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Measuring Service Quality of Banks: An Empirical Study

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Abstract

This study examines an interrelationship among service quality, satisfaction and customer loyalty. The objective of this study is to establish an inter-linkage among service quality, satisfaction and loyalty. For this purpose, existing SERVQUAL model has been extended to test the above linkage in a developing country context. A quantitative research approach is used in this study. A sample of 222 bank clients was drawn randomly from private and public sector banks in Bangladesh. The research findings suggest that there is a strong influence of service quality dimensions on satisfaction. It is also found that the customer satisfaction and reputation of the bank lead greater loyalty. Hence, the findings of the study would open up a new method of designing banking service in developing country like Bangladesh. It will also guide the bankers how well they could serve present and prospective customers. In fact, the study provides a framework for bankers to offer quality service.

Key words: Banks, Service quality, Satisfaction, and Loyalty.

1. Introduction

During the last two decades, the service-oriented industry has potential growth (Hoffma & Bateson 2002) and now constitutes a major portion of the world economy. Service has become an integral part of modern business. Now-a-days, even manufacturers are paying greater attention in adding service features to their products. This is attributed to downward pressure on prices caused by intense competition. One of the few things that companies are left with is to distinct themselves in terms of quality of service they offer, which has a direct impact on profit making. Thus quality of service is deeply intertwined with profits, customers' expectations and eventual performance of a firm. As in many other industries, quality of services provided is of paramount importance in banking sector owing to customers' ability to easily switch to competitors.

There is limited scope in case of quantitative method of measuring service quality. However, a significant contribution in this regard is by Parasuraman, *et al.* (1985). Service quality model (SERVQUAL) developed by Parasuraman, *et al.* (1988) is extensively used to evaluate quality of service in different business domains. Many researchers have also adopted this model to measure and evaluate service quality of banks. Service quality issue is equally important both for private and public banks (Kangis & Voukelatos

1997). Allred & Addams (2000) analyze service quality of the bank in its various dimensions from customers' perspective. Angur, *et al.* (1999) studied service quality dimensions of the banking industry in developing economies. Jham & Khan (2008) measured relationship between banks performance and customer satisfaction with a focus on quality of service. But there was no such study conducted to link service quality dimensions with satisfaction and loyalty. Satisfaction is always unidirectional toward loyalty. Customer loyalty is considered as a strong determinant for marketing services and is critical to success of a business in today's competitive marketplace. And banks are no exception (Ehigie 2006).

Bangladesh is a developing country with poor socio-economic conditions. Like many other economic institutions, banking sector is also under explored and under developed in this country. However, recent trends point to a more positive development and prospects in the industry. After deregulation and privatization policy was implemented by the government, private banks have got enormous benefits to set up facilities. As a result, numbers of private commercial and investment banks have been established. This results significant development of banking industry in Bangladesh during recent past years. There are four types of scheduled banks available in Bangladesh. These are: 1.State owned commercial banks 2. Specialized banks 3. Local private commercial banks 4. Foreign commercial banks. A total of 48 banks operating in the country. Among these four are publicly owned commercial bank , five are state owned specialized bank and the rest thirty nine are private banks, of which thirty are privately owned commercial banks and nine are foreign commercial banks (Bangladesh Economic Survey 2009).

The above picture shows that the banking business in Bangladesh is considerably competitive in nature. Recently, a lot of changes are occurring in global banking with their varied approach and procedures in dealing with customer as confronting competitors. Given the extent and scope of these changes, Bangladeshi banks responded well to adapt to the changing global banking milieu. Contemporary banking is mostly characterized by new service offerings supplemented by technology. To meet growing needs and expectations of clients, banks must invest heavily in services and technology infrastructure to satisfy and retain their clientele. Service quality should therefore, be a prime consideration of banks. Thus service quality measurement is inevitable to make customer satisfied as well as loyal toward a particular bank. However, there is paucity of research regarding service quality, satisfaction and customer loyalty in the banking sector in Bangladesh.

Though a lot of studies have been conducted on service quality, satisfaction and customer loyalty, no integrated study has yet been to draw an interlink among service quality dimensions, satisfaction and customer loyalty. Therefore, the research question addressed in this study is: what are the different service quality dimensions in Bangladesh banking sector and how do they impact on customer satisfaction and customer loyalty? The main objective of this study is to develop a model and test it through data collected from a developing country banking sector like Bangladesh to determine the generalizability of the findings.

2. Literature Review

An extensive effort has been made to explore banking services in different developed country contexts. The review of relevant literature reveals that very limited effort has been made in terms of correlating service quality, satisfaction and loyalty in the banking sector. This study integrates a broad review of relevant literature, which helps to synthesize the variables and research contexts regarding service outcome of both public and private bank. Service quality is one of the important determinants for the success of a bank. It is difficult to measure quality of service due to its distinct characters. In comparison, goods have tangible characteristics and thus can be readily measured by objective indicators such as performance, physical attributes and durability (Hoffman & Bateson, 2002). In fact, service quality is measured by intangible and subjective elements such as attitudes, perceptions and feelings of customers. Increasingly service quality dimension is becoming ever more important both for researchers and service providers.

A conceptual model concerning perceived service quality was first developed by Parasuraman *et al.* (1985). They identify ten dimensions (tangible, reliability, responsiveness, competence, courtesy, credibility, security, access, communication, and understanding the customer) of measuring service quality. The study found that the differences between perceived performance and expected performance of these ten

dimensions determine overall service quality. However, this conception does not examine any particular service industry. Later, Parasuraman *et al.* (1988) revised their earlier conceptual model and conceptualized perceived service quality as "a global judgment, or attitude, relating to the superiority of the service" and also developed a 22-items instrument, recognized as SERVQUAL, which has become widely used as a generic instrument for measuring service quality. The instrument items represent five dimensions: reliability, responsiveness, tangibles, assurance and empathy. The conceptual model of Parasuraman *et al.* (1988) can serve as a basis for understanding customer expectations and service performance. Lee *et al.* (2000) have made substantial contribution to the service quality literature. They used SERVQUAL model and identified determinants of perceived service quality. Furthermore, they tried to build a relationship of these service quality determinants with satisfaction in the service-oriented firm. They have found that perceived service quality is an antecedent of satisfaction. However, they did not pay attention to whether loyalty can be the final outcome of service quality and satisfaction.

Further, researchers identified various service quality dimensions and these are used as independent variables in several service quality studies. For example; Flavian et al. (2004) identified factors like access to service, service offered, security, and reputation for measuring service quality. In this study, authors measured corporate image especially in case of Internet banking domain to assist management of banks. This paper is centered on developing and proposing a reliable and valid scale to measure corporate image of a bank in the context of the Internet. Authors here ignored satisfaction and loyalty issues that can impact on service quality. Kangis & Voukelatos (1997) have followed Parasuraman et al. (1988) and compared service quality of public and private banks in a conceptual study. They found private bank providing better service than public banks. However, no model was proposed and client's satisfaction and loyalty were not measured in their study. Joseph et al. (1999) used service quality indicators in banking sector. They measured the impact of technology on service delivery. However, the study overlooked quality dimensions for measuring the role of technology. Similarly, Jabnoun & Tamimi (2002) conducted a study to measure perceived service quality of commercial banks in the context of United Arab Emirates and for this purpose, they modified the SERVQUAL model. In this study, authors examined the relative importance of each dimensions of service quality but they did not relate these dimensions with satisfaction and loyalty. Tamimi & Amiri (2003) measured and analyzed service quality only for Islamic banks in UAE. This study also considered service quality dimensions, but they did not relate these dimensions to customer satisfaction and loyalty.

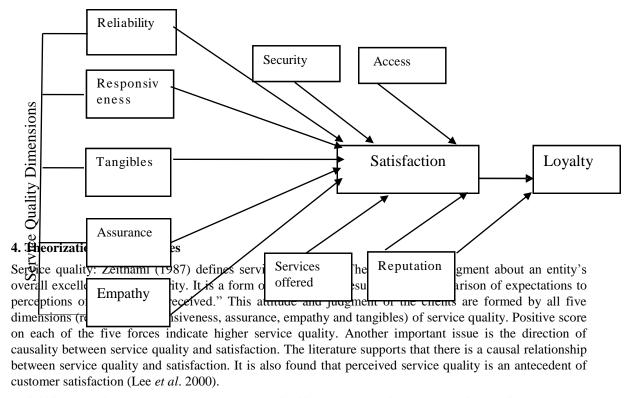
Surprisingly, most of the literature ignores loyalty as vital to success in banking services except Ehigie (2006) study. This study examined how customers' expectations, service quality, and satisfaction predict loyalty among bank customers. This study found satisfaction and service quality as the most significant predictors of customer loyalty. Although the study was conducted in an African context, it provides strong case for adopting the proposed model for the current study.

3. Development of Conceptual Model and Hypotheses

From the review of relevant literature, it is clear that most of the scholars consider five dimensions for measuring service quality. These seem to be most appropriate to identify firms' service quality. In addition to the major antecedents developed by Parasuraman *et al.* (1988), some researchers found other factors significant in service quality study such as *access to service, service offered, security, and reputation* (Flavian *et al.* 2004). In a similar vein, service quality dimensions lead to customer satisfaction, which become the determinants of customer loyalty. Once a firm makes its customers satisfied, they become loyal to the firm (Ehigie 2006).

These determinant factors have theoretical importance as well as conceptual and anchored in empirical evidence that is included in our model. The model presented in Figure-1 illustrates direct and indirect links among the variables.

Figure 1: Conceptual Framework of Service Quality Dimension and Its Relationships with Client's Satisfaction and Loyalty



Reliability: The literature also lends support to reliability as the most important service quality dimension. It refers mainly to dependability and accuracy of performing service function. To evaluate service quality of a bank, clients determine whether they can rely on bank's services or not since it leads to greater satisfaction. Therefore following hypothesis can be drawn.

 H_1 : The greater the clients reliability on banks, the greater will be customer satisfaction.

Responsiveness: It emphasizes on the willingness and readiness of bank employees. A bank service can also be measured by the willingness and readiness of service availability. The factor (responsiveness) affects the customer satisfaction greatly and can be hypothesized as -

 H_2 : The greater the bank employees responsiveness, the higher will be satisfaction.

Tangibles: This dimension refers to the physical facilities, equipment, and appearance of personnel. It refers to the visible elements of bank and its surroundings (Parasuraman *et al.* 1985, 1988). Although tangible elements do not directly influences satisfaction, however, a well-decorated office can affect the perception of clients. Thus the hypothesis can be as follows-

 H_3 : The more the banks' tangible elements' attractiveness, the greater will be satisfaction.

Assurance: Assurance denotes the ability of bank to make the clients assured about their deposit and transaction. It includes employees' knowledge, courtesy and ability to convey trust and confidence to the clients and all concerned parties (Parasuraman *et al.* 1985 & 1988). Whenever a bank delivers assurance, the customer satisfaction will obviously be boosted up. Thus, another hypothesis can be drawn as follows-

H₄: The greater the banks' assurance provided to clients, the higher will be customer satisfaction.

Empathy: This dimension refers to the level of caring and individual attention to special customers' concerns, understanding need of customers, and having problem solving attitude directed towards client group (Parasuraman *et al.* 1985 & 1988). Dealing with care and giving special attention make customers bonded with a bank, hence, become satisfied. So hypothesis is:

 H_5 : The greater the banks' empathy to the customer, the greater will be customer satisfaction.

Security: It is freedom from danger, risk or doubt. It entails physical safety, financial security and confidentiality of client's personal and financial information. It is found that secured and safe environment is preferred by clients (Flavian *et al.* 2004; and Parasuraman *et al.* 1985). It leads to following hypothesis:

 H_6 : The more perceived security of bank transaction, the greater will be the customer satisfaction.

Access to service: It is described as how conveniently a customer can get access to a bank service. It means approachability and ease of contact. Greater accessibility increases the satisfaction of clients (Flavian *et al.* 2004). The hypothesis in this regard is:

 H_7 : The easier the customer access to bank services, the higher will be customer satisfaction to the bank.

Services offered: Service offered by the bank must be attractive in the eyes of its clients. It comprises interest given on savings, commission taken for services, interest charged for loans etc. Varieties of service package enhance customer satisfaction. Hence, the following hypothesis is developed:

 H_8 : The more attractive the banks' offered services, the greater will be customer satisfaction.

Reputation: Reputation offers a strong organizational image and goodwill in any industry, even more so in banking. Customer perceives reputation of bank based on the goodwill in dealings, which leads to increase satisfaction in bank-client relationship. The hypothesis here drawn as such-

 H_9 : The greater the reputation of the bank, the higherr will be customer satisfaction.

Once more, a bank's clients tend to be more loyal if it enjoys excellent reputation and rapport. They perceive that reputed banks are able to provide more advanced services. It facilitates a stronger bondage and closer relationship with the bank. Further hypothesis is drawn as under:

 H_{10} : The greater the reputation of the bank, the higher will be customer loyalty.

Satisfaction: Satisfaction refers to overall feelings of pleasure or displeasure experienced by customers during the process of getting services from the bank. When a customer feels that a particular bank is her appropriate choice, given the quality of service received, it indicates that she is satisfied (Ahmed 2002, Jham & Khan 2008 and Lee *et al.* 2000). Customer satisfaction and service quality are the significant predictors of customer loyalty (Ehigie 2006). Thus it can be hypothesized that -

 H_{11} : The greater the clients satisfaction to the bank services, the higher will be customer loyalty.

Loyalty: In this study, loyalty is the ultimate dependent variable which is influenced by satisfaction and reputation. All FIVE service quality dimensions and other FOUR variables lead to satisfaction. So all TEN variables used in this study determine loyalty of the clients to their respective bank. Loyalty here defines the depth of bank—clients relationship. It is a bondage between clients and bank(er). The more loyal customer for the bank, the greater the possibility to be successful in banking business.

5. Research Methodology

5.1 Research Setting

An empirical research approach has been chosen for the study. The service quality model has gained much importance over the last three decades to measure overall service standard of the firms. Several scholars have conducted research related to SERVQUAL model however; authors have extends and adds some new dimensions to existing model those are the contributory aspects of this study.

5.2 Unit of Analysis

The unit of analysis of this study is bank customers' perception of service quality outcome of private and public banks in Bangladesh. For this purpose, respondents were selected randomly to complete questionnaire with respect to their evaluation for each statement of measures.

5.3 Sample and Research Design

On the basis of research title, all clients of both public and private bank could be included to define the population. The database of ten banks including private and public banks is considered as a sampling frame

of the study. Around 1000 clients were primarily drawn from their databases. A random telephone contact to 700 respondents identified 500 knowledgeable respondents who agreed to participate in the survey. Finally, the questionnaires were sent to them through postal mail and in personal. A follow up telephone call and personal contact with the respondents yielded 258 responses in four weeks time. From the collected questionnaire, 36 questionnaires were dropped due to respondent's inability to fulfill, unconscious responses and excessive missing data. Consequently, the size of the sample stands to 222 with a response rate of 44%.

5.4 Measurement Development

Measures of all constructs in the questionnaire were developed based on extant literature. Multi-item scales (seven point Likert scale) response formats were used to operationalize all the variables. The measurements for each theoretical construct are described below:

Reliability: Reliability was operationalized using five indicators such as promised, dependable, consistent service, and accurate and error free transactions. The items promised and dependable service, accurate and error free transaction were borrowed from (Parasuraman *et al.* 1994; Kangis & Voukelatos 1999). The item 'consistent service' was taken from Allred & Addams (2000). The composite score was calculated from the five indicators that was highly satisfactory (Alpha= 0.90).

Responsiveness: It also includes five indicators such as prompt and quick service, helping customer, quick response, keeping clients informed and reduced waiting time. The study borrowed four items for this construct from Parasuraman *et al.* (1994), and one item from Kangis & Vaokelatos (1999). The composite score of the measures was highly satisfactory (Alpha=0.94).

Tangibles: This construct includes five item measures such as modern equipment, appealing decoration, employee tables and professional, well-dressed employees. Here two items were borrowed from Kangis & Voukelatos (1999) and other three items were taken from Parasuraman *et al.* (1994). The composite value of the five items measures was highly satisfactory (Alpha=0.94).

Assurance: This dimension refers to employees' knowledge, courtesy, ability to convey trust, confidence, confidentiality and safety. For this construct measures were adopted from Kangis & Vaokelatos (1999) and Parasuraman *et al.* (1994). The composite score of all five items was satisfactory (Alpha=0.88).

Empathy: This construct refers to the level of caring and individual attention provided to, understand the need of, problem solving attitude to, convenient branch for the customers. For this construct, all the items were borrowed from Parasuraman *et al.* (1994). The composite score of all items under this construct was highly satisfactory (Alpha=0.91)

Security: It denotes five measures such as, security in transactions, of deposits, at entrance and exit and secured financial data and employee desk and table. For this construct, indicators were borrowed from Allred & Addams (2000) and Flavian *et al.* (2004). The composite score of all five measures was satisfactory (Alpha=0.87).

Access to service: It means whether service is convenient, easy to access, and eases of contact. It includes convenient office time and available time for transaction. Four measurement items for this construct were taken from Flavian *et al.* (2004). One item was developed based on authors' own understanding. The composite score of all measurement items under this construct was calculated that was highly satisfactory (Alpha=0.90).

Service offered: This construct includes all the service packages such as, interest given, interest charged, commission charged, attractive services, and number of service available. All the measurement items for this construct were borrowed from Flavian *et al.* (2004). The composite score of these measurement items was highly satisfactory (Alpha=0.94).

Reputation: The measures of this construct include reputation for keeping promises, goodwill, image, mass popularity and reputation for transaction with beneficiaries. For this construct, all indicators were adopted from Flavian *et al.* (2004). The composite score of all indicators was satisfactory (Alpha=0.89).

Satisfaction: It refers that customers are satisfied with performance, employee cooperation, and office decoration and have no complain against the bank and the bank can meet expectations better. Measures for this construct were incorporated from Ehigie (2006). The composite score of all the measures was highly satisfactory (Alpha=0.95).

Loyalty: Loyalty is the ultimate dependent variable of the study. This measure has five indicators such as customers are happy with service, will use the bank continuously, will introduce and influence others to use the bank, and they think services are of high standard. All of the measurement indicators were taken from Ehigie (2006). The composite score of all the measures was highly satisfactory (Alpha=0.94).

5.5 Questionnaire Development and Pre-testing

A pilot questionnaire was designed to test the applicability of the measures. This research instrument has been redefined several times for perfection. Before conducting final survey, the study has gone through with pre-testing the questionnaire for relevance, appropriateness and clarity. In questionnaire format, the study followed seven point Likert's scale (1= Strongly disagree to 7= strongly agree).

5.6 Method of Data Collection

Both mail survey and personal interview were conducted to collect data. Initially 300 questionnaires were mailed to the respondents in different regions of the country and 200 questionnaires were personally supplied to the respondents in a big metropolitan city. 95 reply mails questionnaires were received. In four weeks time, out of 200 personally distributed questionnaires 163 were collected from the respondents.

6. Data Analysis and Results

6.1 Demographic and Personal Information

In the questionnaire, there were seven questions related to demographic and personal characteristics of the respondents. These characteristics are accordingly analyzed as follows:

Of 222 respondents 194 (87.4%) were male and 28 (12.6%) were female. Most of the respondents were between the age of 22 and 29. The highest frequencies were found at the age of 25 years revealing 23 respondents. The findings suggest that most of the respondents were young. It was also found that 56.3% respondents were married and 43.7% were unmarried. Most of the respondents (45.9%) were found to hold a graduate degree. Majority of the respondents (120) have an account in private banks whereas 102 respondents were the clients of public banks bearing the respective percentage 54.1 % (private) and 45.9 % (public).

6.2 Measurement Model

For each construct, the measures were purified using item-to-item total correlations, single measurement models, and CFA (Confirmatory Factor Analysis). Based on the analyses and suggested modifications, four measurement indicators from the eleven constructs were dropped. Using common SEM (structural equation model) procedures, all refined measures in the CFA were used to test the proposed SEM model. The correlations for the construct measures are shown in Table-1.

6.3 Confirmatory Factor Analysis

The result of the CFA indicates a reasonable model fit (CMIN= 2317.713; DF= 1169, CMIN/DF= 1.983, RMSEA= .068, IFI= .902, TLI= .892, and CFI= .901 where CMIN= Chi-square value, DF= Degrees of freedom, RMSEA= Route mean square error approximation, IFI= Incremental fit index, TLI= Tucker Lewis index and CFI= comparative fit index). This result also shows that the constructs provided parsimonious fit to the data. The detailed CFA results with standardized loading scores for each construct measure are displayed in Annexure-A.

6.4 Structural Model

For this study, authors have used SEM (structural equation model) to test the proposed model and its hypothesized paths. The SEM analysis shows good model fit (CMIN/DF= 1.994, IFI= .900, TLI= .891, CFI= .900 and RMSEA= .068). Further, hypotheses testing (illustrated in Table-2) shows that seven of

eleven hypotheses are supported. This specifically indicates that the indirect effects of empathy, responsiveness, assurance, and reputation on customer satisfaction are significant and effects of reputation and satisfaction on loyalty are also significant.

The result of *Hypothesis 1* indicates that reliability (β = -.24, p< .196) is not significantly related to satisfaction. Therefore, Hypothesis 1 is not supported empirically. The result of *Hypothesis 2* indicates that responsiveness (β = .682, p< .001) is significantly positive to satisfaction. So Hypothesis 2 is supported. Regarding *Hypothesis 3*, result suggests that tangibles (β = .09, p< .268) do not positively affect customer satisfaction; therefore, Hypothesis 3 is rejected. *Hypothesis 4*, *Hypotheses 5* and *Hypotheses 6* indicate that assurance, empathy and security are significantly related to satisfaction as they have respective values (β = -.367, p< .027), (β = .341, p< .022) and (β = .30, p< .021). Hence, Hypothesis 4, Hypothesis 5 and Hypothesis 6 are supported. The results of *Hypothesis 7* and *Hypothesis 8* suggest that access and service offered are not significantly related to satisfaction (β = -.084, p< .349), (β = .032, p< .690). Thus, Hypothesis 7 and Hypothesis 8 are rejected. According to the *Hypothesis 9*, satisfaction is strongly affected by reputation (β = .274, p< .018). *Hypothesis 10* suggests that reputation is significantly related to clients' loyalty (β = .313, p< .001). And finally *Hypothesis 11* indicates that satisfaction can lead to greater customers loyalty (β = .612, p< .001). Hence, these results suggest that Hypothesis 9, Hypothesis 10 and Hypothesis 11 are supported.

7. Discussion and Conclusion

Service quality concept is obviously important in the modern banking business. Extant literature supports that perceived service quality, customer satisfaction and loyalty are significant determinants for the success of modern banking business. Quality of service is the main determinant factor when clients consider a bank's standard. This study has examined an interrelationship among service quality, satisfaction and customer's loyalty by identifying and measuring the variables underlying with this relationship. Primarily nine variables were identified that lead to greater customer satisfaction. Among these, five are service quality dimensions such as; reliability, responsiveness, tangibles, assurance and empathy and other four are related to customer satisfaction such as; security, access to services, service offered and reputation. Here nine hypotheses are also drawn; five of them are accepted. It leads to the conclusion that responsiveness, assurance, empathy; security and reputation have a strong impact on clients' satisfaction. This also lends support to Lee *et al.* (2000). The banks with highly responsive employees facilitate to create strong customer bondage. The banks that provide assurance, empathy and offer secured atmosphere for their clients enhance customer satisfied. The result shows, banks' reputation has also strong impact on customer satisfaction. It can be strongly recommended that these above five variables are the key to customer satisfaction. Hence, these factors should be seriously considered by the bankers.

However, four hypotheses of the study were rejected (reliability, tangibles, access to services and services offered) indicating that they have no significant impact on customer satisfaction to banks. The authors assume that there may have been some variation on the perception of bank customers in terms of different geographical location and cultures. To reach a concrete conclusion these variables demand further investigation.

The result of other two hypotheses (H_{10} and H_{11}) indicates that satisfaction and reputation both have strong influence on client's loyalty. According to Ehigie (2006), satisfaction has strong influence on customer loyalty. Thus, H_{10} and H_{11} were accepted. Hence, result of the study shows that the proposed structural and measurement model is a good model fit.

8. Contributions

This paper is an extension of existing knowledge base in service quality literature. The findings claims that existing SERVQUAL model can be extended by incorporating some other dimensions such as security, access, service offered and reputation. These additional dimensions obviously will broaden the service quality measurement system. The findings of this study would open up a new method of designing banking service in developing country like Bangladesh. It will also guide bankers how well they could serve present

and prospective customers. The study will facilitate to build strong organizational image or reputation of banks which will lead customer satisfaction and make customers loyal towards a particular bank. In fact, the model of this study provides a framework for bankers in order to prescribing the pathway of offering quality service. Moreover, the study would contribute future researchers for undertaking similar study in the field of service marketing. The research findings also contribute to developing new insights and understanding for service outcomes of banks.

9. Limitations and Future Research Scope

The study allows only the educated clients of banks from both private and public sectors which limit the generalizability of the findings. The study also ignores clients from banks which locating in rural areas of the country. Since data were collected from clients of both private and public banks; a comparative study would be interesting to measure service quality, customer satisfaction and customer loyalty. The future researchers would conduct similar studies all over the country. The authors have undertaken four additional variables (i.e., security, access to services, service offered and reputation) in the existing SERVQUAL model, but future researchers can incorporate other variables like, *commitment* and *communication* to contribute in the body of knowledge. This can lead future researches to be taken with the help of the proposed model in this field. Authors invite future researchers to test the proposed model in any other service sector. In this way the study will contribute to further knowledge exploration in the respective field.

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Table-1: Correlation Matrix

Constructs	1	2	3	4	5	6	7	8	9	10
1. Reputation	1.000									
2. Service offered	.768	1.000								
3. Access to service	.771	.736	1.000							
4. Security	.769	.647	.742	1.000						
5. Tangible	.616	.754	.610	.575	1.000					
6. Empathy	.756	.827	.693	.597	.831	1.000				
7. Assurance	.824	.783	.767	.783	.682	.822	1.000			
8. Responsiveness	.670	.811	.715	.562	.873	.928	.770	1.000		
9. Reliability	.761	.738	.766	.692	.750	.870	.834	.884	1.000	
10. Satisfaction	.750	.831	.703	.637	.873	.927	.758	.938	.835	1.000
11. Loyalty	.811	.805	.714	.666	.793	.870	.768	.854	.806	.921

Table- 2: Results of Hypotheses Testing

	Path direction			Estimate	C.R.	P	Sup/not
H_1	Reliability	>	Satisfaction	240	-1.292	.196	Not support
H_2	Responsiveness	>	Satisfaction	.682	3.387	.001***	Support
H_3	Tangibility	>	Satisfaction	.090	1.109	.268	Not support
H_4	Assurance	>	Satisfaction	367	-2.209	.027*	Support
H_5	Empathy	>	Satisfaction	.341	2.293	.022*	Support
H_6	Security	>	Satisfaction	.300	2.315	.021*	Support
H ₇	Access to service	>	Satisfaction	084	936	.349	Not support
H_8	Service offered	>	Satisfaction	.032	.399	.690	Not support
H ₉	Reputation	>	Satisfaction	.274	2.374	.018*	Support
\mathbf{H}_{10}	Reputation	>	Loyalty	.313	5.047	.001***	Support

	Path direction			Estimate	C.R.	P	Sup/not
H_{11}	Satisfaction	>	Loyalty	.612	10.869	.001***	Support

Note: ***p<.001, **p<.01, *p<.05

Annexure-A

Results of CFA Analysis

Constructs		Measures	Factor loading
	re1	This bank provides service as promised	.833
Reliability	re2	Dependable in solving customer problem	.792
	re3	This bank maintain consistency of performance	.795
	re5	Accuracy in transactions	.767
	res1	Provides prompt and quick service	.862
D	res2	Willing to help customer	.878
Responsiveness	res3	Ready to response quickly	.886
	res4	Always keep customer informed	.830
	res5	Reduced waiting time in queue	.878
	ass1	I feel safe in transaction with this bank	.775
Assurance	ass2	Employees give confidence to customer	.807
	Ass3	Employees are knowledgeable and efficient	.760
	ass5	Keep confidentiality of clients information	.777
	emp1	Give individual attention to customer	.862
F 4	emp2	Deal customer with care	.853
Empathy	emp3	Understand the need of customer	.853
	emp4	Having problem solving attitude	.879
	emp5	Have branches in convenient location	.702
	tan1	Modern equipment are used in this bank	.880
Tangibles	tan2	Employees have professional appearance	.889
	tan3	Visually appealing decoration	.912
	tan4	Employees are well dressed	.903
Security	sec1	This bank is secured in transactions	.779
	sec2	This bank provides security of deposits	.801
	sec3	Personal and financial data is secured in this bank	.816
	sec4	Provides security at entrance and exit	.762
	sec5	Employees desk and table is secured for the clients	.717
Access	acc1	This banks service is Convenient to me	.855

Constructs		Measures	Factor loading
	acc2	Required time available for transactions	.869
	acc3	This banks service is easy to access	.813
	acc4	Bank's office time is convenient to me	.758
	acc5	Ease of contact	.741
	ser1	Interest given on savings are satisfactory	.845
g :	ser2	Commission charges for services is logical	.903
Services Offered	ser3	Offered services are Attractive of this bank	.885
Offered	ser4	Interest charged on loans is rational	.845
	ser5	Maximum Banking services available	.855
	rep1	This bank is reputed to keep promises for clients	.835
Reputation	rep2	This bank has goodwill in the banking industry	.860
	rep3	It has a positive image among clients and public	.851
	rep4	The bank is well known to mass people	.721
	sat5	I am satisfied with office decoration	.844
a	sat4	I am satisfied with the employees cooperation	.865
Satisfaction	sat3	This bank can meet my expectations better	.920
	sat2	I am satisfied with the performance of this bank	.933
	sat1	I have no complain against this bank	.872
Loyalty	loy1	I will continuously use this bank	.848
	loy2	I will introduce this bank to others	.911
	loy3	This bank's services are of high standard	.905
	loy4	I am happy with the services of this bank	.896
	loy5	I will influence others to use this bank	.897

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