

THE RELATIONSHIP BETWEEN SERVICE
QUALITY AND CUSTOMER SATISFACTION:
AN EMPIRICAL STUDY IN BANKING INDUSTRY

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DECLARATION

We hereby declare that:

- (1) This UBFZ3026 Research Project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
- (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.
- (4) The word count of this research project is 22,648 words.

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DEDICATION

This research project is dedicated to

Our supervisor,

Ms Nurfadhilah binti Abu Hassan

Who always give sage advice and patient encouragement to us,

Once again,

We hereby deliver our heartfelt gratitude,

Hope we made a positive contribution.

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SPSS Statistical Package for Social Science

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PREFACE

Customers nowadays are concerned about the service that is being provided by a bank. As competition increases, quality of service will become the only true differentiator. Therefore, successful banks will be those that compete on quality and able to provide superior customer services.

An acceptable quality of service delivered by a bank can delight and impress a customer who perceives it during service delivery process. The more quality of service does a bank improving, it could lead to a higher level of customer satisfaction. This may ultimately resulting in retain loyal customer and attract new customer come over to build and maintain bank-and-customer relationship.

This research is emphasized to examine the relationship between five core service quality dimension (Assurance, Empathy, Reliability, Responsiveness, Tangible) and the level of customer satisfaction in banking industry. It provides a very useful insight for management of bank and policy makers in understanding customer behaviour at this present time.

ABSTRACT

The main objective of this research project is to find out the factors that contribute the most significant effect towards determination of customer satisfaction. The five core service quality dimension: assurance, empathy, reliability, responsiveness, and tangible will be discussed further in the research studies. Past researcher's work will helpful in develop the hypothesis in this research project.

The research is done through distributing questionnaire to respondents while the target population is the depositor in Malaysia banking industry. During the process of analyzing data, the Statistical Package for Social Science (SPSS) version 16.0 was used.

Respondent's feedback was analyzed and presented through the test of Pearson's Correlation Analysis and Multiple Regression Analysis. The research finding tells us that assurance dimension is very significant to determine the level of customer satisfaction in banking industry.

As the finalist of this research study, discussion on major findings, limitation as well as recommendation for future research will be discuss in more detailed.

CHAPTER 1: INTRODUCTION

1.0 Introduction

In chapter 1, it presents a general survey on study context and stated the research problem. This chapter has introduced the five dimensions on services quality that will influence the customer satisfaction in the bank industry. Besides, this chapter will emphasize the problems that arise in the bank industry which is the aim we conduct this research. It will clearly state the research background, problem statement and the objectives of research in order to realize the reason of this study and define the term. In addition, hypothesis of the study, significance of the study, and the chapter layout will exhibit in this chapter.

1.1 Research background

Nowadays, there are many researchers' studies has been broadly investigated and assessed on how the services quality has influence to the bank customer satisfaction. For this entire research, we will discuss on the determinants of customer satisfaction in banking industry. According to Lo, Mahamad, Ramayah and Mosahab (2010), there are numbered empirically studies of the relationship between services quality and customer loyalty in banking industries. Currently, banks in Malaysia have facing the challenges of better services quality providing in order to increase customer satisfaction among the bank competitive. Therefore, Bank Negara Malaysia also took some implementation to against the competition.

In year 2004, Bank Negara Malaysia has accomplished a study to examine customers' expectations and satisfaction on the quality of products and services offered in banking industry. In September 2007, Bank Negara Malaysia has begun the Financial Sector Talent Enrichment Program (FSTEP) to train and get ready

1000 highly capable and skilled employee for instant placements in banking institutions. Lo et al. (2010) state that this is for the purpose to increase the supply of well-trained and competent employee for the financial services industry, increased competition, decline pressures to control expenditure and customer demands for better services quality (Source: BNM 2008, 9th Bank Human Resource Conference).

As we know, customer satisfaction has played a significant role in an organization and banking industry. Customer satisfaction is highly related to the services quality of a bank. Therefore, when bank improve the services quality will cause the increase in probability of bank customer satisfaction. Besides, according to Arasli, Mehtap-Smadi and Katircioglu, (2005) research findings pointed out that an increase in bank customer satisfaction will lead to behavioural outcome. In fact, Arbore and Busacca (2009) declared that past researchers have testify that bank customer satisfaction can lead to the changes of significant consumer behaviours, such as cross-buying of banking product and financial services, positive impression for customer which could make help for advertising purpose, in turn customer would be more willing to pay a premium and high tendency to remain and stay loyal to a bank. (Arbore & Busacca, 2009)

According to Zhou (2004), past researchers have continuous growth in the use of SERVQUAL model has been debatably due to an actual use in the diagnostic analysis for better service quality. In their argument, there is more diagnostics in the measurement of SERVQUAL model. Therefore more practical implications should be established than just the measurement of the performance of bank. Therefore, in this research we will adopt SERVQUAL model as a starting point from a qualitative study to examine a service quality level in banking industry.

In the SERVQUAL model, there are five main dimensions to identify the services quality level delivery by bank. Those dimensions are Responsiveness, Reliability, Assurance, Empathy, and Tangible. These dimensions were used to evaluate the impact of services quality on customer satisfaction among bank customer. Some

researcher's findings show that the service quality is significant in examines the performance of bank branches, because the bank survival depends on the service quality levels they deliver to their customer, said by Lo et al. (2010). According to Choudhury (2008), determination of the dimension of customer-perceived service quality is important. This is because service managers need to understand how perceptions of their performance on service quality dimensions influence the levels of bank customer satisfaction. Besides that, once identified the dimensions of service quality, service managers is able to improve the services process and have greater control the overall service quality in order to delivery professional service. As the explanation above, it can be concluded that the five dimensions are important to services quality standard.

In this research, it is interested to investigate on how the level of services qualities influences the overall customer satisfaction in banking industry. The aim of this study is to identify which of the core dimension causes the most significant effect toward overall customer satisfaction for the following section of research paper.

1.2 Problem Statement

Awan, Bukhari, & Iqbal (2011) have raised a question throughout the development phase of research in customer satisfaction. That is whether customer satisfaction is different for products and services or it is the same? Malhotra et al. (as cited in Awan et al., 2011), also raised a related question about the measurement either direct or indirect, should be used to fully capture from their consumption experience and measure the behavioural components of customer satisfaction.

Furthermore, there is some drawback in literature review about customer satisfaction in general services reflected by various studies on customer satisfaction with particular reference to financial services. Therefore, future researchers should dig out some specific measures of customer satisfaction

analysis for their experiences with financial services, said by Awan et al. (2011). Some other relative dimensions provided by Howell and Shamir (as cited in Awan et al., 2011), includes availability, responsiveness, timeliness, completeness, tangibility, empathy, reliability, and professionalism.

Lee and Hwan (2005) has taken other research background into consideration and pointed out that, the assessment of banking industry achievements useful for scholastic and business research, however the other researcher has rarely focus on carrying out qualitative analysis of service quality when trying to assess management performance of both domestic and foreign banks. Second, the importance of the service quality within industry has gradually increased. However, questionnaires on service quality investigations merely observe the customer perspective, and generally fail to assist quality manager in understanding customer actual preferences.

Newmann (2001); Soteriou and Stavrinides (as cited in Bedi, 2010) has highlighted the importance of the service quality and customer satisfaction serve as a way to achieve competitive advantage and corporate profitability in banking. However, there are difficulties to identify a single bank which not yet started to emphasize on some kind of service quality improvement drive. Researches particularly in service sector should began to address whether or not service quality will affects satisfaction depending on diverse service quality or situations

According to reviews as in Hazna and Srivastava (2009) literature, public sector banks are exposing to higher competition, whereas foreign and private sector banks trying to win customer loyalty, commitment and trust by providing them better quality services. Service quality has become a competitive strategy used in banking sector, thus it is important to explore service quality and its effect to enhance customer satisfaction.

1.3 Research objective

1.3.1 General objectives

The aim of this study is to expand the growing research in the field of services quality affect the customer satisfaction to the banking institution. A poor services quality will lead to a lower level of customer satisfaction in which occur negative behaviors such as negative mouth-of-word, tendency to switch bank and so on. Therefore we keen to determine which dimension of services quality in the bank should emphasize in order to increase the bank customer satisfaction.

1.3.2 Specific objectives

1. To identify the customer satisfaction level for each service quality dimension in banking industry.
2. To explore the relationship between services quality dimensions and customer satisfaction in banking industry.
3. To examine the dimensions of service quality towards the customer satisfaction in banking industry.
4. To identify which of the dimension of service quality causes the most significant effect towards customer satisfaction in banking industry.

1.4 Research Questions

1. What is the satisfaction level for each of the service quality dimension in the banking industry?

2. What is the relationship between service quality dimensions and customer satisfaction in banking industry?
3. Can the assurance, empathy, reliability, responsiveness, and tangible explain the customer satisfaction in banking industry?
4. Which of the dimension of service quality causes the most significant effect towards customer satisfaction in banking industry?

1.5 Hypothesis of the study

Before carry out this research, we had gone through some literature review to make some prediction toward the result. A specific hypothesis should be developed before we go further depth of research analysis in which helping us to understand the relationship between independent variables and dependent variable. We are going to conduct a test based on Statistical Package for Social Science (SPSS) software and trying to examine whether or not there is any relationship between 5 core dimension services quality and the customer satisfaction throughout our study. And we expect to obtain a result will tend to have a positive relationship between the independent variable and dependent variable through an empirical research in our study.

1.6 Significance of the study

Contribution and importance of this study is to provide us a better understanding of factors that will affect the customer satisfaction. The purpose of this study is to notice how the five core dimensions affect the customer satisfaction level. Based on our research, it is essential for bank to maintain its services quality and about to achieve positive word of mouth from customer to advertise the bank image. Besides, we identify the most significant dimension which determining customer satisfaction and this work to provide a guideline for banking sector to put emphasizes on services quality deliver by bank. In addition, it is useful for bank to

identify their customer needs and wants. By conducted this research, it can help the bank to find out the best solution to solve the encounter problem and give the best services to fulfil customers' satisfaction.

1.7 Chapter Layout

There are 5 chapters in this research project which included introduction, literature review, research methodology, research results and the last part is discussion and conclusion. In chapter 1, the researchers will provide an overview of the research background and explain about the research problem in the problem statement. The research objective, research questions, hypotheses will be mentioned and the significance of the study.

Literature review of the research is carried out in Chapter 2. In this chapter, the importance of each of the variable and independent variable will be defined. The literature review obtained from other research regardless published or unpublished information to define the relationship, terms and theories which are related to the research. Besides, developing conceptual framework included in this chapter which is based on investigation and hypotheses testing to measure validity of theory formed.

In Chapter 3, the researchers will investigate on research methodology. The researchers is going to discuss the way of research being conducted in term of research design, data collection methods (primary data or secondary data), sampling design (eg : target population, sampling frame, location, elements, technique and sampling size), research instrument, constructs measurement, data processing (eg : checking, editing, coding, transcribing, cleaning) and data analysis (eg : descriptive analysis, scale measurement, inferential analysis).

Chapter 4 is the critical part which is used to conducted research result with the assist of Statistical Package for Social Science Version 16.0 (SPSS). The researchers will carried out the result based on the primary data get from

questionnaires. The result conducted will be summaries in chart and tables in order to make it easier for the researchers to interpret it.

Chapter 5 is the last part of the research proposal which is about discussion and conclusion. The researchers will make a conclusion based on the result and finding get from Chapter 4. Furthermore, summarize the entire research proposal from Chapter 1 to Chapter 4 and identified the major finding. Limitation will be discussed on the last part as well as providing recommendation for future researchers in conducting research related to this topic.

1.8 Conclusion

As a conclusion, customer satisfaction has played an important role in the service-based firm and banking institution. The level of satisfaction of a consumer is highly dependable to the bank service they perceived. Bank should always make a great effort to improve their quality of service to ensure service delivered meet customer expectation. The quality of service is solely determined by five core dimensions proposed by Parasuraman, Zeithaml, and Berry (1988) who presented a great framework, called SERVQUAL, a scale using to evaluating service quality. The five core dimensions included tangible, responsiveness, reliability, assurance, and empathy in which served to measure the quality of service delivered. In chapter 2, we will explain further about the five core component by providing more useful theories and framework.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter attempts to provide the review of previous researches that related to this research topic which is the relationship between service quality dimensions and customer satisfaction. In this chapter, numerous of empirical researches have been reviewed in order to determine the relevant variables as well as strengthen the reliability of this theoretical model. Majority of previous researches developed a hypothesis to examine the validity of theory formulated.

2.1 Review of Literature

2.1.1 Dependent Variable - Customer Satisfaction

Satisfaction is defined as “entire customer attitude react toward service provider” (Levesque & McDougall, 1996). Gerpott, Rams and Schindler (2001) indicated customer satisfaction level was measure based on previous experience of customer with service provider. Customer satisfaction level increases as service provider success in accomplishing their expectation. Fornell et al’s study (as cited in Hellier, Geursen, Carr & Rickard, 2003) stated service quality is major element of customer satisfaction. Emotive satisfaction valuation was affected by service quality appraisal of service based company (Bagozzi, 1992). Customer perception of service quality is the major causes of customer satisfaction (Cronin, Bardy, & Hult, 2000). There are a few measurement suggest by Heskett et al. (as cited in Levesque & McDougall, 1996) which often used by researchers on their research and normally included entire service quality,

reach expectation of service demander and customer satisfaction. A high standard service quality will lead to long term profitability since it influenced the repurchase intention of customers (Leverin & Liljander, 2006).

Glaveli, Petridou, Liassides and Spathis (2006) indicated level of satisfaction regarding to the service quality increases when service provider could deliver on time service. For researches that studies on UK financial service, Maddern, Maull, Smart and Baker (2007) had conducted a study to identify the main element which lead to customer satisfaction. The study shown service quality is the major influence of customer satisfaction which can be obtained from the result of service profit chain. Apart from this, technical service quality (TSQ) is important as the driver of customer satisfaction levels which is in consistent with the finding of Newman (2001). Maddern et al. (2007) explained technical service quality responsible in recover the poor operational behaviour since excellent performance of front-office employees could not fully offset poor operational process.

Beerli, Martin and Quintana (2004) identified which factor influence customer loyalty in a bank and found out impact developed by satisfaction stronger than switching cost. From the empirical result conducted, Beerli et al. (2004) found that satisfaction is positively link to perceived quality, however not significant relationship when appeared in opposite direction, which mean high level of service quality not necessary causes high satisfaction level. Aside from this, the study of Ehigie (2006) determined customer satisfaction and customer retention are positively correlated. Hence, customer satisfaction is viewed as core element which link service quality and customer retention in their studies.

2.1.2 Independent Variable – Assurance

Knowledge and behaviour of employee with the ability to deliver trust and deal with customers' request is the main idea of assurance (Parasuraman et al., 1988). In the service industries, assurance is defined as the perception of services provider to ensure providing service in the form of security and credibility (Parasuraman et al., 1988). According to Wolfinbarger and Gilly (as cited in Ho & Lin, 2010), security is the major concept to ensure privacy when apply in global network environment. Basically, domestic banks would take into consider the quality of assurance when build up e-banking service. In the assurance perspective, the web site must protect the data and attain a desirable security levels of the interaction between bank and customer, thus to ensure individual privacy. (Cristobal, Flavián, & Guinaliu, 2007). According to Keller (as cited in Huang, Shen, Yen & Chou, 2011), Brand-name as a representative for trust and represent a symbol of quality and assurance in the online service circumstances.

Chowdhary and Prakash (2007) carried out the test based on cluster analysis, by grouping people and information processing as the first cluster while possession and mental-stimuli processing as the second cluster. He found from the test as the requirement of the assurance was decline once the service form are highly invisible. As a result, customers of mental-stimuli-processing services are highly intangible, which require strong customer relationship, thus, customer might demand greater assurance from supplier. According to the empirical result, people-processing service perceived assurance dimension as the most important, followed by information processing service perceived assurance dimension as important and lastly, possession processing service perceived assurance dimension as not so important. As a conclusion, assurance dimension important for service based industries since it have high interaction between service supplier and customer.

A professional employee will ensure his or her customers getting a kind, warm and prompt response which is for the purpose to convey trust and assurance for their customer (Kumar, Fong & Charles, 2010). Lo et al. (2010) examined banking industries in Malaysia, they found out there is significant relationship between assurance and customer satisfaction. Arasli, Katircioglu and Mehtap-Smadi (2005) examined 5 core dimension of service quality and examined which have the most significant effect on customer satisfaction in Cyprus. They using multiple regression analysis and found out assurance dimension have most significant contribution on customer satisfaction which is in line with studies of Shlash Mohammad and Mohammad Alhamadani (2011). According to Hazra and Srivastava (as cited in Dharmalingam & Kannan, 2011), assurance and empathy should be put on focus by understand customer particular needs and paying individualized concern to increases customer loyalty and customer commitment.

Siddiqi (2011) found that assurance dimension is positively correlated with customer satisfaction in the banking industries of Bangladesh which is consistent with the study of Munusamy, Chelliah and Hor (2010). However, Munusamy et al. (2010) found that is insignificant effect due to customer does not feel important of assurance and can be excluded from service quality. Based on the statement, Munusamy et al. (2010) come out with two possibilities to explain the insignificant effect. Firstly, customer over confident on banks' service, thus take it as granted and deem lightly when dealing with any banks. Secondly, customer had totally given up since majority of the banks could not achieve customer expectation toward safety issues. Munusamy et al. (2010) suggested retail banks enhance the assurance dimension in their service as it can gain competitive advantage.

2.1.3 Independent Variable – Empathy

Empathy can be defined as caring and personalized attention that the firm provides to its customer. According to Sin et al., 2012, empathy can be described as process of a business relationship that enables two or more parties to see the situation from perspective view of others. For example, a person who tries to understanding other's desires and goals. Wang (2007) also described that empathy is the capability of a person to take a look at a situation from other people's point of view.

In personal selling literature, empathetic ability is a main factor that will make a salesperson successful in their sales and marketing. In service marketing literature, the empathy component is used as one of the component in the service quality model. While in networking literature, empathy is one of the independent variable to explain the relationship between franchisor and franchisee. (Sin et al, 2002)

According to Yavas, Bilgin and Shemwell (1997), empathy is a simple way to see how the banks with a seller's mindset in giving individual attention to customers and understands the particular needs of customers. From the result of Canadian sample, empathy is the most important predictor for both satisfaction and loyalty which conclude from Ladhari, Ladhari & Morales (2011) research finding. If the bank's employees serve their customers the excellent service attitude, customer will achieved high level of satisfaction and stay loyalty to the bank.

Empathy was the most significant dimensions to determine service quality in Malaysian Islamic banks. (Amin and Isa, 2008) This statement also agreed with the findings of Karapte, Yavas and Babakus (2005) which found that empathy were the second important dimensions of overall bank service quality in Northern Cyprus.

Moreover, in United Arab Emirates, Rehman (2012) declared that empathy is important elements for service quality dimensions. Yavas, Benkenstien and Stuhldreier (2004) found that empathy will also influence the consumer commitment to the bank and the word-of-mouth. The higher empathy services, the customers will be feel more satisfy with the bank services. This will make them would not easily change from their current bank to another bank. They also will recommend the bank to their friends and families. These are supported by finding from Arasli, H. et al. (2005), which state that employees of the banks will be more sensitive to their customers' needs and provide professional services to customers if the customers have interact more with employees.

2.1.4 Independent Variable – Reliability

Reliability is one of the most important dimensions to examine in accessing the banking services quality. *According to* Karatepe et al. (2005), *reliability is* defines as a trustiness of bank customer toward the bank services, precise records and information statement. Saraei and Amini (2012) stated the term of reliability also refers as the skill of bank's employee in delivering services to fulfil bank customer constantly and trustfully. Other than that, according to Jacob and Simons (2004) the definition of reliability is capability to carry out the promised services consistently, regularly, and exactly the same as the bank customer demanded.

The researchers, Arasli et al. (2005) showed that reliability is the main causes on overall customer satisfaction level. (Variation of 59% in overall satisfaction level is explained by regression model for the bank customers) Therefore, it have examine that the reliability have a positive relationship to the overall bank customer satisfaction.

In addition, Charkravarty, Feinberg, and Rhee (2004) found that among customer service quality dimensions, reliability are significantly negative correlated with customer's tendency to switch banks. This means that when increase in reliability of a bank services quality will deduce the tendency to switch to other bank. If the reliability services provided is not satisfied by the bank customer, it will lead to higher tendency the customer will switch to other bank. Besides that, it will create negative viva-voce that destroys the bank reputation to other customers. This is one of the negative impacts that will occur when bank customer is dissatisfied with the poor reliability services provided.

According to Arasli et al. (2005), reliability dimension has the significant effect on overall bank customer satisfaction. This is because when a bank offering expertise in the services to customer, they can delivery error free and on time services that bank promise to do. Through a higher reliability services, customer will be satisfied with the bank and they will create positive mouth-of-word by recommend the bank to others.

Kyj and Isik (2008) stated bank should concerned with the reliability of bank data in evolution environment which can stay away from an occurred of serious misreporting and noncompliance data. When a high percentage of services failures are result from human error in delivery services process, it will influence the reliability of customer satisfaction to the bank performance. Consequently, it is difficult for bank services manager to achieve high quality performance to their customer. Therefore, some of the error prevention strategies should be taken by the bank to avoid the error generation and improve the quality of the bank services.

Moreover, according to Karatepe et al. (2005) empirical studies, reliability can be examined through few actions of the employee and bank. First, whether the employee of bank provides error-free service in the bank account transaction. Second, whether the employee can confidentially carry out the customer transaction. Third, does the employee present

accurate information to customer and delivery the bank service at the right time. Lastly, does the bank update their customers about its financial operation correctly and trustfully.

Besides, reliability can determine through internet online banking services. Zavareha, Md Ariff, Jusoh, & Zakuan (2012) suggest that we can examine that whether the service delivered through the Internet banking pages is fast, whether the part of website of Internet banking is accessible for business, does the internet banking section provides its services at the time it promises to do so or does it complete a quickly transaction through the banking online system.

2.1.5 Independent Variable - Responsiveness

One of the key quality determinants of service quality that significant to customer satisfaction is responsiveness. Abdullah, Suhaimi, Saban and Hamali (2011) defined responsiveness as the willingness to assist customers and offer timely service. For examples, employees are assisting them patiently and quick to respond to their needs. The behaviour of employees with a pleasant and friendly is important to infuse confidence among customers. Employees should be able to deal effectively with complaints and promptness of the service (Ghobadian, Speller, & Jones 1993). Besides, frontline employees should also be trained to give prompt service, show care and interest in helping customers, and respond appropriately to their requests. Employees should not ignore user questions when they are busy (Ladhari et al., 2011).

Responsiveness which is the one of the dimension in service quality has been chosen as our independent variables because numerous studies have been shown that responsiveness is one of the key quality determinants of service quality. Johnston (1995) identified responsiveness as an important factor in service quality. It identified employees' willingness to react to a

problem and their employees' responsiveness to customer needs as key factors in service quality. Wang, Lo and Hui (2003)'s study in China found that responsiveness were found to be significant to overall service quality.

The study of Avkiran (1994) in an Australian trading bank, found that the elements of responsiveness to be the most important in service quality. The result in the research of Kang, Jame and Alexandris (2002) found responsiveness dimensions were significant determinants of overall service quality. Antony, Antony and Ghosh (2004) also indentified responsiveness was recognized as the most important dimension of service quality. Newman and Cowling (1996) in their study in the UK found responsiveness to be the most important valued by customers. The study of Angur, Natarajan and Jahera (1999) in India and study of Beerli et al. (2004) in Spain report the responsiveness were the most important of service quality. Najjar and Bishu (2006) found responsiveness is the most important and significant to overall service quality in the USA. Tahir and Abu Bakar (2007) in Malaysia found responsiveness is the most important in service quality dimension.

Responsiveness that has significant effect on customer satisfaction has been supported by previous researchers which are following. Yavas et al. (1997) in Germany found responsiveness has positive relationship with customer satisfaction. In the research of Johnston (1995) also found that responsiveness is identified as a important determinant of quality as it is a common cause of satisfaction, and the lack of responsiveness is a major cause of dissatisfaction. Rehman (2012) found that responsiveness is statistically significant and have relationship with customer satisfaction.

Ladhari et al. (2011) carried out a research to compare perceptions of bank service quality among Tunisian and Canadian customers, and to determine which dimensions of service quality contribute most to overall customer satisfaction and loyalty. From their result, they found that responsiveness were the most important causes of satisfaction and loyalty in the Tunisian.

In the banking industry, responsiveness refers to the level of which bank employees are willing to assist customers and offer timely service. It is concerned with the degree of the bank employees anticipate customers' wants and needs provide timely service or respond to the requirement of customers (Bhattacharyya & Rahman, 2004). Bank employees also responsible to provide financial advice, access to teller services and serve timely notices which refers to the adequacy of number of staff serving customers during business hours and peak hours (Avkiran, 1994).

A study by Bitner et al. (1990) attempted to identify the causes that led to customer's satisfactory and dissatisfactory outcomes. They investigated 700 incidents from customers of airlines, hotels, restaurants and other service-based corporation. The researchers found that employees' willingness to react to a problem, employees' responsiveness to customer needs and requests and employee attributes also being as one of the key determinants to cause both satisfaction and dissatisfaction. The result indicated that higher responsiveness of employees lead to higher satisfaction of customers.

2.1.6 Independent Variable – Tangible

According to Zeithaml and Bitner, tangible element consider as one of the service delivery to customer which could directly affect customer experience as well as their repurchase intention (as cited in Kincaid, Baloglu, Mao, & Busser, 2010.) Bitner (as cited in Kincaid et al., 2010), used the term "*servicescape*" to represent the physical elements of the service circumstance. Bitner (as cited in Kincaid et al., 2010) said that the "*servicescape*" consists of numerous tangible elements such as ambient conditions, spatial layout and functionality which affect satisfaction level of customer and indirectly influence customer loyalty. Ambient conditions such as temperature, noise, smell of environment. Furthermore,

environment layout and functionality can be view from layout of furnishings since the way of how the furnishing being arrange closely related to customer and employee needs.

Barber and Scarcelli (2010) has defined the tangible elements of service as physical environmental quality which refer to personnel, appearance of the physical facilities, information materials and other physical features work to provide service in the service facility. Numerous researchers have used the term servicescape to represent the tangible element as the physical facility in the service environment. For instance Sureshcharder et al. (2003); Wakefield and Blodgett (1996); Reimer and Kuehn (2005). Furthermore, Wakefield and Blodgett (1996) has classified the servicescape into five categories which included:

- spatial arrangement of furnishing and equipment
- how is the architectural design and interior decoration
- is the seating comfort which adequate seating space and chair padding
- provided electronic equipment and visible displays, signs and symbols
- is the floor, carpets, or restrooms always kept clean and tidy

Yavas et al. (2004) has carried out canonical correlation analysis recommended by Thompson (1994). The canonical correlation between dependent variable, customer satisfaction and independent variable, tangible element, show a high strength of association. It implies that tangible element is significant to explain the customer satisfaction. Yavas et al. (2004) suggest that an improvement of tangible element of service quality should lead to higher level of customer satisfaction

Yavas et al. (1997) revealed the fact that tangible found to be significant predictors of customer satisfaction. Coefficient of tangible achieve the expected sign and score a beta of 0.24 implies the significance of tangible

on customer satisfaction. Rehman (2012) made a hypothesis of tangible element has the significant relationship with customer satisfaction. Refer to the result obtained from regression analysis; tangible significance level was lower than 0.05 which implies that tangible element is statistically significant and relatively associated with customer satisfaction. Furthermore, this is supported by the finding of Culiberg (2010) which implies that tangible element is statistically significant and score 48.8% of the variation in explaining customer satisfaction.

How is the extent of tangible factor considered as having acceptable significance level in determination of customer satisfaction in banking industry? According to Yavas et al. (1997) studies and refer to an informal conversation between author and targeted bank customers as respondents, majority of customer strongly refuse to build a relationship with banker in which the branch office filled with smoke odour. Besides that, irregular temperature in the branches made them feel uncomfortable while waiting bank staff to serve them. Yavas et al. (1997) therefore come out a conclusion with a creation of comfortable banking environment is as important as creation of our own comfort living room.

In addition, Levesque and McDougall (1996) have gave his point of view to bank which has the necessary to monitor on employee's behaviour or some other tangible aspect of bank main performance. For instance, the appearance of bank employee and its facilities should always enhance, the communication of material must be presented clearly and the bank location is convenient to majority of public. All these features are to ease bank customer to doing transaction and build good impression on bank.

However, tangible element is seen as least important in determining customer satisfaction. In Spathis et al. (2004) research findings, in other country like Greek, bank customers put not too much concern on tangible factor of a bank such as comfort, assess, cleanliness or tidy and aesthetics. This is supported by Johnston (1997) who proved the tangible score low

strength in importance indicator analysis which also implies tangible element of service was not to amplified by bank customer.

2.2 Review of Relevant Theoretical Models

The following theories related to our research objective which provide us the framework of constructing the 5 dimension of service quality that impact on customer satisfaction, which are assurance, empathy, reliability, responsiveness and tangible.

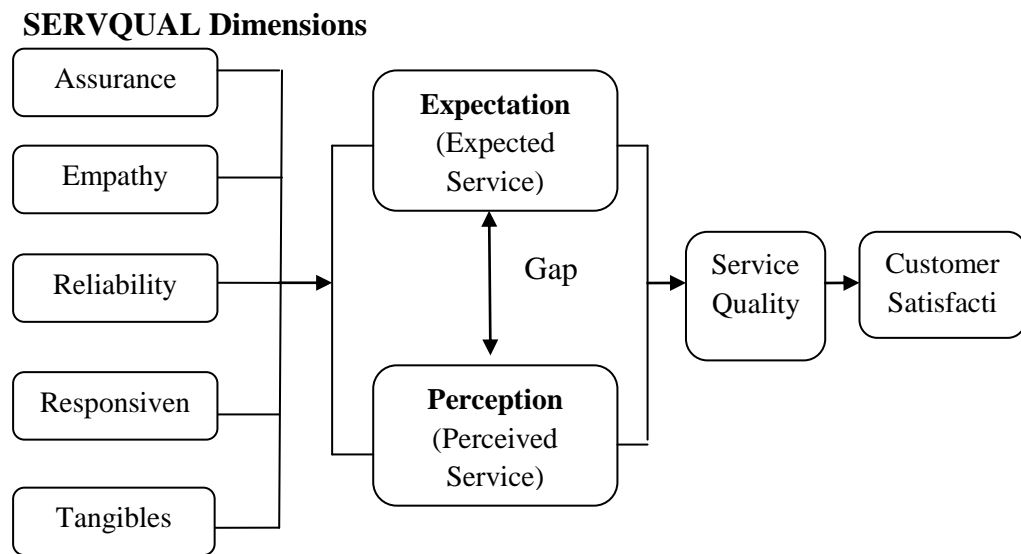
2.2.1 SERVQUAL Model and Customer Satisfaction

Parasuraman, Zeithaml and Berry (as cited in Buttle, 1996) proposed that service quality is the differences between expectation and perception of the quality dimensions. They developed a SERVQUAL based on GAP analysis.

In the study of Abili, Thani, Mokhtarian, and Rashidi (2011), the service quality model is constructed based on GAP model of Parasuraman et al. (as cited in Buttle, 1996). The study is to determine the quality gap of university services in the behavioral science faculties of the University of Tehran (Iran). The data was collected from a sample of 300 students of five behavioural science faculties in the University of Tehran (Iran) through questionnaire on a random basis. The questionnaire consists of two parts, which are customer's perceptions and expectations about the service. There are five dimensions of service quality, which are assurance, responsiveness, empathy, reliability and tangibles. The quality gap of the services of behavioral science faculties was determined from the differences between the students' perceptions and expectations. The results showed that the three of the five SERVQUAL dimensions, which are tangibles, reliability, and empathy have a negative quality gap. Negative

quality gaps mean students' expectations higher than their perceptions and this indicates their dissatisfaction. The result also showed that empathy and tangible have the most significance on customer satisfaction. The conceptual framework has been established from this study in figure 2.1.

Figure 2.1: Conceptual framework of Abili, Thani, Mokhtarian, & Rashidi (2011)



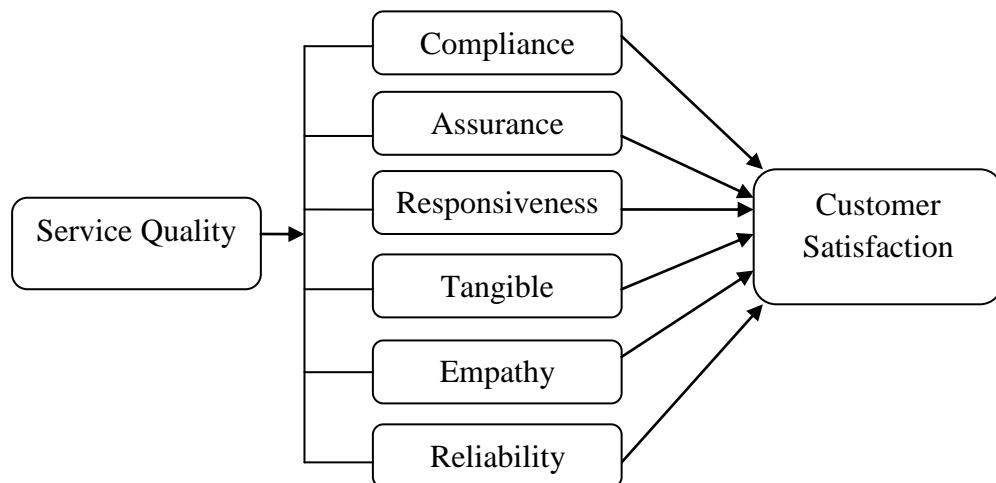
Source: Abili, K., Thani, F. N., Mokhtarian, F., & Rashidi, M. M. (2011). Assessing quality gap of university services. *The Asian Journal on Quality*, 12(2), 167-75.

2.2.2 CARTER Model and Customer Satisfaction

The CARTER is an instrument that used to measure service quality in Islamic banking. It added the dimensions of compliance with Islamic law and principles of SERVQUAL five dimensions (Othman & Owen, as cited in Osman, Ali, Zaimuddin, Rashid, & Jusoff, 2009). The six dimensions are compliance, assurance, responsiveness, tangible, empathy and reliability.

In the study of Rehman (2012), the purpose is to identify the relationship between customer satisfaction and six dimensions of service quality (CARTER model) in Islamic banks of Pakistan, the UK and UAE. The six dimensions from CARTER model are compliance, assurance, responsiveness, tangible, empathy and reliability. Data was collected through questionnaire from a sample of 225 customers of Islamic banks and 75 responses have been taken from each country. The research found that assurance, reliability and empathy are significant factors of customer satisfaction in Pakistani and UK Islamic banking customers whereas assurance and tangible are significant dimensions of customer satisfaction in UAE. The conceptual framework has been established from this study in figure 2.2.

Figure 2.2: Conceptual framework of Rehman (2012)



Source: Rehman, A. A. (2012). Customer satisfaction and service quality in Islamic banking: A comparative study in Pakistan, United Arab Emirates and United Kingdom. *Qualitative Research in Financial Markets*, 4(2/3), 165-175.

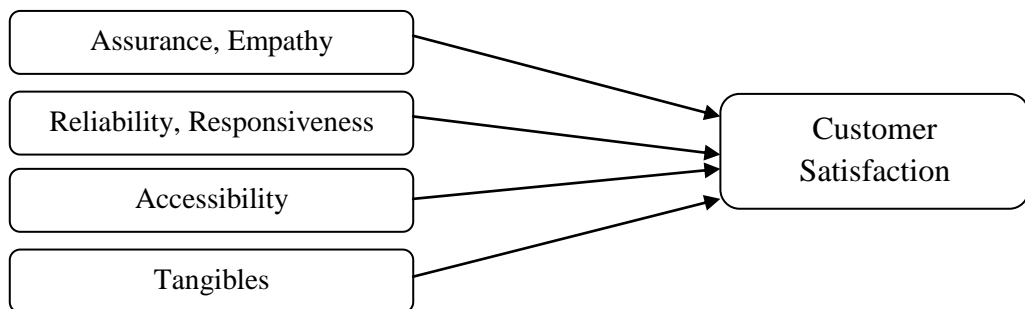
2.2.3 SERVPERF Model and Customer Satisfaction

SERVPERF, proposed by Cronin & Taylor (as cited in Chowdhary & Prakash, 2007) is the performance component of the Service Quality scale

(SERVQUAL). It assumes respondents provide their ratings by automatically comparing performance perceptions with performance expectations and that is unnecessary to measure expectations directly.

The study of Culiberg (2010) is to measure the relationship between service quality dimensions and customer satisfaction in retail bank in Slovenia based on SERVPERF model, a 28-item scale has been developed for this study. The four dimensions of service quality have been obtained through factor analysis, which are assurance and empathy, reliability and responsiveness, accessibility and tangibles. The data collected from a sample of 150 bank customers in Slovenia. Multiple regression analysis was used to predict customer satisfaction. The variables were entered into the model using the Stepwise method. The results shown all five variables used in the model are statistically significant in predicting customer satisfaction. The relationship of five variables has positive relationship with customer satisfaction. Assurance and empathy was found to be the most significant in predicting customer satisfaction. The conceptual framework has been established from this study in figure 2.3.

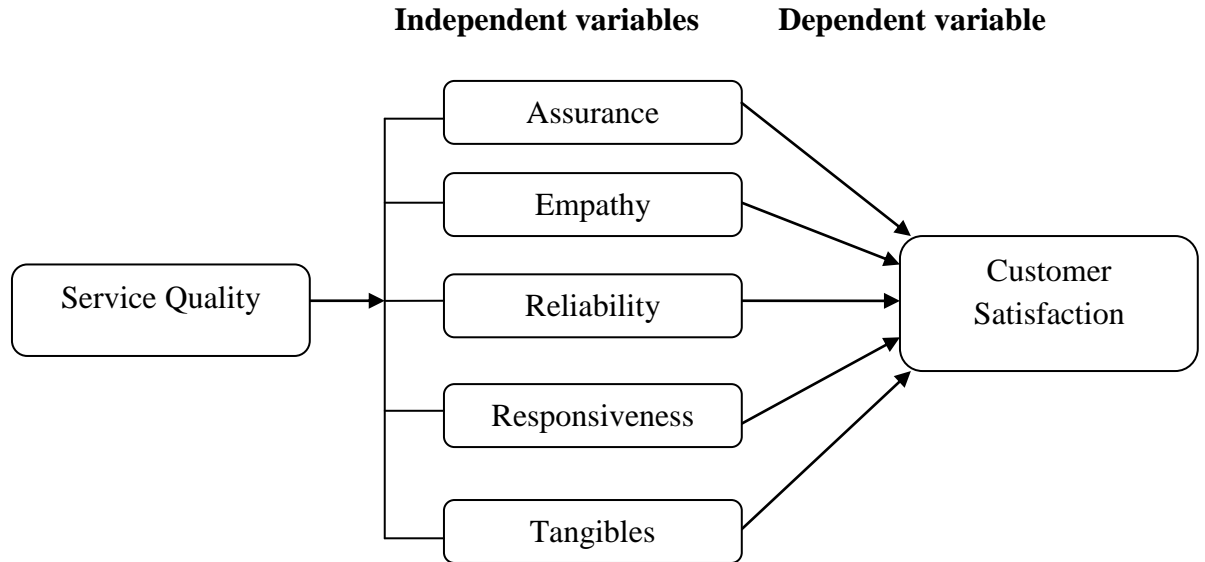
Figure 2.3: Conceptual Framework of Culiberg (2010)



Source: Culiberg, B. (2010). Identifying service quality dimensions as antecedents to customer satisfaction in retail banking. *Economic and Business Review*, 12(3), 151-166.

2.3 Proposed Theoretical / Conceptual framework

Figure 2.4: Research framework for independent and dependent variables



Source: Developed from Research

2.4 Hypothesis Development

This chapter aims to find out the relative significance effect of service quality dimensions on customer satisfaction. From our research, we attempt to carry out a few variables and thereby conduct experiment to determine whether the variables selected will influence the customer satisfaction. Theories and existing evidence are discussed as following in order to establish the determinants of customer satisfaction in the sample.

1. Determine the relationship between assurance and customer satisfaction in banking industry.

H0: There is no relationship between assurance and customer satisfaction

H1: There is a relationship between assurance and customer satisfaction.

Assurance is a crucial dimension in the services quality, which indicates that the higher assurance will lead to the higher services quality and tend to increase in customer satisfaction. Previous researcher examined the relationship between assurance and customer satisfaction. Assurance is an important dimension in service based industries (Chowdhary & Prakash, 2007). According to Arasli et al. (2005); Shlash Mohammad and Moham mad Alhamadani (2011); Lo et al. (2010) found that is statistically significant and have association with customer satisfaction. Siddiqi (2011) and Munusamy et al. (2010) found that assurance and customer satisfaction are positively correlated. Throughout this study, we expected there is a positive relationship between these two variables at the end of our research.

2. Determine the relationship between empathy and customer satisfaction in banking industry.

H0: There is no relationship between empathy and customer satisfaction.

H1: There is a relationship between empathy and customer satisfaction.

Empathy is the element that determines the service quality. Higher empathy can lead the higher service quality and increase customer satisfaction. Few research studies regarding relationship between empathy and customer satisfaction are the following. Rehman (2012), Amin and Isa (2008) and Karapte et al (2005) found that empathy is statistically significant and associated with customer satisfaction. Ladhari et al (2011), Yavas et al. (2004) and Arasli et al (2005) found that the result shows a positive relationship between empathy and customer satisfaction. Therefore, we expected there is a positive relationship between these two variables at the end of our research.

3. Determine the relationship between reliability and customer satisfaction in banking industry.

H0: There is no relationship between reliability and customer satisfaction.

H1: There is a relationship between reliability and customer satisfaction.

Reliability is a crucial dimension in the services quality, which indicates that the higher reliability will lead to the higher services quality and tend to increase the customer satisfaction. Studies result regarding the relationship between reliability and customer satisfaction are shown in following. Refer to Deng, Lua, Kwok, & Zhang(2010), Arasli et al. (2005), Dong and Jeong (2007) state that reliability dimension has the significant effect on overall bank customer satisfaction. According to Chakravarty et al. (2004), Arasli et al. (2005), are found there is reliability has a positive relationship to the overall bank customer satisfaction. Therefore, we expected there is a positive relationship between these two variables at the end of our research.

4. Determine the relationship between responsiveness and customer satisfaction in banking industry.

H0: There is no relationship between responsiveness and customer satisfaction.

H1: There is a relationship between responsiveness and customer satisfaction.

Responsiveness is essential in determine the service quality, which higher responsiveness relatively achieve the higher service quality and tends to higher customer satisfaction. Studies result regarding relationship between responsiveness and customer satisfaction are the following. Bitner *et al.* (1990); Johnston (1995); Ladhari et al. (2011); Rehman (2012) found that responsiveness is statistically significant and have association with customer satisfaction. Yavas et al. (2004) and Owusu-Frimpong and Nwankwo (2012) found that the result shows a positive relationship between responsiveness and customer satisfaction. Throughout this study, we expected there is a positive relationship between these two variables at the end of our research.

5. Determine the relationship between tangibles and customer satisfaction in banking industry.

H0: There is no relationship between tangibles and customer satisfaction.

H1: There is a relationship between tangibles and customer satisfaction.

Tangible is one of the core element in determining the quality of service, in which an improvement in tangible aspect will impress customer and hence resulting in higher customer satisfaction level. Various research findings regarding relationship between tangible and customer satisfaction is shown in following. Barbara et al. (2010) ; Culiberg (2010) Rehman (2012) ; Yavas et al. (1997); Yavas et al. (2004) found that tangible is statistically significant and closely associated with customer satisfaction. Therefore, throughout this study, we expected there is a positive relationship between tangible and customer satisfaction at the end of our research.

2.5 Conclusion

In conclusion, this chapter discussed the literature of previous researches, including the definition and importance of five dimensions in service quality as well as the relationships of the independent variables and dependent variables. This chapter also reviewed the relevant theoretical models, which are SERVQUAL Model, CARTER Model and SERVPERF Model. Lastly, in order to identify the elements that can influence on customer satisfaction, the conceptual framework and the hypothesis has been developed and will be tested in the next chapter.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter will carry out the outline of the research methodology according to the research design, data collection methods, sampling design, operational definitions of constructs, measurement scales, and methods of data analysis. We illustrate how the research will be proceeded in order to attain the aim of this entire research. The main purpose of this research is to find out whether or not there is significant relationship between the dimensions of service quality and bank customer satisfaction.

3.1 Research design

In our research paper, we used quantitative methodology to conduct. According to Brigham (2010), quantitative research system is a tool that uses to analysis the issue from the research. Besides that, Ting and Ping (2009) have stated that develop a quantitative research data can help us to identify the interaction between dependent variable and independent variables. There are other researchers, Mangan, Lalwani and Gardner (2004) said that, the quantitative research technique can help to develop a logistic research efficiently because it is essential to point out the research problem. In this quantitative investigational research study, we will exercise a prearranged questionnaire to gather data information from the respondent. This quantitative research method is used to express the dependent and independent variable, to study the interaction among those variables, and to find out cause-and-effect connection between dependent and independent variables.

3.2 Data Collection Method

For data collection method, primary and secondary data are used to gather data for the purpose to complete the research project.

3.2.1 Primary Data

Primary data collection method widely used in the research. Primary data is original data which not been published before and the researcher can obtained the originate source directly. Questionnaire is used to directly collect information from sample respondent. Synodinos (2003) stated that survey used information gather from sample respondent to generalize parent population.

The main purpose of this research project is to identify significant relationship between bank service quality and customer satisfaction in Malaysia. Sample respondent may answer the questionnaires based on their experience with the bank. After collect the 380 questionnaires, it will proceed to chapter 4 and conduct result based on the information collected.

3.3 Sampling Design

3.3.1 Target Population

In this research, the target population is depositor in Malaysia. Depositor who makes several types of deposits included checking accounts, savings accounts, and time deposits. According to the latest data retrieved from work bank (n.d.), as shown in Appendix 3.1, which indicated there are

1.458 thousands of depositors with commercial banks as per 1,000 adults in 2009.

Based on Bank Negara Malaysia (2008), there are 55 million deposit accounts in banking system within a population of 27 million which indicated high percentage of bank's depositor in Malaysia. A survey was carry out in 2003 with a sample size of 5000 which indicated 97% of them have bank account. Therefore, the target population is any depositor of commercial banks in Malaysia.

3.3.2 Sampling Frame and Sampling Location

According to the sample size table of Krejcie and Morgan (1970) as shown in Appendix 3.2, the sample size should be approximately 380 for the population size above 100,000. And hence 450 set of questionnaires will be distributed in order to make sure that at least 380 set of questionnaires will be collected. The sampling frame of this research is all depositor of commercial bank in Malaysia.

Commercial banks included resident banks, resident nonfinancial corporation, whether it is public or private. Sampling Location will focus on Penang area. Penang remains significant in contribution of Malaysia economic since the time when the oldest bank in Malaysia, Standard Chartered Bank first opened in beach street, Penang (Aziz, 2012). In 1875 year, Penang state has been recognized as the centre of banking of Malaysia. Most of the banks remain their local headquarter in Beach Street and currently many financial institution having large branches in Penang. Therefore, respondent of Penang is suitable to represent the population of Malaysia in banking industry.

3.3.3 Sampling Elements

In our research, questionnaires distributed to different level of respondents such as students, professionals, staff of bank and other respondents with different level of income. This is because of our research will explore to the relationship between five core dimensions which is tangible, empathy, responsiveness, assurance and reliability serve as the core factor to affect the customers' satisfaction. At the same time, respondents which don't have relationship with bank may not be suitable to answer our questionnaire.

3.3.4 Sampling Technique

In our research, non-sampling technique was chosen. This is because the sampling frame covers a huge amount of suitable respondents. This study is using convenience sampling. Convenience sampling is one of the non-sampling techniques where subjects are selected because of their ease of access and closeness to the researcher. In this research only choose the people who have the relationship with the banking industry and questionnaire will only distribute to them. This technique is choosing because it is the fastest and easiest way to obtain the result for our research.

3.3.5 Sampling Size

Sample consisted of different income level of people who have relationship to banking industry. 450 questionnaires are distributed to public for the reason to avoid some of the questionnaire may not valid to use such as respondent did not send back the questionnaire or not fully answer the question in the questionnaire. Finally, we only collect back

400 questionnaires used. This is because some of the respondents are not answering the questionnaire in complete order and some of them have just provided moderate answer which may not give a reliable response to the researcher.

3.4 Research Instrument

We have adopted the sample of questionnaires from empirical studies construct by Rahman, Abdullah, and Dr. Rahman (2011). This is because of our research is relatively associated to their point of view, to investigate customers' perception about banking service.

We have our questionnaire constructed in the printed form in which ease and convenient for distribution to our respondent. We will divide the questionnaire into three parts. The demographic and personal information about the respondent such as gender, age, nationality, religion, etc will be gathered and arranged in Section A. In the Section B, the questions is been designed in which related to each of our independent variables and while Section C is established to study their overall satisfaction level based on banking services they perceived.

30 respondents are randomly selected in test on the reliability through pilot test before an actual testing on the relationship between the independent variables and dependent variable being carried out. At the part of beginning, questions were outlined and set. The necessary amendments and corrections will be done on particular questions in order to improve the respondent's understanding. Then the questionnaires are distributed to the selected respondents for the pilot test.

Respondents are required to pay adequate attention to all of the questions and express their ideas positively towards each item. We will also provide a clearly explanation and comprehension on any doubt from respondents trying to assist them in answering the questions.

Until the 30 set of questionnaires has been completed, we will collect back and gather all the data orderly. All the data will be keyed in and put under processing with Statistical Package for Social Sciences (SPSS) version 16.0. As long the consistency and reliability of the questions being verified, we will proceed to carry out an actual test on the relationship between the independent variables and dependent variable.

3.5 Constructs Measurement

The researchers adapted the research questionnaire where the service quality attributes consists of five core components: Assurance, Empathy, Reliability, Responsiveness, and Tangibility.

The primary scale of measurement used in designing the questionnaire includes nominal, ordinal and interval scale. In Section A, nominal scale is applied to questions such as gender, marital status, age, qualification, and monthly income. In Section B and Section C, in order to ascertain the perceptions of service quality, Likert's 5-point scale has been used for its suitability to estimate the range and variations in the perceptions. The scale 1 - 5 represents '5' as strongly agree and '1' as strongly disagree. Likert's 5-point scale have been used by Rahaman et al. (2011); Jain, Dr. Gupta, & Jain (2010) in their questionnaire assessment.

3.6 Data processing

Questionnaire is a list of a research or survey questions asked to respondents, and it is designed to extract specific information that useful to the researchers. There are few steps must be follow in the process in order to produce a perfect questionnaire. Firstly, we have adopted the questionnaire from other researcher. Then we will determine the question should be included in the questionnaire. After the questionnaires have been produced, the questionnaires will distribute to

the respondents. Then we will collect back all the questionnaire form respondents and conduct some processes to avoid mistake occur.

3.6.1 Checking

Questionnaire checking is must be done often while the research is in progress. Check all the questionnaires to ensure that there are not involve any jargons or wording that is difficult to understand to the respondents and make sure there is no grammar mistake. It is important for the respondents to understand the questionnaire in order to provide accurate information for the research. Questionnaire checking should start when the first set of questionnaire have been collect back. Therefore the researcher can avoid any error and problem exists before many surveys have been completed.

3.6.2 Editing

Editing is a process to ensure the questionnaire is free from any error in order to increase the accuracy and precision. The researchers will edit the data illegal codes, omission and inconsistent responses according to the major responses. Editing questionnaire is to enable the researches can proceed to the further step without any disruption on the data collection.

3.6.3 Coding

Coding is an assignment of numerical scores or classifying symbols to previously edited data. In some of the research, they use the Statistical Package for Social Science (SPSS) software. SPSS is the most widely use for analysis and enables the researchers to attain and evaluate quantitative

data very quickly. Besides, an editing activity will help in coding; several editing procedures are designed specifically to simplify the coding process. Therefore, an efficient editing will makes the coding job become easier.

3.6.4 Transcribing

After all the data is being coded, it will ready be transcribed into the computer. Transcribing data involves transferring the coded data from the questionnaires or coding sheets directly into computer.

3.6.5 Cleaning

While the data has been checked and edited during the initial stage of the data preparation process, data cleaning is the final procedure that the data has to go through before it is finally considered “ready” for analysis. The checks in this phase are very extensive since they are done with the help of computer.

3.7 Data Analysis

Statistical Package for Social Sciences (SPSS) is used in analyzing the data. The major statistical techniques applied include descriptive analysis, scale measurement and inferential analysis.

3.7.1 Descriptive Analysis

Descriptive analysis is a method of summarizing a given data set, which can either be a representation of the entire population or a sample. Some

of the common descriptive analyses include measure of central tendency, measure of dispersion, histogram, scatter plot and etc. The data from the Section A in questionnaire is analyzed by using descriptive analysis. The questions constructed in Section A of the questionnaire which describe the characteristics of sample are often distributed. This set of data is organized by summarizing the number of times a particular value of a variable occurs.

3.7.2 Scale Measurement

3.7.2.1 Normality Analysis

Normality analysis is used to find out whether a model formed from a data set follow a normal distribution or not, or to calculate degree of which an underlying random variable is to be normally distributed. The assumption of normality is a prerequisite for inferential analysis (Coakes, Steed & Ong, 2010). Skewness and kurtosis are used to determine normality of model through normality test in this research. According to Coakes et al., (2010), skewness and kurtosis refer to the shape of the distribution. The closer the skewness and kurtosis to zero value, the more exact normal the observed distribution. Positive value for skewness and kurtosis indicate that a distribution is positively skewed and more peaked than a normal distribution. In contrast, negative value for skewness and kurtosis indicate the distribution is negatively skewed and flatter. Skewness and kurtosis of all variables must not go beyond the absolute value of ± 1 in order to achieve the assumptions of multivariate model (Sit, Ooi, Lin, & Chong, 2009).

3.7.2.2 Reliability Analysis

Reliability analysis is to test the degree to which measurement is free from errors and therefore yields consistent results. Cronbach's Alpha is reliability coefficient that indicates how well the items of the average intercorrelations among the items measuring the concept. Table 3.1 shows that the relationships between alpha coefficients range and strength of association.

All the questions that measure the independent and dependent variable in Section B and Section C are required to run the reliability test in order to examine the consistency and reliability. According to Zikmund (2003) and Sekaran (2003), the closer the Cronbach's alpha is to 1, the higher the internal consistency reliability. The alpha value which greater than 0.7 is considered good and acceptable in the rules of thumb for Cronbach's Alpha coefficient value, as shown in Appendix 3.3, and thus the questionnaire formed is considered as reliable.

3.7.3 Inferential Analysis

3.7.3.1 Pearson Correlation Analysis

Inferential analysis is used to simplify the results obtained from a random (probability) sample back to the population from which the sample was drawn. The Pearson Correlation Analysis measures the relative strength of the linear relationship between two variables and it is typically denoted by r . In this research, this analysis is aimed to explore the relationship between each services quality dimension and customer satisfaction in banking industry. Researcher determined the strength of relationship among dependent variables and independent variables according to Hair, Money, Samouel, Page, (2007). The coefficient range

table, as shown in Appendix 3.4 shows that the relationships between coefficients range and strength of relationship between two variables.

3.7.3.2 Multicollinearity Analysis

Multicollinearity analysis is aimed to measure the degree to which two or more independent variables are correlated with each other (Saunders, Lewis, & Thornhill, 2009). Hair, Anderson, Tatham, and Blank (1998) stated that the intercorrelations among the independent variables should not below 0.1 and above 1, or else the multicollinearity problem is existed and one of the highly correlated variables have to be removed.

3.7.3.3 Multiple Linear Regression Analysis

Multiple linear regression analysis is a method which uses more than one independent variable to explain variance in a dependent variable. The purpose of this analysis is to examine the dimensions of service quality towards the customer satisfaction in banking industry and to identify which of the dimension of service quality causes the most significant effect toward customer satisfaction in banking industry.

Through this analysis, R square will be found out to know that how many percentage of the variation in dependant variable (customer satisfaction) is explained by independent variables (assurance, empathy, reliability, responsiveness and tangible). In ANOVA test, F ratio show us whether the regression equation as computed is statistically significant. The t-ratio will also show us respectively whether there is a linear relationship between independent variables and dependent variable. F ratio and t-ratio is significant if their significant level is lower than the alpha level (0.01 or 0.05). The dimensions of service quality (independent variables) will be rank according to their significant level to customer satisfaction

(dependant variable) by comparing their coefficient. Multiple Regression equation will also be formed after this analysis conducted.

3.8 Conclusion

The overview of research methodology has been discussed in this chapter. By going through the methods discussed above, all dimensions of service quality variables have been considered theoretically and empirically to obtain a clear picture in this customer satisfaction study. In the next chapter, the statistical results will be shown and to prove that whether it is consistent with the hypothesis constructed as mentioned in the earlier chapter.

CHAPTER 4: RESEARCH RESULT

4.0 Introduction

The main objective of this chapter is to analyse and interpret the data collected from the questionnaire. The data obtained from the questionnaire that distributed to respondents will be analysed by using Statistical Package of the Social Sciences (SPSS). The result will be evaluated based on the hypothesis analysis that was formed in the previous chapter. In this chapter, we will interpret the result from descriptive analysis, scale measurement, and inferential analysis. The result will be presented in graphical displays such as table and bar chart in order to easier understand the result of the analysis and the statistical figures since it organizing, presenting and summarizing.

4.1 Pilot test

Based on the analysis of pilot study which runs on 30 questionnaires, the result has presented in tables following.

4.1.1 Normality Analysis

Table 4.1: Normality Analysis for Pilot Test

Skewness	Kurtosis
-0.716	0.214

Source: Developed from research

This normality analysis result was based on the 30 set of questionnaires which were distributed out to related parties. Table 4.1 shows the normality analysis for dependent variable, the result for skewness and kurtosis was -0.716 and 0.214 respectively. Since both the results were within ± 1 , it can be concluded that the data was normally distributed.

4.1.2 Reliability Analysis

Table 4.2: Reliability Analysis for Pilot Test

	No of item	Cronbach's Alpha
Dependent variable:		
Customer satisfaction	5	0.817
Independent variable:		
Assurance	5	0.880
Empathy	5	0.917
Reliability	5	0.947
Responsiveness	5	0.938
Tangible	5	0.939

Source: Developed for the research

This reliability analysis result was based on the 30 set of questionnaires which were distributed out to related parties. Table 4.2 has shown the reliability alpha coefficient values for the six variables. As all the Cronbach's alpha for dependent and independent variable has shown in table 4.2 are greater than benchmark of 0.7, which indicates good and acceptable in the rules of thumb (Zikmund, 2003), therefore the questionnaire formed is reliable.

4.2 Descriptive Analysis

400 questionnaires are collected and enter into Statistical Package of Social Sciences (SPSS) for the purpose to carry out the descriptive analysis. In the following, tables and chart are used to interpret the data.

4.2.1 Respondent Demographic Profile

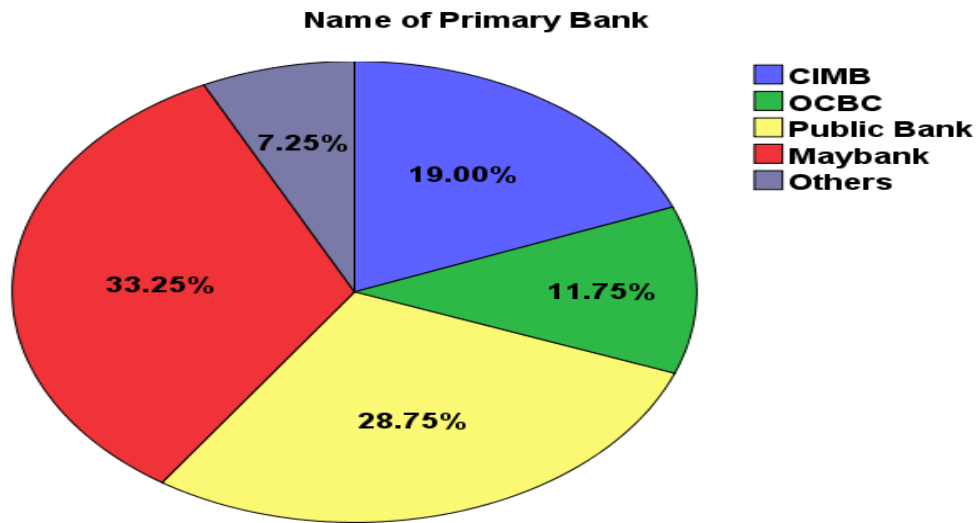
4.2.1.1 Name of Primary Bank

Table 4.3: Respondents' Primary bank

		Name of primary bank			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	CIMB	76	19.0	19.0	19.0
	OCBC	47	11.8	11.8	30.8
	Public Bank	115	28.8	28.8	59.5
	Maybank	133	33.2	33.2	92.8
	Others	29	7.2	7.2	100.0
	Total	400	100.0	100.0	

Source: Developed for the research

Figure 4.1: Respondents' Primary Bank



Source: Developed for the research

Table 4.3 shown the frequency and percentage of respondents based on their preference in primary bank. In Figure 4.1, bar chart is used to interpret the data. As shown in Table 4.3 and Figure 4.1, most of respondents selected Maybank as their primary bank which has highest percentage of 33.2% and the frequency of 133 out of 400 respondents. The second highest is Public Bank which has 28.80% and the frequency of 115 out of 400 respondents. There are 19% and the frequency of 76 out of 400 respondents selected CIMB Bank. It followed by OCBC bank which has 11.80% and the frequency of 47 out of 400 respondents selected OCBC as their primary bank. The lowest percentage is 7.2% which is 29 out of 400 respondents selected other banks as their primary bank.

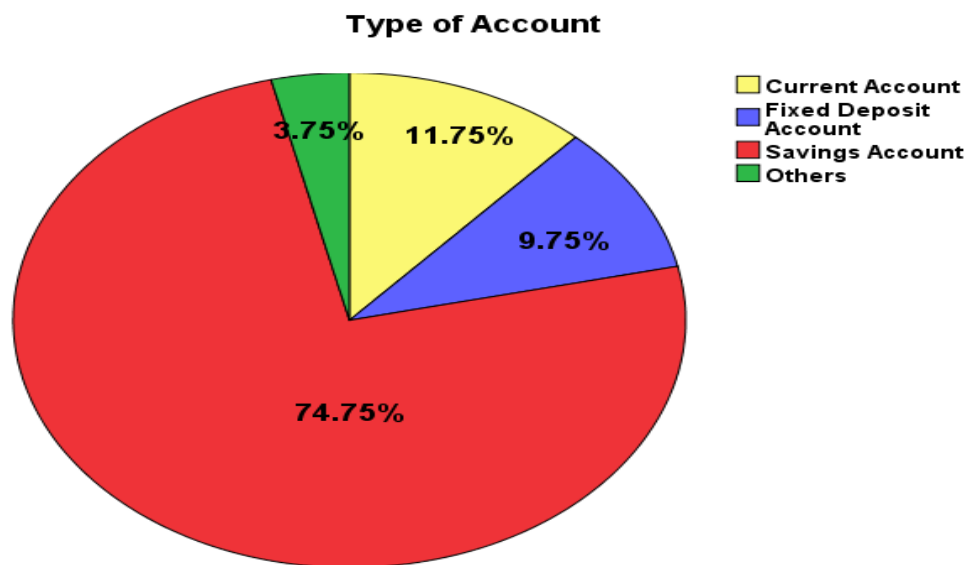
4.2.1.2 Type of Account

Table 4.4 Respondents' Type of Account

		Type of Account			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Current Account	47	11.8	11.8	11.8
	Fixed Deposit Account	39	9.8	9.8	21.5
	Savings Account	299	74.8	74.8	96.2
	Others	15	3.8	3.8	100.0
	Total	400	100.0	100.0	

Source: Developed for the research

Figure 4.2: Respondents' Type of Account



Source: Developed for the research

Table 4.4 show the frequency and percentage based on respondent's type of account which included current account, fixed deposit account and savings account. In Figure 4.2, pie chart is used for data interpretation.

Majority of the respondents, 74.8% (299 respondents) having savings account. It follows by 11.8% (47 respondents) having current account and 9.8% (39 respondents) having fixed deposit account. The lowest percentage is 3.8% (15 respondents) having other types of account.

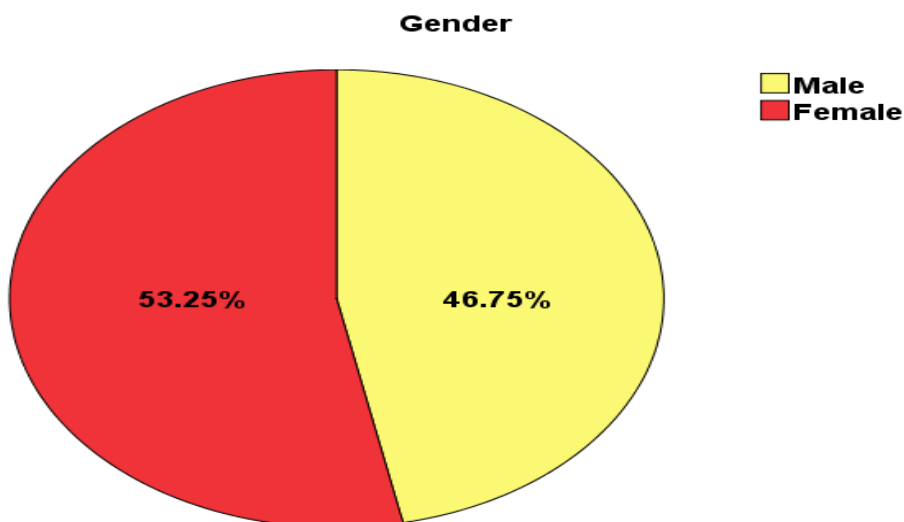
4.2.1.3 Gender

Table 4.5 Respondents' Gender

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	187	46.8	46.8	46.8
	Female	213	53.2	53.2	100.0
Total		400	100.0	100.0	

Source: Developed for the research

Figure 4.3: Respondents' Gender



Source: Developed for the research

Table 4.5 show the percentage and frequency of respondents based on gender. In Figure 4.3, pie chart is used to interpret the data. There are 400 respondents in the survey. As shown in table 4.3 and figure 4.3, 53.2% (213 respondents) of them are female respondents and 46.8% (187 respondents) are male respondents.

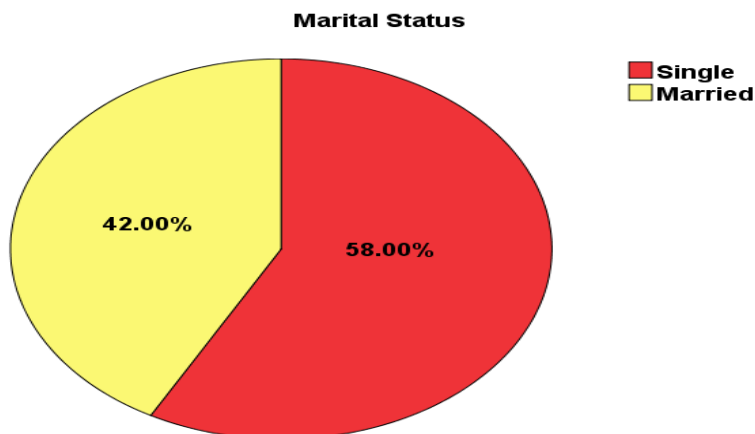
4.2.1.4 Marital Status

Table 4.6 Respondents' Marital Status

		Marital Status			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	232	58.0	58.0	58.0
	Married	168	42.0	42.0	100.0
	Total	400	100.0	100.0	

Source: Developed for the research

Figure 4.4 Marital Status



Source: Developed for the research

Table 4.6 show the frequency and percentage for respondents' marital status. In Figure 4.4, bar chart is used to show the clear picture of the data. As shown in above, the highest percentage which has 58% and the frequency of 232 out of 400 respondents is single. However, 42% and the frequency of 168 out of 400 respondents are married.

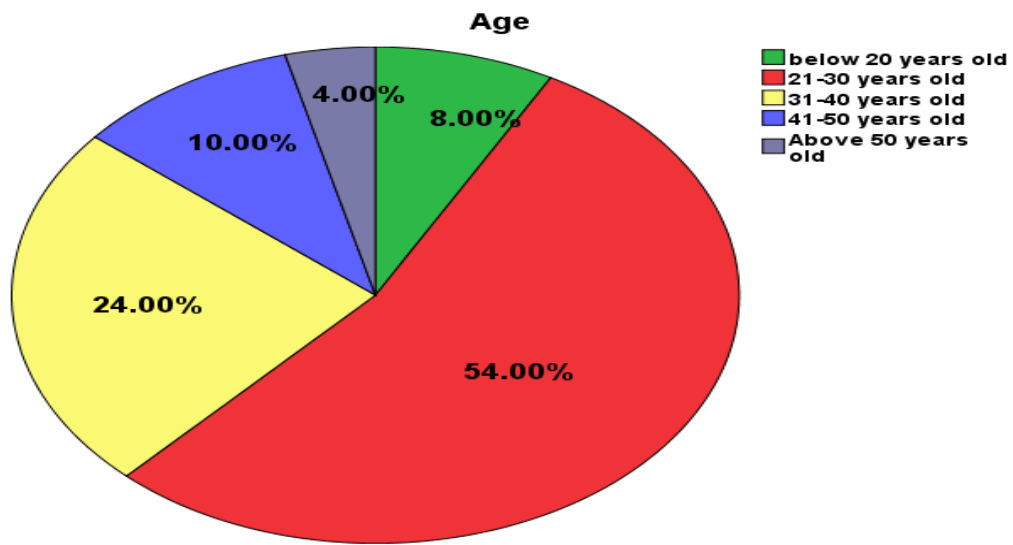
4.2.1.5 Age

Table 4.7 Respondents' Age

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below 20 years old	32	8.0	8.0	8.0
	21-30 years old	216	54.0	54.0	62.0
	31-40 years old	96	24.0	24.0	86.0
	41-50 years old	40	10.0	10.0	96.0
	Above 50 years old	16	4.0	4.0	100.0
	Total	400	100.0	100.0	

Source: Developed for research

Figure 4.5 Respondents' Age



Source: Developed from Research

Table 4.7 show the frequency and percentage of respondents based on age. In Figure 4.5, bar chart is used to interpret data. Based on the data collected, majority of them fall on age group between 21-30 years old which amounted to 54% (216 respondents).

The second highest is age group between 31-40 years old which amounted to 24% (96 respondents). The third highest is age group between 41-50 years old which amounted to 10% (40 respondents). It follows by age group below 20 years old which amounted to 8% (32 respondents). The lowest percentage is age group above 50 years old which amounted to 4% (16 respondents).

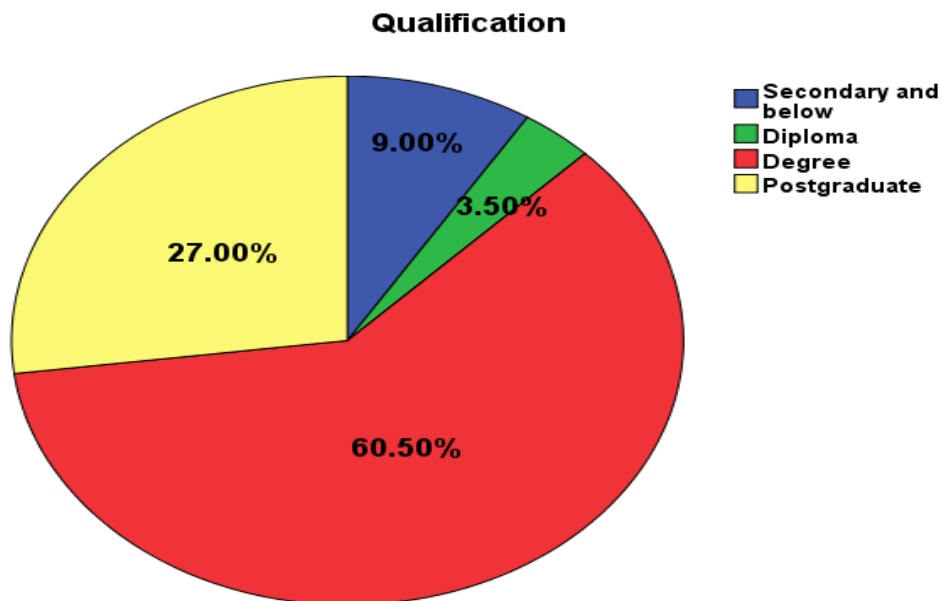
4.2.1.6 Qualification

Table 4.8 Respondents' Qualification

		Qualification			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Secondary and below	36	9.0	9.0	9.0
	Diploma	14	3.5	3.5	12.5
	Degree	242	60.5	60.5	73.0
	Postgraduate	108	27.0	27.0	100.0
	Total	400	100.0	100.0	

Source: Developed from research

Figure 4.6: Respondents' Qualification



Source: Developed for the research

Table 4.8 shown the percentage and frequency of respondent based on their qualification. In Figure 4.6, bar chart is used to demonstrate data. About 60.5% (242 respondents) of respondents is degree holder which

occupied the highest percentage among all. It follows by 27% (108 respondents) of them are postgraduate. The third highest percentage is qualified for secondary and below which has 9% and amounted to 36 respondents. The least percentage is diploma holder which has 3.5% and amounted to 14 respondents.

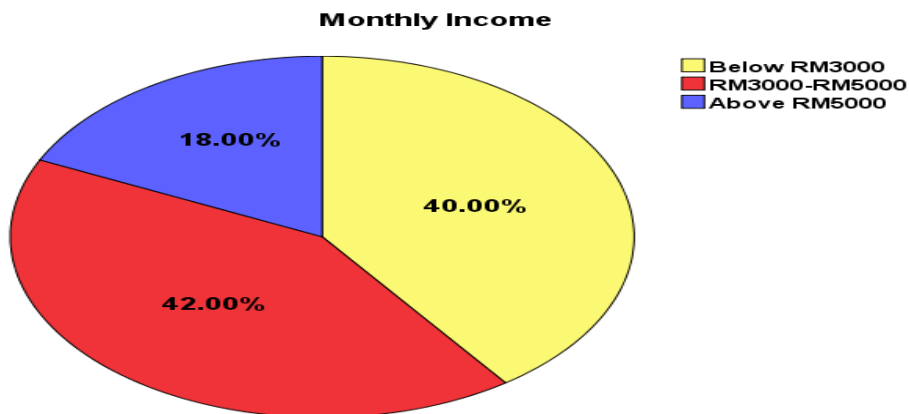
4.2.1.7 Monthly Income

Table 4.9: Respondents' Monthly Income

		Monthly Income			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Below RM3000	160	40.0	40.0	40.0
	RM3000-RM5000	168	42.0	42.0	82.0
	Above RM5000	72	18.0	18.0	100.0
	Total	400	100.0	100.0	

Source: Developed for the research

Figure 4.7: Respondents' Monthly Income



Source: Developed for the research

Table 4.9 shown the frequency and percentage of respondent based on their monthly income. In Figure 4.6, pie chart is used to interpret the data. Based on the finding, monthly income range from RM3000 to RM5000 has the highest percentage which amounted to 42% (168 respondents). The monthly income group below RM3000 ranked second which has 40% and the frequency of 160 out of 400 respondents. The least percentage of respondents falls under monthly income above RM5000 which has 18% and the frequency of 72 out of 400 respondents.

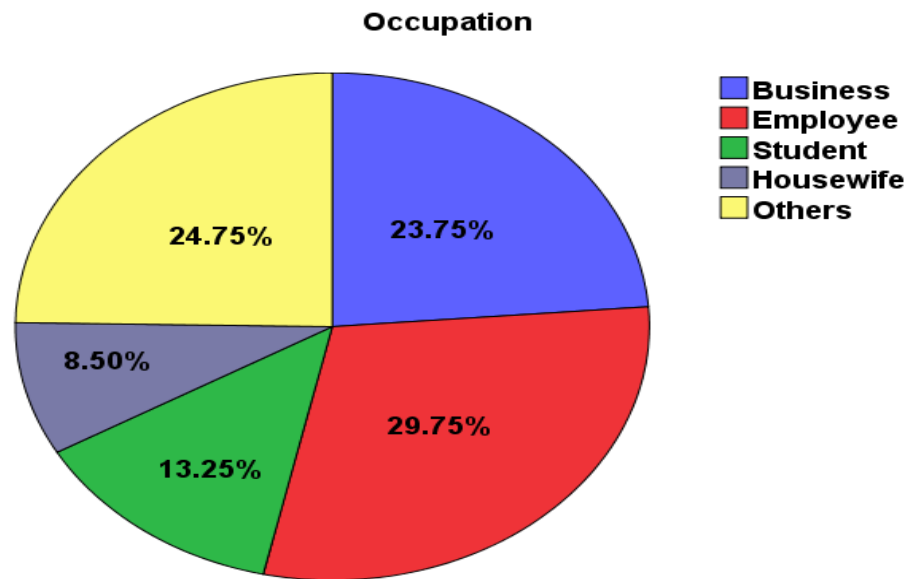
4.2.1.8 Occupation

Table 4.10: Respondents' Occupation

		Occupation			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Business	95	23.8	23.8	23.8
	Employee	119	29.8	29.8	53.5
	Student	53	13.2	13.2	66.8
	Housewife	34	8.5	8.5	75.2
	Others	99	24.8	24.8	100.0
	Total	400	100.0	100.0	

Source: Developed for the research

Figure 4.8: Respondents' Occupation



Source: Developed for the research

Table 4.10 shown the frequency and percentage of respondents based on profession. In Figure 4.8, pie chart is used to demonstrate the data. It can be seen that the highest percentage of respondents which has 29.75% (119 respondents) are employees.

The second rank is about 24.75% or 99 respondents are other occupation. 23.75% and the frequency of 95 out of 400 respondents are profession in business field which are third highest percentage among all. It followed by 13.2% (53 respondents) are student. The respondents who are housewife amounted to 8.5% or 34 respondents.

4.2.2 Central Tendencies Measurement of Constructs

Table 4.11 Assurance Statistic

Statement	N	Mean	Standard Deviation	Variance
Q1. When customers have problems, bank should be compassionate and reassuring.	400	3.38	0.893	0.798
Q2. Customers should feel safe in transactions with bank	400	3.52	0.855	0.732
Q3. Customers can put their trust on employees of the bank	400	3.52	0.873	0.761
Q4. Bank staff should always be polite.	400	3.66	0.864	0.746
Q5. Bank staff should be eager to instil confidence in customers	400	3.53	0.978	0.957

Source: Developed from research

Table 4.11 shows the descriptive statistics of assurance which consists of mean, standard deviation and variance. SPSS is used to summaries the statistics data of each question of assurance. “Bank staff should always be polite” has the highest mean which is 3.66. The second highest mean is “Bank staff should be eager to instil confidence in customers” which has a mean of 3.53. “Customers should feel safe in transaction with bank” and “Customers can put their trust on employees of the bank” have same mean value which is 3.52 and ranked third. The lowest mean is “When customers have problems, bank should be compassionate and reassuring” which has the mean of 3.38. Based on the finding, question 5 has the highest standard deviation and variance which is 0.978 and 0.957. Question 1 has second highest standard deviation of 0.897 and variance of 0.798. This followed by question 3 which has standard deviation of 0.873

and variance of 0.761. Question 4 ranked fourth which has standard deviation of 0.864 and variance of 0.746. Question 2 is classified as the lowest standard deviation and variance which is 0.855 and 0.732.

Table 4.12: Assurance Frequency

Statement	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Q1. When customers have problems, bank should be compassionate and reassuring.	2.00	12.00	41.80	34.20	10.00
Q2. Customers should feel safe in transactions with bank	2.00	8.00	36.20	43.80	10.00
Q3. Customers can put their trust on employees of the bank	1.80	8.20	38.00	40.00	12.00
Q4. Bank staff should always be polite.	2.00	8.00	24.00	54.00	12.00
Q5. Bank staff should be eager to in still confidence in customers	2.00	14.00	28.50	40.20	15.20

Source: Developed from research

Table 4.12 demonstrated the frequency percentage of respondents satisfaction level toward the questions which covered strongly disagree, disagree, neutral, agree and strongly agree. Based on the survey, there are 2% of respondents choose strongly disagreed in question 1. This followed by 12% choose disagreed in the question. 41.8% choose neutral while 34.2% choose agreed. Lastly, 10% of respondents are strongly agreed toward the question. In question 2, 2% of respondents choose strongly disagreed while 8% choose disagreed. Respondents who choose neutral stand for 36.2%. Majority of respondents choose agreed which is 43.8% and only 10% choose strongly agreed in the questions. In question 3, there are 1.8% of respondents choose strongly disagreed. This followed by 8.2%

choose disagreed in the question. 38% of respondents choose neutral while 40% choose agreed. Lastly, 12% of respondents are strongly agreed toward the question. In question 4, 2% of respondents choose strongly disagreed while 8% choose disagreed. Respondents who choose neutral stand for 24%. Majority of respondents choose agreed which is 54% and only 12% of respondents are strongly agreed toward the questions. In question 5, respondents who choose strongly disagreed stand for 2%. 14% of respondents choose disagreed. This followed by 28.5% of respondents choose neutral while 40.2% choose agree. Lastly, 15.2% of respondents are strongly agreed toward the questions.

Table 4.13: Empathy Statistic

Statement	N	Mean	Standard Deviation	Variance
Q1. Bank staff served their customer with caring.	400	3.45	0.845	0.715
Q2. Banker should give individual attention to customers.	400	3.42	0.923	0.851
Q3. Bank should have operating hours convenient to all their customers.	400	3.39	0.809	0.655
Q4. Bank staff should try to recognize what customers' needs are.	400	3.45	0.914	0.835
Q5. Bank should provide the product that best suit to customers.	400	3.33	0.865	0.748

Source: Developed from research

Table 4.13 shows the descriptive statistics of empathy which consists of mean, standard deviation and variance. SPSS is used to summaries the statistics data of each question of empathy. “Bank staff served their customer with caring” and “Bank staff should try to recognize what

customers' needs are” ranked the first as both have mean value of 3.45. The second highest mean is “Banker should give individual attention to customers.” which has a mean of 3.42. “Bank should have operating hours convenient to all their customers” is the third highest mean which has mean value of 3.39. The lowest mean is “Bank should provide the product that best suit to customers” which has the mean of 3.33. Based on the finding, question 2 has the highest standard deviation and variance which is 0.923 and 0.851. Question 4 has second highest standard deviation of 0.914 and variance of 0.835. Question 5 ranked third which has standard deviation of 0.865 and variance of 0.748. This followed by Question 1 which has standard deviation of 0.845 and variance of 0.715. Question 3 is classified as the lowest standard deviation and variance which is 0.809 and 0.655.

Table 4.14: Empathy Frequency

Statement	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Q1. Bank staff served their customer with caring.	1.80	4.80	53.20	27.00	13.20
Q2. Banker should give individual attention to customers.	0.50	18.00	31.00	39.80	10.80
Q3. Bank should have operating hours convenient to all their customers.	0.20	13.80	38.80	41.00	6.20
Q4. Bank staff should try to recognize what customers' needs are.	0.80	11.00	46.50	25.80	16.00
Q5. Bank should provide the product that best suit to customers.	1.80	13.00	43.80	33.50	8.00

Source: Developed from research

Table 4.14 demonstrated the frequency percentage of respondents satisfaction level toward the questions which covered strongly disagree, disagree, neutral, agree and strongly agree. Based on the survey, there are 1.8% of respondents choose strongly disagreed in question 1. This followed by 4.8% choose disagreed in the question. 53.2% choose neutral while 27% choose agreed. Lastly, 13.2% of respondents are strongly agreed toward the question. In question 2, 0.5% of respondents choose strongly disagreed while 18% choose disagreed. Respondents who choose neutral stand for 31%. Majority of respondents choose agreed which is 39.8% and only 10.8% choose strongly agreed in the questions. In question 3, there are 0.2% of respondents chooses strongly disagreed. This followed by 13.8% choose disagreed in the question. 38% of respondents choose neutral while 41% choose agreed. Lastly, 6.2% of respondents are strongly agreed toward the question. In question 4, 0.8% of respondents choose strongly disagreed while 11% choose disagreed. Respondents who choose neutral stand for 46.5%. Majority of respondents choose agreed which is 25.8% and only 16% of respondents are strongly agreed toward the questions. In question 5, respondents who choose strongly disagreed stand for 1.8%. 13% of respondents choose disagreed. This followed by 43.8% of respondents choose neutral while 33.5% choose agree. Lastly, 8% of respondents are strongly agreed toward the questions.

Table 4.15: Reliability Statistic

Statement	N	Mean	Standard Deviation	Variance
Q1. Bank should be dependable.	400	3.48	0.831	0.691
Q2. Bank promise to do something by a certain time, they should do	400	3.40	0.896	0.802
Q3. Bank should provide	400	3.40	0.939	0.882

their services at the time they promise to do so.				
Q4. Bank should keep their records accurately.	400	3.40	0.826	0.682
Q5. Bank should inform the time when service will be performed.	400	3.38	0.915	0.838

Source: Developed from research

Table 4.15 shows the descriptive statistics of reliability which consists of mean, standard deviation and variance. SPSS is used to summaries the statistics data of each question of reliability. “Bank should be dependable” has the highest mean which is 3.48. “Bank promise to do something by a certain time, they should do”, “Bank should provide their services at the time they promise to do so” and “Bank should keep their records accurately” have same mean value which is 3.40 and ranked second. The lowest mean is “Bank should inform the time when service will be performed” which has the mean of 3.38. Based on the finding, question 3 has the highest standard deviation and variance which is 0.939 and 0.882. Question 5 has second highest standard deviation of 0.915 and variance of 0.838. This followed by question 2 which has standard deviation of 0.896 and variance of 0.802. Question 1 ranked forth which has standard deviation of 0.831 and variance of 0.691. Question 4 is classified as the lowest standard deviation and variance which is 0.826 and 0.682.

Table 4.16: Reliability Frequency

Statement	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Q1. Bank should be dependable.	0	8.00	50.00	28.00	14.00
Q2. Bank promise to do something by a certain time, they should do	0	16.00	40.00	32.00	12.00
Q3. Bank should provide their services at the time they promise to do so.	0	16.00	44.00	24.00	16.00
Q4. Bank should keep their records accurately.	0	10.00	52.00	26.00	12.00
Q5. Bank should inform the time when service will be performed.	2.00	12.00	44.00	30.00	12.00

Source: Developed from research

Table 4.16 demonstrated the frequency percentage of respondents satisfaction level toward the questions which covered strongly disagree, disagree, neutral, agree and strongly agree. Based on the survey, there are none of the respondents choose strongly disagreed in question 1. This followed by 8% choose disagreed in the question. 50% choose neutral while 28% choose agreed. Lastly, 14% of respondents are strongly agreed toward the question. In question 2, none of the respondents choose strongly disagreed while 16% choose disagreed. Respondents who choose neutral stand for 40%. Majority of respondents choose agreed which is 32% and only 12% choose strongly agreed in the questions. In question 3, none of the respondents choose strongly disagreed. This followed by 16%

choose disagreed in the question. 44% of respondents choose neutral while 24% choose agreed. Lastly, 16% of respondents are strongly agreed toward the question. In question 4, none of the respondents choose strongly disagreed while 10% choose disagreed. Respondents who choose neutral stand for 52%. Majority of respondents choose agreed which is 26% and only 12% of respondents are strongly agreed toward the questions. In question 5, respondents who choose strongly disagreed stand for 2%. 12% of respondents choose disagreed. This followed by 44% of respondents choose neutral while 30% choose agree. Lastly, 12% of respondents are strongly agreed toward the questions.

Table 4.17: Responsiveness Statistic

Statement	N	Mean	Standard Deviation	Variance
Q1. Bank should provide prompt service to the customers.	400	3.36	0.953	0.909
Q2. Employees of bank should always willing to assist customers.	400	3.50	0.701	0.491
Q3. Banker should reply in any query of the customers.	400	3.38	0.661	0.437
Q4. Bank should arrange special care to occasional customers.	400	3.32	0.706	0.499
Q5. Bank should send out the bank statement at the right time.	400	3.24	0.886	0.784

Source: Developed from research

Table 4.17 shows the descriptive statistics of responsiveness which consists of mean, standard deviation and variance. SPSS is used to summaries the statistics data of each question of responsiveness. “Employees of bank should always willing to assist customers” has the highest mean which is 3.50. The second highest mean is “Banker should

reply in any query of the customers” which has a mean of 3.38. “Bank should provide prompt service to the customers” is the third highest mean which has mean value of 3.36. This followed by “Bank should arrange special care to occasional customers” which has the mean of 3.36. The lowest mean is “Bank should send out the bank statement at the right time” which has the mean of 3.24. Based on the finding, question 1 has the highest standard deviation and variance which is 0.953 and 0.909. Question 5 has second highest standard deviation of 0.886 and variance of 0.784. Question 4 ranked third which has standard deviation of 0.706 and variance of 0.499. This followed by Question 2 which has standard deviation of 0.701 and variance of 0.491. Question 3 is classified as the lowest standard deviation and variance which is 0.661 and 0.437.

Table 4.18: Responsiveness Frequency

Statement	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Q1. Bank should provide prompt service to the customers.	2.00	15.80	38.00	32.00	12.00
Q2. Employees of bank should always willing to assist customers.	0	4.00	50.00	38.00	8.00
Q3. Banker should reply in any query of the customers.	0	6.00	54.00	36.00	4.00
Q4. Bank should arrange special care to occasional customers.	0	6.00	64.00	22.00	8.00
Q5. Bank should send out the bank statement at the right time.	2.00	16.00	46.00	28.00	8.00

Source: Developed from research

Table 4.18 demonstrated the frequency percentage of respondents satisfaction level toward the questions which covered strongly disagree, disagree, neutral, agree and strongly agree. Based on the survey, there are 2% of the respondents choose strongly disagreed in question 1. This followed by 15.8% choose disagreed in the question. 38% choose neutral while 32% choose agreed. Lastly, 12% of respondents are strongly agreed toward the question. In question 2, none of the respondents choose strongly disagreed while 4% choose disagreed. Respondents who choose neutral stand for 50%. Majority of respondents choose agreed which is 38% and only 8% choose strongly agreed in the questions. In question 3, none of the respondents choose strongly disagreed. This followed by 6% choose disagreed in the question. 54% of respondents choose neutral while 36% choose agreed. Lastly, 4% of respondents are strongly agreed toward the question. In question 4, none of the respondents choose strongly disagreed while 6% choose disagreed. Respondents who choose neutral stand for 64%. Majority of respondents choose agreed which is 22% and only 8% of respondents are strongly agreed toward the questions. In question 5, 0% of respondents choose strongly disagreed. 16% of respondents choose disagreed. This followed by 46% of respondents choose neutral while 28% choose agree. Lastly, 8% of respondents are strongly agreed toward the questions.

Table 4.19: Tangible Statistic

Statement	N	Mean	Standard Deviation	Variance
Q1. Bank's physical facilities should be visually appealing.	400	3.44	0.830	0.688
Q2. Up-to-date equipment and instrument facilities of your bank	400	3.38	0.915	0.838
Q3. Employees of bank should be well dressed and appear neat.	400	3.60	0.746	0.557
Q4. Bank statement should be visually clear.	400	3.62	0.798	0.637
Q5. Bank pamphlets should be given in clear and complete information.	400	3.64	0.867	0.752

Source: Developed from research

Table 4.19 shows the descriptive statistics of tangible which consists of mean, standard deviation and variance. SPSS is used to summaries the statistics data of each question of tangible. “Bank pamphlets should be given in clear and complete information” has the highest mean which is 3.64. The second highest mean is “Bank statement should be visually clear” which has a mean of 3.62. “Employees of bank should be well dressed and appear neat.” is the third highest mean which has mean value of 3.60. This followed by “Bank's physical facilities should be visually appealing” which have the mean of 3.44. The lowest mean is “Up-to-date equipment and instrument facilities of your bank” which has the mean of 3.38. Based on the finding, question 2 has the highest standard deviation and variance which is 0.915 and 0.838. Question 5 has second highest standard deviation of 0.867 and variance of 0.752. Question 1 ranked third which has standard deviation of 0.830 and variance of 0.688. This followed by Question 4 which has standard deviation of 0.798 and

variance of 0.637. Question 3 is classified as the lowest standard deviation and variance which is 0.746 and 0.557.

Table 4.20: Tangible Frequency

Statement	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Q1. Bank's physical facilities should be visually appealing.	4.00	4.00	42.00	44.00	6.00
Q2. Up-to-date equipment and instrument facilities of your bank.	2.00	14.00	38.00	36.00	10.00
Q3. Employees of bank should be well dressed and appear neat.	0	4.00	44.00	40.2	18.00
Q4. Bank statement should be visually clear.	2.00	2.00	40.00	44.00	12.00
Q5. Bank pamphlets should be given in clear and complete information.	2.00	4.00	38.00	40.00	16.00

Source: Developed from research

Table 4.20 demonstrated the frequency percentage of respondents satisfaction level toward the questions which covered strongly disagree, disagree, neutral, agree and strongly agree. Based on the survey, there are 4% of the respondents choose strongly disagreed in question 1. This followed by 4% choose disagreed in the question. 42% choose neutral while 44% choose agreed. Lastly, 6% of respondents are strongly agreed toward the question. In question 2, 2% of the respondents choose strongly disagreed while 14% choose disagreed. Respondents who choose neutral stand for 38%. Majority of respondents choose agreed which is 36% and

only 10% choose strongly agreed in the questions. In question 3, none of the respondents choose strongly disagreed. This followed by 4% choose disagreed in the question. 44% of respondents choose neutral while 40.2% choose agreed. Lastly, 18% of respondents are strongly agreed toward the question. In question 4, 2% of the respondents choose strongly disagreed while 2% choose disagreed. Respondents who choose neutral stand for 40%. Majority of respondents choose agreed which is 44% and only 12% of respondents are strongly agreed toward the questions. In question 5, 2% of respondents choose strongly disagreed. 4% of respondents choose disagreed. This followed by 38% of respondents choose neutral while 40% choose agree. Lastly, 16% of respondents are strongly agreed toward the questions.

Table 4.21: Customer Satisfaction Statistic

Statement	N	Mean	Standard Deviation	Variance
Q1. I satisfied with the safety of bank transaction.	400	3.62	0.823	0.677
Q2. I satisfied with the bank employees' attitude.	400	3.50	0.832	0.692
Q3. I satisfied with the accuracy with the information provided.	400	3.46	0.670	0.450
Q4. I satisfied with the bank's performance.	400	3.38	0.823	0.677
Q5. I satisfied with the bank's facilities.	400	3.42	0.875	0.766

Source: Developed from research

Table 4.21 shows the descriptive statistics of customer satisfaction level toward their bank service. Table 4.21 consists of mean, standard deviation and variance. SPSS is used to summaries the statistics data of each question of customer satisfaction. "I satisfied with the safety of bank transaction" has the highest mean which is 3.62. The second highest mean

is “I satisfied with the bank employees’ attitude” which has a mean of 3.50. “I satisfied with the accuracy with the information provided” is the third highest mean which has mean value of 3.46. This followed by “I satisfied with the bank’s facilities” which has the mean of 3.42. The lowest mean is “I satisfied with the bank’s performance” which has the mean of 3.38. Based on the finding, question 5 has the highest standard deviation and variance which is 0.875 and 0.766. Question 2 has second highest standard deviation of 0.832 and variance of 0.692. Question 1 and Question 4 ranked third as both have same standard deviation and variance (0.823, 0.677). Question 3 is classified as the lowest standard deviation and variance which is 0.670 and 0.450.

Table 4.22: Customer Satisfaction Frequency

Statement	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Q1. I satisfied with the safety of bank transaction.	0	10.00	30.00	48.00	12.00
Q2. I satisfied with the bank employees’ attitude.	0	12.00	36.00	42.00	10.00
Q3. I satisfied with the accuracy with the information provided.	0	6.00	46.00	44.00	4.00
Q4. I satisfied with the bank’s performance.	0	12.00	48.00	30.00	10.00
Q5. I satisfied with the bank’s facilities.	0	16.00	36.00	38.00	10.00

Source: Developed from research

Table 4.22 demonstrated the frequency percentage of respondents satisfaction level toward the questions which covered strongly disagree, disagree, neutral, agree and strongly agree. Based on the survey, none of the respondents choose strongly disagreed in question 1. This followed by

10 choose disagreed in the question. 30% choose neutral while 48% choose agreed. Lastly, 12% of respondents are strongly agreed toward the question. In question 2, none of the respondents choose strongly disagreed while 12% choose disagreed. Respondents who choose neutral stand for 36%. Majority of respondents choose agreed which is 42% and only 10% choose strongly agreed in the questions. In question 3, none of the respondents choose strongly disagreed. This followed by 6% choose disagreed in the question. 46% of respondents choose neutral while 44% choose agreed. Lastly, 4% of respondents are strongly agreed toward the question. In question 4, none of the respondents choose strongly disagreed while 12% choose disagreed. Respondents who choose neutral stand for 48%. Majority of respondents choose agreed which is 30% and only 10% of respondents are strongly agreed toward the questions. In question 5, none of respondents choose strongly disagreed. 16% of respondents choose disagreed. This followed by 36% of respondents choose neutral while 38% choose agree. Lastly, 10% of respondents are strongly agreed toward the questions.

Table 4.23: Service Quality Statistic

Statement	N	Mean	Standard Deviation	Variance	Rank
Assurance	400	17.6100	3.91551	15.331	2
Empathy	400	17.0500	3.63256	13.195	4
Reliability	400	17.0600	4.05679	16.458	3
Responsiveness	400	16.8000	3.33884	11.148	5
Tangible	400	17.6800	3.51689	12.369	1

Source: Developed from research

Table 4.23 demonstrated descriptive statistic of five dimension of service quality. Table 4.23 consists of mean, standard deviation and variance. SPSS is used to summaries the statistics data of each service dimension.

As shown in Table 4.23, Tangible dimension has the highest mean which is 17.68 and ranked number 1. The second highest mean is Assurance dimension which has a mean of 17.61. Reliability dimension is the third highest mean which has mean value of 17.06. This followed by Empathy dimension which has the mean of 17.05. The lowest mean is Responsiveness dimension which has the mean of 3.38. Based on the finding, Reliability dimension has the highest standard deviation and variance (4.05679, 16.458). Assurance dimension has second highest standard deviation of 3.91551 and variance of 15.331. This followed by Empathy dimension which have standard deviation of 3.63256 and variance of 13.195. The second lowest is Tangible dimension which have standard deviation of 3.51689 and variance of 12.369. Responsiveness dimension is classified as the lowest standard deviation and variance which is 3.33884 and 11.148.

4.3 Scale Measurement

4.3.1 Normality Analysis

Table 4.24: Normality Analysis

Skewness	Kurtosis
0.287	-0.577

Source: Developed from research

The normality analysis was used to determine whether the data frequencies were normally distributed. Table 4.24 shows the normality analysis for dependent variable, the result for skewness and kurtosis was 0.287 and -0.577 respectively. Since both the results were within ± 1 , it can be concluded that the data was normally distributed.

4.3.2 Reliability Analysis

Table 4.25 Reliability Statistic

	No of item	Cronbach's Alpha
Dependent variable:		
Customer satisfaction	5	0.848
Independent variable:		
Assurance	5	0.924
Empathy	5	0.890
Reliability	5	0.954
Responsiveness	5	0.900
Tangible	5	0.899

Source: Developed from the research

Reliability analysis has been conducting in this part to ensure reliability and consistency of variable. The reliability analysis is based on survey of 400 respondents. Table 4.25 has shown the reliability alpha coefficient values for the six variables. As the Cronbach's alpha for dependent and independent variable has shown in table 4.2 are greater than benchmark of 0.7, which indicates good and acceptable in the rules of thumb (Zikmund, 2003), therefore the questionnaire formed is reliable.

4.4 Inferential Analysis

4.4.1 Pearson Correlation Analysis

4.4.1.1 Hypothesis 1: relationship between assurance and customer satisfaction in banking industry.

H0: There is no relationship between assurance and customer satisfaction.

H1: There is a relationship between assurance and customer satisfaction.

Decision making: Reject H0 if $p < 0.01$ or 0.05 .

Table 4.26: Pearson Correlation between assurance and customer satisfaction

Correlations

		Satisfaction	assurance
satisfaction	Pearson Correlation	1	.904**
	Sig. (2-tailed)		.000
	N	400	400
assurance	Pearson Correlation	.904**	1
	Sig. (2-tailed)	.000	
	N	400	400

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

Source: Developed from research

Result interpretation from Table 4.26:

$r = 0.904 \rightarrow$ Assurance has a 0.904 correlation with the customer satisfaction. There is a positive correlation indicates that assurance and customer satisfaction vary together in the same direction. Higher assurance will cause higher customer satisfaction, while lower assurance will cause lower customer satisfaction. The value of this correlation coefficient 0.904 is fall under coefficient range from ± 0.71 to ± 0.90 . Therefore, the relationship between assurance and customer satisfaction is high. The p-value 0.000 is less than alpha value 0.01 and hence the null hypothesis (H0) is rejected. It indicates that the relationship between assurance and customer satisfaction is significant.

4.4.1.2 Hypothesis 2: relationship between empathy and customer satisfaction in banking industry.

H0: There is no relationship between empathy and customer satisfaction.

H1: There is a relationship between empathy and customer satisfaction.

Decision making: Reject H0 if $p < 0.01$ or 0.05

Table 4.27: Pearson Correlation between empathy and customer satisfaction

Correlations

		Satisfaction	empathy
satisfaction	Pearson Correlation	1	.836**
	Sig. (2-tailed)		.000
	N	400	400
empathy	Pearson Correlation	.836**	1
	Sig. (2-tailed)	.000	
	N	400	400

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

Source: Developed from research

Result interpretation from Table 4.27:

$r = 0.836 \rightarrow$ Empathy has a 0.836 correlation with the customer satisfaction in local bank. There is a positive correlation indicates that empathy and customer satisfaction vary together in the same direction. Higher empathy will cause higher customer satisfaction, while lower empathy will cause lower customer satisfaction. The value of this correlation coefficient 0.836 is fall under coefficient range from ± 0.71 to ± 0.90 . Therefore, the relationship between empathy and customer satisfaction is high. The p-value 0.000 is less than alpha value 0.01 and hence the null hypothesis (H0) is rejected. It indicates that the relationship between empathy and customer satisfaction is significant.

4.4.1.3 Hypothesis 3: relationship between reliability and customer satisfaction in banking industry.

H0: There is no relationship between reliability and customer satisfaction.

H1: There is a relationship between reliability and customer satisfaction.

Decision making: Reject H0 if $p < 0.01$ or 0.05 .

Table 4.28: Pearson Correlation between reliability and customer satisfaction

Correlations

		Satisfaction	reliability
satisfaction	Pearson Correlation	1	.855**
	Sig. (2-tailed)		.000
	N	400	400
reliability	Pearson Correlation	.855**	1
	Sig. (2-tailed)	.000	
	N	400	400

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

Source: Developed from research

Result interpretation from Table 4.28:

$r = 0.855 \rightarrow$ Reliability has a 0.855 correlation with the customer satisfaction. There is a positive correlation indicates that reliability and customer satisfaction vary together in the same direction. Higher reliability will cause higher customer satisfaction, while lower reliability will cause lower customer satisfaction. The value of this correlation coefficient 0.855 is fall under coefficient range from ± 0.71 to ± 0.90 . Therefore, the relationship between reliability and customer satisfaction is high. The p-value 0.000 is less than alpha value 0.01 and hence the null hypothesis (H0) is rejected. It indicates that the relationship between reliability and customer satisfaction is significant.

4.4.1.4 Hypothesis 4: relationship between responsiveness and customer satisfaction in banking industry.

H0: There is no relationship between responsiveness and customer satisfaction.

H1: There is a relationship between responsiveness and customer satisfaction.

Decision making: Reject H0 if $p < 0.01$ or 0.05 .

Table 4.29: Pearson Correlation between responsiveness and customer satisfaction

Correlations

		satisfaction	responsiveness
satisfaction	Pearson Correlation	1	.643**
	Sig. (2-tailed)		.000
	N	400	400
responsiveness	Pearson Correlation	.643**	1
	Sig. (2-tailed)	.000	
	N	400	400

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

Source: Developed from research

Result interpretation from Table 4.29:

$r = 0.643 \rightarrow$ Responsiveness has a 0.643 correlation with the customer satisfaction. There is a positive correlation indicates that responsiveness and customer satisfaction vary together in the same direction. Higher responsiveness will cause higher customer satisfaction, while lower responsiveness will cause lower customer satisfaction. The value of this correlation coefficient 0.643 is fall under coefficient range from ± 0.41 to ± 0.70 . Therefore, the relationship between responsiveness and customer satisfaction is high. The p-value 0.000 is less than alpha value 0.01 and hence

the null hypothesis (H₀) is rejected. It indicates that the relationship between responsiveness and customer satisfaction is significant.

4.4.1.5 Hypothesis 5: relationship between tangible and customer satisfaction in banking industry.

H₀: There is no relationship between tangibles and customer satisfaction.

H₁: There is a relationship between tangibles and customer satisfaction.

Decision making: Reject H₀ if $p < 0.01$ or 0.05 .

Table 4.30: Pearson Correlation between tangible and customer satisfaction

Correlations

		Satisfaction	tangible
satisfaction	Pearson Correlation	1	.827**
	Sig. (2-tailed)		0.000
	N	400	400
tangible	Pearson Correlation	.827**	1
	Sig. (2-tailed)	.000	
	N	400	400

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

Source: Developed from research

Result interpretation from Table 4.30:

$r = 0.827 \rightarrow$ Tangible has a 0.827 correlation with the customer satisfaction. There is a positive correlation indicates that tangible and customer satisfaction varies together in the same direction. Higher tangible will cause higher customer satisfaction, while lower tangible will cause lower customer satisfaction. The value of this correlation coefficient 0.827 is fall under coefficient range from ± 0.71 to ± 0.90 . Therefore, the relationship between

tangible and customer satisfaction is high. The p-value 0.000 is less than alpha value 0.01 and hence the null hypothesis (H₀) is rejected. It indicates that the relationship between tangible and customer satisfaction is significant.

4.4.2 Multicollinearity Analysis

Table 4.31: Multicollinearity Analysis

Independent Variables	Collinearity Statistics	
	Tolerance	VIF
assurance	0.140	7.128
empathy	0.220	4.552
reliability	0.204	4.909
responsiveness	0.604	1.655
tangible	0.245	4.085

Source: Developed from research

As indicated in the Table 4.31, the tolerance value was ranged from 0.140 and 0.604, VIF (variance inflation) were within 1.0683 and 7.128. The results from the Table 4.31 showed that there is no multicollinearity problem among all the independent variables as tolerance value and variance inflation value are above 0.1 and below 10 respectively (Hair et al., 1998).

4.4.3 Multiple Linear Regression Analysis

Table 4.32: Multiple Linear Regression Analysis

Variables	β	Standard Error	t value	Sig
Intercept	2.331	0.367	6.344	0.000
Assurance	0.355	0.041	8.617	0.000
Empathy	0.130	0.036	3.665	0.000
Reliability	0.124	0.033	3.766	0.000
Responsiveness	0.136	0.023	5.818	0.000
Tangible	0.123	0.035	3.544	0.000
R	0.926			
R square	0.858			
Adj R square	0.856			
F statistic	476.154			

Source: Developed from research

Result Interpretation from Table 4.32:

$R = 0.926 \rightarrow$ The strength of the association between the independent variable (assurance, empathy, reliability, responsiveness and tangible) and dependant variable (customer satisfaction) is 92.6%.

$R \text{ square} = 0.858 \rightarrow$ It indicates that approximately 85.8% of the variation in dependant variable (customer satisfaction) is explained by all independent variable (assurance, empathy, reliability, responsiveness and tangible).

$\text{Adjusted } R \text{ square} = 0.856 \rightarrow$ It indicates that approximately 85.6% of the variation in dependant variable (customer satisfaction) is explained by all independent variable (assurance, empathy, reliability, responsiveness and tangible) adjusted for the number of independent variables used.

F statistic = 476.154 → significant because significant level (0.000) is higher than the alpha level (0.05 or 0.01), and thus the regression equation as computed is statistically significant, which mean that at least one variable can explain the dependent variable.

As indicated in Table 4.32, all of the dimensions of service quality (assurance, empathy, reliability, responsiveness and tangible) are significant predictors of customer satisfaction in banking industry because their significant level are lower than the alpha level (0.01 or 0.05).

The independent variables have ranked according to their unstandardized coefficient (β), the ranking has shown in Table 4.33.

Table 4.33: Rank on unstandardized coefficient of Independent Variables

Independent Variables	β	Rank
Assurance	0.355	1
Empathy	0.130	3
Reliability	0.124	4
Responsiveness	0.136	2
Tangible	0.123	5

Source: Developed from research

Through the Multiple Linear Regression analysis, the Multiple Linear Regression equation is formed as following, this equation examines the relationship between independent variables and dependant variables.

$$Y = C + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5$$

where,

Y = customer satisfaction in banking industry.

C = Constant value.

β = Unstandardized coefficient.

X = Dimensions of service quality (Assurance, Empathy, Reliability, Responsiveness, Tangible).

After substitute the amount obtained from result into the equation:
Customer Satisfaction = 2.331 + 0.355Assurance + 0.130 Empathy + 0.124 Reliability + 0.136 Responsiveness + 0.123 Tangible

Multiple Linear Regression Equation Interpretation:

Assurance is the predictor variable that contributes the highest to variation of the dependent variable because coefficient (0.355) is the highest compared to other predictor variables. Coefficient of 0.355 indicates that one unit increase in assurance, the customer satisfaction in banking industry will increase by 0.355 units, holding other factors constant. Hence, assurance the most significant dimension of service quality that causes the effect toward bank customer satisfaction.

Responsiveness is the predictor variable that contributes the second highest to variation of the dependent variable because coefficient (0.136) is the second highest compared to other predictor variables. Coefficient of 0.136 indicates that one unit increase in responsiveness, the customer satisfaction in banking industry will increase by 0.136 units, holding other factors constant. Hence, responsiveness is the second significant dimension of service quality that causes the effect toward bank customer satisfaction.

Empathy is the predictor variable that contributes the third highest to variation of the dependent variable because coefficient (0.130) is the third highest compared to other predictor variables. Coefficient of 0.130 indicates that one unit increase in empathy, the customer satisfaction in banking industry will increase by 0.130 units, holding other factors constant. Hence, empathy is the third significant dimension of service quality that causes the effect toward bank customer satisfaction.

Reliability is the predictor variable that contributes the fourth highest to variation of the dependent variable because coefficient (0.124) is the fourth

highest compared to other predictor variables. Coefficient of 0.124 indicates that one unit increase in reliability, the customer satisfaction in banking industry will increase by 0.124 units, holding other factors constant. Hence, reliability is the fourth significant dimension of service quality that causes the effect toward bank customer satisfaction.

Tangible is the predictor variable that contributes the lowest to variation of the dependent variable because coefficient (0.123) is the lowest compared to other predictor variables. Coefficient of 0.123 indicates that one unit increase in tangible, the customer satisfaction in banking industry will increase by 0.123 units, holding other factors constant. Hence, tangible is the least significant dimension of service quality that causes the effect toward bank customer satisfaction.

4.5 Conclusion

In conclusion, from the result that is analyzed by SPSS software above, it shows that all of the independent variables have significant relationship with the dependent variable. Among the dimensions of service quality, assurance is the most significant dimension causes the effect toward customer satisfaction in local bank and followed by the dimension of responsiveness. The dimension of tangible is the least significant dimension causes the effect toward customer satisfaction in local bank. The further information of the result will be discussed in next chapter.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

In this chapter 5, it provides the completed analyses of discussion, conclusion and implementation of the whole research project. This chapter has summaries the result of statistical analyses with the description of the all descriptive and inferential analyses which discussed in chapter 4. The discussion of major findings to verify the aim and hypothesis also included bases on the result of hypothesis research. Besides that, implementation of the study in this research project also stated in this chapter which shown the actual implications for policy makers and practitioners. This chapter suggests the recommendation for future research in the banking services sector that can solve the limitation of the entire research project. End of this chapter, a general conclusion of overall research project will be presented.

5.1 Summary of Statistical Analysis

5.1.1 Descriptive Analysis

There are few demographic variables we had used to test the descriptive analyses of 400 respondents profile. The first demographic variable we tested in this descriptive analysis is the type of the primary bank the respondents choose based on their preference. The result has shown that the most preference primary bank the respondents choose is Maybank which has highest percentage of 37% and the frequency of 148 out of 400

respondents. The lowest percentage of 13.20% or 53 respondents choose OCBC Bank as their primary bank. The second demographic variable that tested in this descriptive analysis is the type of account that the respondents have in their primary bank. The result shown that most of the respondents having savings account which has 86% or 344 respondents. Only have 16 respondents which is 4% respondents having fixed deposit account in their primary bank.

The third demographic variable that tested is gender, which has 54% or 216 male respondents and 46% or 184 female respondents resulted in this descriptive analysis. From the marital status that tested in the descriptive analysis, the results shown that 232 respondents or 58% are single and 168 respondents or 42% are married. Besides that, age of the respondents also tested in the descriptive analysis. Based on the data collection, the results shown that the highest percentage of 54% which is 216 respondents are between age 21-30 years old and the lowest percentage of 4% which is 16 respondents are age above 50 years old.

Other than that, the education qualification also tested in the descriptive analysis. There are about 60.5% or 242 respondents is degree holder which is the highest percentage in result and only have 3.5% or 14 respondents is diploma holders which is the lowest percentage in the result.

Next, the monthly income of the respondents also tested in the descriptive analysis and shown that 42% or 168 respondents have the monthly income range from RM3000 to RM5000 which is the highest percentage in the result. The lowest percentage of respondents has falls under the monthly income above RM5000 which has 18% or 72 respondents. The last demographic variable we tested in the descriptive analysis is the respondent's profession. The result shown that has the highest percentage of 31.2% or 125 respondents is in other profession and only least respondents are profession in education field which has 6.2% or 25 respondents.

5.1.2 Central Tendencies Measurement of Constructs

Based on the central tendencies measurement discussed on previous chapter, there are total 25 questions stated in the questionnaire to examine the five independent variables (Assurance, Empathy, Reliability, Responsiveness and Tangible). Each independent variable has included of five sub questions in the questionnaire. We used the SSPS software to summarize the descriptive statistics data of five independent variables which include the mean, standard deviation and variance.

In the assurance variable, result shown that the question of “Bank staff should always be polite” obtain the highest mean among the five assurance questions which is 3.66 and the question of “When customers have problems, bank should be compassionate and reassuring” has obtain the lowest mean of 3.38 among of the five question asked in the questionnaire. According to the result, the question of “Bank staff should be eager to instil confidence in customers” obtains the highest standard deviation and variance which is 0.978 and 0.957. The question of “Customers should feel safe in transactions with bank” obtains the lowest standard deviation and variance which is 0.855 and 0.732 among the five assurance questions asked to respondents.

In the empathy variable, result shown that there are two empathy questions obtain the same mean value of 3.45 which is the highest mean than other three questions, which are “Bank staff served their customer with caring” and “Bank staff should try to recognize what customers' needs are”. The lowest mean in the empathy question is “Bank should provide the product that best suit to customers” which has the mean of 3.33. Besides that, the highest standard deviation and variance which is 0.923 and 0.851 is fall under the question’ Banker should give individual attention to customers.” and the question “Bank should have operating hours” is classified as the lowest standard deviation and variance which is 0.809 and 0.655.

Under the reliability variable, the question of “Bank should be dependable.” has the highest mean which is 3.48. The lowest mean has fall under to question of “Bank should inform the time when service will be performed” which has the mean of 3.38. Moreover, the question of “Bank should provide their services at the time they promise to do so.” has the highest standard deviation and variance which is 0.939 and 0.882. Another question of “Bank should keep their records accurately” is classified as the lowest standard deviation and variance which is 0.826 and 0.682.

Under the responsiveness variable, the question of “Employees of bank always willing to assist customers” has the highest mean which is 3.50 and the lowest mean is fall on the question of “Bank should send out the bank statement at the right time” which has the mean of 3.24. Besides that, the question of “Bank should provide prompt service to the customers” has the highest standard deviation and variance which is 0.953 and 0.909 and another responsiveness question of “Bank should send out the bank statement at the right time” is classified as the lowest standard deviation and variance which is 0.661 and 0.437 among the five responsiveness questions.

Lastly, under the tangible variable the question of “Bank pamphlets should be given in clear and complete information” has the highest mean which is 3.64 and the question of “Up-to-date equipment and instrument facilities of your bank” which has the lowest mean of 3.38. Besides that, the question of “Up-to-date equipment and instrument facilities of your bank” has the highest standard deviation and variance which is 0.915 and 0.838 and another question of “Employees of bank should be well dressed and appear neat” is classified as the lowest standard deviation and variance which is 0.746 and 0.557 among the five tangible questions in questionnaire.

5.1.3 Scale Measurement

5.1.3.1 Normality Analysis

The normality analysis was used to determine whether the data frequencies were normally distributed. Table 4.24 showed that the normality analysis for dependent variable, the result for skewness and kurtosis was 0.287 and -0.577 respectively. Since both the results were within ± 1 , it can be concluded that the data was normally distributed.

5.1.3.2 Reliability Analysis

Reliability analysis has been conducting in this part to ensure reliability and consistency of variable. The reliability analysis is based on survey of 400 respondents. Table 4.25 has shown the reliability alpha coefficient values for the six variables. As all the Cronbach's alpha for dependent and independent variable has shown in table 4.2 are greater than benchmark of 0.7, which indicates good and acceptable in the rules of thumb (Zikmund, 2003), therefore the questionnaire formed is reliable.

5.1.4 Inferential Analysis

5.1.4.1 Pearson Correlation Analysis

This Pearson correlation Analysis is used to measure the strength of relationship and the direction of that relationship whether is positive relationship or negative relationship between the five independent variables and dependent variable. For every hypotheses testing in Pearson

correlation analysis, only one independent variable and one dependent variable will be examine.

Assurance has a correlation of 0.904 with the customer satisfaction. There indicate a positive correlation between assurance and customer satisfaction are change together in the same direction. This is because the higher assurance will lead to higher customer satisfaction and vice versa. Since the value of this correlation coefficient 0.904 is fall between the coefficient ranges from ± 0.71 to ± 0.90 . Therefore, there is a positive relationship between assurance and customer satisfaction.

Empathy has a correlation of 0.836 with the customer satisfaction. There indicate a positive correlation between assurance and customer satisfaction are change together in the same direction. This is because the higher empathy will lead to higher customer satisfaction and vice versa. Since the value of this correlation coefficient 0.836 is fall between the coefficient ranges from ± 0.71 to ± 0.90 . Therefore, there is a positive relationship between empathy and customer satisfaction.

Reliability has a correlation of 0.855 with the customer satisfaction. There indicate a positive correlation between reliability and customer satisfaction are change together in the same direction. This is because the higher reliability will lead to higher customer satisfaction and vice versa. Since the value of this correlation coefficient 0.855 is fall between the coefficient ranges from ± 0.71 to ± 0.90 . Therefore, there is a positive relationship between reliability and customer satisfaction.

Responsiveness has a correlation of 0.643 with the customer satisfaction. There indicate a positive correlation between responsiveness and customer satisfaction are change together in the same direction. This is because the higher responsiveness will lead to higher customer satisfaction and vice versa. Since the value of this correlation coefficient 0.643 is fall under coefficient range from ± 0.41 to ± 0.70 , which indicated moderate strong in

correlation. Therefore, there is a positive relationship between responsiveness and customer satisfaction.

Tangible has a correlation of 0.827 with the customer satisfaction. There indicate a positive correlation between tangible and customer satisfaction are change together in the same direction. This is because the higher tangible will lead to higher customer satisfaction and vice versa. Since the value of this correlation coefficient 0.827 is fall between the coefficient ranges from ± 0.71 to ± 0.90 . Therefore, there is a positive relationship between tangible and customer satisfaction.

In conclusion, all the five independent variables (Assurance, Empathy, Reliability, Responsiveness and Tangible) have a positive relationship with customer relationship. Since the p-value 0.000 is less than alpha value 0.01 in five hypotheses testing, it shown there is a significant relationship between the independent variable and customer relationship at alpha value 0.01.

5.1.4.2 Multicollinearity Analysis

Multicollinearity analysis is aimed to measure the degree to which two or more independent variables are correlated with each other. The results from the Table 4.31 showed that there is no multicollinearity problem among all the independent variables as tolerance value and variance inflation value is above 0.1 and below 10 respectively.

5.1.4.3 Multiple Linear Regression Analysis

This Multiple regression analysis is for the purpose to examine the determinants of service quality. It also help to examine which of the dimension of service quality will causes the most significant effect toward

bank customer satisfaction based on the five independent variables. Based on the result stated in chapter 4, the R square value is 0.858 and it indicates that approximately 85.8% of the variation in customer satisfaction is explained by the five independent variables (assurance, empathy, reliability, responsiveness and tangible).

From the ANOVAs table in chapter 4, it shown that F-statistic is significant because Sig. lower than the alpha level of 0.05 or 0.01. The dependent and predictor variables show a good relation in the model for this study, which mean that at least one independent variable can explain the dependent variable. As a result, all of the determinants of service quality (assurance, empathy, reliability, responsiveness and tangible) are significant to customer satisfaction because their Sig. is lower than the alpha level (0.01 or 0.05).

Multiple Linear Regression equation:

$$Y = C + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5$$

where,

Bank Customer Satisfaction, $Y = \text{assurance (0.437)} + \text{empathy (0.148)} + \text{reliability (0.158)} + \text{responsiveness (0.142)} + \text{tangible (0.136)}$

$Y =$ customer satisfaction in banking industry.

$C =$ Constant value.

$\beta =$ Unstandardized coefficient.

$X =$ Dimensions of service quality (Assurance, Empathy, Reliability, Responsiveness, Tangible).

5.2 Discussion of Major Findings

Hypothesis	Findings
<p>H₀: There is no significant relationship between assurance and customer satisfaction.</p> <p>H₁: There is significant relationship between assurance and customer satisfaction.</p>	<p>H₁: There is significant relationship between assurance and customer satisfaction.</p>
<p>H₀: There is no significant relationship between empathy and customer satisfaction.</p> <p>H₁: There is significant relationship between empathy and customer satisfaction.</p>	<p>H₁: There is significant relationship between empathy and customer satisfaction.</p>
<p>H₀: There is no significant relationship between reliability and customer satisfaction.</p> <p>H₁: There is significant relationship between reliability and customer satisfaction.</p>	<p>H₁: There is significant relationship between reliability and customer satisfaction.</p>
<p>H₀: There is no significant relationship between responsiveness and customer satisfaction.</p> <p>H₁: There is significant relationship between responsiveness and customer satisfaction.</p>	<p>H₁: There is significant relationship between responsiveness and customer satisfaction.</p>
<p>H₀: There is no significant relationship between tangible and customer satisfaction.</p> <p>H₁: There is significant relationship between tangible and customer satisfaction.</p>	<p>H₁: There is significant relationship between tangible and customer satisfaction.</p>

5.2.1 Assurance

Assurance dimension has the positive relationship with customer satisfaction. Based on our findings in Chapter 4, the assurance dimension has a correlation of 0.904 with the level of customer satisfaction which showed highest strength of association. From Multiple Linear Regression analysis, the assurance dimension has a coefficient of 0.355 which

indicated that there existed a positive significant relationship between assurance dimension and customer satisfaction.

Our result is consistent with the finding of Arasli et al. (2005) which indicated assurance as the most significant contribution on customer satisfaction and support by Shlash Mohammad and Mohammad Alhamadani (2011); Lo et al. (2010) which indicated statistically significant and have association with customer satisfaction. Siddiqi (2011) and Munusamy et al. (2010) indicated assurance dimension is positively correlated to customer satisfaction which mean by improving assurance dimension in service quality will lead to high customer satisfaction.

It can be explained by finding of Chowdhary and Prakash (2007) which indicated mental-stimuli-processing services are highly intangible, which require strong interaction between customer and service provider. Thus, customer expected greater assurance from service provider. Bank consider as a service-based industries and majority involved in mental-stimuli services, thus, if service quality of assurance meet customer expectation it will lead to high level of customer satisfaction. For the purpose to enhance customer confidence toward assurance, a professional employee must ensure his or her customers getting a kind, warm and prompt response from service provider (Kumar et al., 2010).

5.2.2 Empathy

Empathy dimension has the positive relationship with customer satisfaction. This is shown in our findings in which proved that the empathy dimension achieved a correlation of 0.836 with the level of customer satisfaction which showed high strength of association. From Multiple Linear Regression analysis, the empathy dimension has a coefficient of 0.130 which indicated that there existed a positive

significant relationship between empathy dimension and customer satisfaction.

Our result is consistent with the finding of Ladhari et al. (2011) which implies that the more empathy a bank staff does, it will make customers feel warm and friendly with the service provided. From the point of view of past researcher, Yavas et al. (1997), empathy is defined as how a banks giving its interest at heart and concerned enough to understand the ultimate and specific needs of a customer in order to make he or she feels satisfied. This supported by finding of Ladhari et al. (2011) which indicated that empathy was the important predictor of both satisfaction and loyalty, followed by reliability.

Besides, our research result can be explained by finding of Stuhldreier (2004) which indicated customers feel satisfied toward the bank and will not tend to shift to another bank easily due to greater empathy service received from the bank.

5.2.3 Reliability

Reliability dimension has the positive relationship with customer satisfaction. Our findings have showed that reliability has a 0.855 correlation with the level of customer satisfaction which showed high strength of association. From Multiple Linear Regression analysis, the reliability dimension has a coefficient of 0.124 which indicated that there existed a positive significant relationship between reliability dimension and customer satisfaction. It is expected that the higher the reliability of a bank service, it will caused increase in customer satisfaction. Our result is consistent with the finding of Deng et al. (2010), Arasli et al. (2005), Dong and Jeong (2007).

According to Arasli et al. (2005), reliability dimension has the significant effect on overall bank customer satisfaction. This is because when a bank offering expertise in the services to customer, they can delivery error free and on time services that bank promise to do. With a higher reliability services, customer will be satisfied with the bank and they will create positive mouth-of-word by recommending the bank to others.

It is important for service supplier to know that services failures due to reason of human error which in turn will affect the reliability of bank service and hence reduced customer satisfaction to bank performance. Kyj and Isik (2008), state that bank should ensure that bank data is reliable hence the serious misreporting and noncompliance can be avoided. Otherwise it may lead to difficulty for bank manager to achieve comprehensive quality performance to their customer.

5.2.4 Responsiveness

Responsiveness dimension has the positive relationship with customer satisfaction. Based on our result, responsiveness dimension has a correlation of 0.643 with the level of customer satisfaction which shows moderate high strength of association. From Multiple Linear Regression analysis, the responsiveness dimension has a coefficient of 0.136 which indicated that there existed a positive significant relationship between responsiveness dimension and customer satisfaction. It will lead to increases in level of customer satisfaction when there is increase in responsiveness to customer.

Our result is consistent with the finding of Bitner et al. (1990); Johnston (1995); Ladhari et al. (2011); Rehman (2012) which indicated there is significant relationship between responsiveness and customer satisfaction. According to Abdullah et al. (2011), responsiveness dimension has the significant effect on overall bank customer satisfaction. This is because

customers feel more confidence toward a bank staff who exhibiting a pleasant and courteous behavior in service delivery process.

In order to increases customer satisfaction level toward responsiveness dimension, Bhattacharyya and Rahman (2004) has told us that bank staff should capable to anticipate customers' needs and wants, take action to provide adequate service or respond promptly to situations where service recovery is required. Parasuraman et al. (1988) mentioned that employees are patient in assisting customer and responsive to their needs.

5.2.5 Tangible

Tangible dimension has the significant positive relationship with customer satisfaction. Based on our result in Chapter 4, tangible dimension has a correlation of 0.827 with the level of customer satisfaction which showed high strength of association. From Multiple Linear Regression analysis, the tangible dimension has a coefficient of 0.123 which indicated that there existed a positive significant relationship between tangible dimension and customer satisfaction. Our result showed least influential factor in determining customer satisfaction in banking industry when compare with the other dimensions.

Our result is inconsistent with the finding of Kincaid et al., 2010 which indicated that tangible factor was more important to bank customer than assurance, responsiveness, reliability, and empathy in determining quality. However, our findings has provide an argument that tangible dimension is the least influential factor in determining customer satisfaction.

Our result is supported by work of Johnston (1997) study about critical determinant of service quality in retail banking. The empirical result tells that the tangible elements were the least concern to service customer.

The tangible dimension should be achieved well before other intangible take place; yet customer would not care much on the tangible dimension such as arrangement of facilities, structure of bank and cleanliness in the long term (Spathis et al., 2004). Bank customer will remain loyalty to the bank as long as the tangible dimension maintain on acceptable level. Therefore, tangible factor are not relatively important because most of the bank are selling on the homogeneous product and service that make no one outstanding within the same industries (Spathis et al., 2004).

5.3 Implication of the Study

Based on the study in previous chapter, we examine that the five dimensions of services quality have significant relationship with the bank customer satisfaction. From the finding, we have done a comparison of significant level between five dimension services quality and the customer satisfaction. This purpose is to ensure the bank customer needs and want and help the bank to be more comprehensive in meeting bank customer needs and want. Thus, these five dimensions of services quality were very important to help the bank to improve their customer satisfaction and help the bank operation become more effective and efficiency.

5.3.1 Managerial Implication

Assurance is the most significant dimension services quality the bank should put priority focus in order to improve in bank customer satisfaction. This is because assurance has the highest coefficient which is 0.355 in the Multiple Linear Regression analysis. With this assurance, bank customer will feel safety by giving their trust and full confidence to bank in manage their property. Thus, a sound assurance services quality will improve the customer satisfaction. From the result in chapter 4, assurance has the mean of 17.6100 which second ranked in level of satisfaction on this dimension.

Based on result of coefficient which indicated assurance dimension was the first in priority in term of significance, while in term of mean ranked as second which indicated the customer is satisfied with the assurance quality services deliver by the bank. Therefore, the bank can maintain to provide assurance in the services quality through convey trust in manage customer property and online banking.

Responsiveness is the second significant dimension services quality that the bank should put priority focus in order to improve in bank customer satisfaction. This is because responsiveness has the second highest coefficient which is 0.136 in the Multiple Linear Regression analysis. With this responsiveness, bank customer can feel the existence of themselves as an important customer. Thus, bank should arrange special care to their customer in order to maintain their customer preference and stay at the bank. Thus, a sound responsiveness in services quality will increase the customer satisfaction. According to the result in chapter 4, responsiveness has the mean of 16.8000 which fifth ranked in determining level of customer satisfaction. Based on result of coefficient which indicated responsiveness dimension was the second in priority in term of significance, while in term of mean ranked as fifth which indicated the customer is the least satisfied with the responsiveness quality services deliver by bank. Therefore, the bank needs to improve the responsiveness in the services quality for bank customer. There are some suggestions for bank to improve their responsiveness in the services quality; the employee of bank should always assist their customer when they are busy although. The bank should provide prompt services to their customer such as fasten the deposit transaction process which can give a quick response to bank customer.

Empathy is the third significant dimension services quality the bank should put priority focus in order to improve in bank customer satisfaction. This is because empathy has the third highest coefficient which is 0.130 in the Multiple Linear Regression analysis. With this empathy, bank customer

easily to find the banking product that can meet their need and want. It also help the bank customer do the better decision by the employee who can give individual attention to their customer. Thus, a caring empathy services quality will improve the customer satisfaction. From the result in chapter 4, empathy has the mean of 17.0500 which fourth ranked in determining level of customer satisfaction. Based on result of coefficient which indicated empathy dimension was the third in priority in term of significance, while in term of mean ranked as fourth which indicated the customer is moderate satisfied with the assurance quality services deliver by the bank. Therefore, the bank should enhance the empathy of services quality dimensions for bank customer by organise some employee training or seminar that will help to improve the services quality and attitude toward their customer.

Reliability is the fourth significant dimension services quality the bank should put priority focus in order to improve in bank customer satisfaction. This is because reliability has the fourth highest coefficient which is 0.124 in the Multiple Linear Regression analysis. With this reliability, bank customer can reliable on the promise the bank make in the transaction and services provided. Accurate record and confidential document make the bank customer believe in the services the bank provided. Thus, a strong reliability of services quality will improve the customer satisfaction. From the result in chapter 4, reliability has the mean of 17.0600 which third ranked in determining level of customer satisfaction. Based on result of coefficient which indicated empathy dimension was the fourth in priority in term of significance, while in term of mean ranked as third which indicated the customer is moderate satisfied with the assurance quality services deliver by the bank. Therefore, the bank should maintain the reliability in the services quality for bank customer in order to maintain the customer satisfaction.

Tangible is the least significant dimension services quality the bank should put priority focus in order to improve in bank customer satisfaction. This is

because tangible has the lowest coefficient which is 0.123 in the Multiple Linear Regression analysis. With this tangible, bank customer can easily make the transaction and payment with the full facilities provided by the bank. This can help the customer to save time and clearly bank statement can help customer to easily understand the procedure of the transaction. Thus, a completed tangible of services quality will improve the customer satisfaction. From the result in chapter 4, tangible has the mean of 17.6800 which highest ranked in determining level of customer satisfaction. Based on result of coefficient which indicated tangible dimension was the last in priority in term of significance, while in term of mean ranked as highest which mean that the customer is very satisfied with the tangible quality services deliver by the bank. Therefore, the bank should maintain the tangible in the services quality for bank customer in order to maintain the customer satisfaction.

5.4 Limitation of the Study

Through this study, there are several limitations. One of the limitations that we face is the location coverage. The entire questionnaire that we distributed to public for our research is focus on Penang area. The final result that we get is not able to represent the opinion of whole Malaysian resident. It is better to get more respondents from different state to get more accurate result on it.

Besides, the questionnaire that we prepared to public was written in international language which is English. Some of the respondent might not able to understand English version of questionnaire. They will simply fill up the questionnaire if they not really understand the questionnaire. It will lead the final result of our research not reliable and inaccurate.

Furthermore, in our research study, we only study about perception of respondent and did not study about the expectation of respondent. Expectation is something

that we wish to achieve it and expect to happen in the future. From the data in questionnaire, we only know what the respondents' perception on the service that customer experienced through the bank, but we do not know what is the customer expectation on service provided.

The result that we conducted based on 400 sample size which consider less reliable although our sample size was set according to the sample size table. This is because the entire questionnaire that we collected might not represent the opinion of entire Malaysian residents. The bigger the sample size of research study, the more reliable the result conducted.

5.5 Recommendation for Future Research

Throughout our research, we had identified few limitations. Therefore, we had suggested few recommendations for future research. Future research should expand coverage of location instead of focus on one location to distribute the questionnaire. More opinion from different location of respondent will improve the result of the research.

Other than that, we should prepare our questionnaire in different language such as Malay and Chinese language rather than questionnaire only in version of English language. By to do so, it will help future researcher to save time and no need explain much to respondent who poor in English comprehension. The answer given by respondents in the questionnaire will be more reliable given that they are able understand all the questions.

We also suggest that in future research, they should emphasized more to study about the expectation of respondents. It is important to examine the gap between expectation and perception because it allows us to know whether their experiences with banking service meet with their expectation.

Lastly, future researches are encouraged to enlarge in the sample size of the respondent. The larger the sample size from a population, and hence the result will tend to achieve more accuracy.

5.6 Conclusion

In conclusion, this research is to investigate the relationship between bank service quality dimensions and customers' satisfaction. There are many factors that can affect customers' satisfaction, but we only adopted five factors which are tangible, assurance, empathy, responsiveness and reliability that adopt from Parasuraman et al (1988).

In our research, we attempted to answer our research question following:

1. What is the satisfaction level for each of the dimension in the banking industry?
2. What is the relationship between service quality dimensions and customer satisfaction in banking industry?
3. Can the assurance, empathy, reliability, responsiveness, and tangible explain the customer satisfaction in banking industry?
4. Which of the dimension of service quality causes the most significant effect towards customer satisfaction in banking industry?

According to mean conducted on chapter 4 as shown in Table 4.23, which shown that tangible dimension have the highest mean (17.68) which indicated highest customer satisfaction level toward this dimension and followed by assurance dimension which is 17.61 and the third highest satisfaction level is reliability dimension which is 17.06. Empathy dimension have mean of 17.05 which indicated moderate customer satisfaction level toward this dimension. Lastly, responsiveness dimension have the lowest customer satisfaction level toward this dimension among the 5 core service quality dimension in banking industry.

To examine the relationship between bank service quality dimensions and customers' satisfaction, our research project shown the results, average R-squared of 0.858 proved that the 5 service quality dimensions will affect the bank customers' satisfaction. From the multiple regression analysis, all of the dimensions of service quality dimensions (assurance, empathy, reliability, responsiveness and tangible) are also proved that they have positive significant relationship with customer satisfaction in bank industry.

From our research, it shows that there is significant relationship between bank service quality and customers' satisfaction. We also found that assurance is the factor that has most significant effect to customers' satisfaction. Assurance is defined as knowledge and behaviour of an employee and conveys trust and confidence to their customers. According to our research findings in Chapter 4, assurance is the predictor variable that contributes the highest to variation of the dependent variable because coefficient (0.355) is the highest compared to other predictor variables. It tells us that the higher extent of assurance is contributing higher level of customer satisfaction. Therefore, banks should be more focused on this factor in order to fulfil customers' needs and satisfaction. Otherwise customers will give less confidence to bank with poor performance in this aspect.

On the other hand, the results obtained from Chapter 4 show us that responsiveness is second significant dimension of service quality that affects the bank customer satisfaction because coefficient (0.136) is the second highest compared to other predictor variables. It tells us that the higher extent of responsiveness is contributing higher level of customer satisfaction. However, responsive score the lowest average mean of 16.8000 in determining customer satisfaction level, which implies that customer moderate satisfied with the way bank staff response to their request. When the customers are doubt with bank service and require assistance from bank staff, the staff should be the one enthusiastic and provide adequate advice to the customers. Customers will feel that the bank's employees are very responsible in their job if the employees patient in assisting, willing to help and provide prompt service to customers and fulfil their needs and wants.

Last but not least, the major contribution of our empirical studies has revealed the significance of each service quality dimension: Assurance, Empathy, Reliability, Responsiveness, and Tangible, in relation to level of customer satisfaction in banking industry. It helps bank in decision making in management and policy taking based on our research findings that the 5 dimensions of service quality significantly affect bank customer satisfaction and assurance causes the most significant effect towards customer satisfaction in banking industry.

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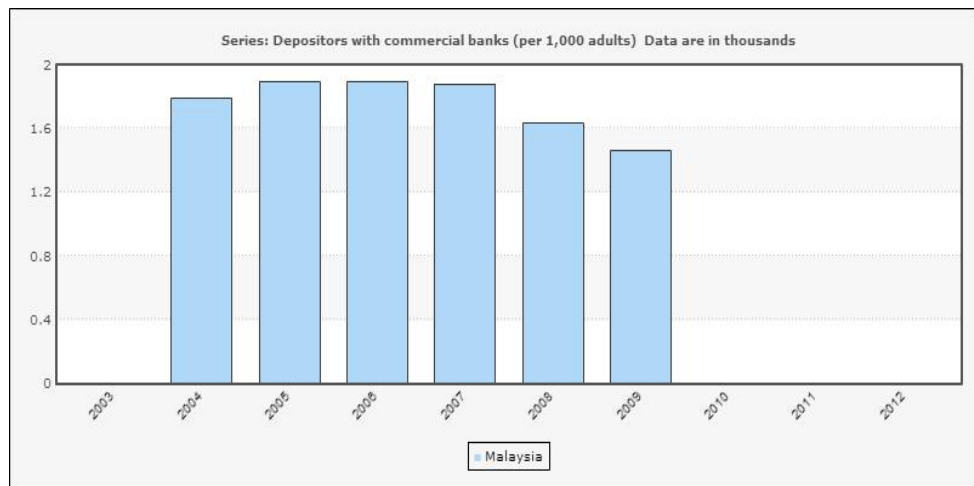
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APPENDICES

Appendix 3.1: Number of Depositors with Commercial Bank Account



Source: World Bank (n.d.)

Appendix 3.2: Table for Determining Sample Size from a Given Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: “N” is population size
 “S” is sample size.

Source: Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.

Appendix 3.3: Rules of thumb for Cronbach’s Alpha coefficient Value

Alpha Coefficient Range	Strength of association
Less than 0.6	Poor
0.6<0.7	Moderate
0.7<0.8	Good
0.8<0.9	Very good
0.9 and above	Excellent

Source: George, D. & Malley, P. (2003). SPSS for windows: A step and reference 11.0 updated (4th Ed). Boston: Allyn& Bacon

Appendix 3.4: Coefficient Range Table

Coefficient range	Strength
±0.91 to ±1.00	Very strong
±0.71 to ±0.90	High
±0.41 to ±0.70	Moderate
±0.21 to ±0.40	Small but definite relationship
±0.00 to ±0.20	Slight, almost negligible

Source: Hair, J. F. J., Money, A. H., Samouel, P., & Page, M. (2007). *Research Methods for Business*, John Wiley and Sons, Inc.

Appendix 3.5 Questionnaire



UNIVERSITI TUNKU ABDUL RAHMAN
Faculty of Business and Finance

BACHELOR OF COMMERCE (HONS) ACCOUNTING
FINAL YEAR PROJECT

**TITLE OF TOPIC: The Relationship between Service Quality and
Customer Satisfaction in Banking Industry.**

Survey Questionnaire

Dear respondent,

We are students of Bachelor of Business Administration (HONS) Banking and Finance from University Tunku Abdul Rahman (UTAR). The **purpose** of this research is to identify the significant relationship between service quality and customer satisfaction in banking industry and to determine which dimension of the services quality the bank should focus in order to increase the bank customer satisfaction.

Thank you for your participation.

Instructions:

- 1) There are **Three** (3) sections in this questionnaire. Please answer ALL questions in ALL sections.
- 2) Completion of this form will take you approximately 10 to 15 minutes.
- 3) Please read the instruction carefully before answering the question. The results of the survey will be reported only in the form of summary and your individual responses will be kept **strictly confidential**.

Group Members:

	Name	Student ID
1.	Lee Yew Chong	0903178
2.	Goh Phei San	1005121
3.	Kow Wen Yi	0905799
4.	Loh Woen Ni	0907364
5.	Sam Kar Hong	0903288

Supervised by: Cik. Nurfadhilah binti Abu Hassan

Designation : Lecturer

Faculty : Faculty of Business and Finance

Section A: Personal Details

Please put a tick in the box next to the answer of your choice or write in the space provided as the case may be.

1. Name of Primary Bank:

- CIMB OCBC Public Bank
 Maybank Others

2. Type of Account:

- Current Account Fixed Deposit Account Savings Account
 Others

3. Gender:

- Male Female

4. Marital Status:

- Single Married

5. Age:

- Below 20 years old 21 - 30 years old 31 - 40 years old
 41 - 50 years old Above 50 years old

6. Qualification:

- Secondary and below Diploma Degree
 Postgraduate

7. Monthly Income:

- Below RM3,000 RM3,000 - RM5,000 Above RM5,000

8. Occupation:

- Businessman Employee Student
 Housewife Others

Section B: Service Quality Dimensions that Influence Customer Satisfaction in Banking Industry

The following set of statement regarding to the service quality dimensions that influence customer satisfaction in Malaysia Banking Sector. The number 1 to 5 represents a continuum with 1 being strong disagreement and 5 represents strong agreement. Based on your experience as a bank customer, please circle the number that best reflects your opinion about the statement.

* Notes: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Service Quality Dimensions		Perceptions * Level of satisfaction with this item				
1.	Assurance * Knowledge of worker and their capability in convey trust and confidence					
a.	When customers have problems, bank should be compassionate and reassuring.	1	2	3	4	5
b.	Customers should feel safe in transactions with bank.	1	2	3	4	5
c.	Customers can put their trust on employees of the bank.	1	2	3	4	5
d.	Bank staff should always be polite.	1	2	3	4	5
e.	Bank staff should be eager to instill confidence in customers.	1	2	3	4	5
2.	Empathy * Provide individualized attention to customer					
a.	Bank staff serve their customer with caring.	1	2	3	4	5
b.	Banker should give individual attention to customers.	1	2	3	4	5
c.	Bank should have operating hours convenient to all their customers.	1	2	3	4	5
d.	Bank staff should try to recognize what customers' needs are.	1	2	3	4	5
e.	Bank should provide the product that best suit to customers.	1	2	3	4	5

SERVICE QUALITY AND CUSTOMER SATISFACTION

* Notes: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Service Quality Dimensions		Perceptions * Level of satisfaction with this item				
3.	Reliability * Provide dependability of service and accuracy of information to customer.					
a.	Bank should be dependable.	1	2	3	4	5
b.	Bank promise to do something by a certain time, they should do so.	1	2	3	4	5
c.	Bank should provide their services at the time they promise to do so.	1	2	3	4	5
d.	Bank should keep their records accurately.	1	2	3	4	5
e.	Bank should inform the time when service will be performed.	1	2	3	4	5
4.	Responsiveness * The willingness to help customers and provide prompt service					
a.	Bank should provide prompt service to the customers.	1	2	3	4	5
b.	Employees of bank should always willing to assist customers.	1	2	3	4	5
c.	Banker should reply in any query of the customers.	1	2	3	4	5
d.	Bank should arrange special care to occasional customers.	1	2	3	4	5
e.	Bank should send out the bank statement at the right time.	1	2	3	4	5
5.	Tangible * Physical element of service environment.					
a.	Bank's physical facilities should be visually appealing.	1	2	3	4	5
b.	Up-to-date equipment and instrument facilities of your bank.	1	2	3	4	5
c.	Employees of bank should be well dressed and appear neat.	1	2	3	4	5
d.	Bank statement should be visually clear.	1	2	3	4	5
e.	Bank pamphlets should be given in clear and complete information.	1	2	3	4	5

Section C: Customer Satisfaction Perceived in Banking Industry

The following set of statement regarding to the customer satisfaction perceived in banking industry. The number 1 to 5 represents a continuum with 1 being strong disagreement and 5 represents strong agreement. Based on your experience as a bank customer, please circle the number that best reflects your opinion about the statement.

* Notes: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Items		Perceptions * Level of satisfaction with this item				
1.	I satisfied with the safety of bank transaction.	1	2	3	4	5
2.	I satisfied with the bank employees' attitude.	1	2	3	4	5
3.	I satisfied with the accuracy of information provided.	1	2	3	4	5
4.	I satisfied with the bank's performance.	1	2	3	4	5
5.	I satisfied with the bank's facilities.	1	2	3	4	5

*Thank you for your time, opinion and comments.
~ The End ~*