

Measuring the perceive service Quality in the Islamic Banking System in Malaysia

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Abstract

The purpose of this study is measuring customers' perceived service quality by using of difference between customers' expectation and perception in the context of Islamic banking system in Malaysia. The work of Islamic bank drives from Islamic principal and Sharia that is differentiate with conventional bank. Therefore, it is important for Islamic banks to determine what customers expect and then develop service products that meet or exceed their perception. In Islamic countries such as Malaysia, Religion is an important factor that can influence on customers' attitude about services. Nowadays, Islamic bank has strong competition with conventional bank because they are faced with different customer expectation to receive high quality services that they serve. Therefore, Islamic bank must think about how they can improve their service to increase customers' perceive quality in compared with conventional bank. In this study we are using CARTER instrument and disconfirmation model for measuring perceive service quality. In addition, this study indicates the gap between customer expectation and perception concerning service quality dimension base on CARTER instrument. By measuring this gap we can find the level of customers' perceive service quality. Furthermore, implications and limitations of this study, as well as directions for future research are discussed.

Keywords: CARTER, perceived service quality, customer expectation, customer perception, Islamic bank, Malaysia

1. Introduction

With the increase of communication devices such as internet, the customers' expectations and demands have been changed. Now, the improvement of the quality of services is enhancing customers' consecutive demand. Nowadays this issue posed for service organization deals with how the outcome is measured in comparison with manufacturing process that generates the products. According to Parasuraman et. al. (1988), service is an intangible outcome that does not possess physical features. Instead, it is determined by its functions, performances and benefits it provides for people that pay money for it. Indeed, it is a form of product that is intangible for those who subscribe it. Marketers believe that services and products marketing are different in several aspects; therefore it is vital that they understand the distinct characteristics of services to apply better marketing strategies and practices (Cowell, 1984; Dibb et. al, 2001). Services and products are especially different through features of intangibility and heterogeneity. Consequently, marketers need to be able to define different aspects of quality for services as compared to products (Parasuraman et. al.1985). In addition, Parasuraman et. al in 1990 defined service quality as customer's perception of how well a service meets or exceeds their expectation; accordingly service quality is judged by customers, not the companies or organizations that offer them.

Therefore, marketers are faced with the challenge of examining their service quality from customers' point view. To achieve this, marketers of service organizations try to determine customers' expectations and then develop their service quality dimension to meet or exceed their customers' expectation.

Marketers utilize data and information obtained from customers point view as the key way of ensuring services fulfill conformity of quality process and customers expectation. Hence, quality from the organization's point view involves a number of key points:

- It is to do with excellence albeit it is subjective
- It is about specifications and standards
- It is very important that it can be measured
- Price and cost for both groups (customers and producers) point view is relevant

- It can meet customers' needs and expectations
- Customer perception of service quality can add some dimensions to customer expectation dimensions (Bettman, 1997).

Given the previous researches, marketers should design their service quality dimensions based on these factors because the dimensions highlighted can cover all aspects of quality. However, these dimensions must be modified based on each organization or industries' needs and areas of services that they want to explore. In some cases, research must be done first to suggest and examine some dimensions to enhance their investigation about the service needs and effectiveness. In Islamic banking sector in particular, marketers are faced by cultural and religious differences among peoples that reinforce the importance of building additional dimensions for service quality. Othman and Owen (2001) introduce a dimension called Compliance for Islamic bank service quality. This dimension includes several items that are directly related to Islamic laws and principles. Muslim people are very sensitive to the Islamic rules especially in financial sectors therefore, the advent of Islamic banking is very important for Islamic world especially in Malaysia that has much Muslim population. In this country, Islamic banking plays very vital role to develop economy and to generate the economic growth.

Islamic banking has become a substantial and fastest growing industry during the last four decades. It has spread across the whole universe and received wide acceptance by both Muslims and non-Muslims (Iqbal & Molyneux, 2005). In this investigation, we will analyze the Islamic banking system in one of the most advanced, fastest growing, and largest economy among Muslim nations in the world that is the country of Malaysia. Management of Islamic banks in Malaysia need to measure their customers' perceived of banks service quality for enhancing their service quality and competitive with commercial banks. In Malaysia, Islamic bank management didn't any work for this issue and can't predict their customers' behavior.

With this introduction, the present study attempts to identify the main criteria of Islamic banks' customer's perceived service quality in Malaysia. Thereby, we seek to study customers' expectation and also perception into the quality of service. For reaching this goal, we select multidimensionality CARTER model to measure service quality. By turn of economic transformation in this era, knowing Customers' Perceived Service Quality includes the potential Muslim customers and non-Muslim customers who are vital for Islamic banking service providers. However, information about customers' perception toward Islamic banking system is inadequate and we don't have enough researches about this issue up to now.

This research finding will lead to the tangible and intangible benefits of the management of Islamic banks, as mentioned below:

- To provide better service quality for Islamic bank customers
- To enhance customer's perceived service quality on Islamic bank services

1.1 Research Objectives

This study investigates Islamic banks because we want to clarify customers' perceptions and expectations within the scope of the services provided in these types of banks. Thus, an important task as per our research's objective is to determine these differentiations to access the degree of customers' perception and satisfaction towards customer loyalty. In addition this research has others objective including:

- To evaluate the dimensions of service quality of Islamic banking system in Malaysia
- To identify the gap between customer expectation and perception

1.2 Research Questions

For reaching this objective, we must provide answers to the following questions:

- What are the dimensions of service quality of Islamic banking system in Malaysia?
- Is there a gap between customers' expectation and perception?

2. Literature Review

2.1 Service Quality

Nowadays, service quality has become one of the important determinants in measuring the success of industries. Marketers agree that service quality has truly presented a significant influence on customers to distinguish competing organizations and contribute effectively to customer satisfaction (Parasuraman, Zeithaml, and Berry, 1985; Mersha, 1992; Avkiran, 1994; Marshal and Murdoch, 2001). Service quality has a vast definition; however an all-embracing definition of this concept and the most recognized definition of this concept proposed by researchers revolves around the idea that it is the result of the comparison that customers make between their expectations about a service and their perception of the service performance (Lehtinen, 1982; Zeithaml, 1988; Gronroos, 1988; Parasuraman, Zeithaml, and Berry 1985, 1988; Mersha, 1992).

Many firms and companies special service organizations pay attention to service quality as an important component for their competitive advantage because they believe that it is a mandatory factor for retaining and improving their level of competitiveness. Marketers recognize that service quality has increasingly become a critical factor in success of any businesses. Therefore, marketers should have to ensure the delivery of superior service values to their customers, especially companies that are active in the banking sector (Parasuraman, Zeithaml, and Berry 1985, 1988). In the present day, this factor is used as one of the variables for customers to evaluate service provider companies and certainly, banking sector in this case is not exempted from this assessment. All researches agree that there are two unique elements of service quality: it is intangible and perishable. Additionally, some of them believe that these elements are the source of all the other elements. (Snoj 1998; Gronroos 2001). The consideration placed on service further portrays that they are processes and not tangible things (Gronroos 2001). As mention in previous chapter, marketers are faced with diverse customer point view about service quality dimensions (Parasuraman, Zeithaml, and Berry, 1985). Whence, marketers of service organization such as bank tried to determine customers expected about service quality and extract their previous experience to improve their service quality dimensions to imply in their production for meeting their customer's expectation. By using of these dimensions, marketers can measure customer perceive service quality and increasing their customers satisfaction.

2.2 Customer Expectation

One of the important issues that marketers are faced with is what the customers expect from the service purchased. Indeed, it is the first and crucial stage in delivering service quality. Customer expectation revolves around their conviction about the products and services that they receive from the organization and company that serves them. It is comprehended as the reference point against which the performance of the service provided is judged. This understanding is imperative for marketers because customers compare the performance or quality of the services received and determines these as the reference points when they experience and evaluate the service quality (Zeithaml et al., 2006).

2.3 Customer Perception

Customers' perceptions are formed subsequent to their experience of the services received from an organization. Furthermore, the level of previous customer experience with certain services that serve by other firms can impact on customers' perception of service quality. Researchers believe that perception and expectation are strong relative concepts (Parasuraman, Zeithaml, and Berry, 1985; Mersha, 1992; Avkiran, 1994). Customers' perceptions results from how customers recognize service quality; customers' expectations however can be shaped through the influence of other people.

2.4 Service Quality Dimensions and Perceive Service Quality

To begin with, in 1982, Lehtinen and Lehtinen provided a three dimensional model of service quality. Their dimensions consist of what they term as corporate, interaction and physical models. Corporate quality consists of organizational image, interaction quality formed among service personnel and customers and finally physical quality includes tangible, equipment and premises. Gronroos (1982) tried to improve this model by focusing on what customers perceive; therefore they see service quality as three dimensions which include functional and technical quality and image. Firstly, technical quality primarily focuses on how the customer receives services and their evaluation on them. Secondly, functional quality focuses on how the service is performed and delivered; finally, image is built during company and customers' interaction (Figure 1). This model is known as Nordic model.

Schneider and White (2004), define service quality as customers' assessment on the overall excellence or superiority of the services provided. Customers evaluate the service perceive performance grounding on their expectation that they already have about the service of the company (Parasuraman, Fornell, and Lehmann 1994). SERVQUAL theory uses this evaluation model for measuring service quality. This is one of the important theories for assessing service quality. Parasuraman and his team's theory highlight five dimensions: Reliability, Empathy, Tangible, Responsiveness and Assurance. According Buttle (1996), this instrument is not universal and has wrong result in some part such as statistical and psychological theory. Other problems of this model are its failure to measure absolute service quality expectation and some item can't capture the variability within each service quality dimension (Othman and Owen, 2001). Cronin and Taylor (1994) introduce another model based on performance to measure service quality (SERVPERF). They expressed that researchers have focused to illustrate differences between service quality and satisfaction by measuring service quality perception; however, this approach cannot distinguish between customers' attitude. One of the important problems that are felt with both the above models is this that none of them pay attention to religion and differentiation among region, religion and countries' culture. In focusing into the variable of religion, it is known that religion, as a belief system affects the choices and behavior patterns in consumers.

In fact, researchers believe that religion is a systematic culture that can create strong beliefs or values for them (Clifford Geertz, 1973). In relation to this and satisfaction of customers' needs in service industry, marketers further believe that religion often influence customer behavior and decision when purchasing a product or service (Kotler et al., 1999; Karjaluoto et al., 2002). Relating this to Islamic banking as a specific model of our study, this explains why Muslim people who are sensitive about interest-based transaction of conventional bank – being one of the most common issues among Muslim banking clients – moved to open account in Islamic banks. Therefore making an additional dimension is necessary for service quality that pays to these factors such as in Islamic banking industry. Othman and Owen in 2001 develop a new model to modify SERVQUAL model for Islamic banking system. They add a new dimension to SERVQUAL five dimensions called “Compliance with Islamic Principal”. This dimension defines the company's ability to fulfill Islamic law and operate under the principles of Islamic banking and economy.

2.4.1 Disconfirmation Model

This research uses the confirmation/disconfirmation model of customer perceived service quality that evaluates customer perceived by making a comparison between perceived performance and expectation (perceived performance-expectation). Oliver (1997) explains that customers' behavior is the customers' response to judgment about how much their evaluation is fulfilled for the services and products they have prescribed. In addition, customer perceived service generally describes customers' feeling on the comparison of the perceived performance and their expectation on services (Kotler, 2003). Others have similarly defined this concept, including Wangenheim (2003) who explains customer perceived service quality as an outcome of customer's comparison between disconfirmation model concepts throughout the customers' relationship with service providers.

Oliver (1997) further elaborates that disconfirmation model can be described as positive disconfirmation, neutral and negative disconfirmation. If perceived performance exceed customers' expectations (performance > expectation), positive disconfirmation occur; whereas, if perceived performance is less than customers' expectations (performance < expectation) and fail to perform what is execrated, negative disconfirmation will occur. In addition, if both of them are within the same grade and performance is able to meet what the customers expect (performance = expectation), then the customer will feel neutral (Figure 2).As described in the literature that have been used as basis for this concept, and based on two instruments we have found for service quality (CARTER, Othman and Owen, 2001) and customer perceived quality (Disconfirmation, Oliver, 1997), we will apply the following equation to developed our framework for this research. Service quality → (Service Perception – Service Expectation) = Perceived Service Quality

3. METHODOLOGY

3.1 Framework and Hypothesis

Researchers state that service quality is significantly embedded in field of service marketing and business literature (Lee, Lee and Yoo 2000). Given that perceived service quality is an offshoot of service quality, we can gauge it with the very attributes of service quality. This measurement method in turn, which is based on features of service quality, can be utilized as a dimension to determine the effectiveness of the service provided by organizations or companies to their customers (Parasuraman , Zeithaml and Berry, 1988). To add, customer expectation, service delivered outcome (performance) and the process of delivery too have their own distinct influences on perceive service quality (Ghobadian, Speller and Jones, 1994). Furthermore, perceived service qualities are established during the process of production and delivery by the companies and in the course of consumption by customers (Edvardsson, 2005). Therefore, to determine perceived service quality, researchers measure level of difference between customers' expectation and their performance of the actual service that was delivered by a company (Parasuraman, Zeithaml, and Berry 1988).

Customers' perception and satisfaction of service depends on the quality of the services that are provided for them by a company. According to Schneider and White (2004), we can observe perceived service quality through the factors that influence experiences that customers receive from services such as the feeling of pleasure and displeasure towards the services received. This element highlight some researchers' belief that customers' previous experience about same product or services affect customers' perceptions on the company in large (Parasuraman, Fornell, and Lehmann 1994). Perceive service quality looks at the difference between customers' performance and expectation; which results to measurement of perceived service quality by highlighting the gap between them The literature that has been used to form the foundation to develop a conceptual framework for this study is shown in Figure 3. This framework can distinguish the gap between service quality performance and expectations in Islamic banking system and increase customers' perceived quality concerning the bank's service quality system.

According to this framework, service quality dimensions directly affect customers' perceived service quality components. The study examines several of these dimensions on customers' perceived quality to extract the gap between customers' perception and expectation.

Based on the framework, it can be hypothesized that:

H1: there is a difference between customer perception and expectation in relation to reliability

H2: there is a difference between customer perception and expectation in relation to empathy

H3: there is a difference between customer perception and expectation in relation to tangibility

H4: there is a difference between customer perception and expectation in relation to assurance

H5: there is a difference between customer perception and expectation in relation to responsiveness

H6: there is a difference between customer perception and expectation in relation to compliance

H7: difference between customer perception and expectation has a direct impact to measure perceived service quality

3.2 Research design

The nature and the purpose of our study are Hypothesis Testing. In addition, this study is conducted in the natural environment with minimum interference. This study used a cross-sectional research design which is a study based on accumulated data analysis to provide insights to answering our research questions. According to Cresswell 1998, cross-sectional studies allow the researchers to integrate variables highlighted within the relevant literature, a pilot study and the actual survey as the main procedure to gather accurate and less biased data. This design of research was used to conduct our study in all Islamic banks in Kuala Lumpur, the capital of Malaysia. In addition, we have also collected information from numerous literatures and researches linked to our research to understand the nature of customers' satisfaction, perceived service quality and Islamic banking system, as well as distinguishing the relationship among these variables. Eventually, upon gathering, refining, categorizing and comparing the data and information from various sources, they are used to provide the content and format of our survey questionnaires for the actual research. In this research, we acquire primary data by distributing questionnaires among clients that have accounts in Islamic banks as well as via emails and survey websites.

3.3 Sample

Since this study investigates the relationship between service quality, customers' expectations and perception and perceived service quality of banks' products in the context of the Islamic banking system, Malaysian customers of the banking sector have been perceived to be the population of the study. The research thus concentrates on primary data that were collected through distributing self-administered questionnaires at major parts of Kuala Lumpur, Serdang and Cyberjaya. Besides this, the questionnaires were also posted on an online survey website (www.kwiksurveys.com). Sampling method that was used in this study is probability sampling. In addition to this method, we also use unrestricted or simple random sampling technique to gather primary data because this sampling technique gives each element an equal and independent chance of being selected. Fifty paper questionnaires were distributed in different parts of Kuala Lumpur (Malaysia National Library, KLCC), Serdang (University Putra Malaysia) and Cyberjaya (Multimedia University) via face-to-face communication to collect their responses and they were answered by the participants by consent and on a voluntary basis but only 34 questionnaires were returned to the researcher. In addition, 62 persons filled up our surveys in www.kwiksurveys.com website. Therefore we gather 102 surveys from respondents that are a sufficient number of statistical reliability.

3.4 Data analysis

A statistical package for social sciences (SPSS) version 15.0 was used to analyze the data from the questionnaires. Firstly, exploratory factor analysis (EFA) was used to assess the validity and reliability of measurement scales (Hair, Anderson, Tatham, & Black, 1998). Secondly, Pearson correlation analysis (r) and descriptive statistics were conducted to determine the linearity problem and the usefulness of the data set. Finally, a multiple regression analysis was used to measure the perceived service quality effect.

4. Result and Analysis

4.1 Hypotheses testing:

This study tried to examine the following hypotheses:

4.1.1 Hypothesis 1:

H0: There is no difference between customer perception and expectation in relation to reliability.

H1: There is a difference between customer perception and expectation in relation to reliability.

In order to analyze this above hypothesis Paired sample T test, which computes the differences between customer perception and expectation in relation to reliability, was used. The following tables show the result from taking Paired sample T test.

Mean reliability perception and expectation are 2.6871 and 1.6986 respectively. The difference is 0.98844 units (Table 1). There are 0.234 correlations between reliability perception and expectation for the 98 cases analyzed here (Table 2). According Table 3, the p-value of the test is 0.000, which is less than 0.05 indicating that there is a significant change in reliability perception and expectation. The mean perception 2.6871 is higher than mean expectation 1.6986; therefore, there is a significant change in reliability perception and expectation. The 95% confidence interval for mean differences is [0.79828, 1.17858] and it does not contain the value of zero. Therefore, we are confidence 95% that there is significant change between perception and expectation in relation to reliability. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to reliability.

4.1.2 Hypothesis 2:

H0: There is no difference between customer perception and expectation in relation to empathy.

H1: There is difference between customer perception and expectation in relation to empathy. In order to analyze this above hypothesis Paired sample T test, which computes the differences between customer perception and expectation in relation to empathy, was used. The following tables show the result from taking Paired sample T test. Mean empathy perception and expectation are 2.5843 and 1.8812 respectively. The difference is 0.70306 units (Table 4). There are 0.249 correlations between empathy perception and expectation for the 98 cases analyzed here (Table 5).

According Table 6, the p-value of the test is 0.000, which is less than 0.05 indicating that there is a significant change in empathy perception and expectation. The mean perception 2.5843 is higher than mean expectation 1.8812; therefore, there is a significant change in empathy perception and expectation. The 95% confidence interval for mean differences is [0.53066, 0.87546] and it does not contain the value of zero. Therefore, we are confidence 95% that there is significant change between perception and expectation in relation to empathy. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to empathy.

4.1.3 Hypothesis 3:

H0: There is no difference between customer perception and expectation in relation to tangibility.

H1: There is difference between customer perception and expectation in relation to tangibility.

In order to analyze this above hypothesis Paired sample T test, which computes the differences between customer perception and expectation in relation to tangibility, was used. The following tables show the result from taking Paired sample T test. Mean tangibility perception and expectation are 2.5837 and 1.8694 respectively. The difference is 0.71429 units (Table 7). There are 0.199 correlations between tangibility perception and expectation for the 98 cases analyzed here (Table 8).

According Table 9 the p-value of the test is 0.000, which is less than 0.05 indicating that there is a significant change in tangibility perception and expectation. The mean perception 2.5837 is higher than mean expectation 1.8694; therefore, there is a significant change in tangibility perception and expectation. The 95% confidence interval for mean differences is [0.55902, 0.86956] and it does not contain the value of zero. Therefore, we are confidence 95% that there is significant change between perception and expectation in relation to tangibility. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to tangibility.

4.1.4 Hypothesis 4:

H0: There is no difference between customer perception and expectation in relation to assurance.

H1: There is difference between customer perception and expectation in relation to assurance.

In order to analyze this above hypothesis Paired sample T test, which computes the differences between customer perception and expectation in relation to assurance, was used. The following tables show the result from taking Paired sample T test. Mean assurance perception and expectation are 1.6684 and 2.5689 respectively. The difference is 0.90051 units (Table 10). There are 0.193 correlations between assurance perception and expectation for the 98 cases analyzed here (Table 11).

According Table 12 the p-value of the test is 0.000, which is less than 0.05 indicating that there is a significant change in assurance perception and expectation. The mean perception 1.6684 is lower than mean expectation 2.5689; therefore, there is a significant change in assurance perception and expectation. The 95% confidence interval for mean differences is [-1.05483, -0.74619] and it does not contain the value of zero. Therefore, we are confidence 95% that there is significant change between perception and expectation in relation to assurance. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to assurance.

4.1.5 Hypothesis 5:

H0: There is no difference between customer perception and expectation in relation to responsiveness.

H1: There is difference between customer perception and expectation in relation to responsiveness.

In order to analyze this above hypothesis Paired sample T test, which computes the differences between customer perception and expectation in relation to responsiveness, was used. The following tables show the result from taking Paired sample T test. Mean responsiveness perception and expectation are 1.8061 and 2.5918 respectively. The difference is 0.78751 units (Table 13). There are 0.207 correlations between responsiveness perception and expectation for the 98 cases analyzed here (Table 14).

According table 15 the p-value of the test is 0.000, which is less than 0.05 indicating that there is a significant change in responsiveness perception and expectation. The mean perception 1.8061 is lower than mean expectation 2.5918; therefore, there is a significant change in responsiveness perception and expectation. The 95% confidence interval for mean differences is [-0.97722, -0.59421] and it does not contain the value of zero. Therefore, we are confidence 95% that there is significant change between perception and expectation in relation to responsiveness. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to responsiveness.

4.1.6 Hypothesis 6:

H0: There is no difference between customer perception and expectation in relation to compliance.

H1: There is difference between customer perception and expectation in relation to compliance.

In order to analyze this above hypothesis Paired sample T test, which computes the differences between customer perception and expectation in relation to compliance, was used. The following tables show the result from taking Paired sample T test. Mean compliance perception and expectation are 2.6071 and 2.4286 respectively. The difference is 0.17857 units (Table 16). There are 0.358 correlations between compliance perception and expectation for the 98 cases analyzed here (Table 17).

According Table 18 the p-value of the test is 0.073, which is less than 0.10 indicating that there is a significant change in compliance perception and expectation.

The mean perception 2.6071 is higher than mean expectation 2.4286; therefore, there is a significant change in compliance perception and expectation. The 90% confidence interval for mean differences is [-0.01721, 0.37435] and it does not contain the value of zero. Therefore, we are confidence 90% that there is significant change between perception and expectation in relation to compliance. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to compliance.

Hypothesis 7:

H0: difference between customer perception and expectation hasn't direct impact to measure perceive service quality

H1: difference between customer perception and expectation has direct impact to measure perceive service quality

In order to analyze the hypothesis 7, the linear multiple regressions was applied.

The linear multiple regressions are used to establish pattern of relationship between predictors and outcome variables. Both the predictor and outcome variables are measured on continuous scale. The following results, as shown in following tables, obtained. As it is shown in the table 19, the Pearson's Correlation Coefficient can be seen. All p-values are less than 0.05, which indicates that there exists a relationship between variables. As it is shown in the table 20, $R=0.796$, and $R\text{-square}=0.634$. 63.4% of the variation in customer perceive service Quality is explained by perception and expectation.

P-value was measured to be 0.000 that is less than 0.05 indicating that perception and expectation can be used to predict customer perceived service quality, and illustrate the goodness of fit of this model (Table 21).

As it is shown in Table 22, all of the regression coefficients of the model are significant at the level 10%.

Customer perceived service quality = $1.135 + -0.423$ (expectation) + 0.955 (perception)

5. Discussions and Conclusions

5.1 Reliability on Perceived service quality

We are confidence 95% that there is significant change between perception and expectation in relation to reliability. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to reliability. (Table 3) It can be deduce that customers able to use Banks' services everywhere because of extensive services and also customer confidence. Moreover Security transaction is very effective for Perceived service quality.

5.2 Empathy on Perceived service quality

We are confidence 95% that there is significant change between perception and expectation in relation to empathy. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to empathy. (Table 5) As a result it can be concluded that following factors play a very important role on Perceived Service Quality:

- a. Bank's Location
- b. Being Well known
- c. Accessory Features (inside and outside the Bank)
- d. Customer confidence on Banks' Employees and Managers

5.3 Tangibility on Perceived service quality

We are confidence 95% that there is significant change between perception and expectation in relation to tangibility. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to tangibility. (Table 9) As a result by considering some elements such as External appearance, Speed and efficiency of transactions, Opening hours of operations, Counter partitions in Bank and its branches and Overdraft privileges on current account, the improvement of Service Quality and also Customer Satisfaction are obvious.

5.4 Assurance on Perceived service quality

We are confidence 95% that there is significant change between perception and expectation in relation to assurance. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to assurance. (Table 12) This means that, positive changes and improvement on Staff's Behaviors, Financial Advices, and Easy Access to Account Information for customers, and also knowledgeable and experienced management team affect on Customer Satisfaction.

5.5 Responsiveness on Perceived service quality

We are confidence 95% that there is significant change between perception and expectation in relation to responsiveness. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to responsiveness. (Table 15) Regarding to the mentioned result it can be illustrated that Employees' Responsibility on the Responsiveness to Customers and also their willingness to help customers affect Perceived service quality.

5.6 Compliance on Perceived service quality

We are confidence 90% that there is significant change between perception and expectation in relation to compliance. Consequently the null hypothesis is rejected and it can be concluded that there is difference between customer perception and expectation in relation to compliance. (Table 18) So there is a relationship between Adherences to Islamic law for providing Banking Services, Customer Satisfaction, Profit-sharing investment product and Perceived Service Quality.

5.7 Conclusion

Service quality context refers to a comparison of expectation with performance. It is a measure of how well a customer's expectation matches with services that are delivered by company or organization (Lewis & Booms, 1993). According to Wong and Sohal in 2003, companies could increase their customer's satisfaction and also customer's loyalty through improving service quality that has been related to success in organization, especially in service provider organizations. One of the important organizations that provide service for customers is bank. Islamic rules especially financial sectors are very important for Muslim people therefore, for Islamic world especially in Malaysia that has much Muslim population the advent of Islamic banking is very crucial. In this country, Islamic banking plays very vital role to develop economy and to generate the economic growth. Islamic banking has become a substantial and fastest growing industry during the last four decades. It has spread across the whole universe and received wide acceptance by both Muslims and non-Muslims (Iqbal & Molyneux, 2005). Identifying the main criteria of Islamic banks' customer's satisfaction in Malaysia and studying customers' expectation and also perception into the quality of service can be done by CARTER model. Because of clarifying customers' perception and expectation that use these banks services, differences between Islamic and conventional banks are important, however their objective is access to the degree of customers' perception and satisfaction towards customer loyalty.

5.7 Recommendation

Regarding to some weaknesses of effective factors in Perceived Customer Quality, there is a need for changes in some Banks. For instance some changes in Responsiveness and Empathy are necessary according to their existing elements. It is evident that in many aspects these changes need some factors such as: Employee training, Management decision making, and also more cost. Although these kinds of changes need more money and time, in long run it will lead to Customer Satisfaction.

References

- Ashfaq.A, Kashif-ur-Rehman, Iqbal.S, Nadeem.S. (2010), "An empirical investigation of Islamic banking in Pakistan based on perception of service quality", *African Journal of Business Management* Vol. 4(6), pp. 1185-1193, June 2010
- Almossawi.M. (2001), "Bank selection criteria employed by college students in Bahrain: an empirical analysis", *International Journal of Bank Marketing*, 19, pp. 115-25.
- Avkiran.N. (1994), "Developing an Instrument to Measure Customer Service Quality in Branch Banking", *International Journal of Bank Marketing*; 12(6), 10-18.
- Bank Negara (2006), *Bank Negara Annual Report 2009*, Central Bank of Malaysia. Kuala Lumpur
- Lumpur.B. (1979), "Why we need service marketing", in O.C. Ferrel, S.W. Brown, and C.W. Lamb, Jr, eds, *Conceptual and Theoretical Development in*
- Bettman.J. (1997) "An Information Processing Theory of Consumer Choice".
- Buttle.F. (1996), "SERVQUAL: review, critique, research agenda. European", *Journal of Marketing*, 30(1), pp.8-32.
- Creswell.J.W. (1998). "Quality inquiry and research design: choosing among five traditions. London", SAGE Publication.
- Cronbach.L.J.(1951). "Coefficient alpha and the internal structure of tests", *Psychometrika*, 16(3), pp.297-334.
- Cronin,J.J , Taylor, S.A., (1994). "SERVPERF versus SERVQUAL: reconciling performance-based and perception-minus-expectations measurement of service quality". *Journal of Marketing*, 58, pp.55-68.
- Cowell, D. (1984), "The Marketing Services, London, Heinemann"
- Dibb.S, Simkin. L., Pride. W, Ferrel, O.C. "Marketing Concepts and Cases, 4th edition, 2001"
- Dusuki. A. W., Abdullah, N. I. (2007). "Why do Malaysian customers patronise Islamic banks?" *International Journal of Bank Marketing*, 25(3), pp.142-160.
- Edvardsson, B.(2005). "Service quality: Beyond cognitive assessment". *Managing Service Quality* Vol.15 (2): pp.127-131.
- Eggert, A, Ulaga, W. (2002). "Customer perceived value: a substitute for satisfaction in business markets?" *Journal of Business and Industrial Marketing*, vol.17 (2/3), pp.107-118.
- Francis Buttle, (1996). "SERVQUAL: review, critique, research agenda" *European Journal of Marketing*, Vol.30 (1), pp.8-31
- Fornell, C. (1994), "A National Customer Satisfaction Barometer: the Swedish Experience", *Journal of Marketing*, Vol. 56, pp. 6-12.
- Ghobadian, A, S. Speller, M. Jones. (1994). "Service quality: Concepts and models". *International Journal of Quality & Reliability Management* 11 (9): pp.43-66.
- Gronroos, C. (1982), "An applied service marketing theory", *European Journal of Marketing*, Vol. 16, January-February, pp. 30-41.
- Gronroos, C. (1988), "SQ: the six criteria of good perceived SQ", *Review of Business*, 9(3), pp.10-13.
- Gronroos, C. (1990). "Service Management and Marketing", D.C. Heath and Company/ Lexington, Massachusetts/Toronto: Lexington Books
- Gronroos, C. (2001). "The perceived service quality concept – a mistake?", *Managing Service Quality* 11 (3): pp.150-2.
- Haron.S, Ahmad.N, Planisek.S. (1994), "Bank patronage factors of Muslim and Non-Muslim customers", *International Journal of Bank Marketing* 12(1): pp.32-40.
- Hallowell.R. (1996), "the relationships of customer satisfaction, customer loyalty, and profitability: an empirical study", *International Journal of Service Industry Management*, Vol. 7, pp. 27-42.
- Harris,L.C, Goode, M. M. H. (2004). "The four levels of loyalty and the pivotal role of trust: A study of online service dynamics". *Journal of Retailing*, 80(2), pp.139-158.
- Hair. J. E, Anderson. R. E, Tatham, R. L, Black. W. C. (1998). "Multivariate data analysis". Upper Saddle River, NJ: Prentice-Hall.
- Iqbal, M., Molyneux, P. (2005). "Thirty years of Islamic Banking: History, Performance and Prospect". New York, NY:Palgrave Macmillan.
- Jamal, A., and K. Naser. (2002). "Customer satisfaction and retail banking: An assessment of some of the key antecedents of customer satisfaction in retail banking". *International Journal of Bank Marketing* 20 (4): pp.146-60.
- Johnson, Michael D. Claes Fornell. (1991). "A Framework for Comparing Customer Satisfaction Across Individuals and Product Categories", *Journal of Economic Psychology* Vol. 12(2) (Fall), pp. 267-286.
- Juwaheer, T. D, Ross. D. L. (2003). "A study of guest perceptions in Mauritius" *International Journal of Hospitality Management*, Vol. 15(2), pp. 105-115.
- Kamila, B, Nantel, J. (2000), "A reliable and valid measurement scale for the perceived service quality of banks", *International Journal of Bank Marketing*, Vol. 18(2), pp. 84-91.

- Karjaluoto, Heikki, Mattila, Minna, and Pentto, Tapio (2002), "Factors Underlying Attitude Formation Towards Online Banking in Finland", *International Journal of Bank Marketing*, Vol.20 (6), pp. 261-272.
- Kotler, P., Armstrong, G., Saunders, J, Wong. V. (1999), "Principle of Marketing" European Edition, Rotolito Lombarda, Milan.
- Kotler Philip, (2003), "Marketing Management", Pearson Education, Inc. Fifth edition.
- LaBarbera, P.A, Mazursky. D. (1983), "A longitudinal assessment of consumer satisfaction/dissatisfaction: the dynamic aspect of the cognitive process", *Journal of Marketing Research*, Vol. 29, November, pp. 393-404.
- Lebank. G and Nguyen N. (1988), "customer perception of service quality in financial institution". *International Journal of Bank Marketing* Vol.6(4), pp. 7-18
- Lee, H., Y. Lee, and D. Yoo. (2000). "The determinants of perceived service quality and its relationship with satisfaction". *Journal of Services Marketing* Vol.14 (3): pp. 217–231.
- Lewis. R.C, Booms. B.H. (1983), "The marketing aspects of service quality", in Berry, L.L., Shostack, G. and Upah, G. (Eds), *Emerging Perspectives in Service Marketing*, American Marketing Association, Chicago, pp. 99-107.
- McDougall, G. H. G, T. Levesque, (2000). "Customer satisfaction with services: putting perceived value into the equation". *Journal of Services Marketing* Vol.14(5), pp.392–410.
- Mersha T, Adlakha V, (1992), "Attributes of SQ: The Consumers' Perspective", *International Journal of Service Industry Management*, Vol.3(3), pp. 55-70.
- Martin. R, Ulrich F. Lunemann, Richard B. Chase, (2008). "Uncertainty Avoidance as a Moderator of the Relationship between Perceived Service Quality and Customer Satisfaction". *Journal of Service Research* 2008, Vol.11; pp. 63
- Muth, J.F., (1961). "Rational expectations and the theory of price movements". *Econometrica* Vol.29, pp.315-335.
- N.K.Yunus, A. Ismail, Z.R. Juga,S. Ishak, (2009). "Service Quality Dimensions, Perceive Value and Customer Satisfaction: ABC Relationship Model Testing". *IB EJ*. Vol.2(1) pp. 1985-2126
- Nunnally, J. C. (1987), "Psychometric theory". McGraw-Hill, New York, pp.23-45
- Oliver, R.L. (1981). "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions". *Journal of Marketing Research*, No. XVII, November.pp.460-69.
- Oliver, R.L. (1993). "A Conceptual Model of Service Quality and Service Satisfaction: Compatible Goals, Different Concepts." in Swartz, A.T., Bowen, D.E. and Brown, S.W. (Eds), *Advances in Services Marketing Management*, Vol. II, JAI Press, Greenwich, CT, pp.65-85.
- Oliver, R.L. (1997). "Satisfaction: A behavioral perspective on the consumer". New York:Irwin/McGraw-Hill.
- Othman & Owen. (2001), "Adopting and Measuring Customer Service Quality (SQ) in Islamic Banks: A Case Study in Kuwait Finance House", *International Journal of Islamic Financial Services* Vol. 3(1).
- Parasuraman, A., V. A. Zeithaml, and L. L. Berry. (1985), "A conceptual model of SQ and its implications for future research," *Journal of Marketing*, Vol. 49, Fall, pp.41-50.
- Parasuraman, A., V. A. Zeithaml, and L. L. Berry. (1988) "servqual: A multiple-item scale for measuring consumer perceptions of service quality". *Journal of Retailing* Vol.64 (1), pp.14–40.
- Parasuraman, A., V. A. Zeithaml, and L. L. Berry.(1990), "An empirical examination of relationship in an extended service quality model", *Marketing Science Institute*, Cambridge, MA.
- Pollard, Jane and Samers, Michael. (2007), "Islamic Banking and Finance: Postcolonial Political Economy and the decentring of Economic Geography", *Trans Inst Br Geogr NS* Vol.32, pp. 313-330.
- Shafie. s, Nursofiza. W. A, Haron, (2004), *Adopting and Measuring Customer Service in Islamic Bank: A Case Study of Bank Islam Malaysia Berhad*", *Journal of Muamalat and Islamic Finance Research*, 2004, Vol. 1(1)
- Schneider, B. and White, S. (2004), "Service Quality Research Perspectives, Sage, Thousand Oaks, CA"
- Spreng RA, Mackenzie SB, Olshavsky RW, (1995), "A reexamination of the determinants of consumer satisfaction", *J Mark* Vol.60, pp.15 –32 (July).
- Snoj, B. (1998). "Management storitev. Koper: Visoka sola za management"
- Sureshchandar, G.S., Rajendran, C. & Anantharaman, R. N. (2002). "The relationship between service quality and customer satisfaction – a factor specific approach". *Journal of Services Marketing*, Vol.16(4), pp.363-379.
- Taylor, S. A., & Baker, T. L. (1994). "An assessment of relationship between service quality and customer satisfaction in the formation of consumers' purchase intentions." *Journal of Retailing*, Vol.70(2), pp.163–178.
- Wallendorf, Melanie and Michael D. Reilly (1983). "Ethnic Migration, Assimilation, and Consumption", *Journal of Consumer Research*, Vol.10 (December), pp.292-302.
- Walker, James. L., (1995). "Service Encounter Satisfaction : Conceptualized. *Journal of Services Marketing*", vol. 9 (1), pp. 7-14.
- Zeithaml, V.A. (1988), "Consumer Perceptions of Price, Quality and Value: A Means-End Model and Synthesis of Evidence," *Journal of Marketing*, Vol.52 (3), pp. 2-22.
- Zeithaml, V.A., Bitner, M.J. and Gremler, D.D.(2006). "Service Marketing. Intergrating Customer Focus Across the Firm". Andy WinstonAmericas. Clifford Geertz, 1973, Religion as a Cultural System,

Appendix:

Table 1. Paired sample statistics of H1

	Mean	N	Std. Deviation	Std. Error Mean
RE_P	2.6871	98	0.74161	0.07491

Table 2. Paired samples correlations of H1

	N	Correlation	Sig.
Pair 1 RE_P & RE_E	98	0.234	0.020

Table 3. Paired sample test:

Paired Differences							
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
			Lower	Upper			
0.98844	0.94841	0.09580	0.79829	1.17858	10.317	97	0.000

Table 4. Paired sample statistics H2

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 EMP_P	2.5843	98	0.65453	0.06612
EMP_E	1.8812	98	0.74421	0.07518

Table 5. Paired samples correlations of H2

	N	Correlation	Sig.
Pair 1 EMP_P & EMP_E	98	0.249	0.013

Table 6. Paired sample test of H2

Paired Differences							
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
			Lower	Upper			
0.70306	0.85989	0.08686	0.53066	0.87546	8.094	97	0.000

Table 7. Paired sample statistics of H3

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 TAN_P	2.5837	98	0.60508	0.06112
TAN_E	1.8694	98	0.61868	0.06250

Table 8. Paired samples correlations of H3

	N	Correlation	Sig.
Pair 1 TAN_P & TAN_E	98	0.199	0.049

Table 9. Paired sample test of H3

Paired Differences							
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
			Lower	Upper			
0.71429	0.77446	0.07823	0.55902	0.86956	9.130	97	0.000

Table 10. Paired sample statistics of H4

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	AS_P	1.6684	98	0.55121	0.05568
	AS_E	2.5689	98	0.65387	0.06605

Table 11. Paired samples correlations of H4

	N	Correlation	Sig.
Pair 1 AS_P & AS_E	98	0.193	0.057

Table 12. Paired sample test of H4

Paired Differences							
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
			Lower	Upper			
0.90051	0.76971	0.07775	-1.05483	-0.74619	11.582	97	0.000

Table 13. Paired sample statistics of H5

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	RES_P	1.8061	98	0.78774	0.07957
	RES_E	2.5918	98	0.72722	0.07346

Table 14. Paired samples correlations of H5

	N	Correlation	Sig.
Pair 1 RES_P & RES_E	98	0.207	0.041

Table 15. Paired sample test of H5

Paired Differences							
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
			Lower	Upper			
0.78571	0.95518	0.09649	-0.97722	-0.59421	8.143	97	0.000

Table 16. Paired sample statistics of H6

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	COM_P	2.6071	98	1.01344	0.10237
	COM_E	2.4286	98	0.60390	0.06100

Table 17. Paired samples correlations Of H6

	N	Correlation	Sig.
Pair 1 COM_P & COM_E	98	0.358	0.000

Table 18. Paired sample test of H6

Paired Differences							
Mean	Std. Deviation	Std. Error Mean	90% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
			Lower	Upper			
0.17857	0.97653	0.09864	-0.01721	0.37435	1.810	97	0.073

Table 19. Correlation of H7

		Customer perceived	Expectation	Perception
Pearson Correlation	Customer perceived	1.000	-.216	.717
	Expectation	-.216	1.000	.175
	Perception	.717	.175	1.000
Sig. (1-tailed)	Customer perceived	.	.016	.000
	Expectation	.016	.	.043
	Perception	.000	.043	.
N	Customer perceived	98	98	98
	Expectation	98	98	98
	Perception	98	98	98

Table 20. Model summary of hypothesis 7

Model R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.796a	.634	.426	.634	82.259	2	95	.000	2.030

a. Predictors: (Constant), Perception, Expectation

b. Dependent Variable: Customer perceived service quality

Table 21. ANOVA of hypothesis 7

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.877	2	14.939	82.259	.000a
	Residual	17.253	95	.182		
	Total	47.130	97			

a. Predictors: (Constant), Perception, Expectation

b. Dependent Variable: Customer perceived service quality

Table 22. Coefficient of hypothesis 7

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics		
	B	Std. Error				Lower Bound	Upper Bound	Zero order	Partial	Part	Tolerance	VIF	
1 (Constant)	1.135	.229		4.967	.000	.682	1.589						
Expectation	-.423	.076	-.352	-5.584	.000	-.573	-.273	-.216	-.497	-.347	.969	1.032	
Perception	.955	.077	.778	12.345	.000	.801	1.108	.717	.785	.766	.969	1.032	

a. Dependent Variable: Customer perceived service quality

Figure 1: Nordic model of perceived service quality (Groneroos, 1982)

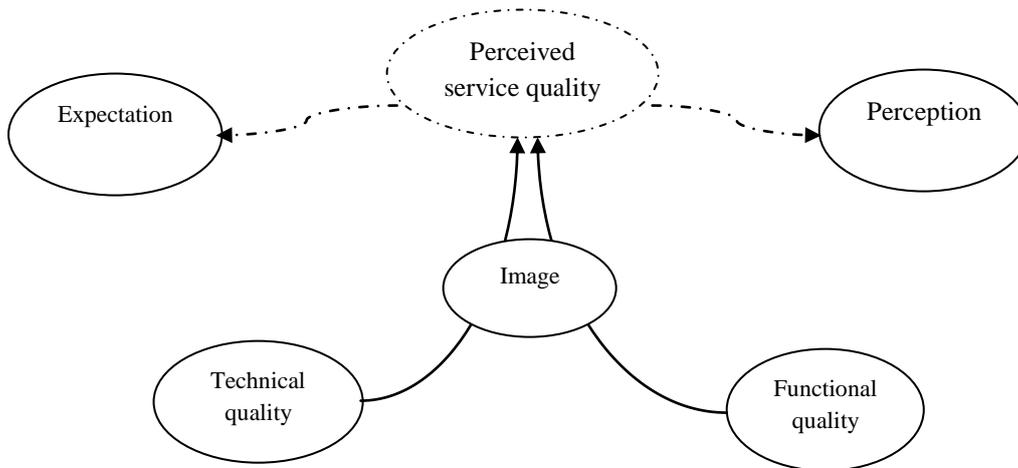


Figure 2: The Disconfirmation Model (walker, 1995; Oliver, 1993)

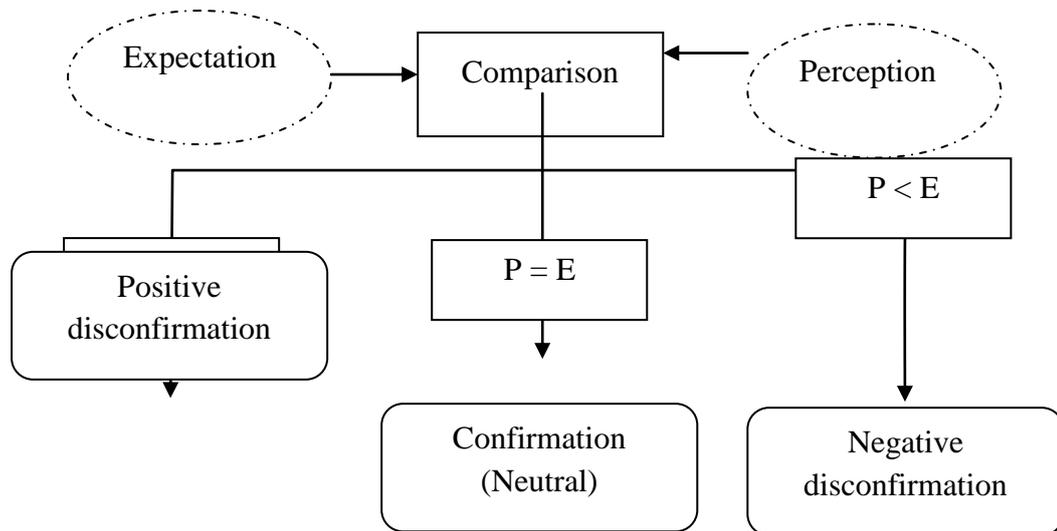


Figure 3: Framework
Service Quality

