

**THE NEED TO IMPROVE CUSTOMER SERVICES IN  
THE BANKING INDUSTRY: EVIDENCE FROM  
MALAYSIA MARKET**

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- (2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing the research project.
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## LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
ATM	Automated Teller Machines
B2C	Business-to-customer
BIMB	Bank Islam Malaysia Berhad
BLUE	Best Linear Unbiased Estimator
OLS	Ordinary Least Squares
SERVQUAL	Service Quality Model
SPSS	Statistical Package for Social Science
TOL	Tolerance
VIF	Variance inflation factor

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## PREFACE

The fierce competition among the commercial banks nowadays had clearly showed that even we have come up with the most innovative product or services, our rivals can still duplicate the idea to have a competitive advantage. To survive in the fierce banking environment, it is very important for the banks to show that how they can be differ from their competitors. They need to make a difference with their competitors and convince the customers that it is better to choose them instead of their competitors. While for banking industry, service quality is probably the most crucial element that can differentiate a bank from the others. The difference in the service quality can affect the customer satisfaction and eventually affect their decision in choosing which bank to deal with.

As a banking and finance student, we are enthusiast in finding out how can the service quality can affect a customer's satisfaction. And so this research is conducted to examine the relationship between customer service and the customer satisfaction in banking industries of Malaysia. This study found that under the normal circumstances, the higher service quality will usually end up with a higher customer satisfaction.

The objective of this study is to determine the relationship between the needs of service quality and customer satisfaction in banking industries of Malaysia. The service quality can be divided into five parts which is tangibility, reliability, empathy, responsiveness and assurance. We have to find out whether each of the service quality dimensions has a significant relationship with customer satisfaction.

## ABSTRACT

It is known that satisfying a customer is the ultimate goal and objective of any business-to-customer (B2C) type of environment, however, it has become an issue of many organizations. This is perhaps because most of the organizations have no idea on what are their customers thinking and what are they actually want. As such, this issue has been a challenge of many organizations and building a good relation with the customer has eventually become their primary focus. Although many researches and studies were conducted in the past to try to understand the customers' mind, but it is still remain a mystery until today.

This paper examines the relationships between the customer satisfaction and the service quality dimensions, which are tangibility, empathy, assurance, responsiveness and reliability. SERVQUAL model has been used in this paper to evaluate the impact of service quality and the customer satisfaction. In order to achieve the aims, primary data has been used in this study in assisting to run the test. The primary data were collected through 400 questionnaires distributed in front of the banks to the bank users located in Kuala Lumpur.

The findings show that the improvement in the service quality dimensions can bring a significant impact on the customer satisfaction. All of the service quality dimensions are found to have a significant relationship with customer service. The result suggest that tangibility and reliability are the key factors in determining customer satisfaction, whereas empathy and assurance are less important in explaining customer satisfaction, and responsiveness are found to have a negative relationship with customer satisfaction. The study highlights implications for the managers in banking industry to make improvement in service quality in order to improve the customer satisfaction.

## **CHAPTER 1: RESEARCH OVERVIEW**

### **1.0 Introduction**

The topic for this research is “The need to improve customer services in banking industry: Evidence from Malaysia market. The main focus for this study is to examine the customer service in the commercial banks. On the other hand, Chartered Mercantile Bank of India, London and China is the first commercial bank in Malaya and was established in 1859. In 1875, first branch of Chartered Bank was located in Penang, followed by a branch in Kuala Lumpur and Taiping in 1888. Commercial banks are licensed under the Financial Service Act 2013 by Central Bank of Malaysia. Currently, there are 8 local banks and 19 foreign banks in the conventional banking sector. Malayan Banking, CIMB, Public Bank, and RHB bank are four market leaders and have 10% market share in the conventional market. In 2007 onwards, commercial banks have merged with finance companies in order to become one-stop financial centres. The main discussion in this chapter includes the research background, problem statement, objectives and question for this research, hypothesis of the study, and significance of the study. Furthermore, there is an outline for the whole research project and followed by conclusion.

## 1.1 Research Background

First of all, there are two components which included financial institutions and financial markets in Malaysia financial system. The financial institutions can be divided into banking system and non-bank financial institutions. In addition, banking system are included Central Bank, commercial banks, Islamic banks, investment banks, representative offices and money brokers. Furthermore, money market, foreign exchange market, capital market, and offshore market are classified under financial market.

Next, bank is defined as any person who conducts on banking business. There are various types of banking business such as receiving cash on deposit or current account, paying and collecting cheques paid or drawn by customers, making advances to customers, and other business as defined by the Central Bank (Lee, Chin & Pamela, 2010).

Commercial banks has played important role in the banking system. The main services that they are provided such as mobilization of saving through current, savings and fixed deposit accounts, provision of payment facilities, granting of loans and advances to business enterprise and private individuals, financing of the government like purchase government securities, Treasury Bills and Treasury Bond, and provision of various banking's facilities and services (Lee, Chin & Pamela, 2010).

Customer service is defined as meeting the needs and expectation from the customers (Smith, 1998). Besides that, interaction between the customer and the people in-charge in the organization and is unlimited to a single function or type of job is known as customer service. There are a growing number of banks are trying to direct their strategies to the goal of customer satisfaction. As people has

found that customer satisfaction can be crucial to a financial institution because it can be serve as a link to critical consumer behaviours. It can be very important for a bank because consumer behaviour will decides whether the bank will have a positive word-of-mouth, the tendency of whether one's bank can be valued as a "relationship" bank and the willingness of a customer to pay at a premium price.

According to the research of Alessandro and Bruno (2009), there is an increase in positive evidence saying that the focus on customer satisfaction has become a primary goal in many Business-to-customer (B2C) environments, and the banking industry are not exceptional in facing this phenomenon. Customer has become a great emphasize in the banking industry as well in order to compete with the other banks, it has become a form of organizational survival. The bankers know very well that in the environment nowadays, a customer loss today is a customer gain for their competitors. This is simply because the customers have too many choices, if they are feeling unsatisfied with the service provided by the current bank, they can just change to another bank they are happy with as the bank switching process can be done very easily nowadays. It is now guaranteed that your incoming and outgoing transactions will be moved to your new account and it is promised that the transfer will be done within 7 working days. The guarantee helps to ensure that the process of switching banks will not bring any huge impact to the customers. And this is why people tend to switch bank more often, making the competition among the banks become even more intense and customer satisfaction is now become a major goal of the financial institutions.

## 1.2 Problem Statements

In this research, researchers will suggest some approaches to measure the customer satisfaction of the banking service quality of the commercial bank in Malaysia. There are a lot of weaknesses in the Malaysia financial institution services nowadays. “In a fiercely competitive market, non-price factors like customer service had become more important” (Kotler, 2003). There are five factors that will influence the customer satisfaction; which are tangibility, reliability, empathy, assurance, and responsiveness.

Tangibility is the physical evidence of service (Lassar et al., 2000). The major problem of the local banks is the issue of the banking service hours. Previously, Malaysia banking operating hours is from Monday to Friday 10 am to 4 pm. The bank operation hour is different in each state. This adjustment is made because there are quite a lot of customer complaints about the operating hours of the local bank, so the trend has changed based on the customer requirements.

While those retail banks, which located in the shopping mall will have to stick with the operating hours of the shopping mall to start their business. The operating hours of the shopping malls are usually from 10am to 10pm. Due to this, the operating hours of the banks seem to be not flexible and too rigid. 24-hours service will be more appropriate if the bank can implement it. Those who work in the company might have a problem going to the bank to make inquiry due to the time clashing between their working period (Munasamy, Chelliah & Hor, 2010). The working hours of the workers are normally between 8am to 6pm. Due to the time constraint, there is not enough time for them to go to the bank during the lunch time. They will probably do not have time to eat their lunch if they go to the bank. This is due to the limited time availability for them during their lunch hour. This will lead to an inconvenience for them if they have any emergency transaction need to make.

Reliability involves consistency of performance and dependability, responsiveness (Lassar et al., 2000). It is very important for a bank to provide the services that they have promised. In order to know the consumer problem, there is need to do a survey or placing the suggestion box to collect the feedback of the banking user (Munusamy, Chelliah & Hor, 2010). Reliable responses, attentiveness, and ease of use had considerable impacts on both customers perceived overall service quality and satisfaction (Jun et al., 1999). The bank needs to respond immediately to the customer question. The responsiveness can be improved by the hotline service and the 24-hour call service is needed as well.

Furthermore, set-up a new branch of a bank is too costly. Although a new branch target in the population area to attract their customers moving in, however, setting up a new branch requires a huge cost, therefore the bank will take the consideration on this issue whether open a new branch will bring them profitability in the future. The cost of retaining existing customers by enhancing the products and services that are perceived as being important is significantly lower than the cost of winning new customers (Krishnan et al., 1999). When customers are satisfied, the likelihood of exit from the relationship and negative word of mouth is reduced greatly (Churchill & Surprenant, 1982; Oliver, 1980).

Empathy is pertains to caring, individualized attention that a firm provides its customers (Lassar et al., 2000). While some of the researcher described empathy as recognition of an emotional state in others, which then prompts an emotional response which is essentially a match for the emotional state of another (Eisenberg, 2000). Most customers rely on face to face deal with a transaction as compared to the online banking. Besides that, the systems are new to them if they are not able to deal with internet personally due to the language problem or complexity. So this kind of customer will be more prefer to settle their transaction face to face with the banker instead of using online banking services. This case will bring to a queuing up at some local banks. The customers are wasting a lot of the time and money by just waiting the banker to help them settle the problem. This is an inefficiency impact toward the customer satisfaction level.

Responsiveness concerns the willingness or readiness of employees to provide services (Lassar et al., 2000). Besides that, the personal quality and skills of the bank officer can be a problem as well. The officer who works in the bank may lack of skill on providing services to their customers. This is the main issue which will affect the customer satisfaction level in that particular bank. It is concerned about the staff's attitude and behaviour in the bank will bring a lot of good performances such as serve their clients politely, immediate response to the problems of the customer and so on. As compared with the foreign bank, they will concern more on their workers in personal attitude and behaviour, their service quality is the main reasons that uphold the bank reputation and retain their customers. In order for the local banker to improve their customer satisfaction level, the bank should focus their management on employee diversity issue such as providing training program to their staffs, emotional control in treating customers.

Assurance corresponds to the knowledge and courtesy of employees and their ability to inspire trust and Confidence (Lassar et al., 2000). Assurance about security relates to the extent to which the web site guarantees the safety of customers' financial and personal information, an area which has witnessed a proliferation of research interest (Kimery & McCord, 2002; Miyazaki & Krishnamurthy, 2002) To overcome these problems, bank should implement the online banking system in order for their customers to deal with a bank with out of bank operating hours. Many people are not confident in the online banking system nevertheless the system has provided enough the security precaution. Especially the person who lack of knowledge of the information technology, they have no knowledge and confidence in this system.

At the end, in order for a local bank to compete with the foreign bank, the local bank should increase their efficiency and effectiveness of the bank service quality to bring to a higher customer satisfaction.



## **1.3 Research Objectives**

### **1.3.1 General Objectives**

- To determine the relationship between the needs of service quality and customer satisfaction in banking industries of Malaysia.

### **1.3.2 Specific Objectives**

- To determine the relationship between the need of tangibility and customer satisfaction in banking industries of Malaysia.
- To determine the relationship between the need of reliability and customer satisfaction in banking industries of Malaysia.
- To determine the relationship between the need of empathy and customer satisfaction in banking industries of Malaysia.
- To determine the relationship between the need of responsiveness and customer satisfaction in banking industries of Malaysia.
- To determine the relationship between the need of assurance and customer satisfaction in banking industries of Malaysia.

## 1.4 Research Questions

- Is there any relationship between the need of tangibility and customer satisfaction in banking industries of Malaysia?
- Is there any relationship between the need of reliability and customer satisfaction in banking industries of Malaysia?
- Is there any relationship between the need of empathy and customer satisfaction in banking industries of Malaysia?
- Is there any relationship between the need of responsiveness and customer satisfaction in banking industries of Malaysia?
- Is there any relationship between the need of assurance and customer satisfaction in banking industries of Malaysia?

## 1.5 Hypothesis of the Study

### 1.5.1 Tangibility

The following hypotheses are proposed:

$H_0$ : There is no relationship between the need of tangibility and the customer satisfaction in banking industries of Malaysia.

$H_1$ : There is a relationship between the need of tangibility and the customer satisfaction in banking industries of Malaysia.

### **1.5.2 Reliability**

The following hypotheses are proposed:

$H_0$ : There is no relationship between the need of reliability and the customer satisfaction in banking industries of Malaysia.

$H_1$ : There is a relationship between the need of reliability and the customer satisfaction in banking industries of Malaysia.

### **1.5.3 Responsiveness**

The following hypotheses are proposed:

$H_0$ : There is no relationship between the need of responsiveness and the customer satisfaction in banking industries of Malaysia.

$H_1$ : There is a relationship between the need of responsiveness and the customer satisfaction in banking industries of Malaysia.

### **1.5.4 Empathy**

The following hypotheses are proposed:

$H_0$ : There is no relationship between the need of empathy and the customer satisfaction in banking industries of Malaysia.

$H_1$ : There is a relationship between the need of empathy and the customer satisfaction in banking industries of Malaysia.

### **1.5.5 Assurance**

The following hypotheses are proposed:

$H_0$ : There is no relationship between the need of assurance and the customer satisfaction in banking industries of Malaysia.

$H_1$ : There is a relationship between the need of assurance and the customer satisfaction in banking industries of Malaysia.

## 1.6 Significance of the Study

Online banking and customer satisfaction is gaining momentum in Malaysia in the last decade. The new forms of banking channels' growth such as Automated Teller Machines (ATM), phone banking, Internet banking and also global competition and maturing financial market have force the bankers to search for the importance of customer satisfaction. The findings prove that service quality improvement can enhance customer satisfaction. Then, maturing financial market and global competition have encouraged bankers to seek for the importance of customer loyalty, the changing role of the banking system and its dynamic financial market. Based on SERVQUAL model, the five service quality dimensions namely tangibility, reliability, empathy, responsiveness, and assurance have been chosen. These variables have been tested to explore the relationship between customer satisfactions.

Therefore, researchers foresee that this study would contribute towards the banks understanding of the requirement or preferences of their customers and thereby improve their competitive edge in the years to come. In this study, an understanding of the factors identified allows the policy makers and bank managers to direct efforts and resources in the most efficient and effective way to increase bank's profit and business in the long run and encourage customers to adopt electronic banking. This would witness sustainable businesses for the banking sector. This study is special in that it analyses the banking services literature and sum up the results in order to provide perspectives for future research and obtain a proper understanding of customer services delivery. Although the findings show that the overall respondents evaluate the bank positively, but still there are rooms for improvements.

## 1.7 Chapter Layout

- Chapter 1- The introductory chapter which includes background of the study, explains the research problem, determine the research objectives to be achieved, the research questions to be answered, and the significance of study.
- Chapter 2- An overview of the relevant literature which consists of theoretical framework and propositions development.
- Chapter 3- Research methodology which consists of data collection, research instruments and empirical model.
- Chapter 4- Results and Interpretation. In this chapter, it includes the result pattern and major findings interpretation.
- Chapter 5- Overall research that has been conducted. It presents researchers discussion, limitation, conclusion and policy implication, and suggestion for the future research.

## **1.8 Conclusion**

A briefly introduction of the whole research which consist a few parts are in Chapter 1. Research background and problem statement are where researchers discussed about the customer services of banking industries in Malaysia at this current period and the issues and problems behind it. The objectives of the research were also stated and the questions to the research are mainly on the determinants that affect the customer service performance of bank. Hypotheses were made from the determinants of the bank's customer service. Also, it includes a brief discussion on the financial ratios used to determine the bank performance. Overall, this chapter includes the research background, problem statement, research objectives, research questions, hypotheses and significance of study. It provides complete guidance and the following chapters will be discussed precisely in order to explain more in depth regarding about this research.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

The subtopic of this chapter cover the literature review, relevant theoretical models review, proposed framework and hypotheses development. Researchers proceed to review what the other researchers have found on the relationship between service quality and customer satisfaction. The researchers have flagged the customer satisfaction as the dependent variable and the service quality dimensions (tangibility, reliability, empathy, responsiveness and assurance) as the independent variable.

### **2.1 Review of the Literature**

#### **2.1.1 Customer Satisfaction**

The need to improve customer services will be measured by customer satisfaction. The company will be able to know their customer's opinion on the products and services by conducting customer satisfaction surveys. The purpose of the survey is to improve the competitive position of the company and serve their customers with better services (Frank and Enkawa, 2007). According to Kursunluoglu (2014), the customer satisfaction and loyalty had effect on customer service variables. In addition, both satisfaction and loyalty is affected by customer services



about atmosphere (CSA). Besides that, customer satisfaction can be defined as meet the customer needs and expectations with the help of customer service. Employees must provide the excellent customer service in order to achieve customer satisfaction (Lusch et al., 2011). According to Berman and Evans (2010), customer satisfaction occurs in the case of customer services in order to meet the expectation from customer. Furthermore, customer services such as payment facilities, after-sale services, home delivery, and high quality of product are needed to achieve customer satisfaction. Therefore, customer service is related with customer satisfaction which is affected by expectation, experience, and evaluations.

Customer satisfaction is actually a term for business and commerce industry to define a successful in fulfilling the customer's expectation. It is a key performance indicator which differentiates a company with their competitors in a competitive marketplace where business compete to attract customers (Munusamy, Chelliah & Hor, 2010).

Lo et al. (2010) determines that assurance and empathy are significant and positive relationship in affecting customer satisfaction. This finding is consistent with previous studies Annamalah et al. (2011) but is inconsistent with the result finding obtain by the Munusamy, Chelliah and Hor (2010). Lo et al. (2010) found that there is an insignificant relationship between responsiveness, reliability and tangibility on the customer satisfaction. This finding is consistent with previous studies Annamalah et al. (2011). They indicate that the customer value is an asset to the company because the value that comes from the customers is the only value the company can create. The relationship between the customers and the banks is the most important factor in affecting the customer satisfaction in term of empathy.

The assurance is a key factor affecting the customer satisfaction because of the customer perception towards fraud in transactions. According to Lo et al. (2010) and Annamalah et al. (2011), they noticed that most of the respondents give a positive evaluation for the banks, but there is still improvement can be made by the banks. The researchers found out that customer satisfaction has mediating effect on the relationship between SERQUAL dimensions (assurance, empathy, responsiveness, reliability and tangibility) and customer loyalty as well. According to Annamalah et al. (2011), it is not a major factor that the bank manager's ability to perform the promised services dependably and accurately was not seen in term of reliability. In terms of tangibility, the facilities and equipment in the banks were not important to the customers. The employee in the bank's willingness to help and service customers and it considers is a personalized service. They were considered as marginal factors in term of responsiveness towards customer satisfaction.

According to Munusamy, Chelliah and Hor (2010), there is a positive correlation and highly significant relationship between customer satisfaction and tangibility. This result is supported by the previous researcher Razak et al. (2013) but is different to the prior findings in other studies (Seghier & Nathan, 2013; Lo et al., 2010; Annmalah et al., 2011). Razak et al. (2013) indicate that the responsive has a weak and almost negligible relationship with the customer satisfaction. This finding is contrary to the findings by Saghier and Nathan (2013) found that the customer satisfaction has positive and significant relationship with the responsiveness. These findings are enabling the bank manager to have a better understanding of customers' perception of service quality so that they can improve the customer satisfaction in banking sectors. The researchers indicate that the customer care and customer retention programs are greatly linked to the customer's perception of the service they can get and the perceptual outcome will then affect the customer satisfaction ratings, retention and switching rates.

### **2.1.2 Tangibility and Customer Satisfaction**

Tangibility is defined as the appearance of personnel physical facilities, and equipment (Parasuraman et al., 1988; Saghier & Nathan, 2013). Tangibility comprises the appearance of the company representatives, equipment, materials and facilities. The machines help the banks to perform faster and provide better services to their customers. These machines are being built in a way with more accurate less error, and time saving, and they can work in extend hour. There are many banks taking measures to improve this manner to attract more customers (Munusamy, Chelliah & Hor, 2010). Issues related to the branches such as access to the facilities, safety and convenience are on tangibility basis (Castro, 1997 as cited by Bellini et al., 2005).

According to Munusamy, Chelliah and Hor (2010), there is significant relationship and positively correlated between tangibility and customer satisfaction. This result is consistent with the researchers (Zafar et al., 2012; Molafe, Ansari & Teimuori, 2013; Lau et al., 2013). This is because the facilities of bank, for example, the machines (ATM machines, cash and cheque deposit machines) is very convenient for their customer to make payments, transfer money and save money into account. Besides that, internet banking can help the banks to provide 24 hours which is non-stop service and customer can do their transactions whenever they want. The tangibility is positively impact on customer satisfaction of the banking services (Zafar et al., 2012). The higher the need of tangibility, the customers are more satisfied with the service quality at banking industries. Then, tangibility and customer satisfaction has a positive correlation and significant (Molafe, Ansari & Teimuori, 2013). This result is also consistent with previous researchers Lau et al. (2013). By providing the good services and the facilities with standard physical, psychological and

social indices, it will affect the customer's impression and can help to retain and attract more new customers.

According to Saghier and Nathan (2013), there is positive relationship between tangibility and customer satisfaction but no significant effect. This is because tangibility is not a must in providing the infrastructure facilities so it is not important in affecting the customer satisfaction. There is no relationship between the need of tangibility and the customer satisfaction in retail banking sector of Malaysia (Annamalah et al., 2011). This result is inconsistent with the previous researchers (Zafar et al., 2012; Molafe, Ansari & Teimuori, 2013; Lau et al., 2013). The facilities were not considered important and no longer a major criterion in delivering customer satisfaction.

### **2.1.3 Reliability and Customer Satisfaction**

In finding the relationship between reliability and customer satisfaction, the previous researchers have come out with different conclusions, some of the researchers found that reliability and customer satisfaction has a significant and positive relationship while some researchers have come out with a different conclusion which is no significant relationship.

Shariff and Aniza (2013) determined that the overall analysis result shows that the Malaysian bank as a whole has a direct positive relationship between reliability and customer satisfaction. The result also implies that the respondents think that they can't rely on the employee of the bank and the employee of the bank does not understand what the customers actually want. An adequate training is needed for the improvement in the service

quality for the bank's employee. They also found that the gap between service quality specifications and actual service delivery will affect the customers perceived service quality in terms of the level of reliability actually delivered by the service provider.

Razak et al. (2013) indicated that there is a very strong positive relationship between reliability and the customer satisfaction which is consistent with the result found by Shariff and Aniza (2013). They have used the SPSS software to analyze the data gathered from the distribution of questionnaires and the result conclude that the reliability of the service provided by the bank will influence the customer's satisfaction towards the quality of services provided by Bank Islam Malaysia Berhad (BIMB). Lo et al. (2010) also determined that reliability and customer loyalty has a positive relationship; however, in their research, the reliability and the customer satisfaction has no significant relationship. They found that the customers may still stay with a bank even they are dissatisfy with the service provided by the bank because they perceive they have no choice.

Some researchers are however, come out with a different conclusion. Munusamy, Chelliah and Hor (2010) found that reliability does not have any significant impact on customer satisfaction. They said that the result is probably because of growth in the phone banking and internet banking. Internet banking portal has been setup by many banks their own, since they have an alternative to turn into, the customer does not concern about the reliability level in customer service. Since machines are now replaced with many staffs to make cash withdraw, cash credit, credit transfer and so on, the customer demand in the machine reliability will be higher than human reliability when dealing with banks. Annamalah et al. (2011) indicated that reliability and customer satisfaction are not. They found that the reliability, which is the bank's ability to perform the promised service dependably and accurately, is not the customer's priority. A clear

understanding between customer satisfaction and loyalty can improve the bank.

### **2.1.4 Empathy and Customer Satisfaction**

Most of the previous researches we reviewed have come out with the same conclusion that empathy and the customer satisfaction has a significant relationship. According to Culiberg (2010), empathy and customer satisfaction has a positive relationship in banking industries. The researchers determined that the service quality is directly related with customer satisfaction and retention. Bank staff needs to be more competent, friendly, polite, helpful, give attention to them, understand their needs, and knowledgeable when provide information on products and services to customer in order to satisfy them. In this research, the researchers had targeted the customer who is above 18 years old and opened an account with a bank for 8 branches from different cities.

Similar result is also found by Sidduqi (2011) and Tripathi (2013) that there is a positive correlation between empathy and customer satisfaction in commercial banking sector. That is more efficiency if the bank staffs can see the things from point of view as a customer. Therefore, the researchers had distributed 400 questionnaires to bank account holder in order to collect data for analysis. Service quality is a competitive weapon in the banking industries as the number of bank branches increase in every year. Empathy is one of the relevant variables to affect the customer switching behavior in banking sector (Subramaniam & Ramachandran, 2012). Some of the customers will prefer face-to-face deal with transaction although online banking system is applicable now. Therefore, customers

expect to have a friendly, helpful, and polite staffs to help them settle for the transaction.

There are three parts of customer relationship management (CRM) application architecture which included analytical, operative and collaborative. Therefore, bank staffs can be categorized under operative CRM (Buttle, 2009). The main concept of empathy is required the service provider or bank staffs to understand the needs from customers and able to provide personal attention. Database of communication between the staff and customer is tracked and stored, it will be provided to the user if there is necessary. This approach enable the employees communicate with their customers by using various channels so that the customer is feeling taken care of by just one person. According to previous researchers (Buttle, 2009), there is positively correlated between empathy and customer satisfaction in banking industries.

### **2.1.5 Responsiveness and Customer Satisfaction**

Responsiveness defined as the willingness or readiness of employees to provide service (Parasuraman et al., 1985; Saghier & Nathan, 2013). It is also involves understanding needs and wants of the customers, convenient operating hours, individual given by the staff, attention to problems and customers' safety in their transaction (Kumar et al., 2009). Responsiveness is providing prompt service and help to customer, the reaction speed plays a vital role (Parasuraman et al., 1985; Saghier & Nathan, 2013).

Researchers examining the responsiveness of web-based services have positive and significant relationship between service quality and customer

satisfaction (Yanf & Jun, 2002; Zhu et al., 2002). This result is consistent with researchers (Parasuraman et al., 1988; Yavas et al., 1997; Yang, 2001; Kim & Lee, 2002; Geetika et al., 2008). In a Turkish study, Yavas et al. (1997) confirmed that responsiveness is positive correlation and significant predictors of customer satisfaction. Banks should not ignore the role of customer-contact personnel in order to achieve customer satisfaction. Responsiveness was also the explanatory variables in predicting customer satisfaction for Greek Cypriot bank customer (Arasli et al., 2005). In a study on internet banking, consumers gave the highest weight to service quality dimensions such as responsiveness while selecting a particular bank (Geetika et al., 2008).

Responses to Niveen and Nathan (2013) research, they suggest that responsiveness and customer satisfaction has positive correlation and significant effect. This findings is consistent with the researchers (Jun & Cai, 2001; Jamal & Nasser, 2002; Joseph et al., 2005; Glaveli et al., 2006; Jham & Khan, 2008; Lo & Osman, 2010; Riel et al., 2001). Responsiveness is the timely reaction towards the customers' needs and they prefer to deal with the human being rather than machines. A positive and significant relationship existed between responsiveness and customer satisfaction (Jamal & Nasser, 2002). Jham and Khan (2008) support the earlier studies that responsiveness, the service quality dimension in banking services affects customer satisfaction. Responsiveness is likely to have a significant and positive effect on customer satisfaction (Jun & Cai, 2001; Diaz & Ruiz, 2002; Joseph et al., 2005; Glaveli et al., 2006). Lo and Osman (2010) found that satisfaction has mediating effect on the relationships between responsiveness and customer satisfaction which is consistent with the studies done by Caruana (2002), Butcher (2001), Ehigie (2006) and Lam and Burton (2006). Results from hypotheses testing also show that responsiveness found to have positive relationship with customer satisfaction this is in line with Glaveli et al. (2006) who brought out the speed of delivery service enhanced perception of service



quality while Joseph et al. (2005) indicated that 'no waiting time' increased the level of customers' satisfaction.

Chakravarty (2003) found that there is a negative relation among service quality dimensions, responsiveness with customer's tendency to abandon the bank in America. This finding is consistent with the researchers (Annamalah et al., 2011; Lo & Osman, 2010). The Structural Equation modelling technique was used by Annamalah et al., (2011) in this analysis to determine customer satisfaction and customer loyalty. However, responsiveness is found to least impacting customer satisfaction. The results also indicate that customer satisfaction is determined by consumer perceptions of service quality and responsiveness exhibiting the strongest impact. Responsiveness is insignificant and does not contribute to customer satisfaction. The bank customers feel that responsiveness is not their top priority due to personalized services no longer a prerequisite to determine customer satisfaction (Annamalah et al., 2011). Lo and Osman (2010) indicate that between responsiveness and customer loyalty, there is an insignificant relationship. Surprisingly, the results are different to the prior findings in other studies (Jun & Cai, 2001; Diaz & Ruiz, 2002; Joseph et al., 2005; Glaveli et al., 2006).

Jayaraman, Shankar, and Hor (2010) indicate that responsiveness and customer satisfaction has a positive relationship but no significant impact. This result is inconsistent with previous researchers. Responses to the research of Munusamy, Chelliah, and Hor (2010) suggest that responsiveness has positive relationship but no significant effect on customer satisfaction. This result shows that the banks' customers are prefer to deal with the machines rather than human being. Machines are made to have a shorter respond time compare to human being, and continual improving every day. While human responsiveness sometimes can be affected by emotion, which causing low in productivity. Customers can understand that sometimes machines can break down, but they cannot

accept if they requirement is not being responded on time by the banks' staffs. There are the difference perception from customers between dealing with machines and human being.

### **2.1.6 Assurance and Customer Satisfaction**

According to Lo et al. (2010), Parasuraman et al. (1988) has defined assurance as the knowledge and courtesy of employees and their ability to inspire trust and confidence. The banker should serve their customers by behaving courteously and provide some essential information to the customer. After conducted a 22- item survey instrument to measure the service quality, some determinant is omitted to become five main determinants (tangibility, reliability, responsiveness, assurance and empathy). Competence, courtesy, credibility and security are classified under the factor of assurance.

Lo et al., (2010) found that in their studies show that there is a significant and positive relationship between assurance and customer satisfaction. This finding is consistent with previous studies, including Ndubisi (2006) and Lympelopoulos et al., (2006). Ndubisi have verified that communication is a strong and important source for the customer satisfaction in the Malaysia banking industry. In this study, researcher found that there is a significant and positive relationship between assurance and customer satisfaction. This result is consistent with studies done by Santhiyavalli and Sandhya (2011); Arokiasamy and Abdullah, (2013); Ilias, Rahman, Abd Razak, and Abu Hasan, (2008); Saghier and Nathan (2013).

On the other hand, Munusamy, Chelliah and Hor (2010) found that there is a positive relationship between assurance and customer satisfaction, but assurance has an insignificant effect on the customer satisfaction. This result is inconsistent with the studies done by Santhiyavalli and Sandhya (2011). Researcher defined assurance as the mean of being safe, the responses do not feel assurance act as a major factor of the service quality that must be included. Santhiyavalli and Sandhya (2011) found that the assurance is the core factor influences the customer satisfaction level in the banking sector. Others than assurance, tangibility and reliability also found that as major factors influences customer satisfaction in their studies.

## **2.2 Review of Relevant Theoretical Models**

### **2.2.1 SERVQUAL Model (1988)**

According to Lo, Mahamad, Ramayah, and Mosahab (2010) found that SERVQUAL model is the most popular research instrument which developed by Parasuraman in 1988. This model is applied to examine the customer satisfaction level in order to perceive a higher customer satisfaction level in Service Company. According to Nyeck, Morales, Ladhari, and Pons (2002) determined SERVQUAL remains as the most complete research instruments which try to conceptualize and determine the service quality. SERVQUAL is the useful research instruments which can be apply by the researcher to measure the satisfaction level in different type of service companies. For example: fast food restaurants, financial service, healthcare, education, large retail chain and others. Previous researchers indicate that the banking industry is one of the most common service companies which had been proved that can apply SERVQUAL to

measure their company customer satisfaction level (Paswah et al., 2004; Seth et al., 2005; Lympelopoulos et al., 2006). Furthermore, this model show become relevant when use to measure quality of service in various industries including banks. SERVQUAL was included 10 dimensions which are tangibility, reliability, responsiveness, competency, courtesy, assurance, credibility, security, access, and understanding. These 10 dimensions are reduced to become 5 dimensions which are assurance, empathy, reliability, responsiveness and tangibility (Charles, Kumar & Suggu, 2013).

### **2.2.2 Technical and Functional Quality Model (1984)**

Customer service takes place when the staffs are performing a transaction for the customer. Bank customers have a high expectation toward the staffs in the branches to help them solve the enquiries and transactions. Besides that, employees in the bank must be very good in understanding the customer perception and provide a great service in order to be able to compete with their competitors. Therefore, technical and functional quality model was developed by Gronroos in 1984 (Seth, Deshmukh & Vrat, 2004). The researchers had determined three components in this model which are technical quality, functional quality, and image. Technical quality is the quality of service which had received by the customers when they interact with bank employees. Customer evaluation is important to bank management in order to measure the customer satisfaction level on products and services. There are five output-related attributes which are employee's technical solutions, technical ability, computerized systems, knowledge and machine quality. For example, the bank staffs should know how to overcome the technical problems for ATM machine and computer system. Besides that, there are 7 attributes in functional quality which included appearance, attitude, accessibility, internal relationship, behavior,

customer contact, and service-mindedness. As a professional banker, they should consists these seven attributes when interact with the bank customer. In fact, the customer will have more confident and feel comfortable with the staffs when doing transaction. Lastly, image or reputation is very important to the service industry especially for bank. In addition, word-of-mouth is a simple and efficient strategies to increase the level of customer satisfaction which commonly used by service industries. Therefore, bad image or low reputation will affect the evaluation of the customer service from customer.

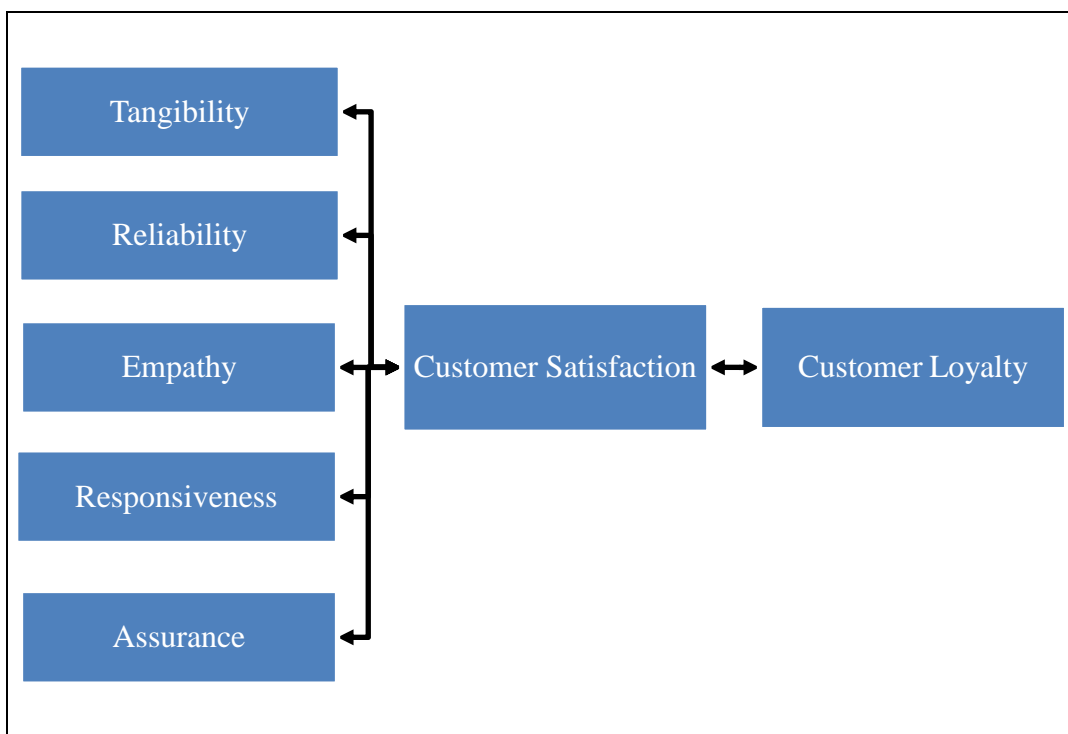
### **2.2.3 Attribute and Overall Affect Model (1996)**

According to Beatson, Lee and Coote (2007) identified two models are attribute and overall affect model which developed by Dabholkar in 1996 to investigate customer service based on self-service technology. Attribute model is based on customer expectation on self-service technologies like automated teller machine (ATM) and online banking. According to the result from the research, more customers who likely to use these options of technology compared to face-to-face deal with transaction. Networking is advanced in nowadays and people are busy for their job. Therefore, they wish to settle the simple transaction by using ATM or online banking to avoid queue up in the branch. In a nutshell, customer expectation consists of speed of delivery, ease of use, reliability, enjoyment, and able to control by themselves. In addition, overall affect model is regarding customer's feeling towards the self-service technologies. This model consists of attitude toward using the technological products and need for interaction with service employee. The staff needs to ensure that customer able to contact with hotline within 24 hours because they may face difficulty when using such technologies. In addition, the employees need to be

knowledgeable when dealing with the customer based on self-service option.

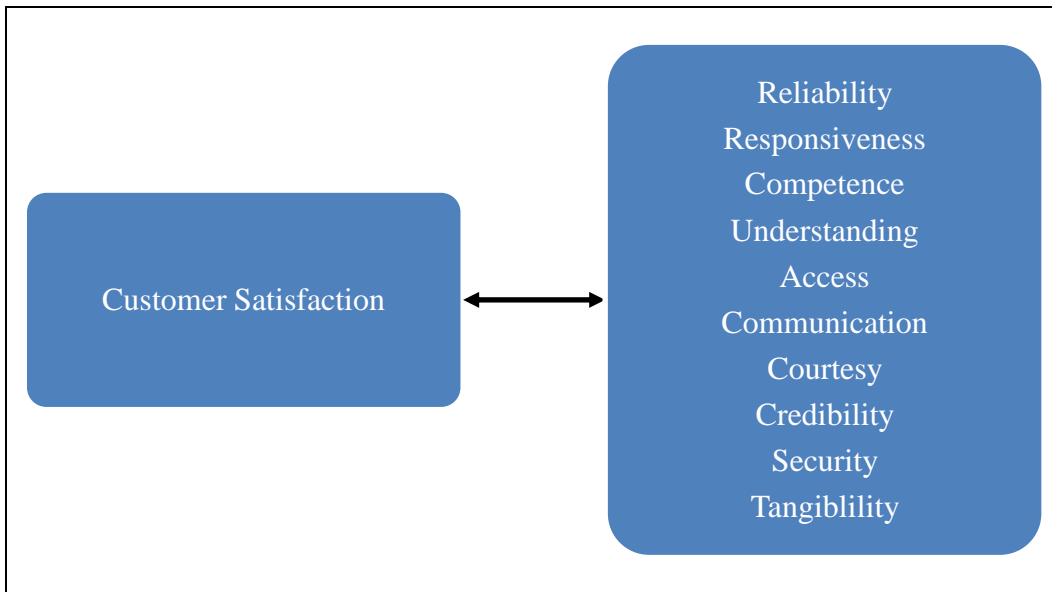
### 2.3 Theoretical Framework/ Conceptual Framework

Figure 2.1: Theoretical model guiding the investigation.



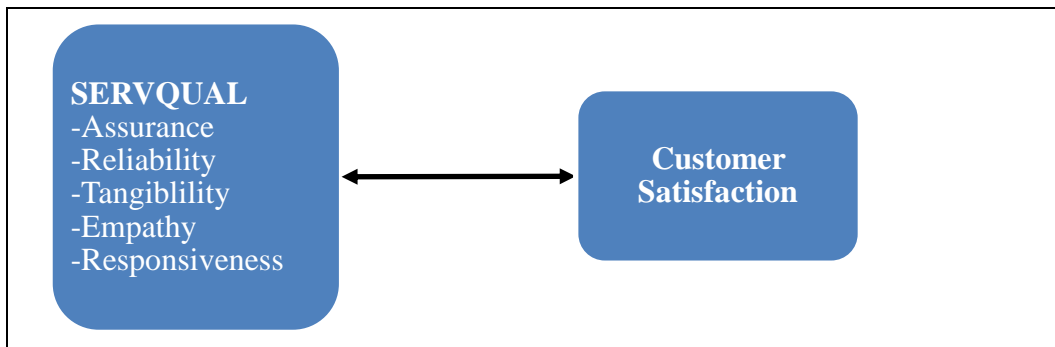
Adapted from: Caruana, A. (2002). Service Loyalty: The Effects of Service Quality and the Mediating role of Customer Satisfaction. *European Journal of Marketing*, 36(7), 811-828.

Figure 2.2: SERVQUAL



Adapted from: Parasuraman et al. (1985), showcased ten various components.

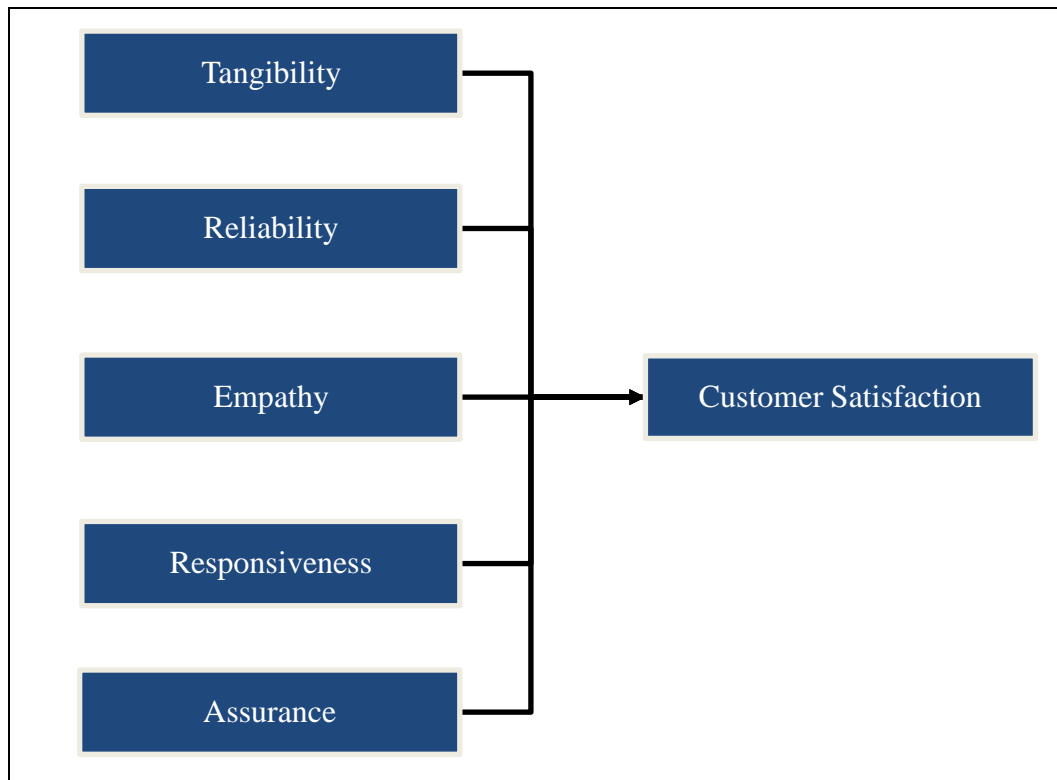
Figure 2.3: SERVQUAL model



Adapted from: Parasuraman et al. (1985), the ten components were collapsed into five different dimensions in 1988.

In the study, researchers make assumptions for how all this service quality variables contribute their effect on customer satisfaction.

Figure 2.4: Proposed the Expected Relationships between Service Quality and Customer Satisfaction



Adapted from: Parasuraman et al. (1988), Agues et al. (2007) and Caruana (2002) showcased five various components.

### **2.3.1 Tangibility**

Tangibility has been defined as physical facilities, equipment, and appearance of personnel (Parasuraman et al., 1988). Tangibility consists of the company representative's appearance, materials, facilities, and equipment. Machines in the bank can perform faster and provide better services at the same time to their customers. Issues related to the branches such as access to the facilities, safety and convenience are on tangibility basis (Castro, 1997 as cited by Bellini et al., 2005).



### **2.3.2 Reliability**

Reliability defined as the dependability in handling customer's problem and the ability to perform the service in the promised time accurately. Nguyen and Leblanc (2001) consider reliability as reputation that can be the most reliable indicator of service quality which could be related to customers past experiences. The result which done by the previous researcher is found to be inconsistent; some of the researchers conclude that there is a significant and positive relationship between reliability and customer satisfaction while some found that there is insignificant relationship for two variables.

### **2.3.3 Empathy**

Empathy is defined as the feeling of understand and share another individual's experience and emotions. According to Culiberg (2010) found that the willingness and capability to give individualized attention to a customer in banking sector is also known as empathy. Besides that, the literature of positive relationship between the need of empathy and customer satisfaction in banking industries of Malaysia had come out with consistent result from previous researches.

According to Iacoboni and Dapretto (2006), mirror of neuron system (MNS) is a main concept to understand function of empathy. It is placed in the premotor and parietal areas of the brain. It plays an important role in human understanding and reaction for both emotional and intentions of individual. According to Gallese (2003) found that the premotor sectors in the brain will stimulus when one person observe or hear from another

individual perform an action. Therefore, the researchers had undergoing an experience by observing the customer's facial expression, posture, gestures, and mannerisms during interaction between the bank employees and customers. These actions will directly reflect the needs or intention of a customer. By the observation, bank staffs can suggest the right products or services and give a hand to their respective customer. Eventually, level of customer of satisfaction will be increased by giving better service quality to the customers in term of empathy.

### **2.3.4 Responsiveness**

Customers expect online stores to respond to their inquiries promptly (Liao & Cheung, 2002). Responsiveness describes how often an online store voluntarily provides services, for example, customer inquiries, information retrieval and navigation speed that are important to its customers (Parasuraman et al., 1988; Yang, 2001; Kim & Lee, 2002). Researchers examining the responsiveness of web-based services have highlighted the importance of perceived service quality and customer satisfaction (Yanf & Jun, 2002; Zhu et al., 2002).

### **2.3.5 Assurance**

Assurance is a relevant variable that would give impact to the customer satisfaction level, claimed by Annamalah et al., (2011) and is consistent with studies done by Butcher (2001) and Caruana (2002). From his finding there is 73.4% of assurance associated with customer satisfaction. Therefore his result shows that the determinant of assurance is very important towards the satisfaction of customer. Annamalah et al., (2011) argued that satisfaction is an important factor that will influence the customer loyalty with banks. Thus, the service quality dimension which influence customer loyalty with bank will indirectly give an impact to the customer satisfaction on bank.

## **2.4 Hypotheses Development**

### **2.4.1 Tangibility**

*H<sub>0</sub>: There is no relationship between the need of tangibility and the customer satisfaction in banking industries of Malaysia.*

*H<sub>1</sub>: There is a relationship between the need of tangibility and the customer satisfaction in banking industries of Malaysia.*

### **2.4.2 Reliability**

*H<sub>0</sub>: There is no relationship between the need of reliability and the customer satisfaction in banking industries of Malaysia.*

*H<sub>1</sub>: There is a relationship between the need of reliability and the customer satisfaction in banking industries of Malaysia.*

### **2.4.3 Empathy**

*H<sub>0</sub>: There is no relationship between the need of empathy and the customer satisfaction in banking industries of Malaysia.*

*H<sub>1</sub>: There is a relationship between the need of empathy and the customer satisfaction in banking industries of Malaysia.*

### **2.4.4 Responsiveness**

*H<sub>0</sub>: There is no relationship between the need of responsiveness and the customer satisfaction in banking industries of Malaysia.*

*H<sub>1</sub>: There is a relationship between the need of responsiveness and the customer satisfaction in banking industries of Malaysia.*

### **2.4.5 Assurance**

*H<sub>0</sub>: There is no relationship between the need of assurance and the customer satisfaction in banking industries of Malaysia.*

*H<sub>1</sub>: There is a relationship between the need of assurance and the customer satisfaction in banking industries of Malaysia.*

## **2.5 Conclusion**

The determinants of customer satisfaction include assurance, empathy, reliability, responsiveness and tangibility. All these variables were commonly used in the past researchers. In our literature review, it stated that some factors have positive relationship towards the customer satisfaction where some of it has negative relationship. The model of our choice in this research is obtained from the reference of past researchers whereby customer satisfaction will be the measurement of bank's quality service performance and the other five variables will be the independent variable in the equation. The developments of hypothesis were also discussed in Chapter 2.

Overall, this chapter has covered the significant theoretical models and other related literature review on the service quality and customer satisfaction. At the same time, the proposed conceptual framework was formed by then relationship of dependent variables and independent variables. The related hypotheses were stated and will be tested in Chapter 3.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.0 Introduction**

This chapter provides a systematic overview of the methods implemented in the study. This chapter presents the research design, data collection methods, sampling design, research instrument, constructs measurement, data processing and data analysis. Four hundred survey questionnaires were collected from targeted respondents through face-to-face approaches. The chapter will further discuss how the research was conducted.

### **3.1 Research Design**

Research design is a detailed plan and analytical strategy of completing a research and answering each research question validly and accurately (Kumar, 2010). In addition, a good research design must at least consists of four aspects, which are the clear statement of research problems, different procedures and techniques used for collecting information, the population to be studied and various methods to be carried out in analyzing and interpreting data (Kothari, 2004). On the other hand, Lee (2012) defined research design as the foundation for systems creation that responds to human needs. Besides, based on Kothari (2004), research design provides a conceptual structure for conducting the research and a blueprint for collecting, measuring and analyzing the data. In addition, a good research design must at least consists of four aspects, which are the clear statement of research problems, different procedures and techniques used for collecting information, the

population to be studied and various methods to be carried out in analyzing and interpreting data (Kothari, 2004).

### **3.1.1 Correlational Research**

Correlational research can be defined as the method to identify whether two or more variables in the study have relationship after collecting the data from the respondents (Jackson, 2011). Harris (2005) also describes the use of correlational research in order to determine the existence of relationships between variables besides providing new theories and hypotheses in the study. The aim of this research is to examine the relationship between assurance, empathy, reliability, responsiveness, and tangibility on customer satisfaction in Malaysia's banking industries, thus correlational research is appropriate in the study.

### **3.1.2 Quantitative Research**

Quantitative research is another methods applied in this study. Quantitative research can be defined as the quantitative studies that involved numerical data. Nykiel (2007) stated that quantitative research's meaning can be consists of two different perspectives which are marketing and science perspectives. Marketing perspective explained that quantitative research involved the collection of quantifiable data or information that can be traced over time whereas science perspective is about processing the facts, making predictions and testing the stated hypotheses. Quantitative research is suitable in this study because the quantifiable data collected from

samples of targeted population to measure the respondents' opinions become more convenient as the sample size chosen are huge and the respondents are randomly selected (Fitzpatrick, 2006). On top of that, reliable results able to obtained if the research is conducted in proper way (Nykiel, 2007).

## **3.2 Data Collection Methods**

Data collection method usually depends on which types of data that has been chosen. There are two types of data which include the primary data and secondary data. In this study, primary data has been chosen in the research.

### **3.2.1 Primary Data**

Primary data is the first-hand data or the information collected by researchers via direct observations (Panneerselvam, 2000). Normally, primary data is collected through observation method, surveys, interviews and experiments instead of other sources which are available for public access (Forshaw, 2000). Since the study is about the responses and opinions of respondents towards the bank's services, primary data research is the best way to collect the information. Survey questionnaires and interview are the most common technique used in primary data research.

In this research, questionnaire is given as the tool to collect data as questionnaire provides reliable information for the research. The



questionnaires are randomly distributed to 400 targeted respondents. Furthermore, each respondent required to spend five to ten minutes to complete the paper-and-pencil questionnaire. In order to make sure the data to be reliable and unbiased, researchers monitored the whole process of answering the questionnaires. All the questionnaires are then collected back by researchers once the respondents completed the questionnaires to avoid loss of data. Other than that, by using paper-and-pencil questionnaires method, respondents able to ask the researchers about any doubt relating to the questions in the questionnaires which able to avoid bias results (Phellas, Bloch, & Seale, 2011).

### **3.3 Sampling Design**

Sampling design is the process of selecting a number of units from a larger group in this study. According to Nonan (2008), sampling measures a small portion of population and then making a general statement about the whole thing. Besides that, it includes the target population, sampling frame and location, sampling elements, sampling technique and sample size.

#### **3.3.1 Target Population**

Group of people who known as target of population complete collections of observations related to the research so that the researcher able to make conclusions (Kitchenham & Pfleeger, 2002). The population comprised the customer that experienced in using the banking services which provided by any of commercial banks in Malaysia. The population for this

research is the total numbers of the Kuala Lumpur residents. The estimation of the total numbers of the Kuala Lumpur residents in 2013 is about 1.7 million persons (Adapted from Department of Statistics Malaysia, Official Portal 2013).

### **3.3.2 Sampling Frame and Location**

Set of elements used by the researchers to select a sample of the target population is defined as sampling frame. It may not be important to the non-probability technique. According to Trochim (2006), non-probability technique cannot depend upon the rationale of probability theory. Hence, non-probability technique cannot be used to deduce and make inferences from the sample to the population. Besides that, the study was carried out at the area of Kuala Lumpur, Malaysia.

### **3.3.3 Sampling Elements**

Sample elements can be defined as the respondents who participate in the research study (Latham, 2007). In order to participate in the research, the respondents should have some of characteristics, for example, the respondent must have an account in commercial banks. In addition, the researchers will look for the targeted respondents who have not done the questionnaire before so that they can avoid for the repetition data.

### **3.3.4 Sampling Technique**

The convenient sampling method or non-probability sampling method is suitable used as a sampling technique in this research study. Convenient sampling is a non-probability sampling method. The people selected to become the sample is due to their convenient accessibility to the researchers (adapted from Business dictionary).

The researcher usually distributes a questionnaire to the respondents who are willing to participate and must qualify in term of sampling elements (George, 2012). Besides, the non-probability sampling method is selecting sample from population and it does not involve random selection. One advantage of this method is low cost as compared to the probability sampling. Questionnaires distribution is the best instruments to collect the respondents' information. This is because these instruments will give an accurate and efficient result due to the face to face interview and are the most inexpensive method among the others.

### **3.3.5 Sampling size**

Sample size is relevant in this study because it will be more accurate if obtain large sample size. According to Krejcie and Morgan (1970), the appropriate sample size to be use can be determined by using the table to determinate sample size from a given population. This table is creating by Krejcie and Morgan in one of their research name Determining Sample Size for Research Activities. The population for this research is the total numbers of the Kuala Lumpur residents. The estimation of the total numbers of the Kuala Lumpur residents in 2013 is about 1.7 million

persons (Adapted from Department of Statistics Malaysia, Official Portal 2013). Based on the table about determination of sample size for population given, if the population is excess 1 million persons then the minimum sample size need to be use is 384. In order to obtain the accuracy result from respondents in this research, 400 questionnaires are distributed by the researchers in Kuala Lumpur area in Malaysia.

### **3.4 Research Instrument**

In this research, researcher are using questionnaire as an instrument for collecting the data from the respondent. The questionnaire is a set of research instrument which provide a set of written questions and a choice of answers. This instrument is invented by Sir Francis Galton (1870). The questionnaire is often used by the researcher now to conduct their research because implementing the questionnaire to collecting data is easier, efficient and cheap as compared to the other methods. On the other hand, researcher also can avoid from the biased result of the research by using a questionnaire to collect data because questionnaire frequently involve face to face interview or telephone interview.

#### **3.4.1 The purpose of using a questionnaire**

The questionnaire is simple tool to collect the information from respondents. There are a lot of advantages of implementing the questionnaire as a research instrument. The questionnaire is an instrument which is cheaper as compare to other instruments. The researcher can provide questionnaire to the large amount of respondents with the cheaper price. The information presented on research resulted in a better

understanding by respondent as compare to the information presented by video display terminal (Belmore, 1985). So the questionnaire may provide research an unbiased result of the research. Moreover researcher can mail the questionnaire to respondents to save their time spent.

### **3.4.2 Questionnaire Design**

Questionnaire is divided into 3 parts. First part is the demographic profile of respondents such as age, gender, education level and others. Second part is about the general information of the respondents on the customer satisfaction of the banking service quality of the commercial bank in Malaysia. The last part is about the independent variables. On an overall, English is used in designing the questionnaire in this study.

### **3.4.3 Pilot Test**

Pilot test is defined as a small scale exploratory research technique by taking sampling without applies rigorous standards. Uses of the test are measured the validity, efficiency and measurements of the data (Ballan, 2012). Therefore, 30 sets of questionnaires had been distributed to bank users in Kuala Lumpur. The purpose is measured the internal reliability and validity of questionnaires to know whether it is capable and comprehensive to implement into the real survey.

**Table 3.1: Reliability Test for Pilot Testing**

Variable	Construct	Cronbach's	
		Alpha	No.of Items
DV	Customer Satisfaction	0.723	5
IV1	Tangibility	0.652	5
IV2	Reliability	0.826	5
IV3	Empathy	0.781	5
IV4	Responsiveness	0.677	5
IV5	Assurance	0.856	5

Source: Developed for the research

Cronbach's Alpha was introduced by Lee Cronbach in 1951 (Tavakol & Dennick, 2011). This is provided the measurement of the internal consistency of a test or scale. According to Table 3.1, the range of Cronbachs' Alpha is between 0.652 and 0.856 that obtained from SPSS, version 20.0. According the rule of thumb, Cronbach's Alpha for the reliability, empathy, assurance, and customer satisfaction are within 0.7 to 0.8 which under good level of reliability. On the other hand, Cronbach's Alpha for tangibility and responsiveness are within 0.6 to 0.7 which categorized under acceptable level of reliability.

### **3.5 Constructs Measurement (Scales and Operational Definitions)**

The scales of measurement are distinguished on the hypothesized relationships assumed to exist between objects having different scale values in questionnaire. Nominal, ordinal, interval and ratio are level of measurements (Osherson & Lane,

2012). The nominal, ordinal and interval scale are used as the scale of measurement in this research. In addition, the scaling technique Likert scale is also used in the questionnaire.

Table 3.2: Measurement applied on variables

	Variables / Objects	Measurements	Scales of Measurement
Demographic	Gender	Nominal	-
	Age Group	Ordinal	-
	Education level	Ordinal	-
	Income Level	Ordinal	-
	Frequency patron to bank	Nominal	-
Dependent Variable	Customer Satisfaction	Interval	5-point Likert Scale
Independent Variables	Tangibility	Interval	5-point Likert Scale
	Reliability	Interval	5-point Likert Scale
	Empathy	Interval	5-point Likert Scale
	Responsiveness	Interval	5-point Likert Scale
	Assurance	Interval	5-point Likert Scale

Source: Developed for the research

### **3.5.1 Nominal Scale**

The nominal scale is known as qualitative types of scale. It helps to differentiate and classify the data into distinct categories such as gender. Besides that, the nominal scale does not imply any ordering or ranking among the items (Garger, 2012). For example, gender is one of the variables and “1” can be represents as male or “2” represents as female. Frequency of visiting bank is another variable used in this research, “1” is used to represent daily, “2” is represent weekly and “3” is represent monthly.

### **3.5.2 Ordinal Scale**

The ordinal scale is also known as qualitative data. It helps to classify the data into distinct categories which the ranking is implied (Garger, 2012). For example, a rank as “1” (below 19 years old) respondent does not mean that it is low rank than a rank “2” (20-29 years old) respondent in the research, as “1” is smaller than “2”. The researcher can get more useful and meaningful information when they ranking within a variable. For instance, a rank “1” (below 19 years old) respondent is younger than a rank “2” (20-29 years old) respondent for age group. Besides that, education level and income level are the variables in ordinal scale. For example, the SPM respondent has higher educational level compare to PMR respondent. For income level, the lower middle income respondent (RM1000-RM2499 per month) has higher income level compare to the lower income respondent (less than RM1000 per month).



### **3.5.3 Interval Scale**

The interval scale is an ordered scale in which the difference between measurements is a meaningful quantity but it does not involve a true zero point. Brown (2011) stated that interval is numerical scale that shows the orders of things with equal intervals between the points on the scale. Osherson and Lane stated that interval scale is numerical scale, which intervals or group distances indicate same meaning, for example, 10 Celsius Degree to 20 Celsius Degree has 10 Celsius Degree in group distance, 20 Celsius Degree to 30 Celsius Degree also has 10 Celsius Degree in group distance and these 10 Celsius Degree in distance show same meaning. Likert scales contain multiple items and can be taken to be interval scales so descriptive statistics can be applied (Brown, 2011). Based on this research, measurement for Customer Satisfaction, Tangibility, Reliability, Empathy, Responsiveness, Assurance is 5-point Likert scale; which is measure as: 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree) and 5 (strongly agree).

### 3.5.4 Origins of Questionnaire

Table 3.3: Origins of Questionnaire

Construct	Statement	Origin Statement
Customer Satisfaction	Customer satisfaction is the post-purchase evaluation of products or services taking into consideration the expectations.	(Kotler & Armstrong, 2012)
	The customer will purchase another products and services from the bank.	(Munusamy, Chelliah & Hor, 2010)
	Unsatisfied customer will start considering switching to another bank.	(Manrai & Manrai, 2007)
	A satisfied customer is six times more likely to repurchase a product and share his experience with five or six other people.	(Grönroos, 2000; Zairi, 2000)
	The customer comfortable and secured with the services provided by the bank.	(Lau et al., 2013)
Tangibility	Bank has new and the latest equipment.	(Aghdaie & Faghani, 2012)
	Bank's physical facilities are attractive.	(Saghier & Nathan, 2013)
	Bank's reception desk employees are good in manners and neat appearing.	(Munusamy, Chelliah & Hor, 2010)
	Materials associated with the service (such as pamphlets or statement) are visually attractive at bank.	(Munusamy, Chelliah & Hor, 2010)

	Less queuing time is needed at the bank's counter.	(Munusamy, Chelliah & Hor, 2010)
Reliability	Bank will honour its promises if they promise to do something by a given time.	(Santhiyavalli & Sandhya, 2011)
	When you are facing problem, bank's employees will show a sincere interest in helping you to solve it.	(Munusamy, Chelliah & Hor, 2010)
	Bank employees perform the service right the first time.	(Shariff & Aniza, 2013)
	Bank employees will keep the customer's information remain confidential.	(Munusamy, Chelliah & Hor, 2010)
	Bank employees insist on keeping their customer records free from error.	(Santhiyavalli & Sandhya, 2011)
Empathy	Banks gives individual attention to you.	(Lo, Mahamad & Ramayah, 2010)
	Easy to contact with bank's employees.	(Munusamy, Chelliah & Hor, 2010)
	Bank's employees are knowledgeable.	(Culiberg & Rojsek, 2010)
	Banks has your best interest at heart.	(Shanka, 2012)
	Bank's employees able to understand your specific needs.	(Culiberg & Rojsek, 2010)
Responsiveness	Bank's employees inform you exactly when services will be performed.	(Santhiyavalli & Sandhya, 2011)
	Bank's employees give you prompt service.	(Parasuraman et al., 1988; Jun & Cai, 2001)

	Bank's employees are helpful and willing to help you.	(Parasuraman et al., 1988; Claveli et al., 2006)
	Bank's employees are never too busy to handle your request.	(Santhiyavalli & Sandhya, 2011)
	You prefer to deal with bank machines rather than human being.	(Munusamy, Chelliah & Hor, 2010)
Assurance	The behaviour of bank's employees give you confident.	(Annamalah et al., 2011; Santhiyavalli & Sandhya, 2011)
	You feel secure in doing transactions with bank.	(Munusamy, Chelliah & Hor, 2010)
	Employees in the bank treated you with a good attitude.	(Santhiyavalli & Sandhya, 2011)
	Employees in the bank have the knowledge to help you in solving your problem.	(Santhiyavalli & Sandhya, 2011)
	Employees in the bank know their client on regular basis.	(Amaoko, 2012)

## **3.6 Data Processing**

### **3.6.1 Data Checking**

By checking the data is one of the processes to determine whether the collected data is accurate and precise (Onis & Blossner, 2003). After distribution of questionnaires, it will collect back from target respondent after they had selected answer for each of the question. Furthermore, the selected answer will be checked thoroughly for error identification that might occur during or after the submission of questionnaire. The example is missing answer or incomplete information gathered from the questionnaire. It will trigger the inability of the data collected from questionnaire to be used in the data analysis. Data checking is an important stage because if found any problem that can be solved on time before heading to next stage.

### **3.6.2 Data Editing**

Data editing has been expensive and time consuming because it is a manual process which people are checking the collected data record by record and correcting if necessary for long times ago. But for now, there is new ways which called selective editing. It states that not necessary to find and correct all errors but only select those errors where has substantial influence on publication figures. In a nutshell, the main purpose of data editing is to correct the errors (Waal, 2013). Process of data editing will carry out as long as finish the data checking in order to avoid missing questionnaire that collected from respondent. If there is blank or empty on

the questionnaire which caused by online data recording or technical problem will lead the error occur and data might inaccurate.

### **3.6.3 Data Coding**

Coding of data is defined as translate data from one language or format into another and usually to make it readable for a computer. The choices for all sections in the questionnaire are assigned with ascending numerical order which beginning with the value of 1 at this stage. In Section A, male is assigned with value of 1 meanwhile female is 2 for the gender. Moreover, there are different age groups in the questionnaire. Therefore, people who are 19 years and below is coded with 1, the code for 20-29 years old is 2, 30 to 39 years old is 3, 40 to 49 years old is 4 whereas 50 years and above is 5. Other than that, the choices of the “Likert” scale of strongly disagree are coded with the value of 1 and followed by ascending value until 5 for strong agree.

### **3.6.4 Data Transcribing**

Data transcribing is the processes whereby the online recorded data were downloaded and converted into the Microsoft Excel spreadsheet format. After all the choices in the questionnaire are coded with values in Microsoft Excel, the data is opened with the Statistical Package for Service Solution (SPSS) software for data analysis.

## **3.7 Data Analysis**

### **3.7.1 Descriptive Analysis**

Descriptive analysis is a set of brief summary of a collected data which occurred in the sample or the entire population (Thompson, 2008). Descriptive analysis is the method used for organising, summarizing and presenting demographic data by using table and numerical summaries. By using tables, it can help the researcher to simply large amounts of data and describe the data in more sensible way (Trochim, 2006).

Under the descriptive analysis, all the unstructured data which collected from the questionnaire can be perform and shows in table form. Data collected will be calculated by using measurement such as mean average, frequencies of distribution and exhibition of percentage, so it can summarize into simpler forms. Thus, it can be easily view and have better understanding in the research. As a result, it is mostly for the use of section A which content more unstructured data.

### **3.7.2 Reliability Test**

Reliability means the range of consistency of scores towards measures where obtain the same results are consistent in repeated testing (Wells & Wollack, 2003). The reliability test is the consistency of scores over time. According to Miller, there are three aspects of reliability such as equivalence, stability and internal consistency. The internal consistency

reliability or homogeneity was conducted to test the reliability and consistency of the results of data in the research.

The most common statistical index used in the internal consistency reliability test is Cronbach's alpha. Cronbach's alpha is to explain and interpret the reliability among the items surveyed. In addition, Cronbach's alpha is preferably used when there was an existence of multiple 5-point Likert scale questions in the questionnaire (Lund, 2013). Besides, Cronbach's alpha coefficient is range from 0.0 to 1.0 and it was used to check whether the construct is reliable or not. There is no lower limit to the coefficient. In addition, the value of coefficient which is close to 1.0 in Cronbach's alpha is high consistency for the result. Many researchers suggested that 0.70 is the most acceptable and suitable cut-off point for the Cronbach's Alpha value (George & Mallery, 2003; Hair et al., 2009).

According to Table 3.4 below shows the rules of thumb about Cronbach's Alpha for internal reliability test which was developed by George and Mallery (2003). The value of Cronbach's Alpha greater than 0.9 is considered as excellent and high-stakes rating, 0.8 to less than 0.9 is considered as good and low-stakes testing, 0.7 to less than 0.8 is considered as the acceptable of the reliability level, 0.6 to less than 0.7 will be considered as questionable or moderate level of reliability, the value which less than 0.6 is considered poor while below the value of 0.5 are considered as unacceptable level of reliability.



**Table 3.4: Rules of Thumb for Internal Reliability Test**

Cronbach's Alpha Coefficient Range	Strength of Reliability Level
$\alpha \geq 0.9$	Excellent (High-stakes testing)
$0.8 \leq \alpha < 0.9$	Good (Low-Stakes testing)
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Source: George and Mallery *SPSS for Windows step by step: A simple guide and reference. 11.0 update* (4th ed.). Boston: Allyn & Bacon.

### 3.7.3 Inferential Analysis

Inferential analysis is to determine whether there is a relationship between interventions with an outcome. The researcher often uses inferential analysis to identify the strength of the relationship between a dependent variable and the independent variables. The inferential analysis applied statistical test, can help the researcher to identify the pattern, whether is the influence by the program, intervention effect or chance (Adapted from University of Minnesota- Driven to Discover). It can be divided into two

which is parametric and nonparametric. The differences between parametric and nonparametric is parametric only apply for the variables with nominal and ordinal measurement level, while nonparametric is apply for the variables with interval or ratio level of measurement.

### **3.7.3.1 Pearson Correlation Coefficient Analysis**

Pearson Correlation Coefficient is used to measure the degree of correlation between two variables. The value of Pearson Correlation Coefficient can be obtained by using the calculator or formula.

The value of Pearson Correlation Coefficient is between -1 and +1. The value of Pearson Correlation Coefficient smaller than zero denotes a negative correlation between two variables (x and y) which show that the increase of one variable will influence the other variables to decrease and the variables tend to move in the opposite direction. While the positive correlation between independent and dependent variables is occurring when the value of Pearson Correlation Coefficient is greater than zero, which show that the increase of one variable will influence the other variables to increase and the variables tend to move in the same direction. The value equal to zero denotes that x and y are uncorrelated which show that the increase or decrease of one variable will not influence the flow of other variables.

Table 3.5: Features of Correlation

Correlation Coefficient, r	Value
Perfect correlation	+1.00
Strong positive correlation	0.50 to 0.99
Medium	0.30 to 0.49
Weak	0.01 to 0.29
No correlation	0
Weak negative correlation	-0.01 to -0.29
Medium negative correlation	-0.30 to -0.49
Stronger negative correlation	-0.50 to -0.99
Perfect negative correlation	-1.00

Source: Weiers, R. M. (2010). Introduction to business statistics (7th ed.).  
Cengage South - Western.

However, there are four assumptions that need to fulfill in order to obtain a valid result of the Pearson correlation coefficient. First of all make sure that the data is at a continuous level, which is scale, intervals or ratio. Second, the data values should be independent between each other. Third, there is a linear relationship between both of the variables. Last is outliers should be removed or be minimized (Statistical Analysis 2: Pearson Correlation).

### 3.7.3.2 Multiple Regression Analysis

Multiple Regression Analysis is a method to forecast the unknown value based on the others known value of two or more than two variables (Adapted from explorable.com, Multiple Regression Analysis). The unknown value we want to forecast is called dependent variable, while the known value we used to forecast for the dependent variable is called independent variables (Adapted from Statistics Laerd). Multiple regression model is the extent of the simple regression model. Simple regression model only applied to the model which includes an independent variable, while the dependent variable in a multiple regression model is influenced by two or more than two variables. According to Gujarati & Porter (2009), indicate that the econometric theory is quite complex and seldom so simple. This is the reason of why the multiple regression model is most commonly used by researchers as compared to the simple regression model.

Multiple Regression Model of this research is shown below:-

$$Y = \beta_1 + \beta_2 \text{TAN}_2 + \beta_3 \text{REL}_3 + \beta_4 \text{EMP}_4 + \beta_5 \text{RES}_5 + \beta_6 \text{ASS}_6 + \mu$$

Where,

Y = Customer Satisfaction

$\beta$  = Slope of Coefficient

TAN= Tangibility

REL= Reliability

EMP= Empathy

RES=Responsiveness

ASS= Assurance

There is some assumption that should meet in order to achieve a classical normal linear regression, such as; linear regression model, fixed X value, zero mean value of error terms, the number of observations must greater than the number of parameters to be estimated, variation in the value of independent variables, normality in error term, no multicollinearity, homoscedasticity, no autocorrelation, and no specification bias.

Multicollinearity happened when some or all of the independent variable is highly correlated with each other. Present of multicollinearity will cause a problem of difficulty to find out which independent variables are influencing the dependent variable. Multicollinearity arises most commonly is due to the data collection method employed, model specification, overdetermined model, and constraints in the model. , the ordinary least squares (OLS) are still BLUE, although the multicollinearity occur. There is no one unique method of detecting multicollinearity, but have some rule of thumb. Such as when there is a high R square, but less significant t ratio or higher pairwise correlation coefficient will cause multicollinearity happened. The others popular way to detect multicollinearity is by using Variance inflation factor (VIF) or Tolerance (TOL).

When VIF is greater than 10 we can conclude that the model is high multicollinearity, while the low multicollinearity is happened when the VIF is between the ranges of more than 1 but smaller than 10. There is no multicollinearity if the VIF is equal to 1.

The closer the  $TOL_j$  to zero, the greater the degree of collinearity.

### 3.7.3.3 One-way ANOVA

One way analysis of variance is a method used by researcher to compare the means between two or more samples. However, this method can only be applied for numerical data which mean that only can be used in the case of a quantitative outcome with a categorical explanatory variable that consist of two or more independent variables. According to Bewick, Cheek & Ball (2004) one-way ANOVA is a method for analyzing the way in which a variable mean is influenced by different type of factors.

In order to get the reliable result, researcher must make sure that some assumptions have been met before the test. First, make sure the populations are normally distributed. Second, the sample size must be large enough. Third, the population must have equal variance. Last, the sample is independently selected.

When proceed to the One-way ANOVA, researchers need to state the null and alternative hypothesis as shown below:-

$$H_0: \mu_1 = \mu_2 = \mu_3 = \dots = \mu_k$$

Null hypothesis state that all the population mean are equal, which means the null hypothesis is true.

$$H_1: \text{At least one of } \mu_i \text{ is not equal,}$$

Where  $i = 1, 2, 3, \dots k$

Alternative hypothesis state that at least one population mean is different, which mean the null hypothesis is not true.

### **3.8 Conclusion**

In this chapter, the research is performed in term of research design, data collection methods, sampling design, research instrument, constructs measurement, data processing and data analysis. Based on research design was justified and the primary data was used in data collection methods. The sampling designed was discussed about the target population, sampling frame and location, sampling elements, sampling technique and sampling size. The research instrument was determined to carry out the research. Besides that, the construction of measurements such as nominal scale, ordinal scale, interval scale and Likert scale are used in designing the questionnaire. The data processing is done and the researchers used the software known as SSPS version 20.0 to analyze the data. In the next chapter, the researchers will explain and interpret the result which obtained from the SSPS to answer the research questions and hypothesis statements.

## **CHAPTER 4: DATA ANALYSIS**

### **4.0 Introduction**

This chapter presents the data analysis results which according to the research methodology as discussed in Chapter 3. Data analysis is a process to evaluate the data by using analytical and logical reasoning to examine each component from data. In this research 400 sets of questionnaires are collected to run the test. In this chapter, the Statistical Package for Social Sciences (SPSS), version 20.0 and Microsoft Excel is used in order to analyze result for descriptive analysis, reliability analysis and inferential analysis.

### **4.1 Descriptive Analysis**

Descriptive analysis is used to describe the sample characteristics for each respondent and demonstration the general pattern of responses provided by the respondents.



### 4.1.1 Respondent Demographic Profile

There are 5 questions have been used in the questionnaire to collect the demographic profile of the respondents. The questions include gender, age group, highest education, income level (per month) and how frequent do the respondents patron to bank.

#### 4.1.1.1 Gender

Table 4.1: Frequency distribution of respondent's gender

	Frequency	Percentage
Male	207	51.75
Female	193	48.25
Total	400	100

Source: Developed for the research

Based on Table 4.1 above, it shows the information of the respondents about the gender. In this research, male respondents are slightly higher than female respondents, which is 51.75% (207 respondents) for male and 48.25% (193 respondents) for female.

#### 4.1.1.2 Age

Table 4.2: Age of Respondents

	Frequency	Percentage
≤ 19 years old	35	8.75
20-29 years old	152	38
30-39 years old	82	20.5
40-49 years old	95	23.75
≥ 50 years old	36	9
Total	400	100

Source: Developed for the research

The Table 4.2 above shows the information of age of respondents. It clearly shows that the majority respondents are from the age group 20 – 29 which is occupied a total of 38% of the total respondents. The following age group is 40 – 49 years old which is 23.75% and age group of 30 – 39 which consists of 20.50% of the total respondents. While for the age group of below 19 years old and above 50 years old, both of age group is the lowest percentage compared to others age group which are 8.75% and 9%.

### 4.1.1.3 Education Level of Respondents

Table 4.3: Education Level of Respondents

	Frequency	Percentage
PMR	17	4.25
SPM	59	14.75
Diploma / Advance	85	21.25
Diploma / STPM	85	21.25
Bachelor Degree	188	47
Master Degree	49	12.25
Other	2	0.5
Total	400	100

Source: Developed for the research

Based on the Table 4.3 above shows that highest percentage of education level is Bachelor Degree holder which is 47% (188 respondents) while for Diploma/ Advance Diploma/ STPM ranked the second which is 21.25% (85 respondents). The SPM certificate holder has ranked the third which consist of 14.75% (59 respondents) followed by the Master Degree which consist of 12.25% (49 respondents). The PMR certificate holders have only 4.25% (17 respondents). In this research, some respondents who hold UPSR certificate, UEC certificate and other certificate will be categorized to other group and it is consist of 0.5% (2 respondents) of total respondents.

#### 4.1.1.4 Monthly Income Level

Table 4.4: Frequency distribution of respondents' monthly income level

	Frequency	Percentage
< RM 1000	144	36
RM1000 – RM2499	76	19
RM2500 – RM5000	121	30.25
> RM5000	59	14.75
Total	400	100

Source: Developed for the research

According on Table 4.4, most of the respondents fall under monthly income level range of < RM1000 income each month, which occupied 36% out of the total number of respondents. Besides, respondents which have monthly income level of RM2500 to RM5000 consist of 30.25% or in other words, there are 121 respondents which are in this range of income level. Meanwhile, the least group of respondents which consist only 14.75% fall under monthly income level range of RM5000 and above which are less than the group of respondents that having monthly income level between RM1000-RM2499 by 4.25% out of the total respondents.

#### 4.1.1.5 How Frequent the Respondent Patron to Bank

Table 4.5: Frequency of Respondents Patron to Bank

	Frequency	Percentage
Daily	17	4.25
Weekly	150	37.5
Monthly	233	58.25
Total	400	100

Source: Developed for the research

Table 4.5 is clearly showed that the majority of the respondents only patron to the bank once per month which occupied 58.25% out of the total number of respondents. And 37.5% of the respondents will patron to the bank once per week. Only 4.25% of the respondents will patron to the bank once per day which is only 17 bank users.

#### 4.1.2 Central tendencies measurement of construct

Central tendencies measurement of construct is used to measure the statement of the dependent variable and the independent variable value by their respective means and ranking. The purpose using central tendency is to measure the single value to describe and evaluate each of the dependent and independent variables.

Table 4.6: Customer Satisfaction

DV1	Customer Satisfaction	Mean	Ranking
CTS3	I have the intention of switching the product to another bank in future.	3.3450	1
CTS5	Overall, I feel comfortable and secure with the services provided by the bank.	3.1350	2
CTS1	Services provided by bank company meet my expectations.	3.0575	3
CTS2	I will purchase another products and services from the bank.	2.9875	4
CTS4	I will recommend my bank company to my friends or family members.	2.8450	5

Source: Developed for the research

Table 4.6 shows the ranking and measurement of the central tendency of the dependent variables of the research which is customer satisfaction. There are 5 statements in this category of variables. The first ranking of mean value in the statement of responsiveness variable is “intention of switching product to other banks” and the mean value is 3.3450. Meanwhile, the second highest is “comfortable and secure with the services provided” and the mean value is 3.1350. Furthermore, “meet the expectation for the services provided” and “purchase other products and services from the bank” are the third and fourth ranking statement. The mean values are 3.0575 and 2.9875 for both statements. The last ranking statement is “recommend banks to friends and family” and the mean value is 2.8450.

Table 4.7: Tangibility

IV1	Tangibility	Mean	Ranking
TAN3	Bank's reception desk employees are good in manners and neat appearing.	3.2050	1
TAN1	Bank has new and the latest equipment.	3.1375	2
TAN4	Materials associated with the service (such as pamphlets or statement) are visually attractive at bank.	3.0575	3
TAN2	Bank's physical facilities are attractive.	3.0225	4
TAN5	Less queuing time is needed at the bank's counter.	2.7375	5

Source: Developed for the research

Table 4.7 shows the ranking and measurement of the central tendency of the independent variables of the research which is tangibility. There are 5 statements in this category of variables. The highest value of mean in the statement of tangibility variable is "employees are good in manners and neat appearing" and the mean value is 3.2050. The second highest is "new and latest equipment" and the mean value is 3.1375. Furthermore, "materials are attractive at bank" and "physical facilities are attractive" are the third and fourth ranking statement. The mean values are 3.0575 and 3.0225 for both statements. The last ranking statement is "less queuing time is needed" and the mean value is 2.7375.

Table 4.8: Reliability

IV2	Reliability	Mean	Ranking
REL4	Bank employees will keep the customer's information remain confidential.	3.3450	1
REL5	Bank employees insist on keeping their customer records free from error.	3.2225	2
REL1	Bank will honor its promises if they promise to do something by a given time.	3.1600	3
REL2	When you are facing problem, bank's employees will show a sincere interest in helping you to solve it.	3.1350	4
REL3	Bank employees perform the service right the first time.	3.0650	5

Source: Developed for the research

Table 4.8 shows the ranking and measurement of the central tendency of the independent variables of the research which is reliability. The highest value of mean in the statement of reliability variable is "customer's information remains confidential" and the mean value is 3.3450. The second ranking statement is "keep customer record free from error" and the mean value is 3.2225. Furthermore, "honor its promises" and "employees show sincere interest in helping" are the third and fourth ranking statement. The mean values are 3.1600 and 3.1350 for both statements. The last ranking statement is "perform the service right in the first time" and the mean value is 3.0650.



Table 4.9: Empathy

IV3	Empathy	Mean	Ranking
EMP3	Bank's employees are knowledgeable.	3.2375	1
EMP2	Easy to contact with bank's employees.	3.0575	2
EMP4	Banks has your best interest at heart.	2.9750	3
EMP5	Bank's employees able to understand your specific needs.	2.9650	4
EMP1	Banks gives individual attention to you.	2.9575	5

Source: Developed for the research

Table 4.9 shows the ranking and measurement of the central tendency of the independent variables of the research which is empathy. There are 5 statements in this category of variables. The highest value of mean in the statement of empathy variable is "employees are knowledgeable" and the mean value is 3.2375. The second highest is "easy to contact" and the mean value is 3.0575. Furthermore, "best interest at heart" and "understand specific need" are the third and fourth ranking statement. The mean values are 2.9750 and 2.9650 for both statements. The last ranking statement is "gives individual attention" and the mean value is 2.9575.

Table 4.10: Responsiveness

IV4	Responsiveness	Mean	Ranking
RES3	Bank's employees are helpful and willing to help you.	3.2375	1
RES1	Bank's employees inform you exactly when services will be performed.	3.1725	2
RES5	You prefer to deal with bank machines rather than human being.	3.1150	3
RES2	Bank's employees give you prompt service.	3.0475	4
RES4	Bank's employees are never too busy to handle your request.	2.8475	5

Source: Developed for the research

Table 4.10 shows the ranking and measurement of the central tendency of the independent variables of the research which is responsiveness. There are 5 statements in this category of variables. The first ranking of mean value in the statement of responsiveness variable is "employees are helpful" and the mean value is 3.2375. The second highest is "inform exactly when services will be performed" and the mean value is 3.1725. Furthermore, "more prefer to deal with machines" and "provide prompt service" are the third and fourth ranking statement. The mean values are 3.1150 and 3.0475 for both statements. The last ranking statement is "never too busy to handle request" and the mean value is 2.8475.

Table 4.11: Assurance

IV5	Assurance	Mean	Ranking
ASS2	You feel secure in doing transactions with bank.	3.2875	1
ASS4	Employees in the bank have the knowledge to help you in solving your problem.	3.2825	2
ASS3	Employees in the bank treated you with a good attitude.	3.2025	3
ASS1	The behavior of bank's employees gives you confident.	3.1400	4
ASS5	Employees in the bank know their client on regular basis.	2.9300	5

Source: Developed for the research

Table 4.11 shows the ranking and measurement of the central tendency of the independent variables of the research which is assurance. The highest value of mean in the statement of this variable is “feel secure in doing transaction” and the mean value is 3.2875. The second highest is “have knowledge to solve the problem” and the mean value is 3.2825. Furthermore, “treated with a good attitude” and “confident with behavior” are the third and fourth ranking statement. The mean values are 3.2025 and 3.1400 for both statements. The last ranking statement is “know their customer on regular basis” and the mean value is 2.9300.

## 4.2 Scale Measurement

### 4.2.1 Internal Reliability Test

Table 4.12: Reliability Test for Substantive Study

Variable	Construct	Cronbach's Alpha	No. of Items
DV	Customer Satisfaction	0.723	5
IV1	Tangibility	0.652	5
IV2	Reliability	0.826	5
IV3	Empathy	0.781	5
IV4	Responsiveness	0.677	5
IV5	Assurance	0.856	5

Source: Developed for the research

Table 4.12 is shown the result of Cronbach's Alpha for independent and dependent variables such as tangibility, reliability, empathy, responsiveness, assurance, and customer satisfaction. There are 30 items was measured in this research and the reliability was tested. According to the results, assurance has obtained the highest value of Cronbach's Alpha at 0.856. However, tangibility has obtained the lowest value of Cronbach's Alpha at 0.652. Assurance ( $\alpha = 0.856$ ) and reliability ( $\alpha = 0.826$ ) are determined as having a very good reliability (Tavakol & Dennick, 2011). Meanwhile, the Cronbach's Alpha for customer satisfaction and empathy are 0.723 and 0.781 are considered as good reliability as their value have exceed 0.7. Furthermore, Cronbach's Alpha for tangibility and

responsiveness are 0.652 and 0.677. Both variables are categorized as acceptable reliability.

Overall, the result for constructed Cronbach's Alpha are between 0.652 and 0.856, which had exceeded the lower limit of 0.6 that accepted by majority of authors. Thus, the constructed study is reliable and consistently.

## 4.3 Inferential Analysis

### 4.3.1 Pearson's Correlation Coefficient

Table 4.13: Correlation Matrix between independent variables (Tangibility, Reliability, Empathy, Responsiveness, and Assurance) and dependent variable (Customer Satisfaction)

	CTS	TAN	REL	EMP	RES	ASS
Pearson						
Correlation	1	.590**	.716**	.586**	.583**	.598**
Sig. (2-tailed)		.000	.000	.000	.000	.000
N	400	400	400	400	400	400
**Correlation is significant at 0.01 level (2-tailed)						

Source: Developed for the research

The table 4.13 presents the Pearson correlation coefficient, significant value and the sample size. Pearson Correlation Coefficient is to identify the degree of correlation between two variables. The value of Pearson Coefficient is between -1 and +1. All of the items for each construct are significant and positive at 0.01 levels in table 4.13. Thus, all the constructs are valid. This is because all the related items are significantly positive correlation which is satisfied the rule of thumb of convergent validity (Westen & Rosental, 2003).

Table 4.13 shows the correlation matrix between the five independent variables (tangibility, reliability, empathy, responsiveness and assurance) and a dependent variable which is customer satisfaction. The value of correlation coefficient is ranged from 0.583 to 0.716. The coefficient correlation value of tangibility, reliability, empathy, responsiveness and assurance are 0.590, 0.716, 0.586, 0.583, and 0.598 respectively. This show that all five independent variables have stronger relationship with customer satisfaction as their coefficient correlation value is higher than +0.50.

On the whole, the result obtained indicated that all of the independent variables have positive relationship with customer satisfaction due to the positive correlation coefficient value among the independent variables on the dependents variables. In addition, the p-value of all independent variables obtained is smaller than 0.01. Its show the independent variables is significantly related toward the dependents variable (customer satisfaction). As a conclusion, the increase of tangibility, reliability, empathy, responsiveness and assurance will increase the customer satisfaction level.

Table 4.14: Correlation between Tangibility and Customer Satisfaction

	CTS	TAN
Pearson Correlation	1	.590**
Sig. (2-tailed)		.000
N	400	400
**Correlation is significant at 0.01 level (2-tailed)		

Source: Developed for the research

*H<sub>0</sub>: There is no relationship between the need of tangibility and the customer satisfaction in banking industries of Malaysia.*

*H<sub>1</sub>: There is a relationship between the need of tangibility and the customer satisfaction in banking industries of Malaysia.*

If p-value less than 0.01, it will reject  $H_0$ . Based on the table above, the p-value (0.000) is less than 0.01. Therefore, reject  $H_0$ . As a result, the conclusion is there is a relationship between the need of tangibility and customer satisfaction in banking industries of Malaysia.

The Pearson coefficient correlation is 0.590 is below coefficient range from +0.583 to +0.716. The value of this correlation coefficient 0.590 which is greater than +0.5 indicate that there is strong positive relationship between the independent variable (tangibility) and the dependent variable (customer satisfaction). This mean that if improve the tangibility, the level of customer satisfaction will also be increase.

Table 4.15: Correlation between Reliability and Customer Satisfaction

	CTS	REL
Pearson Correlation	1	.716**
CTS Sig. (2-tailed)		.000
N	400	400
**Correlation is significant at 0.01 level (2-tailed)		

Source: Developed for the research

$H_0$ : *There is no relationship between the need of reliability and the customer satisfaction in banking industries of Malaysia.*

$H_1$ : *There is a relationship between the need of reliability and the customer satisfaction in banking industries of Malaysia.*

If p-value less than 0.01, it will reject  $H_0$ . Based on the table above, the p-value (0.000) is less than 0.01. Therefore, reject  $H_0$ . As a result, the conclusion is there is a relationship between the need of reliability and customer satisfaction in banking industries of Malaysia.

The Pearson coefficient correlation is 0.716 is under coefficient range from +0.583 to +0.716. The value of this correlation coefficient 0.716 which is greater than +0.5 indicate that there has strong positive relationship between the independent variable (reliability) and the dependent variable (customer satisfaction). This mean that if improve the reliability, the level of customer satisfaction will also be increase.



Table 4.16: Correlation between Empathy and Customer Satisfaction

	CTS	EMP
Pearson Correlation	1	.586**
CTS		
Sig. (2-tailed)		.000
N	400	400
**Correlation is significant at 0.01 level (2-tailed)		

Source: Developed for the research

*H<sub>0</sub>: There is no relationship between the need of empathy and the customer satisfaction in banking industries of Malaysia.*

*H<sub>1</sub>: There is a relationship between the need of empathy and the customer satisfaction in banking industries of Malaysia.*

If p-value less than 0.01, it will reject  $H_0$ . Based on the table above, the p-value (0.000) is less than 0.01. Therefore, reject  $H_0$ . As a result, the conclusion is there is a relationship between the need of empathy and customer satisfaction in banking industries of Malaysia.

The Pearson coefficient correlation is 0.586 is categorized under coefficient range from +0.583 to +0.716. The value of this correlation coefficient 0.586 which is greater than +0.5 indicate that there is strong positive relationship between the independent variable (empathy) and the dependent variable (customer satisfaction). This mean that if improve the empathy, the level of customer satisfaction will also be increase.

Table 4.17: Correlation between Responsiveness and Customer Satisfaction

	CTS	RES
Pearson Correlation	1	.583**
Sig. (2-tailed)		.000
N	400	400
**Correlation is significant at 0.01 level (2-tailed)		

Source: Developed for the research

*H<sub>0</sub>: There is no relationship between the need of responsiveness and the customer satisfaction in banking industries of Malaysia.*

*H<sub>1</sub>: There is a relationship between the need of responsiveness and the customer satisfaction in banking industries of Malaysia.*

If p-value less than 0.01, it will reject  $H_0$ . Based on the table above, the p-value (0.000) is less than 0.01. Therefore, reject  $H_0$ . As a result, the conclusion is there is a relationship between the need of responsiveness and the customer satisfaction in banking industries of Malaysia.

The Pearson coefficient correlation is 0.583 is under coefficient range from +0.583 to +0.716. The value of this correlation coefficient 0.583 which is greater than +0.5 indicate that there has strong positive relationship between the independent variable (responsiveness) and the dependent variable (customer satisfaction). This mean that if improve the responsiveness, the level of customer satisfaction will also be increase.

Table 4.18: Correlation between Assurance and Customer Satisfaction

	CTS	ASS
Pearson Correlation	1	.598**
Sig. (2-tailed)		.000
N	400	400
**Correlation is significant at 0.01 level (2-tailed)		

Source: Developed for the research

$H_0$ : *There is no relationship between the need of assurance and the customer satisfaction in banking industries of Malaysia.*

$H_1$ : *There is a relationship between the need of assurance and the customer satisfaction in banking industries of Malaysia.*

If p-value less than 0.01, it will reject  $H_0$ . Based on the table above, the p-value (0.000) is less than 0.01. Therefore, reject  $H_0$ . As a result, the conclusion is there is a relationship between the need of assurance and the service quality in banking industries of Malaysia.

The Pearson coefficient correlation is 0.598 which fall under the coefficient range from +0.583 to +0.716. The value of this correlation coefficient 0.598 which is greater than +0.5 indicate that there is a strong positive relationship between the independent variable (assurance) and the dependent variable (customer satisfaction). This mean that if the assurance, the customer satisfaction will also be increase.

### 4.3.2 Multiple Regression Equation

$$\text{Customer Satisfaction: } 1.124 + 0.145\text{TAN} + 0.414\text{REL} + 0.058\text{EMP} \\ - 0.002\text{RES} + 0.007\text{ASS}$$

TAN = Tangibility

REL = Reliability

EMP = Empathy

RES = Responsiveness

ASS = Assurance

Table 4.19: Model Summary of Multiple Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.731 <sup>a</sup>	.535	.529	.36861	2.088

- a. Predictors: (Constant), ASS, TAN, EMP, REL, RES
- b. Dependent Variable: CTS

Source: Developed for the research

Table 4.20: ANOVA of Multiple Regression Model

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	61.555	5	12.311	90.607	.000 <sup>b</sup>
1 Residual	53.534	394	.136		
Total	115.090	399			

- a. Dependent Variable: CTS
- b. Predictors: (Constant), ASS, TAN, EMP, REL, RES

Source: Developed for the research

Table 4.21: Coefficients of Multiple Regression Model

Model	Unstandardized		Standardized	t	Sig.	VIF
	Coefficients		Coefficients			
	B	Std. Error	Beta			
(Constant)	1.124	.100		11.268	.000	
TAN	.145	.045	.166	3.237	.001	2.237
REL	.414	.047	.543	8.848	.000	3.185
EMP	.058	.046	.076	1.267	.206	3.031
RES	-.002	.051	-.003	-.042	.966	3.434
ASS	.007	.052	.009	.137	.891	3.928

Source: Developed for the research

There are 3 tables which are table 4.19, table 4.20 and table 4.21 show that the summary of multiple regression model between dependent variable and independent variables. From Table 4.19 shows that the coefficient of correlation value (R) is 0.731, it is meaning that it has the moderate correlation between dependent variable and independent variables. Besides that, the coefficient of correlation equal to 0.731 indicate that there is positive relationship between dependent variable and independent variables.

The coefficient of determination value ( $R^2$ ) is equal to 0.535. It is meaning that it has 53.5% variation of the customer satisfaction can be explained by these 5 independent variables. On the other side, it indicates that got 46.5% variation of the customer satisfaction is explained by other variables which are excludes these 5 independent variables. In table 4.21, these 3 independent variables which are tangibility, reliability and empathy are still considered as significant to this study even though the coefficient of determination is low.

According to Table 4.20, it shows that the F-value is 90.607 with a p-value which is 0.000. Since the p-value of ANOVA is less than the significance level which is 0.01, it means that all the independent variables which are tangibility, reliability, empathy, responsiveness and assurance have a significant relationship with the dependent variable, customer satisfaction. According to the F-test result is significant and the entire Beta ( $\beta$ ) of independent variables has the correct direction, the model is reliable and fit to determine the relationship between customer satisfaction and the five independent variables (Gujarati & Porter, 2009).

Besides that, the multicollinearity problem does not exist in this study due to the Variance Inflation Factor for these five independent variables are between 2.237 and 3.928 which are below 10. Based on table 4.21, reliability is the most significant to the customer satisfaction due to the highest Beta of unstandardized coefficient which is 0.414 among the independent variables. The second will be the tangibility that has 0.145 Beta of unstandardized coefficient. The third will be the empathy that has 0.058 Beta of unstandardized coefficient. However, it shows that empathy, responsiveness and assurance are not significant individually to the customer satisfaction due to the p-value is more than 0.01 significant level. The p-value of empathy is 0.206, responsibility is 0.966 and assurance is 0.891.

### 4.3.3 One Way ANOVA

Table 4.22: One Way ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
TAN	Between Groups	42.155	18	2.342	12.234	.000
	Within Groups	72.935	381	.191		
	Total	115.090	399			
REL	Between Groups	59.867	17	3.522	24.360	.000
	Within Groups	55.223	382	.145		
	Total	115.090	399			
EMP	Between Groups	43.106	20	2.155	11.348	.000
	Within Groups	71.984	379	.190		
	Total	115.090	399			
RES	Between Groups	41.325	17	2.431	12.589	.000
	Within Groups	73.765	382	.193		
	Total	115.090	399			
ASS	Between Groups	43.425	18	2.413	12.826	.000
	Within Groups	71.665	381	.188		
	Total	115.090	399			

Source: Developed for the research



H<sub>0</sub>: There is no relationship between independent variables (Tangibility, Reliability, Empathy, Responsiveness, and Assurance) and dependent variable (Customer Satisfaction).

H<sub>1</sub>: There is a relationship between independent variables (Tangibility, Reliability, Empathy, Responsiveness, and Assurance) and dependent variable (Customer Satisfaction).

Table 4.22 shown the ANOVA p-value for all independent variables (Tangibility, Reliability, Empathy, Responsiveness, and Assurance) are approximately 0, which is smaller than the level of significant 0.01, thus, H<sub>0</sub> is rejected and there are sufficient evidence to conclude that all these independent variables have significant difference with dependent variable (Customer Satisfaction).

## 4.4 Conclusion

In this chapter, the research is performed in term of descriptive analysis, scale measurement and inferential analyses. The empirical results have been shown clearly in table form as well as figure form. The precise and clear explanations have been written in this chapter. The summary and discussion of the whole research will be presented in Chapter 5.

## **CHAPTER 5: DISCUSSION, IMPLICATIONS AND CONCLUSION**

### **5.0 Introduction**

Chapter 5 is the chapter to conclude the whole research project. In this chapter, there are few components which including summary based on statistical analysis, discussion of major findings, implications of the research, limitations, recommendations for future research, and overall conclusion for whole research project.

### **5.1 Summary of statistical analyses**

Researchers had distributed over 400 sets of questionnaire to the targeted respondents which are bank users in Kuala Lumpur. According to the results of demographic profiles from the previous chapter, the number of male and female respondents is 207 and 193. There are 38% of respondents is under 20-29 years old. The highest percentage of education level is Bachelor Degree which is 47% or 188 respondents. Moreover, income level for most of the respondent is below RM1000. There are 58.25% of respondents will visit to the bank monthly to settle the transactions.

In this research, customer satisfaction is known as dependent variable whereas the independent variables are tangibility, reliability, empathy, responsiveness, and assurance. The researchers had calculated the mean value for each statement in different variables. Based on the results from central tendencies measurement of construct in Chapter 4, “I have intention of switching the product to another bank in future” is the statement which has highest mean value in dependent variable which is customer satisfaction. However, the lowest mean value statement is “I will recommend my bank to friends and family”.

For tangibility which is one of the independent variables, the highest mean value statement is “bank employees who in-charged the reception desk are good in manners and neat appearing” whereas “less queuing time is needed” is the lowest mean value statement.

Besides that, “staff will keep the customer’s information as private and confidential” is the statement which has highest mean value compare to others. Meanwhile, “employees are performing the service right in the first time” is the lowest mean value statement under reliability.

Moreover, the statement “bank’s employees are knowledgeable” and “banks give individual attention to you” are the highest and lowest mean value statements under independent variables which is empathy.

Furthermore, the lowest mean value statement is “employees are never too busy to settle your request” under responsiveness. In addition, “bank’s staffs are helpful” is the highest mean value statement under the same category.

For assurance which is the last independent variables, the statement which has highest value of mean is “customer will feel secure when doing transaction with

bank”. However, the lowest value of mean statement is fall under “employees know their client on regular basis” under this variable.

According to the result from internal reliability test, Cronbach’s Alpha value for customer satisfaction which is dependent variables, tangibility, reliability, empathy, responsiveness, and assurance are exceeded 0.6 which consider as acceptable level of reliability.

Lastly, the independent variables are significant in this research. Variables such as tangibility, reliability, empathy, and assurance have positive relationship towards customer satisfaction. In contrast, one of the independent variable which is responsiveness shows there is negative relationship towards customer satisfaction.

## 5.2 Discussion of Major Findings

Table 5.1: Summary of Hypothesis Testing

Hypothesis	Result	Relationship	Reject / Do Not Reject
H1: There is a relationship between the need of tangibility and the customer satisfaction at banking industries of Malaysia.	Coefficient = 0.145 P-value = 0.000	Positive Relationship  P-value < 0.01	Reject H null
H2: There is a relationship between the need of reliability and the customer satisfaction at banking industries of Malaysia.	Coefficient = 0.414 P-value = 0.000	Positive Relationship  P-value < 0.01	Reject H null
H3: There is a relationship between the need of empathy and the customer satisfaction at banking industries of Malaysia.	Coefficient = 0.058 P-value = 0.000	Positive Relationship  P-value < 0.01	Reject H null
H4: There is a relationship between the need of responsiveness and the customer satisfaction at banking industries of Malaysia.	Coefficient = -0.002 P-value = 0.000	Negative Relationship  P-value < 0.01	Reject H null

<p>H5: There is a relationship between the need of assurance and the customer satisfaction at banking industries of Malaysia.</p>	<p>Coefficient = 0.007 P-value = 0.000</p>	<p>Positive Relationship P-value &lt; 0.01</p>	<p>Reject H null</p>
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Source: Developed for the research

### **5.2.1 Relationship between Tangibility and Customer Satisfaction**

In this research, the findings show that assurance has a p-value of 0.000 (less than  $\alpha = 0.01$ ) and coefficient value of 0.145 represent that tangibility has a significant and positive relationship towards customer satisfaction. Therefore, a high tangibility in services provided will give positive impacts to customer's satisfaction in banking industries. This result is consistent with studies done by Munusamy, Chelliah and Hor (2010), Zafar et al., (2012) Molafe, Ansari & Teimuori, (2013) and Lau et al., (2013). Tangibility comprises the appearance of the company representatives, facilities, materials, and equipment. By providing the good services and the facilities with standard physical, psychological and social indices, it will affect the customer's impression and can help to retain and attract more new customers.

### **5.2.2 Relationship between Reliability and Customer Satisfaction**

Based on the research, the findings shows that reliability has a p-value of 0.000 (less than  $\alpha = 0.01$ ) and coefficient value of 0.414 represent that reliability has a significant and positive relationship towards customer satisfaction. This result is consistent with studies done by Razak et al. (2013), Shariff & Aniza (2013). Reliability, which is the bank's ability to perform the promised service dependably and accurately, is the bank customer's priority. A clear understanding between customer satisfaction and loyalty helps to improve a bank. When dealing with banks, there is a higher customer demand in the machine reliability then human since machines is now replaced with many staffs to make cash withdraw, cash credit, credit transfer and so on.

### **5.2.3 Relationship between Empathy and Customer Satisfaction**

Next, this research highlighted that independent value, empathy and customer satisfaction has a positive relationship with a p-value of 0.000 (less than  $\alpha = 0.01$ ) and coefficient value of 0.058. This result is consistent with studies done by Culiberg (2010), Sidduqi (2011), Subramaniam and Ramachandran, (2012) Tripathi (2013). Bank's employees need to be more competent, friendly, polite, helpful, give attention to their customer in order understand their needs, and knowledgeable when provide information on products and services to customer in order to satisfy them. It is important to gain positive feedback from customer in order to improve satisfaction level from customer.

#### **5.2.4 Relationship between Responsiveness and Customer Satisfaction**

According to the findings of the research, responsiveness has a p-value of 0.000 (less than  $\alpha = 0.01$  which indicate that responsiveness has a significant relationship towards customer satisfaction. However, coefficient value of -0.002 represent that responsiveness has a negative relationship towards customer satisfaction. This result is consistent with studies done by Chakravarty (2003), Annamalah et al., (2011), Lo and Osman, (2010). Responsiveness is the timely reaction towards the customers' needs and they prefer to deal with the human being rather than machines. The speed of delivery service enhanced perception of service quality while 'no waiting time' increased the level of customers' satisfaction. However, some bank customers feel that responsiveness is not their top priority due to personalized services no longer a prerequisite to determine customer satisfaction.

#### **5.2.5 Relationship between Assurance and Customer Satisfaction**

According to the research, its show the assurance and customer satisfaction has a significant positive relationship with a p-value of 0.000 (less than  $\alpha = 0.01$ ) and coefficient value of 0.007. This result is consistent with studies done by Ndubisi (2006) and Lymperopoulos et al., (2006), Lo et al., (2010) Santhiyavalli and Sandhya (2011), Arokiasamy, A. R., and Abdullah, A. G. (2013), Ilias, A., Rahman, R. A., Abd Razak, M. Z., and Abu Hasan, H. F. (2008), Saghier and Nathan (2013). Assurance is known as the knowledge and courtesy of employees and they should serve their customers by behaving courteously and provide some essential



information to the customer. Assurance as the mean of being safe, the responses do not feel assurance act as a major factor of the service quality that must be included.

## **5.3 Implications of the Study**

Throughout this research, there are a few implications can be formed for the manager in the banking industry to improve the customer satisfaction.

### **5.3.1 Managerial Implications**

Based on the result from the research, if the independents are being ranked out according to sequence, the reliability ( $\beta=0.414$ ) ranked the first followed by tangibility, given that its beta value is 0.145. Empathy ranked at the third ( $\beta=0.058$ ), and followed by the assurance ( $\beta=0.007$ ). While the responsiveness is the least important determinant which ranked at the last and have a negative value ( $\beta= -0.002$ ). The ranking above clearly shows that the tangibility and the reliability are playing a very important in determining the customer satisfaction. It mean that if a bank is able to improve in the tangibility and reliability , the customer will feel more secured to do business with the bank and will have a enhanced customer satisfaction.

From the ranking above, it shows that in order to effectively and efficiently enhances the customer satisfaction, it is very important to improve in both the tangibility part. Improve in the tangibility means that the bank will need to improve in their physical facilities, materials and the equipment used in the bank. Besides those, the appearance of the representative in the bank also appears to be part of the tangibility. To

improve this, the bank will need to renew their equipment and facilities after a period of time to ensure that they are using the latest technology so that can perform their task effectively. The employees in the bank are also need to be well trained and make sure they are in a proper attire and appearance from the moment they step into the bank to show their proficiency in doing their job. In this way, the bank will be able to improve in their tangibility part and it should also increase the customer satisfaction.

Besides that, the reliability of the bank is also very important that should never be ignored by the bank. The reliability will show whether a bank are dependable or not while performing the promised service, if a bank are able to deliver their service accurately in the promised time, it means that they are highly reliable. In order for a bank to improve in the reliability, the bank must first acknowledge that how important it is to maintain a good reliability while they are performing their job. If a bank is unable to deliver the promised service accurately in the promised time, it might bring a huge problem to the customer as it might involve in a large amount of cash transaction. The bank should make sure that their system server are always working perfectly when the customer make transactions with the bank whether over the counter or via online banking. The bank should also make sure that they have enough human resources to perform the large amount of task given by the customers. The managers of the bank will need to have an effective recruitment and training program to make sure their employees have the skills that needed in their job and offer professional service to the customers.

Empathy is also very important according to the results of the study. It means that most of the customers are seeking for a bank that can provide caring and individualized attention, they hope that the bank will understand their situation and provide a different service that can fit them well. Many customers would enjoy the new facilities that the bank provided, but still there are people who prefer a face-to-face service in the bank. The bank need to consider on behalf of the customer in order to provide a better service to the customers, for example, the bank can try to

set an enquiry channel in their website to reply to the questions of the customers. Although most of the banks have their own enquiry numbers to call for enquiries, but there are some people who may have a hearing problem through the phone, or some of the people that would prefer to make enquiry over the web. By setting up an enquiry channel in the website, the customer can get an instant answer to their question, it may be very helpful to some of the customers. In this way, the customer may feel warm while doing business with the bank and having a caring service provided by the bank and eventually the customer will be more satisfied with the bank service.

Based on the finding, assurance and responsiveness is not very important in determining the customers' satisfaction. Assurance means that the customer is feeling safe and confident with the services provided by the bank. The possible reason that the result shows that it is not important is because most of the customers are feeling that the bank has provided enough safety and confidence in their services. Responsiveness means that the timeliness of the service provided by the bank. Once again, the possible reason that the result shows that it is not important is because most of the customers are feeling that the responsiveness of the bank is good enough for them already.

As a manager of a bank, they should not focus only on the short-term profit and benefit of the bank; instead, they need to think on customer behalf for the long-term benefit of the bank. A satisfied customer will more likely to do business with the bank in the future, and this will probably lead to a positive word-of-mouth which can help the bank to attract more customers.

## 5.4 Limitation of study

There are few limitations in this study. One of the limitations is sample size. The sample size and the number of the respondents are limited. The 400 samples from Kuala Lumpur may not be accurately to represent the whole populations' attitude and perception impact on customer satisfaction in the service quality provided by commercial bank of Malaysia. Besides that, the sample size might allocate into one bank only. The questionnaires do not mention the name of the bank and the bank users might buy several products and services in the same bank. Therefore, the results found in this study might be allocated by only one bank. For instance, there are 200 of bank users out of 400 of bank users are from Public Bank, 100 of bank users are from Maybank and remaining of 100 of bank users are from Ambank. Thus, there is insufficient evidence to support the results and it cannot represent the commercial banks in Malaysia as the sample to represent the whole population.

The next limitation is limitation of time constraint, cost and geographic location is also the limitation on this study. The study has been carried out on a small scale due to the cost and time constraint that could be expanded. The distribution of the questionnaires was only centralized in Kuala Lumpur only. This research does not separate the sample into separate geographical locations. For example, the person who lives in the rural area may has different opinions and expectation towards the services provided by the bank. They might be more tolerance and willing to spent more time to queue up in front of the bank whereas the person who lives in urban area might not spent their time to queue up and they might use online banking for their transaction.

Language barrier is also one of the limitations in this research. There are different level educations of the respondents and some of them may not well-understand the statements in the questionnaire. They may not understand the English language

and do not get the idea of the statements. This might causes the respondents had difficulties and simply choose the inappropriate answer which provided in questionnaire. Therefore, the result collected from the questionnaires might be inaccurate and not reliable.

The last limitation is changes of technology in advance. Nowadays, e-banking is a major trend in Malaysia. The people who live in rural area have different cultural and level of education. They may not familiar and do not know how to use the ATM, cash deposit and checks machines in rural areas. The technology and machine keep on changing to improve the efficiency and productivity of the banks. For example, the bank users can use the ATM machine provided by the bank to pay utility bills and make transactions. This may cause some of the bank users do not know how to use the machine in the bank and provide not reliable result in the research.

## **5.5 Recommendation for Future Study**

In order to obtain a more accurate result, the future researcher should select the right respondents to fill up the survey form. The researcher needs to inform the respondents that the questionnaire is needed to fill up by the bank user in Malaysia to avoid the questionnaire is distributed to the wrong person and get the selection bias. Furthermore, the questionnaire should distribute to the respondents regarding to the targeted group and for those who have free time to complete the questionnaire.

Next, the sample size selected should be increased to a larger sample size in order to get a more valid result. The survey is conducted for the whole Malaysian so the sample size should be increased in order to represent the whole Malaysian. From

this survey the sample size selected is only focus on Kuala Lumpur, so future researchers should consider a larger sample size to get an unbiased result.

On the other hand, future researchers should coverage on a wider geographical location and not only focus on the respondents in Kuala Lumpur. The survey form should be distributed to the respondents around the country. This is because the sample size gets from Kuala Lumpur cannot represent the whole Malaysian. For instance, the respondents from Kuala Lumpur are based on the urban area. While the rural area respondents might have different opinions as compare to the respondents in an urban area on the customer satisfaction on the bank. In order to enhance the generalization of the findings, both areas could also be considered for future study.

Besides that, the language barrier can be avoided by providing multi-language questionnaires. Future researchers should provide multi-language questionnaires for respondents to avoid some respondents misunderstanding the question and fill up a wrong answer. The question of the questionnaire must be simple, clearly and easily understand by the respondent to avoid misunderstanding.

Lastly, future researcher should include others variable which might influence the dependent variables. New technology must be considered by the future researcher. The future researcher must include some related question which is suitable with the change of banking requirement of customer.

## 5.6 Conclusion

As a final point, independent variables such as tangibility, reliability, empathy, and assurance have significant positive relationship towards customer satisfaction. Subsequently, responsiveness is negatively related with the customer satisfaction which defined as dependent variable. Through this research study, it is possible banks to be aware and alert when serve the customers on regular basis. Customer satisfaction is one of the significant elements because it will affect the customer loyalty in banking industry. In addition, it will also increase the customer lifetime value and reduce the negative word-of-mouth. If a bank has accumulated a lot of negative word-of-mouth, it will affect the reputation and reduce the confidence level of customers.

By introducing more training course to the employees is one of the strategies to increase the level of customer satisfaction. The contents shall include the manner when serve the customers, ways to communicate to the customer, and enhance the knowledge on the product that introduce by the banks.

Subsequently, staffs need to treat their clients like they are your boss in order to increase level of satisfaction. The most important point is the staff must keep their promise such as do the transaction in a given time that promises to their clients. Besides that, there are many ways of communication to different customers. Bank's employees need to have best interest at heart for their customers and this is to understand their customer's need. Moreover, they can well communicate with the customer by introducing the suitable product to them. Furthermore, in order to improve the knowledge on the product, bank can distribute the new information on the products for every month to their employees. This is to ensure the employees have up to date information on new or existing products.

## REFERENCES

- Abu Hasan, H. F., Ilias, A., Rahman, R. A., & Abd Razak, M. Z. (2008). Service Quality and Student Satisfaction: A Case Study at Private Higher Education Institutions. *International Business Research*, 1, 163-175.
- Aliyu, A. A., Rosmain, T., & Takala, J. (2013). Online Banking and Customer Service Delivery in Malaysia: Data Screening and Preliminary Findings. *International Conference on Innovation, Management and Technology Research, Malaysia*, 3, 1-8.
- Amiri Aghdaie, S. F., & Faghani, F. (2012). Mobile Banking Service Quality and Customer Satisfaction (Application of SERVQUAL Model). *Int. J. Manag. Bus. Res.*, 2, 351-361.
- Ananth, A., Ramesh, R., & Prabakaran, B. (2011). Service Quality Gap Analysis in Private Sector Banks -A Customers Perspective. *Indian Journal of Commerce & Management Studies*, 2, 245-252.
- Annamalah, S., Munasamy, J., Chelliah, S., Sulaiman, M., & Pandian, S. (2011). Service Quality Transformation and its Impact on Customer Satisfaction and Loyalty in Malaysian Retail Banking Sector. *World Applied Sciences Journal* 15, 10, 1361-1368.
- Arbore, A., & Busacca, B. (2009). Customer satisfaction and dissatisfaction in retail banking: Exploring the asymmetric impact of attribute performances. *Journal of Retailing and Consumer Services*, 16, 271-280.
- Arokiasamy, A. R., & Abdullah, D. A. (2013). Customer Satisfaction and Online Service Quality in the Banking Sector in Malaysia. *International Journal of Contemporary Business Studies*, 4, 70-83.
- Ballan, M. (2012). A pilot study: designing and testing the task parameter. *Journal of Student Research*, 2(2), 97-106.
- Beatson, A., Lee, N., & Coote, L. V. (2007). Self-Service Technology and the Service Encounter. *The Service Industries Journal*, 27(1), 75-89.
- Berman, B. and Evans, J.R. (2007), *Retail Management*, Prentice Hall, New Jersey, NJ.
- Berman, B. and Evans, J.R. (2010), *Retail Management*, Prentice Hall, New Jersey, NJ.
- Caruana, A. (2002). Service Loyalty: The Effects of Service Quality and the Mediating role of Customer Satisfaction. *European Journal of Marketing*, 36(7), 811-828.
- Charles, V., Kumar, M., & Suggu, S. (2013). Adapting Fuzzy Linguistic Servqual Model: A Comparative Analysis of Bank Services. *Middle-East Journal of Scientific Research*, 18, 1119-1132.




- Churchill, G. A. Jr. and Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research* 19(4):491-504.
- Culiberg, B., & Rojsek, I. (2010). Identifying Service Quality Dimensions as Antecedents To Customer Satisfaction in Retail Banking . *Economic and Business Review*, 12, 151-166.
- Emel, K. (2014). Shopping centre customer service: creating customer satisfaction and loyalty. *Marketing Intelligence & Planning*, 32, 528-548.
- Frank, B., & Enkawa, T. (2007). How Economic Growth Affects Customer Satisfaction: A Study from Germany. *Proceedings of the 13th Asia Pacific Management Conference, Melbourne, Australia*, 115-120.
- Garger, J. (2010, July 4). 4 Levels of Measurement in Social Science Research. *John Garger RSS*. Retrieved July 4, 2014, from <http://johngarger.com/articles/methodology/4-levels-of-measurement-in-social-science-research>
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference*. 11.0 update (4th ed.). Boston: Allyn & Bacon.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice Hall.
- Innis, D.E. and La Londe, B.J. (1994), Customer service: the key to customer satisfaction, customer loyalty, and market share, *Journal of Business Logistics*, 15 (1), 1-28.
- Jun, M., Peterson, R., Zsidisin, G., & Daily, B. (1999). Service quality perceptions in the banking industry: major dimensions. *Journal of Business Strategies*, 16, (2), 170-88.
- Kimery, K.M., & McCord, M. (2002). Third-party assurances: mapping the road to trust in e-retailing. *Journal of Information Technology Theory and Applications*, 4, (2), 63-82.
- Kotler P, Armstrong G (2012). *Principles of Marketing, 14th Edition*, New Jersey, USA . Pearson Education Inc.
- Kotler, P. (2003). *Marketing Management* , Prentice Hall, New Delhi, India.
- Krejcie, R.V., & Morgan, D.W., (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(1), 607-610.
- Krishnan, M.S., Venkatram, R., Mary, C.M. and Paul, D. (1999) 'Customer satisfaction for financial services: the role of products, services, and information technology', *Management Science*, 45(9), pp.1194-1209.
- Lee, G., & Lin, H. (2005). Customer Perceptions Of E-service Quality In Online Shopping. *International Journal of Retail & Distribution Management*, 33(2), 161-176.

- Levy, M. and Weitz, B.A. (2007), *Retailing Management*, McGraw Hill, New York, NY.
- Lo, L. K., Mahamad, O., Mosahab, R., & Ramayah, T. (2010). The Impact of Service Quality on Customer Loyalty: A Study of Banks in Penang, Malaysia. *International Journal of Marketing Studies*, 2, 57-66.
- Lusch, R. F., Dunne, P. M., & Carver, J. R. (2011). *Introduction to retailing* (7th ed.). Mason, Ohio: South-Western Cengage Learning.
- Manrai, L. A. & Manrai, A. K., (2007). A Field Study of Customers' Switching Behaviour for Bank Services. *Journal of Retailing and Consumer Services*, Vol. 14: 208–215. ISSN 0969-6989.
- Md Razak, M. I., Raihan Sakrani, S. N., Wahab, S. A., Abas, N., Arwin Yaacob, N. J., & Mohd Rodzi, S. N. (2013). Adaptive of SERVQUAL Model in Measuring Customer Satisfaction towards Service Quality Provided by Bank Islam Malaysia Berhad (BIMB) in Malaysia. *International Journal of Business and Social Science*, 4, 189-198.
- Miyazaki, A.D., & Krishnamurthy, S. (2002). Internet seals of approval: effects on online privacy policies and consumer perceptions. *The Journal of Consumer Affairs*, 36, (1), 28-49.
- Molaei, M., Ansari, R., & Teimuori, H. (2013). Analyzing the Impact of Service Quality Dimensions on Customer Satisfaction and Loyalty in the Banking Industry of Iran. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(3), 1-9.
- Muda, M. (2001). Financial Positioning of Commercial Banks and its Implications to Bank Management. *Asian Academy of Management Journal*, 2, 99-108.
- Munusamy, J., Chelliah, S., & Hor, W. M. (2010). Service Quality Delivery and Its Impact on Customer Satisfaction in the Banking Sector in Malaysia. *International Journal of Innovation, Management and Technology*, 1, 168-174.reference. 11.0 update (4th ed.). Boston: Allyn & Bacon.
- Saghier, N. E., & Nathan, D. (2013). Service Quality Dimensions and Customers' Satisfactions of Banks in Egypt. *Proceedings of 20th International Business Research Conference*, 4, 134-141.
- Santhiyavalli, G., & Sandhya, B. (2011). Service Quality Evaluation in Select Commercial Banks: A Comparative Study. *The IUP Journal of Operations Management*, 10, 44-62.
- Seth, N., Deshmukh, S., & Vrat, P. (2005). Service quality models: a review. *International Journal of Quality & Reliability Management*, 22(9), 913-949.
- Shlash Mohammad, A. A., & Mohammad Alhamadani, S. Y. (2011). Service Quality Perspectives and Customer Satisfaction in Commercial Banks Working in Jordan. *Middle Eastern Finance and Economics*, 1(14), 60-72.

- Siddiqi, K. O. (2011). Interrelations between Service Quality Attributes, Customer Satisfaction and Customer Loyalty in the Retail Banking Sector in Bangladesh. *International Journal of Business and Management*, 6, 12-36.
- Subramaniam, R., & Ramachandran, J. (2012). Customers' Switching Behavior in Banking Industry -Empirical Evidence from Malaysia. *International Journal of Business, Economics and Law*, 1, 156-162.
- Swati, T. (2013). An Empirical Study - Awareness of Customers on Service Quality of Public Sector Banks in Varanasi. *Journal of Business Management & Social Sciences Research*, 2, 24-29.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's Alpha. *International Journal of Medical Education*, 2(1), 53-55.
- Thompson, C. B. (2009). Descriptive Data Analysis. *Air Medical Journal*, 28(2), 56-59.
- Trochim, W. M. (2005, October 20). Descriptive Statistics. *Research Method Knowledge Base*. Retrieved July 1, 2014, from <http://www.socialresearchmethods.net/kb/statdesc.php>
- Waal, T. D. (2013). Selective Editing: A Quest for Efficiency and Data Quality. *Journal of Official Statistics*, 29(4), 473-488.
- Weiers, R. M. (2010). Introduction to business statistics (7th ed.). Cengage South-Western.
- Yee, B., & Faziharudean, T. (2010). Factors Affecting Customer Loyalty of Using Internet Banking in Malaysia. *Journal of Electronic Banking Systems*, 2, 1-22.
- Zafar, M., Zafar, S., Asif, A., Hunjra, A. I., & Ahmad, H. M. (2012). Service Quality, Customer Satisfaction and Loyalty: An Empirical Analysis of Banking Sector in Pakistan. *Information Management and Business Review*, 4, 159-167.
- Zairi, M. (2000). Managing Customer Dissatisfaction Through Effective Complaint Management Systems. *The TQM Magazine*, 12(5): 331-335.

APPENDICES

Appendix 1.1: Certification Letter from UTAR



**UNIVERSITI TUNKU ABDUL RAHMAN**  
Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

5<sup>th</sup> June 2014

**To Whom It May Concern**

Dear Sir/Madam

**Permission to Conduct Survey**

This is to confirm that the following students are currently pursuing their *Bachelor of Business Administration (Hons) Banking and Finance* program at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR) Perak Campus.

I would be most grateful if you could assist them by allowing them to conduct their research at your institution. All information collected will be kept confidential and used only for academic purposes.

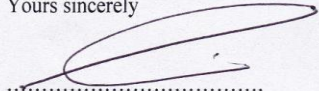
The students are as follows:

<u>Name of Student</u>	<u>Student ID</u>
HAU HUEY TING	11ABB06468
JAOW AI NI	11ABB06471
LEE ZHI WEI	11ABB06562
LOO MUN HAR	11ABB03584
LEE CHEI THAI	11ABB03382


If you need further verification, please do not hesitate to contact me.

Thank you.

Yours sincerely




.....  
Mr Woo Kok Heong *acting HOD*  
Head of Department *Lim CHONG HENG*  
Faculty of Business and Finance  
Email: [khwoo@utar.edu.my](mailto:khwoo@utar.edu.my)



.....  
Ms Wei Chooi Yi  
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**Tel:** (603) 7958 2628    **Fax:** (603) 7956 1923    **Homepage:** <http://www.utar.edu.my>



## Appendix 1.2: Personal Data Protection Statement

### PERSONAL DATA PROTECTION STATEMENT

Please be informed that in accordance with Personal Data Protection Act (PDPA) 2010 which came into force on 15 November 2013, Universiti Tunku Abdul Rahman (UTAR) is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

#### **Notice:**

1. The purposes for which your personal data may be used are inclusive but not limited to:-

- For assessment of any application to UTAR
- For processing any benefits and services
- For communication purposes
- For advertorial and news
- For general administration and record purposes
- For enhancing the value of education
- For educational and related purposes consequential to UTAR
- For the purpose of our corporate governance
- For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan

2. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

**Consent:**

1. By submitting this form you hereby authorize and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

3. You may access and update your personal data by writing to us at maomao\_lct@hotmail.com or lzen533@gmail.com.

**Acknowledgment of Notice**

(        ) I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.

(        ) I disagree, my personal data will not be processed.

.....

Name:

Date:

Appendix 1.3: Questionnaire



**UNIVERSITY TUNKU ABDUL RAHMAN**

**FACULTY OF BUSINESS AND FINANCE**

**BACHELOR OF BUSINESS ADMINISTRATION (HONS)  
BANKING AND FINANCE**

**QUESTIONNAIRE**

**RESEARCH TITLE**

**The Need to Improve Customer Services in the Banking Industry:  
Evidence from Malaysia Market**

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Dear Respondent,

We are Banking and Finance student from University Tunku Abdul Rahman. We are doing our Final Year Project titled “The Need to Improve Customer Services in the Banking Industry: Evidence from Malaysia Market”.

The purpose of this survey is to examine the need for improved customer services in conventional banking available in Malaysia which affect the customer satisfaction towards banking industry. Besides, this survey to determine the need to improve customer services towards the conventional banking so that banking industry able to improve their services.

Please answer all questions to the best of your knowledge. All responses are completely confidential.

Thank you for your participation.

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<b>Name</b>	<b>Student ID</b>	<b>Email Address</b>
LEE CHEI THAI	1103382	maomao_lct@hotmail.com
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LOO MUN HAR	1103584	mun_har@hotmail.com
LEE ZHI WEI	1106562	lzen533@gmail.com
JAOW AINI	1106471	ni_jaow123@hotmail.com

**Instructions:**

- 1) There are **TWO (2)** sections in this questionnaire. Answer **ALL** questions.
- 2) It will take you approximately **20 minutes**.
- 3) The contents of this questionnaire will be kept **strictly and confidential**.

## Section A: Demographic Profile

*In this section, we are interested in your background in brief. Please TICK (✓) your answer in the grid.*

1. Gender
  - Male
  - Female
  
2. Age group
  - 19 years and below
  - 20-29 years old
  - 30-39 years old
  - 40-49 years old
  - 50 years old and above
  
3. Highest education
  - PMR
  - SPM
  - Diploma / Advance Diploma / STPM
  - Bachelor Degree
  - Master Degree
  - Other \_\_\_\_\_
  
4. Income level (per month)
  - <1000
  - 1000 - 2499
  - 2500 – 5000
  - >5000
  
5. How frequent do you patron to bank?
  - Daily
  - Weekly
  - Monthly



**Section B: Determinants of customer satisfaction toward conventional banking services in Malaysia**

*This section is seeking your opinion regarding the need to improve customer service in Malaysia banking industries. Please indicate the extent you agree or disagree with the following statements by circling one number per line on the 5-point Likert scale:*

*{(1) = strongly disagree; (2) = disagree; (3) = neutral; (4) = agree; and (5) = strongly agree.}*

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
DV	Customer Satisfaction					
CTS1	Services provided by bank company meet my expectations.	1	2	3	4	5
CTS2	I will purchase another products and services from the bank.	1	2	3	4	5
CTS3	I have the intention of switching the product to another bank in future.	1	2	3	4	5
CTS4	I will recommend my bank company to my friends or family members.	1	2	3	4	5
CTS5	Overall, I feel comfortable and secured with the services provided by the bank.	1	2	3	4	5

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>IV1</b>	<b>Tangibility</b>					
TAN1	Bank has new and the latest equipment.	1	2	3	4	5
TAN2	Bank's physical facilities are attractive.	1	2	3	4	5
TAN3	Bank's reception desk employees are good in manners and neat appearing.	1	2	3	4	5
TAN4	Materials associated with the service (such as pamphlets or statement) are visually attractive at bank.	1	2	3	4	5
TAN5	Less queuing time is needed at the bank's counter.	1	2	3	4	5

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>IV2</b>	<b>Reliability</b>					
REL1	Bank will honour its promises if they promise to do something by a given time.	1	2	3	4	5
REL2	When you are facing problem, bank's employees will show a sincere interest in helping you to solve it.	1	2	3	4	5
REL3	Bank employees perform the service right the first time.	1	2	3	4	5
REL4	Bank employees will keep the customer's information remain confidential.	1	2	3	4	5
REL5	Bank employees insist on keeping their customer records free from error.	1	2	3	4	5

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>IV3</b>	<b>Empathy</b>					
EMP1	Banks gives individual attention to you.	1	2	3	4	5
EMP2	Easy to contact with bank's employees.	1	2	3	4	5
EMP3	Bank's employees are knowledgeable.	1	2	3	4	5
EMP4	Banks has your best interest at heart.	1	2	3	4	5
EMP5	Bank's employees able to understand your specific needs.	1	2	3	4	5

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>IV4</b>	<b>Responsiveness</b>					
RES1	Bank's employees inform you exactly when services will be performed.	1	2	3	4	5
RES2	Bank's employees give you prompt service.	1	2	3	4	5
RES3	Bank's employees are helpful and willing to help you.	1	2	3	4	5
RES4	Bank's employees are never too busy to handle your request.	1	2	3	4	5
RES5	You prefer to deal with bank machines rather than human being.	1	2	3	4	5

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
IV5	Assurance					
ASS1	The behaviour of bank's employees give you confident.	1	2	3	4	5
ASS2	You feel secure in doing transactions with bank.	1	2	3	4	5
ASS3	Employees in the bank treated you with a good attitude.	1	2	3	4	5
ASS4	Employees in the bank have the knowledge to help you in solving your problem.	1	2	3	4	5
ASS5	Employees in the bank know their client on regular basis.	1	2	3	4	5

*Thank you for your time and response.*

*~ The End ~*