that they need to have loyal customers if they want to exits and develop in the long term.
However, there are not few businesses forget to find the answer to the question of how to build and retain the loyalty in their customers. These days, many businesses are trying to attract new customers without paying attention to retaining the already existed ones. Therefore, in this age of high competition, they lose a lot of their old customers even when they do not gain many new ones. This is s bitter for them.

One the other hand, there are more businesses than ever before paying attention to building the relationship with their customers. They both focus on sales and after-sale services. In addition, along with strengthening the relationship with their partners, enterprises are also trying to develop the loyalty in their end-users. That is the reason why nowadays, a lot of businesses are willing to spend a remarkable sum of their budget on finding loyal customers and on developing the loyalty in their customers as well.

2.1.4. Factors Affecting Customer Loyalty

A. Customers’ need

Customer’s need of course has special influence on customer loyalty. One customer can only be loyal to a brand incase he/she needs the products or services of that brand. (Anderson, Fornell & Lehmann, 1994) Emphasize the importance of satisfying customer’s need in case a business wants to acquire customer loyalty stating that this in turn would create a lot of profits to the business. Customers and their needs change all the time. Thus it is important for the companies to change and develop their strategies in order to meet the current customers’ expectations and needs. (Harris, E. K., 2000)

In terms of banking industry, customer’s needs when using bank service are various; therefore, it is essential that each bank carry out market research to find out what their customers need and want about their bank service. Then, they can use their findings to improve their service so that it can meet their customer’s need. If they can do so, surely they can win in this competitive age. Generally,
when using bank service, customers need security, convenience, fast and affective service, etc.

B. 3-P marketing (place, price, promotion)

It is widely approved that the three components of marketing, which are Place, Price, and Promotion have particular impacts on the loyalty of customers.

- **Place:**

According to (Weinreich, 2006), this term describes the way that product reaches the customers. In more detail, “place” for a tangible product means the distribution system including warehouses, means of transport like trucks, sales force, and retail outlets, etc. meanwhile, “place” for an intangible product is not as clear as the one for a tangible product. That means refers to the decisions about the channels that can be used to supply customers with information or training. These channels can be a doctor’s office, a shopping mall, or mass media, etc.

Choosing the right place to locate branches or Bank service is a hard task for the managing board of every bank in Vietnam, especially in Can Tho province. Sometimes, even when your services are similar to the ones of your competitors, you still lose your customers just because the location of your branch is not as convenient for them as your competitors consequently, it is important to see if the branch of Vietinbank in Can Tho is convenient for customers or not.

- **Price:**

Price is the amount of money a customer pays for a product or for using a service. Weinreich (2006) shares the opinion that setting a right price is not always an easy task. This is absolutely true as in the opinion of many customers; a too-low-price is often accompanied with low quality. Meanwhile, many customers cannot afford too-high-price products or services.
Price is a very important factor that makes your customers come back and use your services again. (Temkin, 2009) gives a conclusion that lower prices can affect the buying habits of the majority of customers the most. Moreover, in Can Tho, there are many other branches of other banks which also offer customers with ATM service. Therefore, it is very important for Vietinbank Can Tho to offer a good price to their customers.

- **Promotion:**

  Weineich (2006) states that “promotion consists of the integrated use of advertising, public relations, promotion, media advocacy, personal selling and entertainment vehicle”, and that promotion focuses on creating and sustaining demand for a product or a service.

  There are now a lot of kinds of promotions that business can use to attract customers. For example, the offer Buy-one-get-one-free, discount, etc, have been working well. In term of banking service, it is essential to find out what the best kinds of promotions for customer are. Then, it is therefore vital that Vietinbank Can Tho carry out surveys or research to find the most suitable promotion approach for their customers. For instance, users of ATM often like chances to open a bank account free of charge, or chances to participate in a prize-winning campaign, etc.

**C. Technology**

The important of technology is prominent in banking industry and affect strongly customers’ decision whether to choose a particular bank. In this modern age, the technology that businesses apply for their services really affects the buying habits of customers. According to the European Central Bank (1999), technology is “an important strategic tool for banks to safeguard long – term competitiveness, cost efficiency between banks and their customers is expressed by Arbussa Reixach (2001). According to her, technology really has a clear impact on social relations and on economic matters.
Understanding the importance of technology, Vietinbank has tried a lot of supply its customers with the best-technology-service. For example, based on the new Core-Bank technology, Vietinbank has applied the Switch System to issue credit cards and to centralized payments. In addition, its ATM has been controlled by NDC+ standard. The application of ATM NDC+ runs in the Window XP dimension, so it can help integrating a lot of supporting applications of bank service. Last but not at least, all the transactions are controlled by the host server. Therefore, it is much easier and more convenient to develop applications and control errors on bank service system.

D. The serving attitude of the banks staff

It is said that the serving attitude of staff really affects the buying of customers (Grant, 2001) states a reason that staff may fall to satisfy their customers, which is “Staff may become so enmeshed in day-to-day operations that they fall prey to the temptation to listen to loudest whiners and rely on anecdotal to set goals and make plans”. That means every day, there may be a lot of pressure coming to staff of businesses, especially staff banks as they have to deal with a huge number of financial transactions. Therefore, they may become ignorant of how their customers are feeling, and they may have an inappropriate serving attitude.

In the case of Vietinbank Can Tho, the staff needs to be more sensitive to the feelings of customers, and try to have suitable attitude toward the serving offered to their customers.
Figure 4. Factor affecting customer loyalty

Source: (Thanh, 2011)

Explain: in this research, the researcher use factor on the theory of (Thanh, 2011). In there, the researcher already analyzed all factor as customer’s need, marketing, technology and Staff. All factor affected to customer loyalty. That’s why in this research, the researcher want to use analyze all factor again to other bank.

2.2. Theoretical Framework

This research has been carried out based on two purposes. The first purpose is to examine how the four factors shown in the literature review affect the customers Loyalty using Bank service at Vietinbank Can Tho. The second purpose is to use the finsings from this research to contribute to the operation of Vietinbank Can Tho
According to the literature review, there are four factors influencing the customer loyalty. They are: customer’s need, marketing factor (Place, Price, and Promotion), technology and the serving attitude of the staff at Vietinbank Can Tho. Based on the literature review, the author has built a research framework as shown in Figure 5.

**Figure 5. Theoretical Framework**

*Figure 5: Explain the field of study that the researcher would like to observe. There are 4 factors including customer’s need, 3-P Marketing, Technology and Staff. The reason researcher use 3P for this topic following in Literature review already explain. (Thanh, 2011)*
2.3. Hypotheses

The research hypotheses (H) were developed based on the research framework as following

H₁: The need of customer when using bank service at Vietinbank positively affects the loyalty of them

H₂: The marketing factors (Place, Price, and Promotion) of Vietinbank positively affect the loyalty of their customers.

H₃: The technology that Vietinbank applies positively affects the loyalty of their customers.

H₄: The serving attitude of the staff at Vietinbank positively affects the loyalty of their customers.

2.4. Previous research


Previous chapters tried to find the factors and their link with customer loyalty in banking industry in the Iranian environment. As a conclusion this research found Habit, Choosing, Switching cost, Tangible Quality, Intangible Quality and Satisfaction, as the factors which have influence on loyalty. Also these factors have relationship with each other which were explain totally previously. And also the factor which are added to the main model improve the fitness of the model


The purpose of this study is to develop a conceptual framework to investigate the relationship between ethical sales behavior, relationship quality, and customer loyalty.

The purpose of this study discuss how expectations, quality, and price should affect customer satisfaction and why customer satisfaction, in turn, should affect profitability; this results in a set of hypotheses that are tested using a national customer satisfaction index and traditional accounting measures of economic returns, such as return on investment. The findings support a positive impact of quality on customer satisfaction, and, in turn, profitability. The authors demonstrate the economic benefits of increasing customer satisfaction using both an empirical forecast and a new analytical model. In addition, they discuss why increasing market share actually might lead to lower customer satisfaction and provide preliminary empirical support for this hypothesis.


The authors investigate the nature and strength of this link. They discuss how expectations, quality, and price should affect customer satisfaction and why customer satisfaction, in turn, should affect profitability; this result in a set of hypotheses that are tested using a national customer satisfaction index and traditional account on customer satisfaction, and, in turn, profitability. The author demonstrate the economic benefit of increasing customer satisfaction using both an empirical forecast and a new analytical. In addition, they discuss why increasing market share actually might lead to lower customer satisfaction and provide preliminary empirical support for this hypothesis.


This study of relationship marketing focuses on loyalty a relationship built on trust and commitment between the buyer and the seller. Based on the information we garnered from our research, hotels that seek to employ the relationship marketing strategies discussed here may have to undergo fundamental.

This study presents the findings of a study performed on data from a large bank’s retail-banking operations. Illustrates the relationship of customer satisfaction to customer loyalty and customer loyalty to profitability, using multiple measures of satisfaction, loyalty, and profitability. An estimate of the effects of increased customer satisfaction on profitability (assuming hypothesized causality) suggests that attainable increases in satisfaction could dramatically improve profitability.


Jacoby and Kyner’s (1973) definition of brand loyalty. That definition, “the biased (nonrandom) behavioral response (purchase) expresses over time by some decision making unit with respect one or more alternatives. When discuss brand loyalty, they general are considering frequently purchased goods and these are often referred to as low involvement. Perhaps brand loyalty is a low involvement mechanism that make life easier for consumers, it is easy to choose the same brand, the same benefit or the same deal. A key unique benefit for convenience goods may be price, and, therefore, loyalty to price or deal may be the most viable low involvement behavior.


The author investigates what aspect of the consumer satisfaction response has implications for loyalty and what portion of the loyalty response is due to this satisfaction component. The analysis concludes that satisfaction is a necessary step in loyalty formation but become less significant as loyalty begin to set through other mechanisms. These mechanisms, omitted from consideration in current models, include the roles of personal determinism and social bonding at the institutional and personal level.

This study examines the nature of linkage between service quality and customer loyalty in Indian retail banking. Study used confirmatory factor analysis to identify the service quality dimension. The resulted dimensions are Reliability, Responsiveness, Knowledge and recovery and Tangibles. The service quality dimension lead to customer satisfaction and the customer’s satisfaction leads to customer’s loyalty.


The study reported here address the preceding cues, extending the literature in three ways. First, behavioral research on repetitive advertising exposure is reviewed to develop relevant hypothesis. Second, recent development in choice modeling are used to formulate a test of these hypotheses. Third, the hypotheses are tested with individual brand choice data recorded with cablescanner technology the data make possible a within and between subject and a within and between brand analysis the design minimizes the problem of collinearity and causality that limited previous econometric research.


The purpose of this study insists that the list of most important factors affecting loyalty. Specifically, it is the influence of factors name: rental location, hardware & equipment, content provider, internet provider, food and drink, operation cost, software and management solution.

The Researcher have purpose that The main purpose of this study theoretically is finding out how applicable the SERVQUAL model is in the context of grocery stores and empirically, describe how consumers (students) perceive service quality and whether they are satisfied with services offered by these stores in Umea.


This research attempts to find the customer loyalty factors and their relationships with banking industry in one of the developing countries in order to provide a model for this concept.


The research paper is to measure the quality of service offered by private banks operating in Ethiopia. Moreover, it tries to investigate relationship between service quality, customer satisfaction and loyalty. The five dimensions of SERVPERF model, reliability, assurance, tangibility empathy and responsiveness were used to measure the quality of service offered by the private banks. In order to achieve the aims, both primary and secondary sources of data were used. The primary data were collected through administrating questionnaire.
CHAPTER III

RESEARCH METHODOLOGY

This section was dedicated for the explanation of all the scientific methodologies used to carry out the research. In this thesis, only primary data was used for the analysis. About primary data research methodology, this consists of the conceptual framework and research hypothesis, the research design and the reliability.

3.1. Research Method

According to Bryman and Bell (2007), there are two types of research methods, which are qualitative method and quantitative method.

Qualitative method is a naturalistic, interpretative approach concerned with understanding the meaning of certain observed phenomenon or action. It examines to analysis and meaning of certain observed phenomenon or action. It examines to analysis and interprets observation for purpose of discovering underlying meaning and patterns or relationship in a manner that does not involve mathematical models.

Quantitative method uses numbers to prove or disprove a notion or hypothesis. The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationship. Quantitative research uses data that are structured in the form of numbers or that can be immediately transported into numbers (Ross, 2009).

The study used the quantitative research methodology approach. Quantitative research involves obtaining data from a large group of respondents and is used in descriptive studies to quantify data and generalize the results from the sample to the target population (Hollensen, 2003).
Quantitative research is a type of research that uses structured data in the form of numbers, or data that can be immediately transported into numbers. Quantitative research is about the collection of numerical data and it is conducted by using statistical analysis with structured questionnaires, which mainly use closed questions with set responses. Quantitative research uses numbers to prove or disprove a notion or hypothesis. The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationship (Ritchie & Lewis, 2003).

Cooper & Schindler (2006) identified three primary data collection methods as observation, experiment and survey. This research used the survey method by spreading out questionnaires, using the Likert Scale questionnaire. A survey will ask a series of questions that require answers from respondents which are then analyzed at the end of the survey when the participant level has been reached. In survey research, the researcher selects a sample of respondents from a population and administers a standardized questionnaire to them.

3.2. Operational Definition

There are four variables (the customer’s need, the marketing factors, the technology, and the serving attitude of the staff at Vietinbank Can Tho) which are considered in this research. This sector will discuss the operational measurement approaches to those variables.

3.2.1. Customer’s need

While doing this research, the authors recognize that customers at Vietinbank Can Tho have their own needs. Thanks to counseling his friends and colleagues as well as his professors, the author has divided to build up the following questionnaire in order to examine the influence of this factor on customer’s loyalty when using Bank service at Vietinbank Nam Dinh. All of the items in this questionnaire will use a 5-point measurement scale: Strong disagree, Disagree; No idea; Agree; Strong Agree.
Table 1. Items of customer’s need factor influencing customer loyalty

<table>
<thead>
<tr>
<th>Variable</th>
<th>Content of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer’s need</td>
<td>You want a low-cost bank service</td>
</tr>
<tr>
<td></td>
<td>You want a good quality service.</td>
</tr>
<tr>
<td></td>
<td>You want the bank service to be of high security</td>
</tr>
<tr>
<td></td>
<td>You want it to be convenient when using bank service</td>
</tr>
<tr>
<td></td>
<td>You want to deal with helpful and friendly bank staff</td>
</tr>
</tbody>
</table>

3.2.2. Marketing factors

The three components of marketing (Place, Price, Promotion) are also measured by employing a 5-point measurement scale questionnaire. This questionnaire is modified from the questionnaire of Hoan (2009) namely “Factor Influencing Customer Loyalty: A Study on Vietnam i-Café Service”.

Table 2. Item of marketing factors influencing customer loyalty

<table>
<thead>
<tr>
<th>Variable</th>
<th>Content of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place</td>
<td>Vietinbank is near schools and in crowded area</td>
</tr>
<tr>
<td></td>
<td>Bank service of Vietinbank are located in convenient place</td>
</tr>
<tr>
<td></td>
<td>The places of bank service of Vietinbank are safe</td>
</tr>
<tr>
<td>Price</td>
<td>Low-cost is very important to attract more customers.</td>
</tr>
<tr>
<td></td>
<td>Customer of Vietinbank are willing to pay more to have good service quality</td>
</tr>
</tbody>
</table>
3.2.3. Technology factors

The following questionnaire, which is modified from the questionnaire in Hoan (2009), I used to examine the influence of technology on the loyalty of customers using Bank service at Vietbank. This questionnaire also employs a 5-point scale method (Strong disagree; Disagree; No idea; Agree; Strong agree)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Content of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Vietinbank offers bank service of high technology.</td>
</tr>
<tr>
<td>Technology</td>
<td>The technology that Vietinbank offers ensures security for customers using bank service.</td>
</tr>
<tr>
<td>Technology</td>
<td>The technology that Vietinbank offers allows customer to make fast transactions.</td>
</tr>
<tr>
<td>Technology</td>
<td>The technology that Vietinbank offers allows customers to do transactions easily.</td>
</tr>
</tbody>
</table>

3.2.4. The serving attitude of the staff

The serving attitude of the staff at Vietinbank is measured by using the following questionnaire, which employs a 5-point scale method (Strong disagree; Disagree; No idea; Agree; Strong agree). This questionnaire is built based on the research of Daniel and Berinyu (2010) namely “Using the

Table 4. Items of staff factors influencing customer loyalty

<table>
<thead>
<tr>
<th>Variable</th>
<th>Content of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>The staff at Vietinbank gives prompt service to customers.</td>
</tr>
<tr>
<td></td>
<td>The staff at Vietinbank is always willing to help customers.</td>
</tr>
<tr>
<td></td>
<td>The staff at Vietinbank should understand the specific needs of their customers.</td>
</tr>
<tr>
<td></td>
<td>The staff at Vietinbank should show sincere interest in finding solutions whenever their customer have problems</td>
</tr>
<tr>
<td></td>
<td>The staff in the bank tell you exactly when the services will be performed</td>
</tr>
<tr>
<td></td>
<td>The Staff in the bank have the knowledge to answer your questions</td>
</tr>
</tbody>
</table>

3.2.5. Customer loyalty

After measuring those four factors, basing on the research of (Abdollahi, 2008) namely “Creating a model for customer loyalty in banking industry of Iran”, the author continues using the following questionnaire to test the loyalty of customer using Bank service at Vietinbank Can Tho. This questionnaire also
employs a 5-point scale method (Strong disagree; Disagree; No idea; Agree; Strong agree).

Table 5. Items of customer loyalty factors influencing customer loyalty

<table>
<thead>
<tr>
<th>Variable</th>
<th>Content of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Loyalty</td>
<td>I would always recommend this bank to others.</td>
</tr>
<tr>
<td></td>
<td>I would always use this bank’s service</td>
</tr>
<tr>
<td></td>
<td>I intend to continue being a customer of the bank for a long time to come</td>
</tr>
<tr>
<td></td>
<td>I say positive things about the bank to other people</td>
</tr>
<tr>
<td></td>
<td>I do not like to change to another bank because this bank sees my needs</td>
</tr>
<tr>
<td></td>
<td>I will encourage friends and relative to use the service offered by the bank</td>
</tr>
<tr>
<td></td>
<td>Even if close friends recommend another bank, my preference for this bank would not change.</td>
</tr>
<tr>
<td></td>
<td>My intention to use the services of this bank would not be changed.</td>
</tr>
</tbody>
</table>
3.3. Research Instrument

3.3.1. Data collection method

In this research, primary data will be used to analysis. This primary source of information has been collected to support the topic. Data collection method is techniques that can be by researcher to collect data. Further, the method of data collection depends on research methodology, whether is qualitative or quantitative. The collecting data for this research should be systematic because if it is not systematic, it will be difficult for the writer to accomplish this research (Lind, Marchal & Wathen, 2010). In term of data collection, the researcher used a questionnaire to make a survey as the source of the primary data. One part of the questionnaires consulted the related literature and made revisions to fit this study, while the other part recognized previous studies by current researcher. For the pilot test, this study selected 309 respondents from customer of Vietinbank to make sure the data have high reliability level. Following the test, this study was identified as having appropriate content validity. Participation in the questionnaire was voluntary. Moreover, the collected information was kept confidential to avoid any associated privacy concerns.
3.3.2. Research Procedure

Figure 6. Research framework

Statement of Problems

Literature Study

Questionnaire

Pretest

Valid

Invalid

Eliminate

Not Reliable

Reliability Test

Reliable

Data collection

Data Analysis

Conclusion

Source: Constructed by Researcher
3.3.3. Questionnaire

The questionnaire was self-constructed and designed by the researcher based on existing survey as well as from relevant journals and other results before officially distributed. This survey consists of two parts; the first part is respondent’s profile, and the second part is respondent’s feedback with (23) questions for (4) factors that represent the model hypothesis. Twenty – Three of them are used to explain the four independent variables of the model (Customer’s need, Marketing factors, Technology factors, and serving attitude of staff). While the other 8 questions illustrate the dependent variable (user’s acceptance). Whereas, the first section contains the demographic questions such as age, gender of respondent, occupation, marital status, education level, income per month. Due to the scope and laminations of this study, the questionnaire was translates into Vietnamese to make it easier for customer Vietinbank banking to understand and the survey was a bilingual document.

The questionnaire was made in Google Drive, from this instrument; all the responses would be automatically inputted in Microsoft Excel 2010 lastly, the data was analyzed by SPSS version 16.0. All the information for this questionnaire such as questionnaire sample or respondent’s feedback was provided in the appendix 2. The researcher also conducted a pilot study to evaluate the face validity of the questionnaire and made relevant changes in the questionnaire to reflect the suggestion of participants in the pilot study.
3.3.4. Measurement scale

All items in the questionnaire were measured using five – points Likert scales developed by Renis Likert.

Figure 7. Likert Scale

1 = Strongly Disagree
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree

(Source: Consumer Behavior (Schiffman & Kanuk, 2007))

3.3.5. Validity test

Validity construction is very important to test the validity. The validity of scale may be defined as the extent to which different in observes scale score reflect differences among objected on the characteristics being measured. One of factors in the validity test is Construct validity. This was tested by using Pearson Product Moment, because in this research, quantitative data was used. In this test, the r computation would be compared with the r table (Appendix 1). The r computation should be greater than the r table in order to obtain validity in each statement. If the r computation was less than r table, the item was invalid.

According to Mark L. Berenson, David M. Levine and Timothy C. Krehbiel (Basic business statistics, 2009), R, the coefficient of correlation of Pearson Product Moment can be calculated based on the actual values of X and Y formula:
\[
r = \frac{n(\Sigma XY) - (\Sigma X)(\Sigma Y)}{\sqrt{(n\sum x^2 - (\Sigma X)^2)(n\sum y^2 - (\Sigma Y)^2)}}
\]

Where:

\(n\) = the number of parried observations

\(\Sigma X\) = the X variable summed

\(\Sigma Y\) = the Y variable summed

\(\Sigma X^2\) = the X variable squared and the squares summed

\(\Sigma Y^2\) = THE Y variable squared and the squares summed

\((\Sigma X)^2\) = the X variable summed and the sum squared

\((\Sigma Y)^2\) = The Y variable summed and the sum squared

In the real case, the researcher used SPPS 16.0 to get results for faster calculations and accuracy.

### 3.3.6. Reliability test

Reliability indicates the extent to which a variable or set of variable is consistent in what it is intended to measure. It differs from validity in that it relates not to what should be measured, but instead to how it is measured. The current study uses multiple items in all constructs and so the internal consistency is applied. The rationale for internal consistency is that the individual items or indicators of the scale should all be measuring the same construct and thus be highly interred – correlated and as it is the items in this study are. (Cooper, Donald R. & Schindler, Pamela S., 2006) pointed out that the Cronbach alpha which acceptable cutoff point 0.7 demonstrated that all attributes are internally consistent, and as a rule of thumb for describing internal consistency. Cronbach’s alpha is one of the most popular methods to estimate the reliability. The Cronbach’s alpha is calculated by below formula:
\[ \alpha = \frac{K \cdot r}{1 + (K - 1)r} \]

Where:

\( \alpha \) = instrument reliability’s coefficient

\( r \) = mean correlation coefficient between variables

\( K \) = number of questions

To run validity and reliability test, the researcher uses SPSS 16. The purposes of these two tests are to determine the understandability and reliability of the research instrument.

In the second international conference on business and economic research (2\(^{nd}\) ICBER 2011) proceeding, Akbar et al. mentioned that Uma Sekaran (2003) explained that the closer Cronbach’s Alpha reliability coefficients is to 1, the higher is the internal consistency reliability. Consistency indicates how well the items measuring a concept hang together as asset.

The table 6 following showed the value of Cronbach’s Alpha value proposed by Uma Sekaran (2003).

<table>
<thead>
<tr>
<th>Alpha Coefficient Range</th>
<th>Strength of Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; .6</td>
<td>Poor</td>
</tr>
<tr>
<td>.6 to &lt; .7</td>
<td>Moderate</td>
</tr>
<tr>
<td>.7 to &lt; .8</td>
<td>Good</td>
</tr>
<tr>
<td>.8 to &lt; .9</td>
<td>Very Good</td>
</tr>
<tr>
<td>.9 &gt;</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Source: Hair et al (2003), Essential of Business research Methods
3.4. Sampling Design

3.4.1. Sample size

Sample size of number of sample taken to be an important issue when the type of research to be done is research that uses quantitative analysis. According to Bougie (2010) provide guidance on the determining sample size is 100 = poor, 200 = fair, 300 = good, 500 = very good, 1000 = excellent. Therefore, the researcher estimated that this research estimated that this research has totally five variables (including four independent variables and one dependent variable), after that the researchers take out questionnaire to customer, and total is 309 respondent. So the simple size this research is 309.

3.4.2. Margin of Error

Margin of error is percentage allowance for non – precision or error because the use of sample instead of the population. There are usually 0.01 or 0.05 (1% or 5%) in this kind of research. Although the margin of error 0.01 is accurate than margin of error 0.05 the researcher prefer 0.05 for this research. Meaning the level of error 5% and the research has 95% confidence level.

3.4.3. The Actual Sample Size

It is because this research is about customer using Bank service in bank, Vietnam and case study in Vietnam Customer, while the researcher stay in Indonesia during thesis period, so the research asked family who working in the bank to help the researcher give questionnaire and send data by email to the researcher. After trying to give questionnaire to customers who use Bank service, the actual sample size of this research was 309.

3.4.4. Sampling technique applied

Obtaining the sample that can be used in this research to represent the whole population of Vietnamese banking users; nevertheless, due to limited and budget, the convenience sampling method was selected to use to reduce the bias and to approach the participants. Convenience sampling method is considered an effortless approach to get respondents to participate in a study of this nature.
Convenience sampling is one of non-probability sampling. It means the sampling including the most easily accessible members, they are chosen as subject this method is quick, convenient and less expensive, however, is has the disadvantage is not generalizable at all. Many social science studies use convenience sampling with student, paid volunteers or client. In addition, prior related researchers have used similar method in selecting participants. This sampling method is commonly used in information system research. It is also cost effective as anyone can be selected to be a participant with ease. Sample selection was based on stratified proportionate.

3.5. Data Analysis and Testing Hypothesis

3.5.1. Data Analysis

The combination between Microsoft Excel 2010 and SPSS (Statistics Package for Social Science) version 16.0 were used to process statistical data for questionnaires.

a. Microsoft Excel 2010

Researcher also helped by basic software in Microsoft Office for inputting or sometimes used for processing the data

b. SPSS (Statistics Package for Social Science) version 16.0

SPSS its helps in terms to analyze the data where is prove conclusion formed as numerical measurement of data gathered and inputted. This data is helpful in processing the data while there are many equations or formulas that really hard of calculated it manually. Moreover, the data gained is not just one or two data.

3.5.2. Testing Hypothesis

3.5.2.1. Descriptive Statistics

Descriptive statistics includes statistical procedures that are used to describe the population which are being studied. The data could be collected from either
a sample or a population, but the results help to organize and describe data. Descriptive statistics can only be used to describe the group that is being studied. That is, the results cannot be generalized to any larger group.

Frequency distribution, measures of central tendency (mean, median and mode), and graphs like pie charts and bar charts that describe the data are all example of descriptive statistics. The website http://sociology.about.com/od/Statistics/a/Descriptive-inferential-statistics.htm cited it from book Social Statistics for a Diverse Society of Frankfort et al (2006).

### 3.5.2.2. Weighted Mean

According to the website http://ncalculators.com/statistics/weighted-mean-calculator.htm. Weighted Mean is an average computed by giving different weights to some of the individual values. If all the weights are equal, then the weighted mean is the same as the arithmetic means, they do have a few counter instinctive properties. Data elements with a high weight contribute more a the weighted mean than do elements with low weight. The weights cannot allowed. Weighted means play an important role in the system of data analysis, weighted differential and integral calculus.

The weights mean for given set of non negative data \( \{ x_1, x_2, x_3, \ldots x_n \} \) with non negative weights \( \{ x_1, x_2, x_3, \ldots x_n \} \) can be derived from the formula:

\[
\bar{X} = \frac{\sum_{i=1}^{n} W_i x_i}{\sum_{i=1}^{n} W_i}
\]


Where:
3.5.2.3. Multiple regression analysis

According to the Basic Business Statistics book (Mark L. Berenson, David M. Levine, Timothy C. Krehbiel, 2009), multiple regression models is used for estimating or forecasting the value of variable Y, which calculates using several that affect Y. In regression analysis, the relationship between response variable and one or more predictor variable is discovered. The multiple regression models contain a dependent variable (Y), more than one independent variables (X1, X2, X3 … Xn), the β’s are regression coefficients and the random error term (ε), where Y depends on the Xs; Y and the Xs are continuous variables.

The multiple regression model is:

\[
Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \ldots + \beta_{n-1} X_{n-1} + \beta_n X_n + \epsilon
\]

Where:

Y: dependent variable

β: coefficients

X: explanatory/ independent variables

ε: random error term/ residuals

While the correlations is the shows the relationship between independent variables themselves, the regression analysis, in contrast, is expresses the distinction between dependent and independent variables, and in the extent to which dependent variable is explained or influenced by these independent variables. The result from this regression analysis will be used to accept to reject the hypothesis as to observe whether there is any affect or not between dependent and independent variables. Nevertheless, in order to finish the
regression model to see the correlation between the variable, there are three requirements’ must be passed: Normality test, multicollinearity test and hesteroscedasticity test.

**A. Normality test**

Normality test used to determine whether a data set is well – modeled by a normal distribution or not, or to compute how likely an underlying random variables is to be normally distributed. There are some ways to test the normality of the distribution. However, in this study, the researcher decided to use Graphic method. The researcher would base on the output of SPSS 16.0 to analyze for accurate results.

Other than an informal approach to testing normality is to compare a histogram of the sample data a normal probability curve, a graphical tool for assessing normality is the normal probability plot, a probability - probability plot or a Q-Q plot of the standardized data against the standard normal distribution. These plots are easy to interpret and also have the benefit that outliers are easily identified. Instead, the empirical distribution of the data (the histogram) should be bell-shaped and resemble the normal distribution. This might be difficult to see if the sample is small.

**B. Multicollinearity test**

Multicollinearity is the undesirable situation where the correlation among the independent variable is strong. To help detect nulticollinearity, variance inflation factor (VIF) is used to measure. Formally, VIF measure how much the variance of the estimated coefficients is increased over the case of no correlation among the X variables it has been shown that the variance inflation factor for the $K_{th}$ predictor is:

$$VIF_K = \frac{1}{1 - R^2_K}$$
And \( R^2 = \frac{SSR}{SST} \)

Where:

\( R^2_k \) = the \( R^2 \) value obtained by regressing the \( k^{th} \) predictor on the remaining predictors

\( SSR \) = regression sum of squares

\( SST \) = Total sum of squares

According to Barry Render, Ralph Stair and Michael Hanna (2006), a variable has high multicollinerity if it has VIF more than 10 or it has tolerance tend to approach 0. If there are two or more variables that have a VIF around or greater than 10, one of these variables must be removed from the regression model.

C. Heteroscedasticity test

Heteroscedasticity may occur for many reasons, but typically occurs when responses are not normally distributed or when the variance of the error terms differs across observations. The result of the test can be seen by looking at the distribution of residual values towards the predicted values in the scatter plot. If the distribution spread randomly and does not make any systematic pattern such as increasing or decreasing pattern, then the heteroscedasticity assumption is fulfilled.

3.5.2.4. Measuring the variability of the regression model

Adjusted \( R^2 \) – squared: is a version of \( R^2 \) – squared that has adjusted for number of predictors in the model. According to Join Whitehead (An Introduction to Multiple Regression), the adjusted \( R^2 \) statistic is the same as \( R^2 \) (the coefficient of determination). \( R^2 \) – Squared tends to overestimate the strength of the association especially if the model has more than one independent variable. Moreover, adding a variable to a multiple regression equation virtually guarantees that the \( R^2 \) will increase even if the variable is not
very meaningful, especially when there are multiple models presented with varying numbers of independent variables. To compensate for this, adjusted $R^2$ is corrected for the number of independent variables in the model.

In this case, there are four independent variables investigated. For this reason, the adjusted $R^2$ squared. This will tells how much variance in the dependent variable is explained by the independent in the linear regression model. Adjusted $R^2$ WILL Always be lower than unadjusted.

$$R^2_{adj} = 1 - \frac{(1 - R^2)(n - 1)}{n - k - 1}$$

Where:

- $R^2$ = multiple regression coefficient
- $k$ = the number of coefficients in the regression equation
- $n$ = number of sample

For example and $R^2$ of 0.72 means that 72% of the variance in the dependent is explained by this regression model.

### 3.5.2.5. Testing hypothesis

Hypothesis testing or significance testing, is a method of testing a claim or hypothesis about a parameter in a population, using data measured in a sample. To test a hypothesis, there are four basic steps that needed to be done:

- **Step 1:** State the hypothesis
- **Step 2:** Set the criteria for a decision
- **Step 3:** Compute the test statistic
- **Step 4:** Make a decision

To determine whether there is a linear relationship between $X_5$ and $Y$, two statically tests, F – test and T – test are performed.
A. F – test

F – test determines whether or not there is a relationship between set of independent variables and dependent variable. F – Test is used to statistically test the null hypothesis that there is not linear relationship between the X and Y variables.

For the testing hypothesis, the researcher used confidence interval of two -tailed 95% the 5% significance ($\alpha = 0.05$) outside the confidence level leads to rejection of null hypothesis. 5% significance level is applied since the research is within boundary of social science, in which the 5% significance is customary (Krehbiel, 2006). In testing the value of $\alpha$, F – Test is conducted. If the significance level of the F – Test is low (significance level $\alpha$ used is 005), $H_0$ is rejected and concluded there is a linear relationship (Lind, Marchal & Wathen, 2010). F – test and significance of F – value, for this test, if the F – value is significant, this mean that a significant difference between the groups on this variable is found.

$H_0$: $\beta_1 = \beta_2 = 0$, if significant $F > 0.05$, accept $H_0$

$H_a$: at least there is one $\beta \neq 0$, if significant $F < 0.05$, reject $H_0$

$$F=\frac{(R^2/K)}{(1-R^2/(n-K-1))}$$

Where:

F = statistic test for F distribution

$R^2 = $ coefficient of determination

$k = $ number of independent variables in the model

$n = $ number of sample
B. T-Test

The goal of hypothesis testing is to determine the likelihood that a population parameter the T – test is applied to determine the partial relationship between each independent variable (coefficient) and the dependent variable. If the significance level of T – test is low (significance level \( \alpha \) used is 0.05), \( H_0 \) is rejected and concluded there is a linear relationship (Lind,. Marchal & Wathen, 2010).

\( H_0: \beta_1 = 0, \text{ if significant } T > 0.05, \text{ accept } H_0 \)

\( H_a: \text{ at least there is one } T < 0, \text{ reject } H_0 \)

To compute the T – test, there is a T – test formula used

\[
t = \frac{b_j - \beta_j}{S_{b_j}}
\]

Where:

\( t = \text{statistic test for } t – \text{distribution} \)

\( b_j = \text{sample slope} \)

\( \beta_j = \text{slope of the population} \)

\( S_{b_j} = \text{standard error of the slope} \)

However, in this research, the researcher would use the output from SPSS 16.0 from primary data to analyze for accuracy results

3.5.3. Testing the Partial Correlation

Correlation test is conducted to find out the correlation between one independent variable partially to the dependent variable. The result can be shown in the Pearson correlation table. The positive sign gives information on the increase of the values of on variable relative to the increase value of another
variable, and vice versa (Mark L. Berenson, David M. Levine & Timothy C. Krehbiel, 2009)
CHAPTER IV

ANALYSIS & INTERPRETATION

4.1. Company Profile

Vietnam Bank for Industry and Trade (Vietinbank) has set a minimum bid price of VND20,000 ($1.21) for the 53.6 million shares in the Initial Public Offering (IPO) to be held December 25th on HoSE. Vietinbank will use the proceeds of it’s IPO to raise its registered capital. Registration for the auction was from 8am, December 8th to 10am December 19th at places nominated by the HCM City Stock Exchange. Bids must be submitted by 3pm December 23th at places nominated by the exchange. The auction itself will be held from 8am on December 25th.

Vietinbank’s IPO comes almost exactly a year after Vietcombank held its IPO, raising $652 million from selling a 6.5% stake. VCB hasn’t yet announced a data for its listing. Vietinbank’s brokerage arm Vietinbnak Securities, also hopes to raise at least $8.7 million through an IPO next month by selling nearly 13.4 million shares, or 15% of the firm.

The level of information disclosure has been quite limited in terms of financial details and historical performance. Therefore we have built an earnings model based on what we know. Inevitably there is quite a lot of guess work involved in our assumptions. Company has adopted a dual valuation approach using both a discounted dividend valuation approach using both a discounted dividend model and a Gordon’s Growth model. Company uses both approaches in conjunction with regional and local comparatives to try to produce a fair value for the stock. Of course this is an inexact science and the very short time from the publication of the prospectus to the actual IPO makes the task that much harder.
With calculation, company calculates the rough fair value of Vietinbank shares at VND 16,625. Some investors may feel that the stock deserves a premium for various reasons; the strong long term growth potential of the Vietnamese banking system over the next decade; Vietinbank’s strength in industrials and trade related finance and the huge potential the bank has to improve its pretax margins going forward by changing its business model. Company also have a range of interesting JV’s, especially IndoVina Bank and large land holdings which are on the books at suppressed valuations.

However the bank also faces many challenges in turning what is a plain vanilla wholesale banking operation into an above average player in the market. Strengths such as a wide distribution network and above average non interest income are offset by a lack of presence in the retail market and an over dependence on state owned companies as customers.

It has been over 20 years since the establishment of Vietinbank on 26th of March 1988 in accordance with Decree No.53/ND-HDBT, after that bank was renamed as “Vietnam Bank for Industry and Trade” on November 14th, 1990. In January 2008, the bank’s transaction name was changed from Incombank to Vietinbank.

The bank has been strong growth in total asset and net profit. After tax profit has grown at a CAGR of 60.8% from FY2004 to FY2007 while CAGR of assets was 21% over the same period. At the end of FY2007, VietinBank had chartered capital of VND 7,608 billion. Total assets amounted to VND 166,129 billion, accounting for 10% of the total assets in the banking sector.

Vietinbank mainly provides wholesales credit with corporate loans accounting for about 70% of total lending. Major credit clients are Vietnam Post and Telecom Corporation, Vietnam Maritime Corporation, Tam Diep Cement Company, Minh Phu Seafood Company and Vinaconex. The bank has been trying to attract more SME and individual clients with mixed results so far.
Vietinbank is a multi-banking service provider. In addition to some core business such as credit, deposit and investment activities, the bank tried to expand into other value added services, namely financial consultancy, insurance and re-insurance. They have a very wide distribution network in 56 cities and provinces including 140 branches, 631 sub-branches and 750 ATMs, ranking second after Agribank.

Vietinbank (whose trading name was formerly Incombank) provides deposit and savings accounts, short, medium and long term credit facilities, syndicate loans, financial leasing, loan guarantees, overseas remittances, credit card services, traveler, checks, foreign exchange and securities trading. Its core customer base is state owned heavy industry although it has expanded into new fields providing loans and services to SME’s and retail customers.

The bank, one of the country’s four key lenders, has funded several very large projects in the telecoms, energy and construction sectors such as the project to launch Vietnam’s first telecoms satellite and four power plant projects. Traditionally Vietinbank has been a lender to heavy industry and as such has a certain expertise in project finance.
4.1.1. Organization Structure

Figure 8. Organization of chart in Vietinbank banking
4.1.2. Vision and Mission

a. Vision

To become one of the most modern and effective financial and banking group in and outside the country.

b. Mission

To become the leading financial and banking corporation in Vietnam that operates in diverse areas, as well as provides products and services that conforms to international standards, aiming to improve the values of life.

4.2. Data Analysis

4.2.1. Respondent’s Profile

4.2.1.1. Gender

The researcher delivers the question to customer. The questionnaire is only giving the one who is using Vietinbank banking service. And there are 185 Males and 124 Females are respondents for this questionnaire. Actually total Males respondent are bigger than Females, because they have to work their family, so the business will be more active than Female. This gender description is presented as below:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>185</td>
<td>59.87%</td>
</tr>
<tr>
<td>Females</td>
<td>124</td>
<td>40.13%</td>
</tr>
</tbody>
</table>
4.2.1.2. Age

The result of the analysis the data based on the respondent age level could be seen in the Table 8 below:

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Item</th>
<th>Respondent (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Under 18</td>
<td>10</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>18 – 30</td>
<td>128</td>
<td>41.4%</td>
</tr>
<tr>
<td></td>
<td>31 – 40</td>
<td>60</td>
<td>19.4%</td>
</tr>
<tr>
<td></td>
<td>41 – 50</td>
<td>102</td>
<td>33.1%</td>
</tr>
<tr>
<td></td>
<td>Above 50</td>
<td>9</td>
<td>2.9%</td>
</tr>
</tbody>
</table>
The second question in the questionnaire was about the age of the respondent. For this question, researcher got information that the highest frequency of the age belonged to the age group 18 – 30 where they are 128 (41.4%) of respondents and the lowest frequency of age is related to the age group Above 50 where is 9 (2.9%) respondent.

### 4.2.1.3. Occupation

This part also is very important information for VietinBank banking because this part is research about the customer potential. According to the research data, the bank can see that most of their customers in this time are student, employees and business people. This occupation is presented as below
Table 9. Occupation respondent

<table>
<thead>
<tr>
<th>Customer’s Occupation</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary people</td>
<td>30</td>
<td>9.7%</td>
</tr>
<tr>
<td>Students</td>
<td>70</td>
<td>22.7%</td>
</tr>
<tr>
<td>Employees</td>
<td>115</td>
<td>37.2%</td>
</tr>
<tr>
<td>Professionals</td>
<td>28</td>
<td>9.1%</td>
</tr>
<tr>
<td>Business people</td>
<td>66</td>
<td>21.3%</td>
</tr>
</tbody>
</table>

Figure 11. Occupation of Respondent’s profile

Source: Primary Data

The third question in the questionnaire was about the occupation of the respondent. For this question, researcher got information that the highest frequency of occupation belonged to the employees where they are 37% of respondent and the second is student (23%) respondent and the lowest
frequency of occupation are professional (9%) respondent and ordinary people (10%) respondent.

4.2.1.4. Level of education

The result of the analysis the data based on the respondent Education level could be seen in the Table 10 below:

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Item</th>
<th>Respondent (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of education</td>
<td>Certificate</td>
<td>35</td>
<td>11.3%</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>18</td>
<td>5.8%</td>
</tr>
<tr>
<td></td>
<td>Bachelors Degree</td>
<td>210</td>
<td>68%</td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>9</td>
<td>2.9%</td>
</tr>
<tr>
<td></td>
<td>Ph D</td>
<td>20</td>
<td>6.5%</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>17</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

![Figure 12. Education Level](Source: Primary Data)
In this research, based on the gathered data, most of the respondent are Bachelor where 210 (68%). There are 9 (2.9%) respondent the researcher assumes that they are studying or got master, 20 (6.5%) respondents belong to Ph. D level and other with 17 (5.5%) respondent.

4.2.1.5. Salary

Because all of customers who have been using bank service of Vietinbank banking, they all have salary, even students. Although most of student, they are still have to go to university to learn, so almost are not have job yet, then their salary in this part will come from their family (per month/ Vietnam dong). This salary description is presented as below:

<table>
<thead>
<tr>
<th>Customer’s salary</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 3 millions</td>
<td>160</td>
<td>51.8%</td>
</tr>
<tr>
<td>3 – 5 millions</td>
<td>85</td>
<td>27.5%</td>
</tr>
<tr>
<td>5 – 7 millions</td>
<td>39</td>
<td>12.6%</td>
</tr>
<tr>
<td>7 – 10 millions</td>
<td>15</td>
<td>4.9%</td>
</tr>
<tr>
<td>More than 10 millions</td>
<td>10</td>
<td>3.2%</td>
</tr>
</tbody>
</table>
In this research, salary from 1 – 3 million have 52% respondent so it’s highest frequency, the second is 3 – 5 millions (27%) respondent, the third is 5-7 millions (13%) respondent and salary from 7-10 million (5%) respondent and more than 10 million (3%) have lowest frequency.

### 4.2.2. Validity and Reliability

#### 4.2.2.1. Reliability test

According to Hair et. al. (2003), the Conbach’s alpha higher than 0.7 is considered as acceptable. The computed alpha values for the research variables indicated in Table 12:
Table 12. Result of Reliability test of variable

<table>
<thead>
<tr>
<th>Marketing Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.871</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.873</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technology Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.860</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.909</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer Loyalty Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>.884</td>
</tr>
</tbody>
</table>
Table 12 indicates that the alpha of every item in this study. Based on Table on chapter III, Cronbach’s alpha of reputation is below ranged as poor. The result indicates that the Cronbach’s alpha of customer’s need, marketing, technology, staff and customer loyalty are range as good because the value is more than 0.7. All variable are reliable to the research. With the value of Cronbach’s alpha customer’s need is 0.873, marketing is 0.871, technology is 0.860, staff is 0.909 and customer loyalty is 0.884, all of variable are ranged as very good because the values are more than 0.8.

4.2.2.2. Validity Test Result

In this study, researcher use the Pearson’s Product Moment Coefficient Correlation to study item of questionnaire validity, the formula will be used in this research will check the validity of questionnaire question.

The validity variables come from comparing r computation and r table comes from the r-value product moment on appendix 1. The item valid if the r computation is bigger than r table. Otherwise it would be invalid and should be deleted from questionnaire.

By using significant level (α) = 5% and n = 30 (researcher uses 30 respondent as the sample pilot testing in order to verify the question validity), with df = n -2 = 30 – 2 = 28 is 0.361. Compare to the Table 4.7, the items which have r computation greater than 0.361 will be valid and items which have r computation less than 0.361 will be invalid and they were deleted from the questionnaire before being distributed to the respondents.

Therefore, after comparing between r table and r computation, the validity of each statement is shown in the Table 4.2.2.2.b below:
Table 13: The Result of 31 Items for Validity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Corrected Item-Total Correlation</th>
<th>R table</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(X1) Customer’s need</td>
<td>CUSN1</td>
<td>.545</td>
<td>0.361</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>CUSN2</td>
<td>.727</td>
<td>0.361</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>CUSN3</td>
<td>.666</td>
<td>0.361</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>CUSN4</td>
<td>.729</td>
<td>0.361</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>CUSN5</td>
<td>.630</td>
<td>0.361</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>MKT6</td>
<td>.556</td>
<td>0.361</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>MKT7</td>
<td>.656</td>
<td>0.361</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>MKT8</td>
<td>.628</td>
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<tr>
<td></td>
<td>TEC16</td>
<td>.517</td>
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<td>Valid</td>
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<tr>
<td>(X2) Marketing (3-P)</td>
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<td>.595</td>
<td>0.361</td>
<td>Valid</td>
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<td>STF18</td>
<td>.767</td>
<td>0.361</td>
<td>Valid</td>
</tr>
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<td></td>
<td>STF19</td>
<td>.687</td>
<td>0.361</td>
<td>Valid</td>
</tr>
<tr>
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<td>STF21</td>
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<td>Valid</td>
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<td>Valid</td>
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<tr>
<td></td>
<td>CUSL26</td>
<td>.700</td>
<td>0.361</td>
<td>Valid</td>
</tr>
</tbody>
</table>
From Table 4.2.2b, there is no one item is invalid. All items is valid. So researcher don’t need to deleted items which have invalid. Its mean 31 items are supportive for the continuing sampling.

4.2.3. Descriptive Analysis

4.2.3.1. Evaluation of Customer’s need Variable

Service variable consists of four (4) questions:

1. You want a low cost Bank service (CUSN1)
2. You want a good quality service (CUSN2)
3. You want to be convenient when using Bank service (CUSN3)
4. You want the Bank service to be high security (CUSN4)
5. You want to deal with helpful and friendly bank staff (CUSN5)

Based on the result of the analysed data on the Figure 14: Customer’s need Variable Frequency below, it can be explained that majority of responses from respondent fro items of service is neutral until agree. The responses from the respondent, every time in the figure above are as following:

a. The responds for item “You want a low cost Bank service” are 2.9% strongly disagree, 8.7% disagree, 14.6% neutral, 48.5% agree and 25.2% strongly agree.
b. The responds for item “You want a good quality service” are 1.9% strongly disagree, 1.0% disagree, 30.1% neutral, 43.7% agree and 23.3% strongly agree.

c. The responds for item “You want to be convenient when using Bank service” are 2.9% strongly disagree, 5.8% disagree, 29.1% neutral, 40.8% agree and 21.4% strongly agree.

d. The responds for item “You want the Bank service to be high security” are 1.9% strongly disagrees, 1.0% disagree, 35.9% neutral, 39.8% agree and 21.4% strongly agree.

e. The responds for item “You want to deal with helpful and friendly bank staff “are 1.0% strongly disagree, 1.0% disagree, 34.0% neutral, 46.6% agree and 17.5% strongly agree.

Figure 14. Customer’s need Variable Frequency

<table>
<thead>
<tr>
<th>Axis Title</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong disagree</td>
<td>2.90%</td>
<td>1.90%</td>
<td>2.90%</td>
<td>1.90%</td>
<td>1.00%</td>
</tr>
<tr>
<td>Disagree</td>
<td>8.70%</td>
<td>1.00%</td>
<td>5.80%</td>
<td>1.00%</td>
<td>1.00%</td>
</tr>
<tr>
<td>Neutral</td>
<td>14.60%</td>
<td>30.10%</td>
<td>29.10%</td>
<td>35.90%</td>
<td>34.00%</td>
</tr>
<tr>
<td>Agree</td>
<td>48.50%</td>
<td>43.70%</td>
<td>40.80%</td>
<td>39.80%</td>
<td>46.60%</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>25.20%</td>
<td>23.30%</td>
<td>21.40%</td>
<td>21.40%</td>
<td>17.50%</td>
</tr>
</tbody>
</table>

Source: Primary Data (SPSS 16.0)

4.2.3.2. Evaluation of Marketing (3P: Price, Place, Promotion)

Reputation variable consists of eight (8) questions:

1. Vietinbank is near schools and in crow area (MKT1)
2. Bank Service of Vietinbank are located in convenient place (MKT2)
3. The place of Bank services of Vietinbank is safe (MKT3)
4. Low cost is very important to attract more customers (MKT4)
5. Customer of Vietinbank are willing to pay more to have good service quality (MKT5)
6. Vietinbank is implementing a right price Bank service (MKT6)
7. Vietinbank is willing to spend money on promotion (MKT7)
8. Vietinbank regards promotion as an effective way to attract new customers and to retain old ones. (MKT8)

Based on the result of the analyzed data on the Figure 15: Marketing Variable Frequency below, it shows the result of the reputation variable analyzed data’s frequency, it can be indicated that majority of responses from respondents for items of Marketing is neutral until agree. The responses from the respondent, every item in the figure above are as following:

a. The responds for item “Vietinbank is near schools and in crow area” are 1.0% strongly disagree, 4.9% disagree, 35.9% neutral, 38.8% agree and 19.4% strongly agree.

b. The responds for item “Bank Service of Vietinbank are located in convenient place” are 1.0% strongly disagree, 7.8% disagree, 41.7% neutral, 36.9% agree and 12.6% strongly agree.

c. The responds for item “The place of Bank service of Vietinbank is safe” are 1.0% strongly disagree, 8.7% disagree, 55.3% neutral, 26.2% agree and 8.7% strongly agree

d. The responds for item “Low cost is very important to attract more customers” are 1.0% strongly disagree, 5.8% disagree, 37.9% neutral, 37.9% agree and 17.5% strongly agree

e. The responds for item “Customer of Vietinbank are willing to pay more to have good service quality” are 1.9% strongly disagree, 5.8% disagree, 34.0% neutral, 41.7% agree and 16.5% strongly agree
f. The responds for item “Vietinbank is implementing a right price ATM service” are 1.9% strongly disagree, 1.9% disagree, 38.8% neutral, 45.6% agree and 11.7% strongly agree

g. The responds for item “Vietinbank is willing to spend money on promotion” are 1.9% strongly disagree, 0% disagree, 24.3% neutral, 51.5% agree and 22.3% strongly agree

h. The responds for item “Vietinbank regards promotion as an effective way to attract new customers and to retain old ones” are 2.9% strongly disagree, 2.9% disagree, 41.7% neutral, 35.9% agree and 16.5% strongly agree
4.2.3.3. Evaluation of Technology

Technology variable consists of four (4) questions:

1. Vietinbank offers Bank service of high technology
2. The technology that Vietinbank offers ensures security for customers using Bank service
3. The technology that Vietinbank offers allows customers to make fast transaction
4. The technology that Vietinbank offers allows customers to do transaction easily

From Figure 15: Marketing Variable Frequency below, it can be indicated that majority of responses from respondents for items of service is
neutral until agree. The responses from the respondent, every item in the figure above are as following:

a. The responds for item “Vietinbank offers Bank service of high technology” are 2.9% strongly disagree, 17.5% disagree, 27.2% neutral, 32.0% agree and 20.4% strongly agree.

b. The responds for item “The technology that Vietinbank offers ensures security for customers using Bank service” are 2.9% strongly disagree, 12.6% disagree, 38.8% neutral, 30.1% agree and 15.5% strongly agree.

c. The responds for item “The technology that Vietinbank offers allows customers to make fast transaction” are 3.9% strongly disagree, 11.7% disagree, 34.0% neutral, 36.9% agree and 13.6% strongly agree.

d. The responds for item “The technology that Vietinbank offers allows customers to do transaction easily” are 1.9% strongly disagree, 7.8% disagree, 34.0% neutral, 39.8% agree and 16.5% strongly agree.

Figure 16. Technology Variable Frequency

Source: primary data SPSS 16.0
4.2.3.4. **Evaluation of Staff**

Staff variable consists of six (6) questions:

1. The staff at Vietinbank gives prompt service to customers
2. The staff at Vietinbank is always willing to help customers
3. The staff at Vietinbank should understand and the specific needs of their customers
4. The staff at Vietinbank should show sincere interest in finding solutions whenever their customer have problems
5. The staff in the bank tell you exactly when the services will be performed
6. The Staff in the bank have the knowledge to answer your questions

From **Figure 17: Staff Variable Frequency** below, the result indicated that majority of responses from respondents for items of service is neutral until agree. The responses from the respondent, every item in the figure above are as following:

a. The responds for item “The staff at Vietinbank gives prompt service to customers” are 1.9% strongly disagree, 5.8% disagree, 42.7% neutral, 39.8% agree and 9.7% strongly agree.

b. The responds for item “The staff at Vietinbank is always willing to help customers” are 1.9% strongly disagree, 5.8% disagree, 37.9% neutral, 39.8% agree and 14.6% strongly agree.

c. The responds for item “The staff at Vietinbank should understand and the specific needs of their customers” are 1.9% strongly disagree, 3.9% disagree, 38.8% neutral, 39.8% agree and 15.5% strongly agree.

d. The responds for item “The staff at Vietinbank should show sincere interest in finding solutions whenever their customer have problems” are 1.9% strongly disagree, 0% disagree, 26.2% neutral, 55.3% agree and 16.5% strongly agree.
e. The responds for item “The staff in the bank tells you exactly when the services will be performed” are 1.9% strongly disagree, 1.0% disagree, 20.4% neutral, 50.5% agree and 26.2% strongly agree.

f. The responds for item “The Staff in the bank have the knowledge to answer your questions” are 2.9% strongly disagree, 3.9% disagree, 33.0% neutral, 39.8% agree and 20.4% strongly agree

Figure 17. Staff Variable Frequency

Source: Primary data 16.0

4.2.3.5. Customer Loyalty Evaluation

Customer Loyalty consists of eight (8) questions:

1. I would always recommend this bank to others (CUSL1)
2. I would always use this bank’s service (CUSL2)
3. I intend to continue being a customer of the bank for a long time to come (CUSL3)
4. I say positive things about the bank to other people (CUSL4)
5. I do jot like to change to another bank because this bank sees my needs (CUSL5)

6. I will encourage friends and relative to use the offered by the bank (CUSL6)

7. Even if close friends recommend another bank, my preference for this bank would not change. (CUSL7)

8. My intention to use the services of this bank would not be changed. (CUSL8)

From Figure 18: Customer Loyalty Variable Frequency, it be indicated that majority of respondents for items of service is neutral until agree. The responses from the respondent, every item in the figure above are as following:

a. The responds for item “I would always recommend this bank to others” are 1.9% strongly disagrees, 1.9% disagree, 39.8% neutral, 35.0% agree and 21.4% strong agree.

b. The responds for item “I would always use this bank’s service” are 1.9% strongly disagrees, 1.0% disagree, 37.9% neutral, 43.7% agree and 15.5% strong agree.

c. The responds for item “I intend to continue being a customer of the bank for a long time to come” are 1.0% strongly disagrees, 4.9% disagree, 35% neutral, 42.7% agree and 16.5% strong agree.

d. The responds for item “I say positive things about the bank to other people” are 1.0% strongly disagrees, 6.8% disagree, 44.7% neutral, 36.9% agree and 10.7% strong agree.

e. The responds for item “I do jot like to change to another bank because this bank sees my needs” are 1.9% strongly disagrees, 1.9% disagree, 36.9% neutral, 41.7% agree and 17.5% strong agree.
f. The responds for item “I will encourage friends and relative to use the offered by the bank” are 1.9% strongly disagrees, 11.7% disagree, 41.7% neutral, 33.0% agree and 11.7% strong agree.

g. The responds for item “Even if close friends recommend another bank, my preference for this bank would not change” are 1.9% strongly disagrees, 4.9% disagree, 40.8% neutral, 43.7% agree and 8.7% strong agree.

h. The responds for item “My intention to use the services of this bank would not be changed” are 1.0% strongly disagrees, 3.9% disagree, 28.2% neutral, 41.7% agree and 25.2% strong agree.

Figure 18. Customer Loyalty Variable Frequency

![Customer Loyalty Frequency Chart]

4.2.4. Classical Assumption Testing

4.2.4.1. Normality Test

As shown on the normal P – P Plot of Regression seen spread of pints around the diagonal line and follow the direction of the diagonal line. Then, it
means the data in regression model fulfills assumption normality and proper to use to predict customer’s bank selection.

Figure 19. Normal P-P plot of regression Standard Residual

In addition the normal probability plot, normality test can also be measured by seeing the histogram. To test the normality of the variables, it can be done by comparing a histogram of the residual to a normal probability curve. The result of the histogram of the residual should be bell shape and resembles the normal distribution (Render, Hanna, 2006)

Source: Data processing Result of SPSS 16.0
Figure 20. Histogram – Regression Standardized Residual

Histogram

Dependent Variable: average customer loyalty

Source: Data Processing Result of SPPS 16.0

The histogram in figure 20 shown the curve was formed a proper bell shape in the center, neither skewed to the left or the right which means the data has normally distribution.

4.2.4.2. Multicollinearity Test

From Table 14: below, all the independent variables show that the variance inflation factor (VIF) values are greater than 0.1 but less than 10 according to Lind Marchal & Wathen, 2010 as mentioned in chapter III. Hence, researcher can conclude that the data is not facing Multicollinearity. If the data is not facing Multicollinearity, researcher can use the Multiple Regression Model to analyze.
Table 14. Multicollinearity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
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<td>1</td>
<td>(Constant)</td>
<td>.191</td>
<td>.085</td>
</tr>
<tr>
<td></td>
<td>AV_CUSN</td>
<td>.128</td>
<td>.029</td>
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<tr>
<td></td>
<td>AV_MKT</td>
<td>.148</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>AV_TEC</td>
<td>.147</td>
<td>.021</td>
</tr>
<tr>
<td></td>
<td>AV_STF</td>
<td>.515</td>
<td>.032</td>
</tr>
</tbody>
</table>

a. Dependent Variable: AV_CUSL

Source: SPSS 16.0

4.2.4.3. Heteroscedasticity Test

Figure 21. Heteroscedasticity Test

Scatterplot

Source: SPSS 16.0
From Figure 21 above, see the spread points randomly. Point spread in both above and below the number 0. It can be concluded that there is not heteroscedasticity problem. Thus, this regression is valid and eligible to be used predict customer loyalty based on the independent variables (Customer’s need, Marketing (3-P: place, price, promotion), Technology and Staff)

4.2.4.4. Partial Regression (Leverage) Plot

According to the book Applied Regression Analysis of John et al. (1998), it sais that the relationship of the residual to one independent variables can be obscured by effects of other variables when several independent variables car involved. Partial regression leverage plots are an attempt to remove the confounding effects of the other variables.

Moya-Larano and Corcobado (2008) indicated that partial regression plots have also been called added variable plots, adjusted variable plots and partial regression leverage plots, which was citied from citied from Balsey et al 1980, Cook and Weisberg 1982, Neter et al. 1996, Montgomery et al 2001. On wed site itl.nist.giv, it has another name which is individual coefficient plots or partial residual plots.

Partial regression plots are formed by:

1. Compute the residuals od regressing the response variable against the independent variables but omitting $X_i$
2. Compute the residuals of regressing $X_i$ against the remaining independent variables.
3. Plot the residuals from (1) against the residual from (2)

A. Customer Loyalty (Y) by Customer’s need (X1)

From Figure 22 Partial Regression plot Customer Loyalty by Customer’s need below, see the spread points randomly. Point spread in both above and below the number 0. It can be concluded that there is not
heteroscedasticity problem. Thus, it is eligible to be used predict customer loyalty based on the independent variable service.

**Figure 22. Partial Regression plot Customer Loyalty by Customer’s need**

B. **Customer Loyalty (Y) by Marketing (X2)**

From **Figure 23** see the spread points randomly. Point spread in both above and below the number 0. It can be concluded that there is not heteroscedasticity problem. Thus, it is eligible to be used predict customer loyalty based on the independent variable service.

Source: SPSS 16.0
C. Customer Loyalty (Y) by Technology (X3)

From Figure 24 Partial Regression plot Customer Loyalty by Technology, see the spread points randomly, see the spread points randomly. Point spread in both above and below the number 0. It can be concluded that there is not heteroscedasticity problem. Thus, it is eligible to use the independent variable to predict customer loyalty.
D. Customer Loyalty (Y) by Staff (X4)

From Figure 25 Partial Regression plot Customer Loyalty by Staff, see that spread points randomly. Point spread in both above and below the number 0. It can be concluded that there is no heteroscedasticity problem. Thus, this regression is valid and eligible to be use predict customer loyalty based on the independent variable Staff.
4.2.5. Multiple Linear Regression Model

The underlying equation is constructed by the multiple linear regression model concepts, which is mentioned before in chapter III, to examine the influence of five variables: four independent variables and one dependent variable:

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e \]

Filled the equation with the data from the calculation of regression analysis shown on Table 4.2.7.2. previously, so it will be:
Where

\[ Y = 0.191 + 0.128 X_1 + 0.148 X_2 + 0.147 X_3 + 0.515 X_4 + e \]

\[ Y = \text{Customer loyalty} \]
\[ X_1 = \text{Customer’s need} \]
\[ X_2 = \text{Marketing} \]
\[ X_3 = \text{Technology} \]
\[ X_4 = \text{Staff} \]
\[ \beta_0 = \text{Intercept / Constant (value of Y when x = 0)} \]
\[ e = \text{Random Error} \]

4.2.6. Measuring the Variability of the regression Model

4.2.6.1. Correlation

In this section, Pearson Correlation Coefficient is used to test the hypothesis as mention in chapter III. Once again, in the second international conference on business and economic research (2\textsuperscript{nd} ICBER 2011) proceeding, Akbar et al mentioned that according to Sekaran et al, there could be a perfect positive correlation between two variables, which is represented by +1.0 (plus 1), or a perfect negative correlation which would be -1.0 (minus 1). However, neither of these will be found in reality when assessing correlations between any two variables expected to be different from each other. For score 0.7 and above, it can be interpreted as a very strong relationship, 0.5 to 0.69 score considered having a strong relationship, 0.3 to 0.49 as moderate, 0.1 to 0.29 as having a low relationship and lastly 0.01 to 0.09 deem to have very low relationship. The value of \( r \) and its meaning is indicated in the Table 15 below
Table 15. Interpretation for value “r” being proposed by Sekaran (2003)

<table>
<thead>
<tr>
<th>“r” Value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.01 – 0.09</td>
<td>Very low relationship</td>
</tr>
<tr>
<td>0.10 – 0.29</td>
<td>Low relationship</td>
</tr>
<tr>
<td>0.30 – 0.49</td>
<td>Moderate relationship</td>
</tr>
<tr>
<td>0.50 – 0.69</td>
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</tr>
<tr>
<td>0.70 – 1.0</td>
<td>Very strong relationship</td>
</tr>
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</table>

The result of the gathered data’s correlation analysis could be seen in Table 16 following:

Table 16. Correlation Analysis

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<tr>
<th>Correlations</th>
<th>AV_CUSL</th>
<th>AV_CUSN</th>
<th>AV_MKT</th>
<th>AV_TEC</th>
<th>AV_STF</th>
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</thead>
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<td>AV_CUSL</td>
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<td></td>
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<tr>
<td>Pearson Correlation</td>
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<td>.736**</td>
<td>.824**</td>
<td>.632**</td>
<td>.879**</td>
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<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>309</td>
<td>309</td>
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<td>309</td>
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<tr>
<td>AV_CUSN</td>
<td>.736**</td>
<td></td>
<td>.753**</td>
<td>.493**</td>
<td>.667**</td>
</tr>
<tr>
<td>Pearson Correlation</td>
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<td>.000</td>
<td>.000</td>
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<td>Sig. (1-tailed)</td>
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<td>AV_MKT</td>
<td>.824**</td>
<td>.753**</td>
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<td>.621**</td>
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<td>AV_TEC</td>
<td>.632**</td>
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<td>309</td>
<td>309</td>
<td>309</td>
<td>309</td>
<td>309</td>
</tr>
</tbody>
</table>
Source: Primary Data (by SPSS 16.0)

Table 17 below indicates the correlation strength between independent variables and dependent variable:

Table 17. Interpretation of r value

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>R value</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congruence between customer’s need (X1) and customer loyalty (Y)</td>
<td>0.736</td>
<td>Very strong relationship</td>
</tr>
<tr>
<td>Congruence between Marketing (X2) and (Y)</td>
<td>0.824</td>
<td>Very strong relationship</td>
</tr>
<tr>
<td>Congruence between Technology (X3) and (Y)</td>
<td>0.632</td>
<td>Strong relationship</td>
</tr>
<tr>
<td>Congruence between Staff (X4) and (Y)</td>
<td>0.879</td>
<td>Very strong relationship</td>
</tr>
</tbody>
</table>

From the result of the correlation analysis has been shown above, it can be concluded that each of the independent variables has positive value.

- For Technology (X3), there is a strong correlation with the dependent variable (Customer Loyalty (Y))
- For Customer’s need (X1), Marketing (X2) and Staff (X3), there is a very strong correlation with dependent variable (Customer Loyalty (Y)).

4.2.6.2. Coefficient Determinants ($R^2$)

The score of adjust R square is also called as coefficient determinant. The output for adjusted coefficient determinant ($R^2$) between dependent variable (customer loyalty) and independent variables (customer’s need, marketing (3P), technology and staff) is presented in Table 4.13 following:
Table 18. Coefficient Determinant (R2)

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.925</td>
<td>.856</td>
<td>.854</td>
<td>.24066</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), AV_STF, AV_TEC, AV_CUSN, AV_MKT

b. Dependent Variable: AV_CUSL

Source: SPSS 16.0

From the table 18, the adjusted $R^2$ is 0.854 or 85.4%. This means, there is 85.4% independent variables (customer’s need, marketing, technology and staff) affect dependent variable (customer loyalty). Or on the other hand, 85.4% of the customer loyalty as dependent variable is explained by the independent variables including customer’s need, marketing, technology and staff, whereas the other 14.6% is explained by other factors are excluded from model.

4.2.7. Testing the hypothesis

4.2.7.1. F-Test

By using F-Test, researcher wants to find out whether all independent variables have collectively influence on dependent variables. In order to find result, researcher use SPSS 16.0, and get results as Table 4.2.7.1
Table 19. F-Test

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>104.728</td>
<td>4</td>
<td>26.182</td>
<td>452.045</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>17.607</td>
<td>304</td>
<td>.058</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>122.336</td>
<td>308</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), average staff, average technology, average customer need, average marketing
b. Dependent Variable: average customer loyalty

Source: SPSS 16.0

The hypothesis given:

H₀: β₁= β₂= β₃= β₄=0 (There is no influence that is significant from customer’s need, marketing, technology and staff together toward customer loyalty).

Hₐ: at least one βᵢ ≠ 0 (There is influence that is significant from customer’s need, marketing, technology and staff together toward customer loyalty).

Based on the ANOVA result on Table 4.14, it shows that F calculated around 452.045 with level significant is 0.000 because the number of probability is 0.000 < 0.05 so Hₐ is accepted and H₀ is rejected.

It is means that customer’s need, marketing, technology, and staff benefits simultaneously have influence on the customer loyalty.

4.2.7.2. t-Test

The t-test is used to test whether independent variable partially has influence significantly toward dependent variable. The t-test can be done manually by comparing the calculated t and the t-table

However, since the data processing in using SPSS software, the t-test is based on the significant (sig) value of each one of independent variables which are customer’s need, marketing, technology and staff. Table 20 following shows the output of t-test:
Table 20. t-test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.191</td>
<td>.085</td>
</tr>
<tr>
<td></td>
<td>AV_CUS N</td>
<td>.128</td>
<td>.029</td>
</tr>
<tr>
<td></td>
<td>AV_MKT</td>
<td>.148</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>AV_TEC</td>
<td>.147</td>
<td>.021</td>
</tr>
<tr>
<td></td>
<td>AV_STF</td>
<td>.515</td>
<td>.032</td>
</tr>
</tbody>
</table>

a. Dependent Variable: AV_CUSL

Source: SPSS 16.0

The hypothesis given:

a. \( H_{01} \): Customer’s need has no significant influence on customer loyalty
   \( H_{a1} \): Customer’s need has significant influence on customer loyalty
b. \( H_{02} \): Marketing has no significant influence on customer loyalty
   \( H_{a2} \): Marketing has significant influence on customer loyalty
c. \( H_{03} \): Technology has no significant influence on customer loyalty
   \( H_{a3} \): Technology has significant influence on customer loyalty
d. \( H_{04} \): Staff has no significant influence on customer loyalty
Hₐ₄: Staff has significant influence on customer loyalty

The p-values is significant at 0.05 and according to table 20 output of t-test, it indicated that:

a. Customer’s need (X1):

The first independent variable customer’s need (X2) has significant (sig) value of 0.000 which is less comparing to the p-value (0.05). It means service has significant influence on dependent variable (Customer Loyalty). So the first null hypothesis (H₀₁) is rejected and the first alternative hypothesis (Hₐ₁) is accepted.

b. Marketing (X2)

The second independent variable Marketing (X2) has significant (sig) values of 0.001 which is less comparing to the p-value (0.05). It means marketing has significant influence on dependent variable (customer loyalty). So the second full hypothesis (H₀₂) is rejected and the second alternative hypothesis (Hₐ₂) is accepted.

c. Technology (X3)

The third independent variable technology (X3) has significant (sig) values of 0.000 which is less comparing to the p-value (0.05). It means technology has significant influence on dependent variable (customer loyalty). So the second full hypothesis (H₀₃) is rejected and the second alternative hypothesis (Hₐ₃) is accepted.

d. Staff (X4)

The fourth independent variable staff (X4) has significant (sig) values of 0.000 which is less comparing to the p-value (0.05). It means staff has significant influence on dependent variable (customer loyalty). So the second full hypothesis (H₀₄) is rejected and the second alternative hypothesis (Hₐ₄) is accepted.
4.2.7.3. Partial Correlation

The Table 20 t-test is continuously used to analyze this part

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant )</td>
<td>.191</td>
<td>.085</td>
</tr>
<tr>
<td></td>
<td>AV_CUS</td>
<td>.128</td>
<td>.029</td>
</tr>
<tr>
<td></td>
<td>AV_MKT</td>
<td>.148</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>AV_TEC</td>
<td>.147</td>
<td>.021</td>
</tr>
<tr>
<td></td>
<td>AV_STF</td>
<td>.515</td>
<td>.032</td>
</tr>
</tbody>
</table>

a. Dependent Variable: AV_CUSL

A. Customer Loyalty (Y) and Customer’s need (X1)

From table 4.2.7.2, the (sig) value is 0.000 which is lower than p-value (0.05). thereby customer’s need variable (X1) has significant influence on customer loyalty (Y)

The coefficient regression 0.128 is positive. It means that the better the customer’s need is, the higher Customer loyalty will be.

From the coefficient 0.128 the influence of customer’s need variable (X1) on customer loyalty (Y) is 1st rank. It has to be improved to have better customer’s need

B. Customer Loyalty (Y) and Marketing (X2)

The (sig) value is 0.001 which is lower than p-value (0.05). thereby Marketing variable (X2) has significant influence on customer loyalty (Y)

The coefficient regression 0.148 is positive. It means that the better the marketing is, the higher customer loyalty will be
From the coefficient 0.148 the influence of process variable (X2) on customer loyalty (Y) is 3\textsuperscript{rd} rank. It has to be improved to have better marketing.

**C. Customer Loyalty (Y) and Technology (X3)**

The (sig) value is 0.000 which is lower than p-value of 0.05. Thereby the technology variable (X3) has significant influence on customer loyalty (Y).

The coefficient regression 0.147 is positive. It means that the more the technology is, the higher customer loyalty will be.

From the coefficient 0.147 the influence of technology variable (X3) on customer loyalty (Y) is 2\textsuperscript{nd} rank. It has to be improved to have better technology.

**D. Customer Loyalty (Y) and Staff (X4)**

The (sig) value is 0.000 which is lower than p-value of 0.05. thereby the process variable (X4) has significant influence on customer loyalty (Y).

The coefficient regression 0.515 is positive. It means that the more the staff is, the higher customer loyalty will be.

From the coefficient 0.515 the influence of process variable (X4) on customer loyalty (Y) is 4\textsuperscript{th} rank. It has to be improved to have better staff.

**4.3. Interpretation of result**

Basing on the above analysis, it is important to find out ways to increase the loyalty in the customers using Bank service. The bank can carry out direct investment in the factors affecting customer’s loyalty. Beside, it highly recommended that indirect investment through the satisfaction of customers be carried out. So researcher want to find out the factors have influence on customer’s loyalty, case study Vietinbank which is one of the best bank in Vietnam, Can Tho Branch as a typical example.

The implication from this research as the following:
From the result of regression model, Table 4.2.6.2 shows the value adjusted \( R^2 \) is 0.854 or 85.4%. This means 85.4% of the customer’s loyalty as dependent variable is explained by the independent variables including customer’s need, marketing, technology, and staff, whereas the other 14.6% is explained by other factors excluded from the model. In other words, the independent variables are able to explain the variability of the dependent variable.

For simultaneous influence (F-test), the data analysis on Table 4.2.7.1 shows that F calculated around 452.045 with a level of significance of 0.000 which is far below the p-value of 0.05. It means that customer’s need, marketing, technology, and staff simultaneously have influence on customer loyalty.

After testing the simultaneous influence of customer’s need, marketing, technology, and staff toward customer loyalty, the data was processed to t-test which tests the partial influence of each variable. Different results from each variable are elaborated as follows:

1. Customer’s need

   The probability value of customer’s need variable is 0.000 which is quite far lower than 0.05 has indicated there is significant correlation between customer’s need and customer loyalty. Beside, the value of parametric coefficient of customer variable in the amount 0.128 which means the relationship between those two is positive. In other words, with the value of 0.128 it means when customer’s need increase one percent will result the increase 0.128 of customer’s loyalty.

2. Marketing

   The probability value of attractiveness variable is 0.001 which is lower than value 0.05 has indicated there is significant correlation between marketing and customer loyalty. Also, the value of parametric coefficient of marketing variable is the amount of 0.148 which means the relationship between those two is
positive. In another words, with the value of 0.148 it means when marketing increase one percent will result the increase of 0.148 of customer loyalty.

3. Technology

The probability value of technology variable is 0.000 which is far lower than value 0.05 has indicated there is significant correlation between technology and customer loyalty. In addition, the value of parametric coefficient of technology variable in the amount of 0.147 which means the relationship between those is positive. In another words, with the value of 0.147 it mean when reputation increase one percent will result the increase of 0.147 of customer loyalty.

4. Staff

The probability value of Staff variable 0.000 which is far lower than value 0.05 has indicated there is significant correlation between staff and customer loyalty. Moreover, the value of parametric coefficient of staff variable in the mount of 0.515 which mean the relation between those two is positive. In another words, with the value of 0.515 it mean when staff increase one percent will result the increase of 0.515 of customer loyalty

Form the result of t-test on table 4.2.7.2, all variable as customer’s need, marketing, technology and staffs are significant influence on customer loyalty. Staff and Customer’s need are the first and second important factor. Technology and marketing are third and second factor affect on customer loyalty.
CHAPTER V

CONCLUSION & RECOMMENDATION

5.1. Conclusion

This result is done to investigate the significant influence of 4 factors affect to customer loyalty, case study Vietinbank, Can Tho Branch in Vietnam. There are four independent variables which are customer’s need, marketing (3-P), technology and staff. The dependent variable is customer loyalty.

There are several underlying conclusions that can be take from this research:

1. Is there significant relationship between customer’s need, Marketing (3-P), technology and Staff affecting the customer loyalty using bank service in Vietinbank banking?

According to the result of F-test by SPPS 16.0, the significant value is 0.000 so that the null hypothesis $H_{01}$ is rejected and alternative hypothesis $H_{a1}$ is accepted. It means that all independent variables simultaneously have effect on the dependent variable. For this test, researcher can conclude that customer’s need, marketing, technology and staff have significant impact to the loyalty of customer using Bank service.

2. How significant does the relationship between customer’s need, marketing (3-P), technology and staff impact to the customer loyalty using bank service in Vietinbank banking?

As we can from the result of correlation analysis (Table 4.11) by SPSS, each of the independent variables has positive direction with dependent variable as the value of Pearson Correlation.

The correlation between customer’s need and customer loyalty selection is 0.736; it means very strong correlation between them.
The correlation between Marketing and customer loyalty is 0.824; it means very strong correlation between them.

The correlation between technology and customer loyalty is 0.632; it means strong correlation between them.

The correlation between staff and customer loyalty is 0.879; it means very strong correlation between them.

3. To determine the factors that customer consider important when selecting a bank and how those factors are prioritized according to their importance?
   
a. Based on Descriptive Test

A ranking table was produced showing the importance of bank selection criteria based on the mean score of each factor which are taken from the result of Table 21 Descriptive Statistics.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV_CUSN</td>
<td>309</td>
<td>3.7961</td>
<td>.72630</td>
</tr>
<tr>
<td>AV_MKT</td>
<td>309</td>
<td>3.6274</td>
<td>.61237</td>
</tr>
<tr>
<td>AV_TEC</td>
<td>309</td>
<td>3.4951</td>
<td>.83960</td>
</tr>
<tr>
<td>AV_STF</td>
<td>309</td>
<td>3.7087</td>
<td>.70316</td>
</tr>
<tr>
<td>AV_CUSL</td>
<td>309</td>
<td>3.6383</td>
<td>.63023</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>309</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS 16.0
<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer’s need</td>
<td>3.7961</td>
<td>1</td>
</tr>
<tr>
<td>Staff</td>
<td>3.7087</td>
<td>2</td>
</tr>
<tr>
<td>Marketing</td>
<td>3.6274</td>
<td>3</td>
</tr>
<tr>
<td>Technology</td>
<td>3.4951</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: SPSS 16.0

b. Based on t-test

From the result of Table 20 t-test on chapter IV, the beta coefficients indicated the degree of influence the corresponding independent variable has on variations in the dependent variable. The higher the value of B, the more influential the independent variable (www.vermontel.net/~hancockp/SPSS.doc).

The result has a little quite difference:

<table>
<thead>
<tr>
<th>Factors</th>
<th>B</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>0.515</td>
<td>1</td>
</tr>
<tr>
<td>Marketing</td>
<td>0.148</td>
<td>2</td>
</tr>
<tr>
<td>Technology</td>
<td>0.147</td>
<td>3</td>
</tr>
<tr>
<td>Customer’s need</td>
<td>0.128</td>
<td>4</td>
</tr>
</tbody>
</table>

5.2. Recommendation

A. For the Vietinbank

Based on the above analysis, it is important to find out ways to increase the customer loyalty using bank service. Then bank can carry out direct investment in the factor affecting customer’s loyalty. Besides, it highly recommended that indirect investments through the satisfaction of customers be carried out. Some of the solutions to increase the loyalty in customers are presented below:

First, the quality of Bank Service needs rising; especially it is important to guarantee that those machines are not broken, and operate stably. This is to
ensure that the transactions of customers are exact without loses and disputes. Besides, the maintenance and the repairmen of those machines must be carried out rapidly to meet the need of customers.

Secondly, Vietibank in Can Tho needs to increase the number of customer assisting services, and the functions of Bank Service in order to make ATM an alternative solution for cash. Currently, Bank service system of Vietinbank can operate payment transactions.

Thirdly, Vietinbank in Can Tho should create a favorable working environment for its staff to exchange their working experience easily.

Next, it is important to frequently update complaints from customers and to respond to those complaints in time.

Last but not least, the training and re-training for staff and transaction employees play a not less important role. Especially, the staff’s professional knowledge, foreign language and computer skills must meet the need of business dealing.

**B. For Future Researchers**

Future research should be carried out in longer time and in wider scales to strengthen the reliability of the results
REFERENCE

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http://www.inventors.about.com/od/astartinventions/a/atm.htm

http://www.inventors.about.com/od/astartinventions/a/atm.htm


D. Website
http://www.vietinbank.vn/web/home/en/about/


www.vermontel.net/~hancock/SPSS.doc
# Appendix 1: Table of Critical Values Pearson’s r

<table>
<thead>
<tr>
<th>df</th>
<th>.10</th>
<th>.05</th>
<th>.025</th>
<th>.01</th>
<th>.005</th>
<th>.0005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.951</td>
<td>0.958</td>
<td>0.957</td>
<td>0.995</td>
<td>0.999</td>
<td>0.9999</td>
</tr>
<tr>
<td>2</td>
<td>0.800</td>
<td>0.900</td>
<td>0.950</td>
<td>0.980</td>
<td>0.990</td>
<td>0.999</td>
</tr>
<tr>
<td>3</td>
<td>0.687</td>
<td>0.805</td>
<td>0.878</td>
<td>0.934</td>
<td>0.959</td>
<td>0.991</td>
</tr>
<tr>
<td>4</td>
<td>0.608</td>
<td>0.729</td>
<td>0.811</td>
<td>0.882</td>
<td>0.917</td>
<td>0.974</td>
</tr>
<tr>
<td>5</td>
<td>0.551</td>
<td>0.669</td>
<td>0.755</td>
<td>0.833</td>
<td>0.875</td>
<td>0.951</td>
</tr>
<tr>
<td>6</td>
<td>0.507</td>
<td>0.621</td>
<td>0.707</td>
<td>0.789</td>
<td>0.854</td>
<td>0.925</td>
</tr>
<tr>
<td>7</td>
<td>0.472</td>
<td>0.562</td>
<td>0.666</td>
<td>0.750</td>
<td>0.798</td>
<td>0.898</td>
</tr>
<tr>
<td>8</td>
<td>0.443</td>
<td>0.549</td>
<td>0.632</td>
<td>0.715</td>
<td>0.765</td>
<td>0.872</td>
</tr>
<tr>
<td>9</td>
<td>0.419</td>
<td>0.521</td>
<td>0.602</td>
<td>0.685</td>
<td>0.735</td>
<td>0.847</td>
</tr>
<tr>
<td>10</td>
<td>0.398</td>
<td>0.487</td>
<td>0.576</td>
<td>0.658</td>
<td>0.708</td>
<td>0.823</td>
</tr>
<tr>
<td>11</td>
<td>0.380</td>
<td>0.476</td>
<td>0.553</td>
<td>0.634</td>
<td>0.684</td>
<td>0.801</td>
</tr>
<tr>
<td>12</td>
<td>0.365</td>
<td>0.457</td>
<td>0.532</td>
<td>0.612</td>
<td>0.661</td>
<td>0.780</td>
</tr>
<tr>
<td>13</td>
<td>0.351</td>
<td>0.441</td>
<td>0.514</td>
<td>0.592</td>
<td>0.641</td>
<td>0.760</td>
</tr>
<tr>
<td>14</td>
<td>0.338</td>
<td>0.426</td>
<td>0.497</td>
<td>0.574</td>
<td>0.623</td>
<td>0.742</td>
</tr>
<tr>
<td>15</td>
<td>0.327</td>
<td>0.412</td>
<td>0.482</td>
<td>0.558</td>
<td>0.606</td>
<td>0.725</td>
</tr>
<tr>
<td>16</td>
<td>0.317</td>
<td>0.400</td>
<td>0.468</td>
<td>0.542</td>
<td>0.590</td>
<td>0.708</td>
</tr>
<tr>
<td>17</td>
<td>0.308</td>
<td>0.389</td>
<td>0.456</td>
<td>0.529</td>
<td>0.575</td>
<td>0.693</td>
</tr>
<tr>
<td>18</td>
<td>0.299</td>
<td>0.378</td>
<td>0.444</td>
<td>0.515</td>
<td>0.561</td>
<td>0.679</td>
</tr>
<tr>
<td>19</td>
<td>0.291</td>
<td>0.369</td>
<td>0.433</td>
<td>0.503</td>
<td>0.549</td>
<td>0.665</td>
</tr>
<tr>
<td>20</td>
<td>0.284</td>
<td>0.360</td>
<td>0.423</td>
<td>0.492</td>
<td>0.537</td>
<td>0.652</td>
</tr>
<tr>
<td>21</td>
<td>0.277</td>
<td>0.352</td>
<td>0.413</td>
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</table>

Adapted from Appendix 2 (Critical Values of $t$) using the square root of $[t^2/(t^2 + df)]$

Note: Critical values for Infinite $df$ actually calculated for $df = 500$. 
Appendix 2: Survey Questionnaire

QUESTIONNAIRE SAMPLE

The Factors Affecting the Loyalty of Customers Using ATM Service at Vietinbank Banking

Dear clients,

I am Nguyen Thi Huynh Nhu, a student at President University majoring Banking and Finance; I am presently writing a thesis on “The Factors Affecting the Loyalty of Customers Using ATM Service at Vietinbank Banking”

In this regard, I solicit your help in filling out this questionnaire. Thank you for taking the time to complete this questionnaire.

N.B: please put a “✓” mark to all your responses in the circle provided beside to each question (if necessary).

- **Personal Information**

1. **Gender of respondent:** Male [ ] Female [ ]

2. **Age of respondent:**
   - 18 – 30 years [ ]
   - 31 – 40 years [ ]
   - 41 – 50 years [ ]
   - Above 50 years [ ]

3. **Occupation**
   - Ordinary people [ ]
Student

Employees

Professionals

Business people

4. **Level of education:**

Certificate

Diploma

Bachelors Degree

Master

Ph D.

Others

5. **Expenses per month**

- Below 3,000,000
- 3,000,000 to 7,000,000
- 7,000,000 to 11,000,000
- 11,000,000 to 15,000,000
- 15,000,000 to 19,000,000
- Above 19,000,000

6. **Have you ever used Bank service in Vietinbank?**

- Yes
- No

- **Awareness of Service**

1 – Strong disagree

2 – Disagree

3 – Neutral; Average

4 - Agree

5 – Strongly agree
## Items

<table>
<thead>
<tr>
<th>Customer’s need:</th>
<th>Scale</th>
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<tbody>
<tr>
<td>1. You want a low cost Bank service</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. You want a good quality service</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. You want to be convenient when using Bank service</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. You want the Bank service to be high security</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. You want to deal with helpful and friendly Bank staff</td>
<td>1 2 3 4 5</td>
</tr>
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</table>

## Marketing Factors:

<table>
<thead>
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<th>Marketing Factors:</th>
<th>Scale</th>
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<tr>
<td>6. Vietinbank is near schools and in crow area</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. Bank Service of Vietinbank are located in convenient place</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. The place of Bank service of Vietinbank is safe</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9. Low cost is very important to attract more customers</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>10. Customer of Vietinbank are willing to pay more to have good service quality</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>11. Vietinbank is implementing a right price Bank service</td>
<td>1 2 3 4 5</td>
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</tbody>
</table>
12. Vietinbank is willing to spend money on promotion 1 2 3 4 5

13. Vietinbank regards promotion as an effective way to attract new customers and to retain old ones.

Technology Factors:

14. Vietinbank offers Bank service of high technology 1 2 3 4 5

15. The technology that Vietinbank offers ensures security for customers using Bank service 1 2 3 4 5

16. The technology that Vietinbank offers allows customers to make fast transaction 1 2 3 4 5

17. The technology that Vietinbank offers allows customers to do transaction easily 1 2 3 4 5

Serving attitude of the Staff:

18. The staff at Vietinbank gives prompt service to customers 1 2 3 4 5

19. The staff at Vietinbank is always willing to help customers 1 2 3 4 5

20. The staff at Vietinbank should understand and the specific needs of their customers 1 2 3 4 5

21. The staff at Vietinbank should show sincere interest in finding solutions whenever their customer have problems 1 2 3 4 5
22. The staff in the bank tell you 1 2 3 4 5
exactly when the services will be performed

23. The Staff in the bank have 1 2 3 4 5
the knowledge to answer your questions

**Customer Loyalty:**

24. I would always recommend 1 2 3 4 5
this bank to others

25. I would always use this bank’s service 1 2 3 4 5

26. I intend to continue being 1 2 3 4 5
a customer of the bank for a long time to come

27. I say positive things about the 1 2 3 4 5
bank to other people

28. I do not like to change to another 1 2 3 4 5
bank because this bank sees my needs

29. I will encourage friends and 1 2 3 4 5
relative to use the offered by the bank

30. Even if close friends recommend, 1 2 3 4 5
another bank my preference for this bank would not change.

31. My intention to use the services 1 2 3 4 5
of this bank will not be changed.