

# The Impact of Service Quality on Customer Loyalty: A Study of Banks in Penang, Malaysia

Lo Liang Kheng

School of Management, Universiti Sains Malaysia (USM), Malaysia

Osman Mahamad, Professor

Graduate School of Business, Universiti Sains Malaysia (USM), Malaysia

E-mail: osman@usm.my

T. Ramayah, Associate Professor

School of Management, Universiti Sains Malaysia (USM), Malaysia

E-mail: ramayah@usm.my

Rahim Mosahab, PhD Candidate (Corresponding author)

School of Management, Universiti Sains Malaysia (USM), Malaysia

E-mail: rmosahab@yahoo.com

## Abstract

The emergence of new forms of banking channels such as Internet banking, Automated Teller Machines (ATM), phone banking and also maturing financial market and global competition have forced bankers to explore the importance of customer loyalty. Therefore, studies need to focus on the changing role of the banking system and its dynamic financial market. The underlying model of SERVQUAL (Parasuraman et al., 1988) with five dimensions was used by this research to evaluate the impact of service quality on customer loyalty among bank customers in Penang, Malaysia with customer satisfaction mediating these variables. The findings show that improvement in service quality can enhance customer loyalty. The service quality dimensions that play a significant role in this equation are reliability, empathy, and assurance. The findings indicate that the overall respondents evaluate the bank positively, but still there are rooms for improvements.

**Keywords:** Tangibles, Reliability, Responsiveness, Empathy, Assurance, Customer satisfaction customer loyalty

## 1. Introduction

Success of a service provider depends on the high quality relationship with customers (Panda, 2003) which determines customer satisfaction and loyalty (Jones, 2002 as cited by Lymperopoulos et al., 2006). Research has shown repeatedly that service quality influences organizational outcome such as performance superiority (Porella & Thanassoulis, 2005), increasing sales profit (Levesque & Mc. Dougal, 1996; Kish, 2000; Duncan & Elliot, 2002) and market share (Fisher, 2001), improving customer relations, enhance corporate image and promote customer loyalty (Newman, 2001; Szymigin & Carrigan, 2001; Caruana, 2002; Ehigie, 2006). Furthermore, service quality and customer satisfaction were found to be related to customer loyalty through repurchase intentions (Levesque & Mc. Dougal, 1996; Newman, 2001; Caruana, 2002). Delivering quality service to customers is a must for success and survival in today's competitive banking.

Since Malaysia's independence in 1957, its financial landscape has gone through tremendous changes. The first step in the revolutionary process was the gradual deregulation of the financial sector (Bank Negara Malaysia), as at 31 August, 2007, there were 10 domestic commercial banks and 16 foreign owned commercial banks operating in Malaysia. Bank mergers, deregulation and increased competitive pressures have also created dramatic changes in the Malaysian banking industry. Currently, Malaysian banks face the challenges of greater market satisfaction in order to cultivate customer loyalty (Lam & Bojei, 2007).

In year 2004, Bank Negara Malaysia completed a study to assess customers' expectations and satisfaction on the quality of products and services offered by banking institutions that was shared with the industry to improve the service quality of the sector. To facilitate the domestic banking groups in streamlining their operations, the Banking and Financial Institutions Act 1989 was amended to enable the merger of finance company and

commercial bank within the same domestic banking group. In the human intellectual development, the International Centre for Leadership in Finance (ICLIF), established by Bank Negara Malaysia, commenced its Leadership Development Programs in 2004 to develop leadership talent across the financial industry and the corporate sector, thereby promoting excellence in these institutions (Source: Bank Negara Malaysia annual report 2004, Pen 03/05/46BN).

In September 2007, Bank Negara Malaysia also initiated the Financial Sector Talent Enrichment Program (FSTEP) to train and prepare 1000 highly qualified graduates for immediate placements in banking and insurance institutions. This effort is undertaken in collaboration with the industry and training institutes and is aimed at boosting the supply of well-trained and competent personnel for the financial services industry (Source: BNM 2008, 9<sup>th</sup> Bank Human Resource Conference). Driven by increased competition, recessionary pressures to control costs and customer demands for improved quality, financial institutions have now adopted one or more quality initiatives.

According to Portela & Thanassolis, (2006), not only empirically studies of the relationship between service quality and customer loyalty in banking system are limited, but also the existing studies on bank branches efficiency in general do not account for the changing role of bank branches. Service quality is of utmost importance in analyzing the performance of bank branches, since their survival depends on their service quality levels they provide (Portela & Thanassolis, 2006). Excellence in service quality is a key to achieve customer loyalty which is the primary goal of business organizations, due to the advantages of customer retention (Ehigie, 2006). Today, the increasing awareness among bank customers of their rights, changing demands and highly competition requires constant progress in service quality from the bank for their customers to stay loyal. The present research intends to test whether the bank customers are happy with the services provided to them, which will eventually lead to customer loyalty. Penang has been chosen for this research due to its centrality for Economical and Industrial activities and being a silicon valley which requires active banking transactions. Local banks are also being chosen for this research as it better reflects the banking industry of Malaysia.

## 2. Literature Review

Considering the competitive environment, there is a need for banks to plan their strategies that will differentiate them from another. This can be achieved through the delivery of high service quality. The practice of excellent service quality has been proven that customer satisfaction will significantly lead to customer loyalty (Caruana et al., 2000; Caruana, 2002). The present research employs SERVQUAL scale (Parasuraman et al., 1988) to measure the customers' loyalty.

### 2.1 Customer Loyalty

Loyalty is developed over a period of time from a consistent record of meeting, and sometimes even exceeding customer expectations (Teich, 1997). Kotler et al. (1999) states the cost of attracting a new customer may be five times the cost of keeping a current customer happy. Gremler & Brown (1996) offers one definition of customer loyalty that is related to our purpose in this study: the degree to which a customer exhibits repeat purchasing behavior from a service provider, possesses a positive attitudinal disposition toward the provider, and considers using only this provider when a need for this service exists.

According to Bloemer & Kasper (1995), loyalty is interpreted as true loyalty rather than repeat purchasing behavior, which is the actual re-buying of a brand, regardless of commitment. Zeithaml et al. (1996) states loyalty is a multi-dimensional construct and includes both positive and negative responses. However, a loyal customer may not necessarily be a satisfied customer. Colgate et al. (1996) also noted that it is not always the case that customer defection is the inverse to loyalty, while Levesque and Mc Dougall (1993) suggested that, "even a problem is not solved, approximately half of the customers would remain with the firm". This may be due to switching costs, lack of perceived differentiation of alternatives, location constraints on choice, time or money constraints, habit or inertia which are not related to loyalty (Bitner, 1990; Ennew & Binks, 1996).

### 2.2 Service quality

Definitions of service quality hold that this is the result of the comparison that customers make between their expectations about a service and their perception of the way the service has been performed (Lehtinen & Lehtinen, 1982; Lewis & Booms, 1983; Gronroos, 1984; Parasuraman et al., 1985; 1988; Caruana, 2002). Service quality is defined as the degree of discrepancy between customers' normative expectation for service and their perceptions of service performance (Parasuraman et al., 1985). The definition of service quality was further developed as "the overall evaluation of a specific service firm that results from comparing that firm's

*performance with the customer's general expectations of how firms in that industry should perform* (Parasuraman et al., 1988).

As the time evolve, quality concepts such as total quality management (TQM) and new public management (NPM) have been adopted by many organizations in most developed countries as early as 1990s. The key objective of NPM, for instance, is to improve the delivery of service quality by taking a customer-oriented approach (Mwita, 2000). Wu et al. (2006) integrates data envelopment analysis (DEA) and neural network (NNs) to examine the relative branch efficiency. The use of the DEA technique in performance benchmarking of bank branches has evolved from relative benchmarking of performance in terms of operating efficiency (service quality) and profitability (Manandhar & Tang, 2002).

Among general instruments, the most popular model used for evaluation of service quality is SERVQUAL, a well-known scale developed by Parasuraman et al. (1985, 1988). The attributes of (Parasuraman et al., 1985), were: tangibles, reliability, responsiveness, competency, courtesy, assurance, credibility, security, access, and understanding. Parasuraman et al. (1988) later reduced these ten dimensions into five by using a factor analysis. Based on the five dimensions, a 22-item survey instrument for measuring service quality has been developed. These five dimensions are:

Tangibles - Physical facilities, equipment and appearance of personnel.

Reliability - Ability to perform the promised service dependably and accurately.

Responsiveness - Willingness to help customers and provide prompt service.

Assurance (including competence, courtesy, credibility and security) - Knowledge and courtesy of employees and their ability to inspire trust and confidence.

Empathy (including access, communication, understanding the customer) - Caring and individualized attention that the firm provides to its customers.

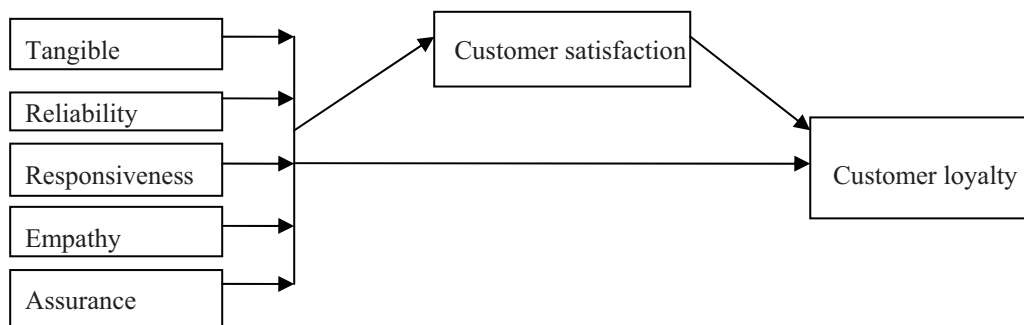
Although there has been criticism from some other researchers to SERVQUAL instrument (Johnston, 1995), yet SERVQUAL is the instrument most utilized for its confirmatory factor analyses in most cases. Thus, up to date, SERVQUAL has proven to be a parsimonious model that has been used in various service organizations and industries to measure service quality including banks (Mc Alexander et al., 1994; Cowling & Newman, 1996; Levesque & Mc Dougall, 1996; Caruana et al., 2000; Caruana, 2002; Sureshchandar et al., 2002; Paswan et al., 2004; Seth et al., 2005; Lympelopoulou et al., 2006).

### 2.3 Customer satisfaction

Perceived service quality is a global judgment or attitude relating to the superiority of the service, whereas satisfaction is related to a specific transaction (Parasuraman et al., 1988). On the other hand, customer satisfaction has frequently been suggested to be the leading determinant of loyalty (Lam & Burton, 2006). Ehigie (2006) suggests that there is a significant positive relationship between customer satisfaction and customer loyalty/retention. As such, customer satisfaction in this research is acting as a mediator between service quality and customer loyalty.

### 2.4 Research theoretical model

The theoretical model guiding the investigation is depicted in figure below, adapted from Agus et al. (2007) and Caruana (2002). This research will study 5 factors of service quality namely: tangibles, reliability, responsiveness, assurance and courtesy which were adapted from Agus et al. (2007) who studied the service quality in the context of Malaysian public service sector by drawing on management and customer perceptions of service quality



### 2.5 Hypotheses development

Tangibles have been defined as physical facilities, equipment and appearance of personnel (Parasuraman et al., 1988). Issues related to the branches such as access to the facilities, safety and convenience are on tangible basis (Castro, 1997 as cited by Bellini et al., 2005). Thus, the following hypotheses are proposed:

H1a. Tangibles will have positive effect on customer loyalty.

H1b. Tangibles will have positive effect on customer satisfaction.

Parasuraman et al. (1988) defined reliability as the ability to perform the promised service dependably and accurately. Nguyen & Leblanc (2001) consider reliability as reputation that can be the most reliable indicator of service quality which could be related to customers past experiences (Ndubisi, 2006). As such, the following are hypothesized:

H2a. Reliability will have positive effect on customer loyalty.

H2b. Reliability will have positive effect on customer satisfaction.

According to Parasuraman et al. (1988), responsiveness is willingness to help customers and provide prompt service. Responsiveness is likely to have an important and positive effect on customer satisfaction (Jun & Cai, 2001; Diaz & Ruiz, 2002; Joseph et al., 2005; Glaveli et al., 2006). Therefore, the following are hypothesized:

H3a. Responsiveness will have positive effect on customer loyalty.

H3b. Responsiveness will have positive effect on customer satisfaction.

Parasuraman et al. (1988) defined empathy as the caring, individualized attention the firm provides for its customers. Empathy is proved to be influential in customer loyalty (Butcher, 2001; Ndubisi, 2006; Ehigie, 2006). Thus, the followings are hypothesized:

H4a. Empathy will have positive effect on customer loyalty.

H4b. Empathy will have positive effect on customer satisfaction.

Parasuraman et al. (1988) defined assurance the knowledge and courtesy of employees and their ability to inspire trust and confidence. Several studies suggest that the exchange of information is an important part of both traditional selling and relationship marketing which may lead to a shared understanding (Ndubisi, 2006; Lymperopoulos et al., 2006). Therefore, the following hypotheses are proposed:

H5a. Assurance will have positive effect on customer loyalty.

H5b. Assurance will have positive effect on customer satisfaction.

Customer satisfaction is measured by the gap between expectations and perceptions of the service quality (Parasuraman et al., 1988) and it is positively related to customer loyalty (Ehigie, 2006). Thus the following hypotheses are proposed.

H6a. Customer loyalty is mediated by customer satisfaction towards service quality.

H6b. High customer satisfaction will have positive effect on customer loyalty.

### 3. Research Methodology

A survey was conducted to test the hypotheses generated for this research. The population frame is customers of various local banks in Penang Island. Penang is located in the north-west coast of Peninsula Malaysia. It is also known to be the highest populated city of Malaysia in terms of density. Penang Island has more than 2,000 people per square km. Penang economic situation has made it a place for banking activities (Penang Wikipedia, 2009).

After Selangor and Johor, Penang state is the third-largest economy amongst the states of Malaysia. Manufacturing is the most important component of the Penang economy. The southern part of the island is highly industrialized with high-tech electronics plants. Penang's historic architecture and its beautiful and colorful beaches have made it a touristic destination. Other important sectors of Penang's economy include, finance, shipping and other services. Penang agriculture is mainly made up of the major export of many products such as, oil palm and some cocoa, fruits, coconut, vegetables etc (Penang Wikipedia, 2009).

Penang has been the banking center of Malaysia before Kuala Lumpur. Standard Chartered Bank (the oldest bank in Malaysia) and then the Chartered Bank of India, Australia and China opened in 1875 in Penang. The Hong Kong and Shanghai Banking Corporation (now known as HSBC) opened its first branch in Penang in 1885. In 1888 The UK-based Royal Bank of Scotland (then ABN AMRO) opened its first office in Penang. Most of the older banks still maintain their local headquarters in George Town. Penang remains as a banking hub with branches of Citibank, United Overseas Bank, and Bank Negara Malaysia (the Malaysian central bank) together with local banks such as Public Bank, Maybank, Ambank and CIMB Bank (Penang Wikipedia, 2009).

The unit of analysis in this study was individual, as customer of the 10 banks. SERVQUAL, created by Parasuraman et al. (1988) was adapted as the instrument for service quality measurement and customer loyalty measurement was adopted from Caruana (2002). A 7-point Likert scale with the range of 1 (strongly disagree) to 7 (strongly agree) were used for the measurement. The questionnaire covered the demographic profile of respondents and items to measure the constructs. A pre-testing of the questionnaires was done with 10 selected banks customers who have experience with branch banking. The respondents were asked to provide feedback on the ambiguity and structure of the questions. With the assistance of the pre-test, the original questions were refined and some corrections were made. Self-administered questionnaire was used to gather data from various bank customers. There were a total of 238 responses received at the end of data collection process.

#### 4. Results

The full profile of the respondents is shown in Table 1. As for channels used to carry out banking transactions, branch banking the highest with 215 (90.3%) followed by ATM 199 (83.6%), Internet banking 87 (36.6%) and phone banking 23 (9.7%). The details are summarized in Table 2.

The reliability of the measures was assessed using the inter-item consistency measure of Cronbach's alpha. The alpha for all the independent variables and dependent variable ranged from 0.984 to 0.932 and exceeded the minimum acceptable value of 0.7 (Nunnally, 1978). Therefore, no item was deleted. The variable with higher standard deviation is Assurance (1.55) followed by customer satisfaction, empathy, tangibles, reliability, and finally, responsiveness (1.12). The differences in standard deviation figure for all variables are small which signify that respondents are consistent in their evaluation (see Table 3).

The regression tests were conducted as suggested by Baron & Kenny (1986), by running four steps of analysis separately:

*Step 1-* Customer loyalty as dependent variable and dimensions of service quality as independent variables,

*Step 2-* Customer satisfaction as dependent variable and dimensions of service quality as independent variables, and

*Step 3 & 4-* Customer loyalty as dependent variable and customer satisfaction together with dimensions of service quality as independent variables.

Referring to Table 4, Tangible (IV) is found to be not significant against Customer Loyalty (DV). As such, no mediation occurs. It is found that the Reliability is not significant when regression the Reliability (IV) and Customer Satisfaction (DV). As such no mediation occurs. Table 5 summarizes this research findings.

#### 5. Discussion

Regression Analysis shows that tangibles have no significant impact on customer loyalty. This result is contrary to the findings by Sureshchandar et al. (2003). It has been observed that there is a changing trend and respondents did not treat tangibles as an important measurement anymore due to availability of self-service terminals. Therefore, the bank must look into upgrading the proficiency of their self-service terminals rather than their interior. Also due to the emergence of IT, tangible has lost its importance as a measurement for customer loyalty. Internet banking has been very popular among the banks in Malaysia and is growing tremendously. As such, IT should be taken into consideration and used as a measurement for customer loyalty. This will give a more reflective result for the banking environment today. Tangibles were also found to be not significance on mediating variable (customer satisfaction). Banks customers do not view the tangibles as an important factor for them.

Reliability is found to have positive relationship with customer loyalty. The finding is supported by the previous researchers including Nguyen & Leblanc (2001) and Bellini et al. (2005). Reliability was found to be not significant to customer satisfaction. This is in the line with the finding that customers may stay with an organization even it predicts they are dissatisfied because they perceive they have no choice (Zeithaml et al., 1996).

Findings indicate that the relationship between responsiveness and customer loyalty is insignificant. Surprisingly, these results are contrary to the prior findings in other studies (Jun & Cai, 2001; Diaz & Ruiz, 2002; Joseph et al., 2005; Glaveli et al., 2006). Customer loyalty remains an important factor that bank has to ensure in order to make profit. Customers, who use a particular bank service, consider switching bank as a threat. Customer are more educated and knowledgeable, their demand is also on an increasing trend. In order to stay in the business, bank need to improvise their customer service campaign. Loyalty program can be used as one of the tools to retain customer. With the emergence of foreign bank, local bank need to improve their service quality by

providing more experienced employees to serve the customer in the operations. Results from hypotheses testing also show that responsiveness found to have positive relationship with customer satisfaction this is in line with Glaveli et al. (2006) who highlighted the speed of service delivery enhanced perception of service quality while Joseph et al. (2005) indicated that “no waiting time” raised customers’ satisfaction level

Empathy has significant positive relationship with customer loyalty. This evidence is supported by the findings by Butcher (2001), Ndubisi (2006) and Ehigie (2006). As suggested by Butcher (2001), friendship between customers and particular service employees has a major influence on the development of customer loyalty. According to Ndubisi (2006), customer satisfaction can be achieved by offering personalized, flexible and adjustable services to suit the needs of customers. This is in line with the findings of this research that empathy has positive impact on customer satisfaction.

This study shows a significant relationship between assurance and customer loyalty and is consistent with previous studies including Lymperopoulos et al. (2006) and Ndubisi (2006). In this study, assurance was found to be a significant prediction of customer satisfaction and this is in line with Ndubisi (2006) arguing the communication is clearly a strong indicator of overall satisfaction and important source of customer satisfaction in the Malaysia banking sector.

In this study, it is also found that satisfaction has mediating effect on the relationships between service quality dimensions (tangibles, reliability, responsiveness, empathy and assurance) and customer loyalty. This result is consistent with studies done by Caruana (2002), Butcher (2001), Ehigie (2006) and Lam & Burton (2006).

On the legislative side, there is Banking and Financial Act 1989 (BAFIA) to govern the conduct of banks in Malaysia. Customers’ information is one that should not be divulged to third party without their consent. But it has been said that customers’ information are being sold, especially to the marketing department of banks. Credit cards, personal loan and insurance products marketers manage to get customers’ information from somewhere. From here, they will make calls to customers, marketing their products. With the banking industry outsourcing some of their departments, this will lead to further potential of customers’ information being divulged without permission. Bank should look into this area because customers will not be happy to find out that their information has been sold to third party without their consent. From this study, it can be noticed that the overall respondents evaluate the bank positively, but still in positive with mean of more than 4 for every variables as per Table 3. However, there are still rooms for improvements.

Managerial implication of this research is that bank managers need effective recruitment and training program to: a) ensure that employees offer professional services, b) pay more attention to customer needs, and c) void revealing customer information to marketers.

## 6. Limitations

Firstly, control variables of socio-demographics variables have not been taken into consideration. According to Caruana (2002), education and age are found to be salient segmentation variables. Secondly, the respondent coverage in this study consists of only Penang State. The generalizations to a wider population or industry and cultural issues should be taken with caution. In addition to that, surveys are not performed for customer of foreign banks.

## 7. Conclusion

Although customer service has been evaluated long time ago, but it is still one study that banks must continue to conduct in order to meet the changes in the banking industry. New technologies must be incorporated as a factor to measure service quality in future researches. Researches and related questionnaires must also be accommodated with the new banking requirements of the customer. A clearer understanding as to the sequence of relationship between service quality, customer satisfaction and customer loyalty can help to ensure better targeting of customer using limited marketing resources.

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Table 1. Personal profile of respondents (N=238)

Profile	Description	Number of Respondents	Percentage (%)
Age	18-29 years	79	33.2
	30-39 years	72	30.2
	40-49 years	58	24.4
	50-59 years	19	8.0
	60 years and above	10	4.2
Gender	Male	106	44.5
	Female	132	55.5
Race	Malay	62	26.1
	Chinese	143	60.1
	Indian	30	12.6
	Others	3	1.2
Education	Certificate/ Secondary	44	18.5
	Diploma/Higher	59	24.8
	Secondary	91	38.2
	Bachelor's Degree	28	11.8
	Master Degree	2	0.8
	Doctorate/ PhD	14	5.9
	Others		
Monthly income	RM 1,000 and below	17	7.1
	RM 1,001-2,000	36	15.1
	RM 2,001-3,000	92	38.7
	RM 3,001-4,000	33	13.9
	More than RM 4,000	60	25.2
Current occupation	Self-employed	32	13.5
	Private Sector	170	71.4
	Public Sector	25	10.5
	Others	11	4.6

Table 2. Frequency Distribution for Present Usage of Banking Transactions

Variable		Frequency	Percentage (%)
Number of banks used	1 only	50	21.0
	2	123	51.7
	3	43	18.1
	4	12	5.0
	More than 4	10	4.2
Type of accounts used	Savings account	225	94.5
	Insurance services	55	23.1
	Current account	87	36.6
	Investment	25	10.5
	Personal loans	41	17.2
	Mortgage	55	23.1
	Others	9	3.8
Type of channels used to carry out banking transactions	Branch banking	215	90.3
	ATM	199	16.4
	Internet banking	87	36.6
	Phone banking	23	9.7
	Others	-	-

Table 3. Reliability Coefficient, Mean and Standard Deviation (SD) for the major variables

Variables	Number of items	Cronbach's Alpha	Mean	S D
Tangibles	5	0.932	5.32	1.30
Reliability	4	0.960	5.32	1.29
Responsiveness	3	0.983	4.92	1.12
Empathy	4	0.943	4.81	1.38
assurance	3	0.984	5.00	1.55
Customer Satisfaction	3	0.984	5.77	1.51
Customer loyalty	4	0.976	5.62	1.60

Table 4. Results of Multiple Regressions

	Step 1	Step 2	Step 3+ Step 4
<b>Dependent variable</b>	LOYALTY	SATISFACTION	LOYALTY
<b>Independent variable</b>	<b>Standardized coefficients -<math>\beta</math></b>		
TANGIBLE	0.07	0.10	0.02
RELIABILITY	0.25**	-0.04	0.27**
RESPONSIVENESS	0.01	0.14**	- 0.08
EMPATHY	0.29**	0.26**	0.13* Partially mediated
ASSURANCE	0.36**	0.51**	0.04 Fully mediated
SATISFACTION			0.62**
<b>Steps summary</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3+ Step 4</b>
R <sup>2</sup>	0.799	0.838	0.862
Adjusted R <sup>2</sup>	0.795	0.834	0.858
Durbin Watson	2.16	1.56	1.91
F value	184.53**	239.63**	240.52**

\*\*p<0.01, \*p<0.05

Table 5. Summary of Hypotheses Analysis

	Hypotheses	Results
H1a	Tangibles will have positive effect on customer loyalty	Not supported
H1b	Tangibles will have positive effect on customer satisfaction	Not supported
H2a	Reliability will have positive effect on customer loyalty	Supported
H2b	Reliability will have positive effect on customer satisfaction	Not supported
H3a	Responsiveness will have positive effect on customer loyalty	Not supported
H3b	Responsiveness will have positive effect on customer satisfaction	Supported
H4a	Empathy will have positive effect on customer loyalty	Supported
H4b	Empathy will have positive effect on customer satisfaction	Supported
H5a	Assurance will have positive effect on customer loyalty	Supported
H5b	Assurance will have positive effect on customer satisfaction	Supported
H6a	Customer loyalty mediated by customer satisfaction towards service quality	Supported
H6b	High customer satisfaction will have positive effect on customer loyalty	Supported