

Interrelations between Service Quality Attributes, Customer Satisfaction and Customer Loyalty in the Retail Banking Sector in Bangladesh

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Abstract

The main objective of this study is to find the interrelationships between service quality attributes, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. The study sought to identify the most important attributes in bank settings, which may be used to review characteristics of the banks as experienced by customers. In Bangladesh, no study has yet investigated the above mentioned interrelationship. The purpose of this study is to fill this gap.

A review of literature was conducted to find out the relationship among service quality, customer satisfaction and customer loyalty. The literature review confirms this relationship.

A survey was conducted to collect data. The sample size of 100 retail banking customers was drawn from different banks in Bangladesh. The result shows that all the service quality attributes are positively related to customer satisfaction and customer satisfaction is positively related to customer loyalty in the retail banking settings in Bangladesh. Empathy demonstrates the highest positive correlation with customer satisfaction and tangibility shows the least positive correlation with customer satisfaction.

This study suggests that SERVQUAL [service quality model] is a suitable instrument for measuring the bank service quality in the Bangladeshi context. Therefore, bank managers can use this instrument to assess the bank service quality in Bangladesh.

Keywords: Retail banking, Service quality, Customer satisfaction, Customer loyalty

1. Introduction

The main aim of this study is to find the interrelationships between service quality, customer satisfaction and customer loyalty in one frame in the retail banking sector in Bangladesh.

The banking industry in Bangladesh is highly competitive. According to International Finance Corporation - IFC (2009), the financial sector in Bangladesh consists of a central bank (Bangladesh Bank), 4 state-owned banks, 5 Government-owned specialised banks, 30 Domestic Private Commercial Banks, 9 Foreign-Commercial Banks, and 29 Non-Bank Financial Institutions. 6562 branches of 49 banks operate in the country (Bangladesh Bank, 2006). According to IMF (2007), Private Commercial Banks command the greatest market share in terms of both industry assets and deposits. In late 2006, the contribution of financial sector assets to GDP was roughly 69%; out of them, the banking sector accounted for 58%. Data shows that retail banking is one of the most important sectors in the Bangladesh economy. The interrelationships between service quality, customer satisfaction and customer loyalty may provide creative ideas for improving services in order to gain a competitive advantage in the retail banking sector in Bangladesh.

Service quality is one of the critical success factors that influence the competitiveness of an organization. A bank can differentiate itself from competitors by providing high quality service. Service quality is one of the most attractive areas for researchers over the last decade in the retail banking sector (Avkiran, 1994; Stafford, 1996; Johnston, 1997; Angur *et al*, 1999; Lasser *et al*, 2000; Bahia and Nantel, 2000; Sureshchandar *et al*, 2002; Gounaris *et al*, 2003; Choudhury, 2008). However, this study will again investigate the factors that enable banks to attract and maintain their customers. In Bangladesh, customers in the banking sector are in a strong bargaining position due to the significant growth of banks. Therefore, banks have to provide service carefully because of the availability of banks. Banks have to improve the service level continuously. There is no guarantee that what is excellent service today is also applicable for tomorrow. To survive in the competitive banking industry, banks have to develop new strategies which will satisfy their customers. That is why service marketing and bank

marketing are important areas in the marketing literature.

Customer satisfaction is one of the important outcomes of marketing activity (Oliver, 1980; Surprenant and Churchill, 1982; Spreng et al, 1996; Mick and Fournier, 1999). In the competitive banking industry, customer satisfaction is considered as the essence of success. According to Hofstede (2001), most of the Asian cultures (like India, Pakistan) are collectivist [People in the collective cultures discriminate in-groups (relatives, institutions and organizations) and out-groups]. In this case, word of mouth (WOM) advertisements are important for the banks. File and Prince (1992) argued that the customers who are satisfied tell others about their experiences and this increases WOM advertising. In this way, banks can increase customers.

Prabhakaran (2003) mentioned that the customer is the king. High customer satisfaction is important in maintaining a loyal customer base. To link the service quality, customer satisfaction and customer loyalty is important. Kumar *et al* (2009) stated that high quality of service will result in high customer satisfaction and increases customer loyalty. Heskett *et al* (1997) argued that profit and growth are stimulated primarily by customer loyalty and loyalty is a direct result of customer satisfaction. Parasuraman *et al* (1988) and Naeem and Saif (2009) found that customer satisfaction is the outcome of service quality. Caruana (2000) developed a mediational model that links the service quality and service loyalty via customer satisfaction and applied this model in the retail banks in Malta. The results appear to prove the links between service quality, customer satisfaction and customer loyalty. In Bangladesh, however, no study has yet investigated these links. The purpose of this study is to fill this gap. A review of literature has been conducted to explore these relationships and then a research methodology has been proposed. A positive correlation between each of the constructs has been confirmed by the review of literature and the primary analysis.

1.1 Objectives of the study

The objectives of the study are as follows:

- To identify the critical factors of service quality in the retail banking sector in Bangladesh
- To identify the critical factors of customer loyalty in the retail banking
- To identify the interrelationships between service quality, customer satisfaction and customer loyalty in the retail banking sector and to identify the benefits of this relationships.

1.2 Scope of the study

The scope of the study is:

- The study is specific only to retail banking sector in Bangladesh

1.3 Theoretical Framework

The study will draw up on a range of theoretical frameworks. Service quality is discussed in relation to the SERVQUAL model (Parasuraman et al., 1988). Links between service quality, customer satisfaction and customer loyalty are examined in relation to the Mediational model by Caruana (2000).

2. Literature Review

2.1 Service Quality Concept

Gronroos (2000, p.46) defined service as, “A service is a process consisting of a series of more or less intangible activities that normally, but not necessarily always, take place in interactions between the customer and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems”. Fogli (2006, p.4) define service quality as “a global judgement or attitude relating to a particular service; the customer’s overall impression of the relative inferiority or superiority of the organization and its services. Service quality is a cognitive judgement”.

Mudie and Pirrie (2006) identified the following features of services:

- Intangibility

Intangibility is the main feature of service. Service cannot assure the quality because it cannot be counted, measured, tested, verified and inventoried in advance of sale. Most of the firms find it difficult to understand how customers consider their services and evaluate the quality of their services.

- Inseparability (or simultaneous production and consumption)

There is a marked distinction between physical goods and services in terms of the sequence of production and consumption.

Physical goods

Production ----- Storage ----- Sold ----- Consumed

Services

Sold ----- Produced and consumed at the same time

Whereas goods are first produced, then stored and finally sold and consumed, services are first sold, then produced and consumed simultaneously.

- Variability (or heterogeneity)

An unavoidable consequences of simultaneous production and consumption is variability in performance of a service. The quality of the service may vary depending on who provides it, as well as when and how it is provided.

- Perishability

Services cannot be stored for later sales or use. As services are performances they cannot be stored. If demand far exceeds supply it cannot be met, as in manufacturing, by taking goods from a warehouse. Equally if capacity far exceeds demand, the revenue and/or value of that service is lost.

In the competitive business world, service quality is considered as a competitive factor of the Organizations. Moreover, it is also considered as an essential determinant that allows an Organization to differentiate from other Organization. It helps an Organization to gain sustainable competitive advantage.

2.2 Service Quality Model

Parasuraman *et al* (1985) undertook a Qualitative Research to investigate the concept of Service Quality. They arranged an in-depth interview with the executives and Focus Group interviews with customers to develop a model of Service Quality. They proposed the following Service Quality model according to their research:

According to figure 1 [see appendix 2], the lower portion shows the gaps revealed by the executive interviews (the marketer side) and the upper portion of the of the figure shows the gaps revealed by the customer interviews (customer side). According to their findings, the five gaps are as follows:

Marketer Side:

GAP 1 – Consumers’ Expectations – Managements’ Perceptions Gap (will impact on the customers evaluations of service quality)

GAP 2 - Management perceptions of consumer expectations- Service Quality Specifications (will impact on the service quality from the customers viewpoint)

GAP 3 - Service Quality Specifications-Service Delivery (will impact on the service quality from the customer’s standpoint)

GAP 4 - Service Delivery-External Communications (will impact on the service quality from the customer’s standpoint)

Customer Side:

GAP 5 - Consumer’s Expected Service- Consumer’s Perceived Service

Parasuraman *et al* (1985) identified ten key determinants of Service Quality. They are: Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding, Tangibles.

In 1988, Parasuraman *et al* arranged a quantitative Research. They revealed an instrument for measuring consumers’ perception of Service Quality, after that it became known as SERVQUAL. They collapsed their dimensions from ten to five. The dimensions were:

- Tangibles – physical facilities, appearance of personnel and equipment
- Reliability – ability to perform the promised service dependably and accurately
- Responsiveness – willingness to help customers and provide prompt service
- Assurance - Assurance (combination of items designed originally to assess Competence, Courtesy, Credibility, and Security) – ability of the organization’s employees to inspire trust and confidence in the organization through their knowledge and courtesy.
- Empathy - Empathy (combination of items designed originally to assess Access, Communication, and Understanding the customer) – personalized attention given to customer.

Organizations can use SERVQUAL in various ways. Parasuraman *et al* (1988) mentioned that SERVQUAL can help the Service and Retailing Organizations in assessing the expectations of customers and Service Quality perceptions. It can focus on the core areas where managers need to take attention and action to improve Service Quality.

2.3 Criticism of SERVQUAL

Much criticism emerged against the SERVQUAL. Some of the reviewed criticism of SERVQUAL is as follows:

Carman (1990) suggested that the five service quality dimensions are inconsistent in cross sectional analysis. He found that some of the items loaded different components when compared to different service providers. As mentioned earlier, Parasuraman *et al* (1988) converted Understanding and Access component into Empathy. Carman did not find it appropriate combinations in his research. Carman also noted that the difference between expectations and perceptions concept is operationally difficult to follow. He suggested that future researchers should analyse the expectation and perception at the individual level.

Babakus and Boller (1992) supported Carman's (1990) idea about the dimensions of Service Quality. He found that the Service Quality dimensions are under investigation depending on the type of service. He identified that there are some operational problems in the expectations and perceptions gap analysis.

Brown *et al* (1993) argued that the "difference score" (perception minus expectation) has some operational problems. Therefore, they suggested that a "non-difference score" measure is superior to "difference score" measure.

After the criticism of Brown *et al* (1993), Parasuraman *et al* wrote an article in the same year where they proved that non-difference score measure is debatable. Brown *et al* (1993) mentioned that SERVQUAL mean was 0.82 and non-difference score measure mean was 4.51. Parasuraman *et al* (1993) argued that 0.82 is the ideal standard of expectations because it implies that the average respondents' perceptions fell short of their expectations. In contrast, the mean of 4.51 draws the opposite conclusion. It raises the validity question of non-difference score measure.

In 1992, Cronin and Taylor criticised Parasuraman *et al* (1988) conceptualization of service quality. Parasuraman *et al* (1988) described service quality as ".....similar in many ways to an attitude." So, managers and researchers could get more information if the construct measurement was conformed to an attitude-based conceptualization. Therefore, they suggested nullifying the expectation portion from the SERVQUAL. They argued that only performance dimensions could predict behavioural intentions and they termed it as SERVPERF.

Gilmore (2003) summarised the criticism of SERVQUAL is as follows:

- The gaps model – some researchers mention that there is a little evidence that customers assess service quality in terms of performance and expectation gaps.
- Dimensionality – SERVQUAL's five dimensions are not universal. The number of dimensions comprising SERVQUAL is contextualized and there is a high degree of intercorrelation between the five dimensions.
- Expectations – some researchers argue that measuring expectations is unnecessary. If they are to be measured, expectations and perceptions should be measured on a single scale.
- Item Composition – four or five items cannot capture the variability within each SERVQUAL dimension.
- Scale Points – the seven-point likert scale is flawed. The mid-range numbers can only be vaguely related to varying degrees of opinions and many respondents may rate these differently.
- Polarity – the reversed polarity of items on the scale causes respondent error. In the SERVQUAL instrument some items are reversed to ensure that respondents do not fall into the habit of marking the same scale point for each question; however this can cause confusion.

2.4 Service Quality in Retail Banking

Service quality is important in the retail banking sector. Some of the reviewed literatures are presented below:

Bahia and Nantel (2000) conducted a research to develop a valid measurement of perceived service quality in the Retail Banking sector in Canada. They argued that the SERVQUAL approach has not except from critics; therefore, they developed a new measurement for perceived service quality in Retail Banking. They proposed a scale that was called Bank Service Quality (BSQ). It comprises 31 items classified across six dimensions as: effectiveness and assurance, access, price, tangibles, range of services offered and accuracy and reliability. They

proved that the dimensions of BSQ are more reliable than the dimensions of SERVQUAL. Glaveli *et al.* (2006) stated that BSQ is more reliable than SERVQUAL.

Stafford (1996) conducted research to identify the core elements of BSQ and identified seven attributes in assessing BSQ. They are as follows:

- Bank atmosphere - environment of the bank including the attitude of the staffs.
- Relationship - it indicates the personal relationship with the bank employees.
- Rates and charges - an individual's perception of BSQ is affected by the low cost and high interest rates.
- Available and convenient services - it indicates the full range of available services, convenient and easily accessible.
- ATMs - it indicates the availability of the automatic teller machines.
- Reliability/honesty - it emphasises on the solid bank ratings and reliable, honest staff.
- Tellers - enough and accessible tellers.

Angur *et al* (1999) examined the applicability of alternative service quality measure in the Retail Banking industry in India. They conducted their research on the consumers of two major banks in India. They use SERVQUAL model to measure the overall service quality. They found that all the dimensions are not equally important in explaining variance in overall service quality. The result indicated that responsiveness and reliability seem to be the most important dimensions followed by the empathy and tangible dimensions; whereas, assurance appears to be the least important dimension. Finally, they concluded that SERVQUAL is the best measure of service quality in banking industry.

The applicability of the SERVQUAL measure is well established in the retail banking industry. As mentioned earlier, Angur *et al* (1999) stated that SERVQUAL is the best measure of service quality in the retail banking industry in the developing country. Most of the researchers use the SERVQUAL measure or the modified SERVQUAL measure in the retail banking industry.

From the above discussion it can be concluded that SERVQUAL is still suitable as an assessment tool to measure the service quality perceptions in the retail banking industry, whether it is based on difference score, gap score or performance only.

2.5 Customer Satisfaction

Customer Satisfaction is one of the most important outcomes in the marketing literature. It serves to link processes culminating purchase and consumption with post purchase phenomena such as attitude change, repeat purchase, and brand loyalty (Surprenant and Churchill, 1982). This definition is supported by Jamal and Naser (2003) and Mishra (2009).

According to Oliver (1980), the customer satisfaction model explains that when the customers compare their perceptions of actual products/services performance with the expectations, then the feelings of satisfaction have arisen. Any discrepancies between the expectations and the performance create the disconfirmation.

Oliver (1980) identified three types of disconfirmation. They are:

- Positive disconfirmation occurs when Product/service performance > expectations. In this case, the customers are highly satisfied.
- Negative disconfirmation occurs when Product/service performance < expectations. In this case, the customers are highly dissatisfied.
- Zero disconfirmation occurs when Product/service performance = expectations.

Based on the above literature and definition of satisfaction, Giese and Cote (2000) identified the following components of satisfaction:

- Customer satisfaction is one kind of response (cognitive or emotional)
- The response emphasises on a particular focus (product, consumption experience, expectations etc.)
- The response occurs at a particular time (after choice, based on accumulated experience, after consumption etc.)

2.6 Customer Satisfaction in Retail Banking

In the competitive business market, many firms are focusing on their efforts on maintaining a loyal customer

base. Most of the retail banks set their strategies towards increasing satisfaction and loyalty of customers through the quality of service. Devlin (2001) pointed out that “customers perceive very little difference in the services offered by retail banks and any new offering is quickly matched by competitors.”

Zaim *et al* (2010) find out that tangibility, reliability and empathy are important factor for customer satisfaction, whereas responsiveness and assurance are important factor, found by Mengi (2009). Kumar *et al.* (2010) and Lai (2004) found that assurance, empathy and tangibles are the important factor, and on the other hand, Baumann *et al.* (2007) found that tangibles are not related to customer satisfaction and Ahmed *et al.* (2010) find out that empathy is negatively related to customer satisfaction. Researchers have identified various determinants of customer satisfaction in the retail banking sector. Arasli *et al* (2005) pointed out that reliability dimension of SERVQUAL has the highest impact on customer satisfaction in Greek Cypriot banking industry, whereas reliability is not related to customer satisfaction, found by Chaniotakis and Lymperopoulos (2009). According to Levesque and McDougall (1996), competitive interest rate is one of the important determinants of customer satisfaction in retail banking sector. They found that a good “employee-customer” relationship can increase the satisfaction level. They pointed out that problem-recovery is important to maintain the customer satisfaction. However, the results did not confirm that satisfactory problem-recovery can increase satisfaction. At least, it can maintain the satisfaction level. Finally, they concluded that competitiveness and convenience of the banks are the two important determinants of customer satisfaction. On the other hand, Jamal and Naser (2003) found that convenience and competitiveness are not the critical factors for all gender, age and income groups.

2.7 Relationship between Service Quality and Customer Satisfaction

In marketing literature, Service Quality and Customer Satisfaction have been conceptualized as a distinct, but closely related constructs. There is a positive relationship between the two constructs (Beerli *et al.*, 2004). The relationship between customer satisfaction and service quality is debatable. Some researchers argued that service quality is the antecedent of customer satisfaction, while others argued the opposite relationship. Parasuraman *et al* (1988) defined service quality and customer satisfaction as “service quality is a global judgement, or attitude, relating to the superiority of the service, whereas satisfaction is related to a specific transaction”.

Jamal and Naser (2003) stated that service quality is the antecedent of customer satisfaction. However, they found that there is no important relationship between customer satisfaction and tangible aspects of service environment. This finding is contrasted with previous research by Blodgett and Wakefield (1999), but supported by Parasuraman *et al* (1991).

Most of the researchers found that service quality is the antecedent of customer satisfaction (Bedi, 2010; Kassim and Abdullah, 2010; Kumar *et al.*, 2010; Naeem and Saif 2009; Balaji, 2009; Lee and Hwan, 2005; Athanassopoulos and Iliakopoulos, 2003; Parasuraman *et al* 1988). Yee *et al* (2010) found that service quality has a positive influence on customer satisfaction. On the other hand, Bitner (1990) and Bolton and Drew (1991) pointed out that customer satisfaction is the antecedent of service quality. In 2004, Beerli *et al* supported this finding. Beerli *et al* mentioned a possible explanation is that the satisfaction construct supposes an evaluative judgement of the value received by the customer. This finding is contrasted with most of the researchers.

2.8 Customer Loyalty

Singh and Sirdeshmukh (2000) suggested the customer loyalty as “the market place currency of the twenty-first century”. Ndubisi (2005) and Pfeifer (2005) pointed out that the cost of serving a loyal customer is five or six times less than a new customer. This statement shows the importance of customer loyalty. Walsh *et al.* (2005) mentioned that it is better to look after the existing customer before acquiring new customers. Gee *et al.* (2008) stated the advantages of customer loyalty are as:

- The service cost of a loyal customer is less than new customers
- They will pay higher costs for a set of products; and
- For a company, a loyal customer will act as a word-of-mouth marketing agent

According to Foss and Stone (2001), customer loyalty relates to what customers think and do (or try to do). Most customer loyalty experts would agree that loyalty is best defined as a state of mind, a set of attitudes, beliefs, desires etc. Loyalty is developed by approaches which reinforce and develop a positive state of mind and the associated behaviours. The exchange of information is one of the keys of loyalty, and provides a critical bridge between state of mind and behaviour. Loyal customers are more likely to give information to the service provider (because they trust the service provider and expect from the service provider to use the information with discretion and to their benefits). Managing loyalty is important because it means not only managing behaviour but also managing a state of mind.

Dick and Basu (1994) and Bloemer *et al* (1998) stated that most research on customer loyalty has focused on brand loyalty; on the other hand, a limited number of researches on customer loyalty have focused on service loyalty. Bloemer *et al* (1998) argued that the findings in the field of brand loyalty did not generalise to service loyalty for the following reasons:

- Service loyalty is dependent on the development of interpersonal relationships as opposed to loyalty with tangible products.
- In case of services, the influence of perceived risk is greater.
- Intangible attributes such as confidence and reliability are the important factors to maintain the customer loyalty in the service context (Dick and Basu, 1994).

Dick and Basu (1994) identified the two dimensions of loyalty (relative attitude and repeat patronage behaviour) and four categories of loyalty: loyalty (positive relative attitude, high repeat patronage), latent loyalty (positive relative attitude, but low repeat patronage), spurious loyalty (low relative attitude, high repeat patronage), and no loyalty (low on both dimensions). Salegna and Goodwin (2005) mentioned that if the attitude of a customer is poor within the industry, then an organization which has just better than “poor” could elicit a positive customer “relative attitude” score and high repeat patronage. Garland and Gendall (2004) supported Dick and Basu’s loyalty typology in the case of personal retail banking. They mentioned that a loyal customer uses few banks, the highest likelihood of increasing business with the main bank, and the lowest probability of defection from that bank. Regression analysis disclosed that attitude and behaviour were the most important determinants of the number of banks used. Palmer *et al* (2007) suggested [cited from Reichheld, 2003] that in addition to measuring repurchase manager should also consider the likelihood of a customer recommending an organization’s product or service to another customer. The willingness to recommend can be seen as a measure of the level of attitudinal customer loyalty.

Levesque and McDougall (1996) pointed out that by increasing loyalty, a retail bank:

- Decreases its servicing cost (i.e. customers do not open or close their accounts)
- Fulfils customers need and gains knowledge of financial affairs
- Has an opportunity to cross-sell existing and new products and services.

2.9 Interrelationships between Service Quality, Customer satisfaction and Customer Loyalty

Researchers argued that service quality has influence on customer satisfaction and generates customer loyalty (Chang *et al.*, 2009). Some of the reviewed literatures are as follows:

Zeithaml *et al* (2008) developed a conceptual model that correlates Service Quality, Customer Satisfaction and Customer Loyalty in one frame. According to the model, service quality is the outcome of reliability, assurance, responsiveness, empathy and tangibles. Customer satisfaction is influenced by the quality of service & product and price as well as the situational and personal factors.

Heskett *et al* (1997) developed a model which is known as “Service Profit Chain”. In this model there is a direct and strong relationships between profits; growth; customer loyalty; customer satisfaction; the value of goods and services delivered to customers; and employee capability, satisfaction, loyalty, and productivity.

The link in the chain is as follows:

- Profit and growth are stimulated primarily by customer loyalty
- Loyalty is a direct result of customer satisfaction
- Satisfaction is largely influenced by the value of services provided to customers
- Value is created by satisfied, loyal and productive employees
- Employees’ satisfaction, in turn, results primarily from high quality support services and policies that enable employees to deliver results to customers.

Heskett *et al* (1997) suggested that in service settings, the relationships were self-reinforcing. That is, satisfied customers contributed to employee satisfaction, and vice versa.

2.10 Interrelationships between service quality, customer satisfaction and customer loyalty in Retail banking sector

Several researchers attempt to find the interrelationships between service quality, customer satisfaction and customer loyalty in the retail banking sector. Researchers argue that service quality and customer satisfaction are

the predictors of customer loyalty (Tariq and Moussaoui, 2009; Han *et al.*, 2008; Ehigie, 2006). Veloutsou *et al.* (2004) found the positive relationship among service quality, customer satisfaction and customer loyalty in the banking sector in Greece.

Caruana (2000) proposed a meditational model that links the service quality to the service loyalty via customer satisfaction. This model is supported by Santouridis and Trivellas, 2010; Cheng *et al.*, 2008; Bei and Chiao, 2006; Lewis and Soureli, 2006; Butcher *et al.*, 2001. Caruana (2000) mentioned that service quality, customer satisfaction and service loyalty are related to each other. The proposed model is in *appendix 3*.

He applied this model to the customers of retail banking in Malta. The results proof the above mentioned relationship. The result confirms that SQ is an important input of CS and depicts 53% of its variance. He stated that management should mainly focus on CS, of which SQ is an important antecedent. Finally, he concluded that a better understanding of this model can help managers ensure better targeting of limited marketing resources.

Johnston (1997) conducted a research to identify the critical determinants of SQ and to examine the effects of SQ on CS. He found that responsiveness (one of the dimensions of SQ) is one of the important factors of CS, as previously supported by Avkiran (1994), Beery *et al.* (1985) and Bitner *et al.* (1990).

From the above discussion it can be concluded that there is a positive relationships between each of the study constructs. Most of the researchers pointed out that there is a positive relation between the service quality attributes and customer satisfaction and customer satisfaction is positively related to customer loyalty. Caruana (2000) found that service quality is positively related to loyalty mediated by customer satisfaction. This study attempts to test this relationship in the retail banking sector in Bangladesh.

3. Research Methodology

This section explains the methodology of research to develop the answers to the research questions. At first the research questions are addressed and then the hypotheses have developed. Next a sampling frame and data collection procedure has been discussed. Finally this section tests the validity and reliability analysis of the data.

3.1 Research questions

This study addresses the following questions after analysing the literature review:

- What are the specific service quality attributes that influence customer satisfaction in the retail banking sector in Bangladesh?
- What are the specific predictors that affect the customer loyalty in the retail banking sector in Bangladesh?
- How the proposed model contribute in the retail banking sector in Bangladesh?

3.2 Research model and Hypotheses

3.2.1 The Research Model

A research model is developed to find out the interrelationships between service quality, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. The research model is as follows:

Insert figure 1 here

Figure 1 demonstrates that the hypothesized relationships between the constructs i.e. service quality, customer satisfaction and customer loyalty. The hypothesized relationships are as follows:

Service Quality Attributes – Customer Satisfaction

Many researchers use SERVQUAL to measure the service quality (Ladhari, 2009; Nadiri *et al.*, 2009; Amin and Isa, 2008; Nijjar and Bishu, 2006; Katircioglu *et al.*, 2005; Lai, 2004; Cui *et al.*, 2003; Hassan *et al.*, 2003; Jabnoun *et al.*, 2003; Zhu *et al.*, 2002; Lassar *et al.*, 2000).

As mentioned earlier in the literature review that in marketing literature, service quality and customer satisfaction have been conceptualized as a distinct, but closely related constructs. There is a positive relationship between the two constructs (Suh and Pedersen, 2010; Saunders and Petzer, 2010; Saha, and Theingi, 2009; Rod *et al.*, 2009; Al-hawari, 2008; Hsu and Hsu, 2008; Eakuru and Mat, 2008; Beerli *et al.*, 2004). The development of hypothesis can be as follows:

H1a: There is a positive correlation between tangibles and customer satisfaction in the retail banking sector in Bangladesh

H1a0: There is no correlation between tangibles and customer satisfaction in the retail banking sector in Bangladesh

H1ba: There is a positive correlation between reliability and customer satisfaction in the retail banking sector in Bangladesh

H2b0: There is no correlation between reliability and customer satisfaction in the retail banking sector in Bangladesh

H1ca: There is a positive correlation between responsiveness and customer satisfaction in the retail banking sector in Bangladesh

H1c0: There is no correlation between responsiveness and customer satisfaction in the retail banking sector in Bangladesh

H1da: There is a positive correlation between assurance and customer satisfaction in the retail banking sector in Bangladesh

H1d0: There is no correlation between assurance and customer satisfaction in the retail banking sector in Bangladesh

H1ea: There is a positive correlation between empathy and customer satisfaction in the retail banking sector in Bangladesh

H1e0: There is no correlation between empathy and customer satisfaction in the retail banking sector in Bangladesh

Customer Satisfaction – Customer Loyalty

There is a strong positive correlation between customer satisfaction and customer loyalty (Donio et al., 2006; Story and Hess, 2006; Cheng et al., 2008). Most of the researchers found that customer satisfaction is the predictor of customer loyalty (Faullant et al., 2008; Leverin and Liljander, 2006; Terblanche, 2006). Pont and McQuilken (2005) found that Customer satisfaction and customer loyalty are related to each other, furthermore, they pointed out that Satisfied customers are not always loyal customers. Al-Wugayan and Pleshko (2010) and Pleshko (2009) pointed out that there is no relationship between customer satisfaction and loyalty. Al-Wugayan and Pleshko (2010) mentions that their findings contrast with most of the researchers. They mention that their findings is only applicable for banks as related to Mutual funds. Based on most of the researchers finding, the development of hypothesis (Customer satisfaction – customer loyalty) can be as follows:

H2aa: There is a positive correlation between customer satisfaction and customer loyalty in the retail banking sector in Bangladesh

H2a0: There is no correlation between customer satisfaction and customer loyalty in the retail banking sector in Bangladesh

3.3 Selecting Samples

The main objective of this research is on the interrelationships among service quality, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. Therefore, the sample for this study was selected from the retail bank customers in Bangladesh. Anderson et al (1998) suggested that the sample size of 100-200 is adequate for the structural equation modelling.

3.4 Data collection procedures

Data were gathered from the retail banking customers in Bangladesh. A set of questionnaire distributed to retail bank customers in Bangladesh. Five post graduate students (interviewers) administered the survey. They administered the survey in Dhaka, Comilla and Feni during two weeks period in July and August, 2010, between 25th July to 7th August, 2010. The first part of the questionnaire consists of the general information of the respondent. Service quality attributes were used in the second part, which is the independent variable of this research. The third part of the questionnaire explains the customer satisfaction and this is the independent/dependent variable of this research. The final part consists of customer loyalty and this is the dependent variable of this research. The interviewers explained each part of the questionnaire to the respondents. Finally, all the questionnaires were posted to the UK.

3.5 Operationalization of variables

The variables are operationalized in this research as follows:

- The Service Quality Attributes consist of five components: Tangibility, Reliability, Responsiveness, Assurance and Empathy. These components are based on SERVQUAL model. This study uses multiple item scale items adapted from Mengi (2009), Caruana (2002) and Cronin and Taylor (1992).

- Customer satisfaction is measured using a single scale item. The single scale item adapted from Jamal and Naser, 2002; Mittal and Kamakura, 2001 and Cronin and Taylor, 1992.
- The construct of customer loyalty is based on Caruana (2002).

(Note: all the parts of the questionnaire use 7-point Likert scales, ranging from “1 - Very dissatisfied” to “7 - Very satisfied”)

3.6 Validity and Reliability issues

3.6.1 Validity

Hair *et al.* (2007, p.8) defined the validity as “the degree to which a measure accurately represents what it is supposed to”. Validity is concerned with how well the concept is defined by the measure(s).

Fujun *et al.* (2007) mentioned [cited from Nunnally and Bernstein, 1994] about three types of validity: content validity, Predictive validity, and Construct validity. Duggirala *et al.* (2008) defined the content validity as the assessment of the correspondence between the individual items and concept. Malhotra (2010) defines the content validity as face validity. This study addresses content validity through the review of literature and adapting instruments used in previous research.

3.6.2 Reliability

Extents to which a variable or set of variables is consistent in what it is intended to measure (Hair *et al.*, 2007). It differs from validity in that it relates not to what should be measured, but instead to how it is measured. Several measures have been used to establish the reliability of the instrument, for example, split-halves, test-retest, equivalent forms and internal consistency method. The current study uses multiple items in all constructs except customer satisfaction. So the internal consistency method should be applied in the current study. Hair *et al.* (2007) mentioned that the rationale for internal consistency is that the individual items or indicators of the scale should all be measuring the same construct and thus be highly intercorrelated. **Fujun *et al.* (2007) pointed out [cited from Nunnally and Bernstein, 1994] that the Cronbach alpha with acceptable cut off point 0.70 demonstrates that all attributes are internally consistent.**

The validity and reliability test of the current study is in **appendix 4**

Pallant (2001) pointed out that in terms of reliability the most important figure is the Alpha value. This is Cronbach's Alpha, which, in this case is 0.905 in table 1a. Pallant (2001) also stated that if any of the values in the Cronbach's Alpha If Item Deleted column (table 1b) are higher than the final alpha value then the researcher may want to consider removing this item from the scale. In this study, all the values are less than the final Alpha value; therefore, all the values are reliable. Finally, it can be concluded that all the service quality attributes are internally consistent because all the values exceeded Nunnally and Bernstein (1994) recommended criterion of 0.70 for scale reliability.

The customer satisfaction measurement scale is adapted from Cronin and Taylor (1992). A seven-point Likert scale ranging from “1 - very unsatisfactory” to “7 - very satisfactory” has been used to measure the customer satisfaction. The internal consistency method will not be applied due to single item instrument.

The measurement scale for the customer loyalty is adapted from Caruana (2002). A seven-point Likert scale described at either end by “extremely likely” and “not at all likely” is used to measure the customer loyalty. Reliability statistics table shows that the Alpha value is 0.905. The column (Cronbach's Alpha if Item Deleted) reveals that the Cronbach's Alpha of Customer Loyalty is 0.895 which is less than the original alpha value, therefore the Alpha value of Customer Loyalty is reliable. It has been observed that the Alpha value of customer loyalty also exceeded Nunnally and Bernstein (1994) recommended criterion of 0.70 for scale reliability.

4. Analysis and Presentation of Findings

At first, this section explains the general sample description and descriptive statistics of each study constructs with the graphical presentation. Then, a hypothesis test has been conducted to find out the relationships between each of the variables of this study. Finally, this section concludes with the summary of findings related to the hypotheses concerning service quality attributes, customer satisfaction and customer loyalty and the summary of open questions.

Based on the 100 sample bank customers, the percentage of male and female respondents are 77 and 23 respectively, which shows the male dominancy of bank customers. In the whole sample, 53% of respondents fell in the age range of 21-30, and 32% fell in the range of 31-40. In terms of qualification, the respondents are almost equal and that is, Undergraduate (31%), Graduate (33%), and Post Graduate (35%). 63% of respondents are service holder and 43% of respondents earn more than 20000 Taka per month.

4.1 Descriptive Statistics for each study constructs

[Note: See the descriptive statistics table on appendix 5]

Based on the 100 samples, Tangibility ranges from 2 to 7 with the Mean of 5.64 and the Standard Deviation of 0.769. Reliability ranges from 3 to 7 and the Mean and Standard Deviation is 5.57 and 0.82 respectively. For Responsiveness, Mean and Standard Deviation is 5.31 and 1.03 respectively with the minimum and maximum value ranges from 2 to 7. Assurance ranges from 3.67 to 7 and the Mean and Standard Deviation is 5.65 and 0.73 respectively. Empathy ranges from 3 to 7 and the Mean is 5.49 and the Standard Deviation is 0.86. The minimum and maximum value for customer satisfaction is 3 to 7 and the Mean and Standard Deviation is 5.64 and 0.90 respectively. Customer loyalty ranges from 2 to 7 and the Mean and Standard Deviation is 5.44 and 1.02 respectively. It has been observed in the table 3 that almost all the Mean are similar. High Standard Deviation means that the data are wide spread, which means that customers give variety of opinion and the low standard deviation means that customers express close opinion.

4.2 Hypotheses Test

Pearson Correlation

A correlation coefficient is a very useful way to summarise the relationship between two variables with a single number that falls between -1 and +1 (Welkowitz et al., 2006). Morgan et al. (2004) stated that:

- -1.0 (a perfect negative correlation)
- 0.0 (no correlation)
- +1.0 (a perfect positive correlation)

[Note see the correlation table in appendix 6].

Pallant (2001) suggested the following interpretation of r-value [cited from Cohen, 1988]. This value will indicate the strength of the relationship between two variables.

- $r = .10$ to $.29$ or $r = -.10$ to $-.29$ Small
- $r = .30$ to $.49$ or $r = -.30$ to $-.49$ Medium
- $r = .50$ to 1.0 or $r = -.50$ to -1.0 Large

The Pearson correlation analysis obtained for the three intervals scaled variables in the table above. The sample size (N) is 100 and the significant level is 0.01 ($p \leq 0.01$).

Recalling the first research question: “What are the specific service quality attributes that influence customer satisfaction in the retail banking sector in Bangladesh?” the first hypothesis will examine the correlation between the service quality attributes and customer satisfaction in the retail banking sector in Bangladesh. The hypotheses are as follows:

Hypothesis # 1

Tangibles

H1aa: There is a positive correlation between tangibles and customer satisfaction in the retail banking sector in Bangladesh

H1a0: There is no correlation between tangibles and customer satisfaction in the retail banking sector in Bangladesh

In the table, it can be seen that the correlation (r) of tangibles is 0.491 and the significant level is 0.01 ($p \leq 0.01$). The table shows that the p-value is 0.000, which is less than 0.01. We therefore reject the null hypothesis, and concluded that there is a medium positive ($r = .491$) relationship between tangibles and customer satisfaction in the retail banking sector in Bangladesh.

Reliability

H1ba: There is a positive correlation between reliability and customer satisfaction in the retail banking sector in Bangladesh

H1b0: There is no correlation between reliability and customer satisfaction in the retail banking sector in Bangladesh

The table shows that the correlation (r) is 0.488 for reliability and the p-value is 0.000, which is less than the significant level (0.01). Therefore, the null hypothesis is rejected and concluded that reliability and customer satisfaction is positively (medium) related in the retail banking sector in Bangladesh.

Responsiveness

H1ca: There is a positive correlation between responsiveness and customer satisfaction in the retail banking sector in Bangladesh

H1c0: There is no correlation between responsiveness and customer satisfaction in the retail banking sector in Bangladesh

It can be observed in the table that the correlation (r) of responsiveness is 0.493 and the p -value is 0.000, which is less than 0.01. Therefore, the null hypothesis is rejected and it can be concluded that responsiveness is positively (medium) related to customer satisfaction in the retail banking sector in Bangladesh.

Assurance

H1da: There is a positive correlation between assurance and customer satisfaction in the retail banking sector in Bangladesh

H1d0: There is no correlation between assurance and customer satisfaction in the retail banking sector in Bangladesh

The table shows that there is a large positive correlation between assurance and customer satisfaction in the retail banking sector in Bangladesh where $p < 0.01$ ($p=0.000$) and $r=0.526$. So, the null hypothesis is rejected.

Empathy

H1ea: There is a positive correlation between empathy and customer satisfaction in the retail banking sector in Bangladesh

H1e0: There is no correlation between empathy and customer satisfaction in the retail banking sector in Bangladesh

According to the table, the strongest predictor of customer satisfaction is empathy. The result indicates that the correlation (r) of empathy is 0.545 and the p -value is 0.000, which is less than 0.01. Therefore, the null hypothesis is rejected and concluded that there is a large positive correlation between empathy and customer satisfaction in the retail banking sector in Bangladesh.

Hypothesis # 2

The second hypothesis examined the correlation between customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. Most of the researchers found that customer satisfaction is the predictor of customer loyalty [cited in literature review]. This hypothesis recalled the second research question: What are the specific predictors that affect the customer loyalty in the retail banking sector in Bangladesh? The hypothesis is as follows:

H2aa: There is a positive correlation between customer satisfaction and customer loyalty in the retail banking sector in Bangladesh

H2a0: There is no correlation between customer satisfaction and customer loyalty in the retail banking sector in Bangladesh

Referring to the table, it can be observed that the correlation (r) of customer satisfaction is 0.673 and p -value is 0.000. Therefore, the null hypothesis is rejected and it can be concluded that customer satisfaction is positively (large) related to customer loyalty in the retail banking sector in Bangladesh.

Insert table 1 here

5. Conclusion

The main objective of the current study is to find the interrelationships between service quality, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. The study sought to identify the most important attributes in bank settings, which may be used to review characteristics of the banks as experienced by customers.

Based on hypothesis H1aa and H1a0, a medium positive correlation was found between tangibility and customer satisfaction. It means that as banks' tangibility increase, customer satisfaction also increases. According to hypothesis H1ba and H1b0, reliability and customer satisfaction has medium positive correlation. This positive relation means that as bank employees' performance and reliability increase, customer satisfaction also increases. Hypothesis H1ca and H1c0 demonstrate the medium positive correlation between responsiveness and customer satisfaction. It means that as the willingness and ability of bank employees' increase, customer satisfaction also increases. Hypothesis H1da and H1d0 shows the large positive correlation between assurance and customer satisfaction. This means that as the assurance from bank employees' increases, customer satisfaction also

increases. According to hypothesis H1ea and H1e0, empathy and customer satisfaction has large positive correlation. It means that as the customer and employee interactions increase, customer satisfaction also increases. Hypothesis H2aa and H2a0 demonstrate that there is a large positive correlation between customer satisfaction and customer loyalty. That means that as the customers are satisfied, there is a high chance for loyalty.

5.1 Applications and Discussion of Findings

The applicability of the SERVQUAL measure is well established in the retail banking industry. Angur *et al.* (1999) stated that SERVQUAL instruments are the best measure of service quality perceptions in the retail banking industry in developing country. The current study also uses the SERVQUAL instruments to measure the service quality perceptions in the retail banking sector in Bangladesh. This study uses the SERVQUAL model to determine the relative importance of each of the service quality attributes which influence customer overall quality perceptions.

The hypotheses test confirms that all the service quality attributes are positively correlated with customer satisfaction. Empathy shows the highest positive correlation with customer satisfaction and Assurance demonstrates the second highest positive correlation with customer satisfaction. Tangibility reveals the least positive correlation with customer satisfaction. A large positive relationship between customer satisfaction and customer loyalty was demonstrated in the hypotheses test. The discussion of the findings is as follows:

5.1.1 Empathy

Service customers often have expectations with regard to the extent to which the service provider appears to understand and be concerned about their individual needs and wants. The more the service provider can see things from the customer's point of view, the better. The core concept of empathy is to understand the needs of customers and provide individual attention. Employee and customer interactions are reflected through the empathy dimensions. Data shows that the bank customers in Bangladesh want a high degree of interaction with the bank staff and they also expect personalized service from the bank staff. The bank customers are also looking for front line staff who are capable of understanding their specific needs. The current study confirms that empathy has a large positive correlation with customer satisfaction. Ladhari (2009) also found that empathy is the strongest predictor of customer satisfaction.

5.1.2 Assurance

Assurance is the degree of trust and confidence that the customer feels that the service provider is competent to supply the service. Mostly, this stems from the degree of confidence that the customer has in the service provider's staff. The customer will not be satisfied if he/she does not feel assured about the competence of the service provider. Assurance shows a positive correlation with customer satisfaction in the current study. The possible explanation of this finding is that the bank can instill feelings of confidence in its customers and the banks handle their customers in a professional and competent way. As mentioned earlier in the literature review, Kumar *et al.* (2010), and Lai (2004) also pointed out that assurance is one of the important factors for customer satisfaction.

5.1.3 Responsiveness

Responsiveness refers to the willingness and ability of the service provider to meet and adapt to customers' needs. This study shows that responsiveness and customer satisfaction is positively correlated. The bank customers in Bangladesh prefer a friendly bank, which is willing to help in their banking operations. Willingness to help customers is likely to have an important and positive effect on customer satisfaction in the retail banking sector in Bangladesh. Mengi (2009) also found that responsiveness is positively related to customer satisfaction.

5.1.4 Reliability

Reliability is the extent to which the service is delivered to the standards expected and promised. In essence, it represents the customer getting what they feel they have paid for. According to this study, there is a positive relationship between reliability and customer satisfaction in the retail banking sector in Bangladesh. Data shows that customers are satisfied with the services provided by the bank as promised and handling (speed) of solving the problem. Customers are confident that banks will fulfil the promised terms and conditions which will not go against their (customers) interests. Zim *et al.* (2010) pointed out that reliability is one of the important factors of customer satisfaction.

5.1.5 Tangibility

The hypotheses test of this study confirms that tangibility and customer satisfaction are positively correlated with

each other. The possible explanation of this finding is that the bank customers often look to any tangible indications which may be used as indicators of the service quality. The customers can assess the premises of the banks; or perhaps the appearance of the bank's staff. Lai (2004) also pointed out that tangibility is positively related to customer satisfaction.

5.1.6 Customer Satisfaction and Customer Loyalty

Bowen and Chen (2001) pointed out that a small increase of customer satisfaction leads customer loyalty dramatically. The current study finds that customer satisfaction has a large positive correlation with customer loyalty in the retail banking sector in Bangladesh. Kandampully and Suhartanto (2000) supported this relationship. The strong positive correlation of customer satisfaction and customer loyalty means that the bank customers will recommend the bank to other people. As a consequence, the banks can be assured of a loyal and stable customer base, thereby reducing the cost. Cohen et al. (2007) found that a loyal customer takes less of the company's time during transactions and are less sensitive to price changes. Recalling the Research Question No 3 "How the proposed model contribute in the retail banking sector in Bangladesh?" Reichheld (2006) stated that companies with the highest customer loyalty typically grew revenues at more than twice the rate of their competitors. Therefore the current research model will contribute in the retail banking sector in Bangladesh by using a loyal customer base.

5.2 Managerial Implications

The current study has shown the interrelationships among service quality, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. This study confirms the positive relationship between all the service quality attributes and customer satisfaction. This study also suggests that SERVQUAL is a suitable instrument for measuring the bank service quality in the Bangladeshi context. Therefore, bank managers can use this instrument to assess the bank service quality in Bangladesh. Moreover, because all the dimensions of service quality attributes are positively correlated with customer satisfaction, Bangladeshi bank managers should emphasise all the service quality dimensions in maintaining and improving the service quality that they provide.

Empathy shows the highest positive correlation with customer satisfaction in the current study. The core concept of empathy is employee-customer interactions. Therefore, Bangladeshi bank managers would be well advised to emphasise the employee training programmes so that they can offer personalized service. The main aim should be to develop a long-term relationship with the customers. The current study demonstrates that there is a large positive correlation between customer satisfaction and customer loyalty. That means that if the customers are satisfied then they will become loyal. Jones and Sasser (1995) pointed out that there is a huge difference between merely satisfied and completely satisfied customers. Therefore bank managers should pay attention on the complete customer satisfaction.

5.3 Limitations

The current study presented exhibit limitations that should be considered. The limitations are as follows:

- The sample size of the current study is 100. This sample size meets the minimum requirement. The researcher may use a bigger sample size to find out more about service quality, customer satisfaction and customer loyalty in the retail banking settings in Bangladesh.
- Other variables may influence customer decision making process in the retail banking industry, such as price, convenience, interest rates etc.
- This study covers the customers of Government and Private banks in Bangladesh. The Foreign banks that have a role in the retail banking industry in Bangladesh were excluded from this study.

5.4 Recommendations for Future Research

Several issues, associated with the limitations inherent in this study, require further research considerations.

Future research should concentrate on a bigger sample size and all types of retail banks [including foreign banks] in Bangladesh. In addition, more decision making variables should also be considered in the research model.

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Table 1. Summary of the Null Hypotheses Test

Null Hypotheses	Descriptions	Results
H1a	Tangibles to Customer Satisfaction	Reject
H1b	Reliability to Customer Satisfaction	Reject
H1c	Responsiveness to Customer Satisfaction	Reject
H1d	Assurance to Customer Satisfaction	Reject
H1e	Empathy to Customer Satisfaction	Reject
H2a	Customer Satisfaction to Customer Loyalty	Reject

[Note: H0 is Null Hypothesis]

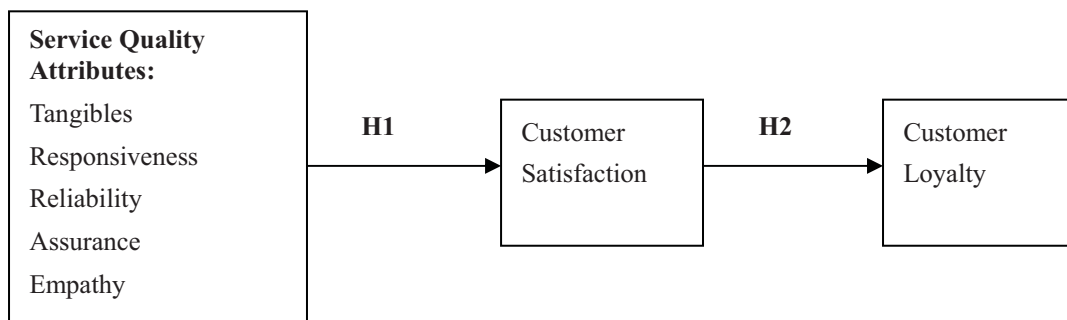


Figure 1. Research Model

Note: All the paths are hypothesized to be positive.

Appendix

Appendix 1: Research instrument

July 27, 2010

Dear Respondent,

I am a MSc International Business student of Buckinghamshire New University in UK. I am conducting a study (Determinants of customer loyalty in the retail banking sector in Bangladesh) as part of my dissertation. The objective of this research is to identify the interrelationship between service quality, customer satisfaction and customer loyalty in the retail banking sector. In Bangladesh, no study has yet investigated these links. This links is important because most of the researchers pointed out that profit and growth are stimulated primarily by customer loyalty. Through your participation, I eventually hope to finish my research.

Enclosed with this letter is a brief questionnaire that asks a variety of questions about your opinion towards your current bank. I hope you will take a few minutes to complete this questionnaire. Your opinion will use only for the research purpose. Without the help of people like you, research on customer loyalty could not be conducted. Your participation is voluntary and there is no penalty if you do not participate.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me at; email: kaziomar82@yahoo.com or 0044-7872642587 in UK and in Bangladesh; Md. Mazharul Hasan, 0088-01816747841; Md. Salahuddin Polash, 01712716627; Md. Mehedi Hasan Sisir, 0088-01712587714; Md. Parvez 0088-01712729242; Md. Toufiqul Islam, 0088-01712545946; Md. Iqbal Hossain, 0088-01824635886.

Yours sincerely,

Kazi Omar Siddiqi

MSc International Business

Buckinghamshire New University

UK.

Survey Questionnaire

Part 1

General Information

Note: This information will exclusively be used for research purpose and in no case will be disclosed to anybody.

A. General information Customer Name: Bank Name: Type of Account: Current / Savings / Fixed Deposit / Any other Gender: Male / Female Marital Status: Married / Single Age: ☐ Under 20 ☐ 21 – 30 years ☐ 31 – 40 years ☐ 41 – 50 years ☐ Above 50 years Qualification: Undergraduate / Graduate / Post Graduate Income: ☐ Below 10,000 Taka ☐ 10,000 – 20,000 Taka ☐ Above 20,000 Taka Profession: Business / Service / Student / House wife / Others

Part 2

Service Quality Attributes

S. No.	Questions	1 — 2 — 3 — 4 — 5 — 6 — 7
		Strongly Disagree Strongly Agree
1.	Tangibility Are you satisfied with the premises of the bank? Is it visually appealing?	1 2 3 4 5 6 7
2.	Are you satisfied with the technological up-to-date equipments of the bank?	1 2 3 4 5 6 7
3.	Are you satisfied with the way employees dress?	1 2 3 4 5 6 7
4.	Are you satisfied with the pamphlets distributed by the bank? Are they clear and give complete information?	1 2 3 4 5 6 7
5.	Are you satisfied with the bank statement? Is it visually clear?	1 2 3 4 5 6 7
6.	Reliability Are you satisfied with the services provided by the bank as promised?	1 2 3 4 5 6 7
7.	Are you satisfied by the service of handling a problem (speed of solving the problem)?	1 2 3 4 5 6 7
8.	Are you satisfied with the way bank provides service at the time they promised (the time at which it is performed)?	1 2 3 4 5 6 7
9.	Are you satisfied with the operating hours of the bank?	1 2 3 4 5 6 7
10.	Are you satisfied with the way bank delivers up to date record?	1 2 3 4 5 6 7
11.	Responsiveness Are you satisfied with the employees' promptness in providing services in the bank?	1 2 3 4 5 6 7
12.	Are you satisfied with the willingness of employees	1 2 3 4 5 6 7

	to help customers?	
13.	Are you satisfied with the bank service of sending timely bank statement?	1 2 3 4 5 6 7
14.	Assurance Are you satisfied with the security of the bank?	1 2 3 4 5 6 7
15.	Are you satisfied with the employee's eagerness of instilling confidence to you?	1 2 3 4 5 6 7
16.	Are you satisfied of the knowledge of the employees?	1 2 3 4 5 6 7
17.	Empathy Are you satisfied by banks service of providing customers best interest at heart?	1 2 3 4 5 6 7
18.	Are you satisfied by the bank service of providing the product that best suits to you?	1 2 3 4 5 6 7
19.	Are you satisfied by the overall service quality of your bank?	1 2 3 4 5 6 7

Anything else, you want to mention about the service quality of the

bank.....

Part 3

Customer Satisfaction

The following statement relates to your feeling about bank..... Please respond by circling the number which best reflects your own perceptions.

My feelings towards bank..... 'S services can best be described as

1 — 2 — 3 — 4 — 5 — 6 — 7

VERY UNSATISFACTORY

VERY SATISFACTORY

Part 4

Based on your overall experience you get from Bank....., please indicate how likely you are to take the following actions. Circle the number which best reflects your likelihood of taking each action.

How likely are you to	1 — 2 — 3 — 4 — 5 — 6 — 7
	Not at all likely Extremely likely
1. Say positive things about Banks..... to other people	1 2 3 4 5 6 7
2. Encourage friends and relatives to do business with Bank.....	1 2 3 4 5 6 7
3. Intend to continue doing business with Bank.....	1 2 3 4 5 6 7
4. Have strong preference on this Bank	1 2 3 4 5 6 7
5. Consider Bank..... as my primary Bank	1 2 3 4 5 6 7

- Anything else, you want to mention the overall experience from the

bank.....

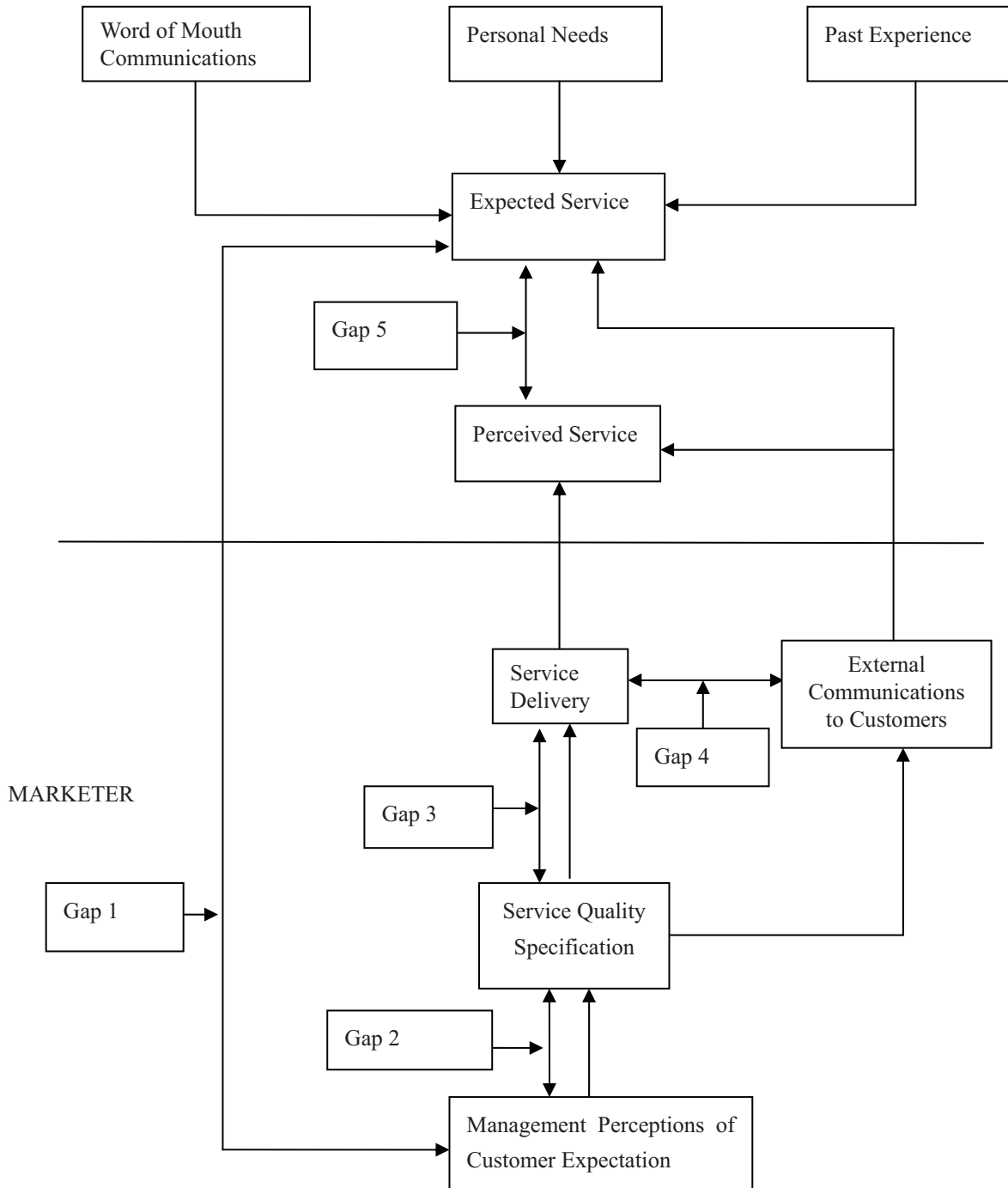
Appendix 2 (Service Quality Model)**CUSTOMER**Source: Parasuraman *et al* (1985)

Figure 1. Service Quality Model

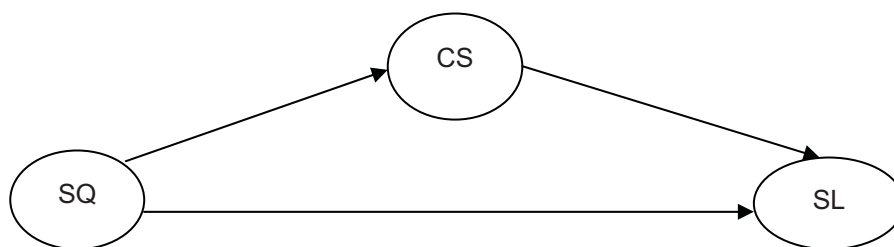
Appendix 3 (Mediational Model)

Figure 2. Mediational model

Source: Caruana A (2000)

SQ= Service Quality, CS= Customer satisfaction, SL= Service loyalty

Appendix 4 (Validity and Reliability statistics table)

Reliability Statistics (Table 1a)				
Cronbach's Alpha	N of Items			
.905	6			

Item-Total Statistics (Table 1b)				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Tangibles	27.464667	14.442	.660	.900
Reliability	27.492667	13.138	.855	.873
Responsiveness	27.751333	12.195	.787	.883
Assurance	27.411333	14.697	.651	.901
Empathy	27.574667	13.076	.816	.878
Customer Loyalty	27.628667	12.636	.716	.895

Scale Statistics (Table 1c)			
Mean	Variance	Std. Deviation	N of Items
33.064667	18.887	4.3459227	6

[Note: SPSS version 17 has been used to calculate the above tables]

Appendix 5 (Descriptive Statistics Table)

Table 2.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Customer Satisfaction	100	3	7	5.64	.90
Tangibles	100	2	7	5.60	.77
Reliability	100	3	7	5.57	.82
Responsiveness	100	2	7	5.31	1.03
Assurance	100	3.67	7	5.65	.73
Empathy	100	3	7	5.49	.86
Customer Loyalty	100	2	7	5.44	1.02
Valid N (listwise)	100				

[Note: Statistical Package for the Social Sciences- SPSS (version. 17) has been used to calculate the Mean, Standard Deviation, Minimum and Maximum value of each of the constructs]

Appendix 6 (Correlation table)**Correlations**

		CS	Tangibles	Reliability	Responsiveness	Assurance	Empathy	CL
Customer Satisfaction	Pearson Correlation	1	.491**	.488**	.493**	.526**	.545**	.673**
	Sig. (1-tailed)		.000	.000	.000	.000	.000	.000
	N	100	100	100	100	100	100	100
Tangibles	Pearson Correlation	.491**	1	.632**	.560**	.500**	.554**	.560**
	Sig. (1-tailed)	.000		.000	.000	.000	.000	.000
	N	100	100	100	100	100	100	100
Reliability	Pearson Correlation	.488**	.632**	1	.759**	.626**	.793**	.680**
	Sig. (1-tailed)	.000	.000		.000	.000	.000	.000
	N	100	100	100	100	100	100	100
Responsiveness	Pearson Correlation	.493**	.560**	.759**	1	.566**	.706**	.660**
	Sig. (1-tailed)	.000	.000	.000		.000	.000	.000
	N	100	100	100	100	100	100	100
Assurance	Pearson Correlation	.526**	.500**	.626**	.566**	1	.661**	.439**
	Sig. (1-tailed)	.000	.000	.000	.000		.000	.000
	N	100	100	100	100	100	100	100
Empathy	Pearson Correlation	.545**	.554**	.793**	.706**	.661**	1	.650**
	Sig. (1-tailed)	.000	.000	.000	.000	.000		.000
	N	100	100	100	100	100	100	100
Customer Loyalty	Pearson Correlation	.673**	.560**	.680**	.660**	.439**	.650**	1
	Sig. (1-tailed)	.000	.000	.000	.000	.000	.000	
	N	100	100	100	100	100	100	100

** . Correlation is significant at the 0.01 level (1-tailed). **Table 3**

[Note: SPSS – version. 17 has been used to calculate the above Table]