Analysis of Gap In Service Quality Through SERVQUAL: A Case of Deposit Service Provided By a Bank In Bangladesh

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INTRODUCTION

The reason why companies offer quality is to satisfy the customer (Dale, 1999). A key aspect in customer satisfaction is the way a customer can get satisfied or dissatisfied with a company's service. If a company wants to satisfy its customers, the first problem it that it needs to know-what it is that satisfies customers and, equally important, what it is that makes customers dissatisfied with the company ,its products and services. Whether customers are satisfied or not, depends on the balance between customers' expectations and customers' experiences with the products and services (Zeithaml et al., 1990). When a company is able to lift a customer's experience to a level that exceeds that customer's expectations, then that customer will be satisfied.

Service itself is a confusing issue and the level of satisfaction varies across the type of customers. In this perspective, the manufacturers of products are privileged over service providers as it is to some extent easier to accommodate most of the satisfaction attributes with the product as produced. Thus, in recent periods, customer satisfaction from service providers' perspective got significant research interests. Ample of study results depict different ways to serve the customers leading to satisfaction. Parasuraman et al. (1985, 1988) advocated such a tool where service quality gap is calculated to find out the areas where there is a gap in satisfaction and named it as SERVQUAL. Initially they have identified five different dimensions with sub-categorization that are all related to the level of satisfaction. Although there are some criticisms on the long-term stability of the results of the SERVQUAL scale (Lam and Woo, 1997) and on the general applicability of the five dimensions (Crosby and LeMay, 1998), it is widely used by academics and practitioners to measure service quality.

In Bangladesh, Banking industry is highly explored by research community. Still, studies on customer satisfaction from a banker's perspective are rare and the use of SERVQUAL is totally absent in Bangladesh. Thus, the use of SERVQUAL in deposit services is thought to be useful to find out the gap. The management at policy level will find the findings of the study useful and the methodology as used here will work as guidelines for them to make it operative. Depositors are not only the customers; they are also the owners as they provide money on which banks operate. Thus, keeping the depositors satisfied is highly demanded in banking industry though it is sometimes overlooked as we find in Bangladesh. The current research targets to calculate the gap scores using SERVQUAL scale that will ultimately conclude the reasons for dissatisfaction of depositors with the bank. It will also bear an important message for the bankers as to what it should do for keeping its depositors satisfied. The next section contains a detailed discussion of relevant literature on the use of SERVQUAL followed by an introduction on SERVQUAL scale and gap. Later on, the current research methodology is presented with detailed analysis, design and findings of the study. Finally, the discussion is ended with conclusion and recommendations.

LITERATURE REVIEW

Quality and satisfaction are intertwined in theory, practice, literature etc. Probably, there is no opposite believes or views in this regard and thus these two areas got significant importance in research. Even different standards have been set to test the quality provided in product or services and to test the degree of customer satisfaction level as well. Current focus is to limit the scope within the boundary of analyzing the quality provided by a typical service provider and customers' level of satisfaction as a response to that.

Quality in a service organization is a measure of the extent to which the service delivered meets the customer's expectations. It is aptly defined as a measure of how well the service level delivered matches the customer's expectations (Lewis and Booms, 1983). The perceived quality lies along a continuum. Unacceptable quality lies at one end of this continuum, while ideal quality lies at the other end. The points in between represent different gradations of quality (Ghobadian et al, 1994). Measures of service quality may either be hard or soft. Hard measures are those which are quantifiable or objective but soft measures are qualitative, judgmental, subjective, and based on perceptual data. Soft measures of service quality are particularly relevant to the measurement of the quality of intangible aspects of service (Voss, 1985). Again, Grönroos (1990) describes the quality of service as having two dimensions - a technical or outcome dimension and a functional or process-related

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dimension. Thus, service quality is defined from different perspective by different researchers due to its subjectivity and situational characteristics. In the long run, it is defined by the customers in the best way in terms of their level of satisfaction. Customer satisfaction is a mental state of affair that may be affected due to a lot of factors. Researchers have identified several factors that state the level of satisfaction. A representative list is stated below where satisfaction is related to values.

Researchers	Style	Factors
Kotler	Customer Delivered Value	Total Customer Value (TCV) – Total Customer Cost (TCC),where, $TCV = f$ *(productvalue, servicevalue, personnel value, imagevalue)* $TCC = f$ *(monetary cost, time cost, energy cost, psychic cost, opportunity cost)*
	Customer Benefit	$CB = f(v,b,r, -c, -t)$ where, v = value of market value, b = value of brand, r = value of relationship, c = cost of market offering, t = cost of time
Gale	Customer Value	$CV = f$ *(productquality, servicequality, relationship, image)*
Berry	domains of satisfaction	Quality, Value, Timeliness, Efficiency, Ease of Access, Environment, Inter-departmental Teamwork, Front line Service Behaviors, Commitment to the Customer and Innovation

Source: Authors' personal compilation

Most researchers, in general, agree that customers have expectations and these expectations serve as reference points against which the delivered services are evaluated. When it comes to the measurement of service quality, however, there is an unresolved controversy of using expectations as determinants of service quality. While Parasuraman et al. (1985; 1988) include expectations as a standard for evaluation of service quality, others (Cronin and Taylor, 1992; Teas, 1994) have advocated excluding expectations and measuring solely performances. As a result, two competing measurement paradigms are used in services research: the disconfirmation paradigm (i.e., SERVQUAL) which is based upon a comparison of perceptions of the service with expectations, and the performance-only paradigm (i.e., SERVPERF) which measures only the perceived/performed aspects of the service.

In a sensation-arousing article, Parasuraman et al. (1985) developed a gap model by synthesizing (1) the expectation-disconfirmation theory concerning consumer satisfaction (Churchill and Surprenant, 1982; Gronroos, 1982; Lewis and Booms, 1983; Oliver, 1980), and (2) previous explorations of the dimensions of service quality (Gronroos, 1982; Lehtinen and Lehtinen, 1982; Sasser, Olsen, and Wyckoff, 1978). They subsequently developed a multiple-item scale named SERVQUAL which conceptualizes and measures elements of service that are evaluated by service customers in assessing service quality. According to the SERVQUAL conceptualization, service quality can be assessed by five dimensions: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman et al., 1988). But the use of SERVQUAL scale has been highly criticized in terms of both theoretical and operational issues. The SERVQUAL scale has also been criticized in methodology aspect, mainly due to its calculation mechanism using a difference score between expected performance and the actual performance of a service provider. Specific criticisms on SERVQUAL methodology include multicollinearity resulting from the auto-correlation between the measures (Spreng, Mackenzie, and Olshavsky, 1993), low reliability (Spreng and Singh, 1993), and problems with discriminant validity (Brown, Churchill, and Peter, 1993).

The most intense criticism of the SERVQUAL scale perhaps has come from Cronin and Taylor (1992). Basing their argument that the gap theory of service quality is supported by little empirical and theoretical evidence, Cronin and Taylor (1992) proposed a "performance-based" service quality measurement scale called SERVPERF. Following Bolton and Drew (1991), Cronin and Taylor (1992) noted that a customer's perception of service quality can be best measured by his/her "perceived" attitude about the service being rendered. Cronin and Taylor (1992) reported that their unweighted performance-based SERVPERF scale was a better method of measuring service quality than SERVQUAL. They contended that the SERVPERF scale consistently outperformed the SERVQUAL scale in terms of reliability and validity. Subsequent studies have supported Cronin and Taylor's (1992) assertion (Babakus and Boiler 1992; Babakus and Mangold 1989; Oliver 1993). Boulding et al. (1993, p. 24), for example, stated that "our results are incompatible with both the one-dimensional view of expectations and the gap formation for service quality. Instead, we find that service quality is directly influenced only by perceptions."

Though SERVQUAL is criticized on a lot of grounds and lot of studies are done comparing between SERVQUAL and SERVPERF, still both of the tools are used in different studies on service quality evaluation (Table 1).

Table 1:Highly Researched Areas of SERVQUAL and SERVPERF (Authors' personal compilation)

Area	SERVQUAL	SERVPERF
Banks	Cronin and Taylor 1992; Kwon and Lee, 1994; Spreng and Singh, 1993.	Angur, Nataraajan and Jahera, 1999; Bauman et al., 2007.
Hospital, dental school patient clinic, business school placement center, tire store, and acute care hospital	Babakus and Mangold, 1989; Lee, 2005; Carman, 1990	Paul, 2003
Travel and tour, Public transportation	Fick and Ritchie, 1991.	Perez, et al., 2007; Hudson, Hudson and Miller, 2004; Johns, Avci and Karatepe, 2004.
Car services, business to business repairs	Bouman and van der Wiele, 1992.	Peterson et al., 2005.
Business schools	Rigotti and Pitt, 1992.	Abdullah, 2006.
Architects	Baker and Lamb, 1993.	
Recreational services, Hotels	Taylor et al., 1993.	Nadiri and Hussain, 2005.
Control, dry cleaning and fast food	Cronin and Taylor, 1992.	
Airline, airline catering, airline cargo	Babakus et al., 1993.	Cunningham, Young and Lee, 2002; Hong and Jun, 2006.
Local government	Scott and Shieff, 1993	
Retailing, discount and department stores.	Finn and Lamb, 1991; Teas, 1994; Gagliano and Hathcote, 1994.	Mehta, Lalwani, and Han, 2000; Marshall and Smith, 2000.

THE 'SERVQUAL' SCALE AND THE GAP

The SERVQUAL approach to the measurement of service quality has attracted considerable attention since first introduced by Parasuraman et al. in 1985. In the early 1980's, Parasuraman, Zeithaml & Berry conducted an extensive program of qualitative research with business people and consumers to explore the concept of service quality. They concluded that service quality as perceived by customers depends on the gap between their expectations and the level of service that was actually provided. They also initially identified ten components of service quality, including constructs such as competence, courtesy, credibility, and security. This list was later reduced to five constructs - tangibles, responsiveness, empathy, assurance and reliability when they have extended their research in 1988 forming the basis of a scale called SERVQUAL ((Parasuraman, Zeithaml, & Berry, 1988)) with the respective meanings as given below:

a) **Tangibles -** the appearance of the physical facilities and materials related to the service.
b) **Reliability -** the ability to perform the service accurately and dependably.
c) **Responsiveness-** the willingness to help customers and provide prompt service.
d) **Assurance-** the competence of the system and its security, credibility and courtesy.
e) **Empathy -**the ease of access, approachability and effort taken to understand customers' requirements.

The structure of the constructs, the notion of a gap, and the linkage between service quality and satisfaction has been vigorously debated in the literature since that time (e.g. Asubonteng, McCleary, & Swan, 1996; Chong, Kennedy, Riquier, & Rungie, 1997; Cronin & Taylor, 1992; Dabholkar, Thorpe, & Rentz, 1996). There has been a fairly convincing argument to suggest that customer perceived service quality is based simply on "performance" rather than a gap between performance and expectations, with the performance-only scale termed SERVPERF (Cronin & Taylor, 1992, 1994). However, there is at least some degree of agreement about the five generic factors that comprise service quality, although it is acknowledged that the precise composition on an instrument may depend on the industry under study.

The SERVQUAL approach starts from the assumption that the level of service quality experienced by customers is critically determined by the gap between their *expectations* of the service and their *perceptions* of what they actually receive from a specific service provider. Later on, the original model is extended and seven major gaps have been identified in the service quality concept as shown in **Figure 1**. According to Brown and Bond (1995), "the gap model is one of the best received and most heuristically valuable contributions to the services literature". The model identifies seven key discrepancies or gaps relating to managerial perceptions of service quality, and tasks associated with service delivery to customers. The first six gaps (Gap 1, Gap 2, Gap 3, Gap 4, Gap 5 and Gap 6) are identified as functions of the way in which service is delivered, whereas Gap 5 pertains to the customer and as such is considered to be the true measure of service quality. The Gap on which the SERVQUAL methodology has influence is Gap 5.
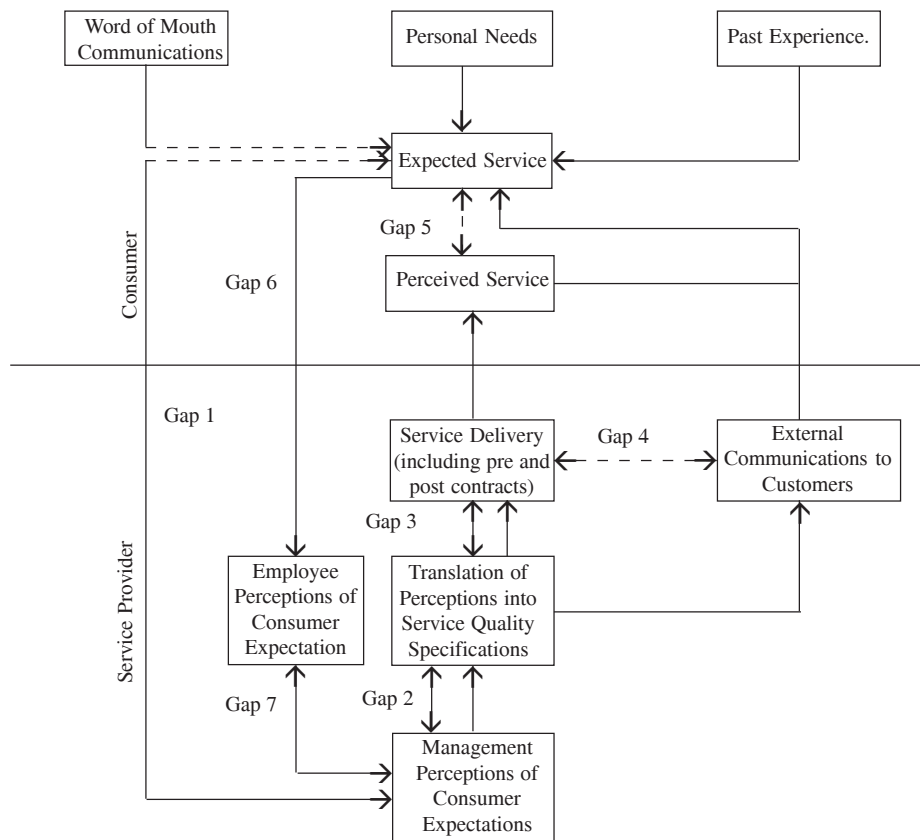
Figure 1: *Model of service quality gaps (Parasuraman et al., 1985; Curry, 1999; Luk and Layton, 2002)*

RESEARCH OBJECTIVES AND METHODOLOGY

The broad purpose of this paper is to analyze the gaps between expectations and perceptions of deposit services provided by a multinational bank whose identity is intentionally hidden to make the study technically viable and a hypothetical name, say XYZ Bank, is used here for identification. The rationale of selecting the industry and area is well founded. As it has already been established that the multinational companies serve better than local companies though their charges are high, the researcher got interested to work in this area to identify the level of satisfaction. SERVQUAL is widely recognized and used, and it is regarded as applicable to a number of industries, including the banking industry (Yavas, Bilgin, Shemuell, 1997). Thus, SERVQUAL is used here for the first time as a tool to calculate the gap in deposit services provided by a bank.

POPULATION AND SAMPLE

Only one bank is considered under the study as the purpose of the study is not a comparison of the status of service quality across the banks rather the standalone analysis of gaps in satisfaction. To extend the coverage of the study, more number of respondents were included in the study. A citywide questionnaire survey was administered through a group of trained surveyors. A total of 578 questionnaires were filled up, collected and analyzed. A total of 10 branches across Dhaka city were randomly selected and 60 questionnaires from each branch were filled up. During data entry, 22 questionnaires had been rejected due to incomplete filling and for reducing response biasedness. Only the depositors have been selected as respondents and the demographic profile of the respondents have been kept normalized.

ADMINISTRATION OF QUESTIONNAIRE

The genetic questionnaire as used by Parasuraman et al. (1988) has been used here with 22 statements under 5 dimensions. The responses have been captured in 7-point Likert Scale and gap score is calculated by deducting expectations from perceptions (E - P). At the time of collecting data, proper care has been given to the demographic profile of the users to ensure that the result is free from any sort of biasedness.

DATA COLLECTION, ANALYSIS AND FINDINGS

The use of SERVQUAL is analyzed here in greater detail with logical sequences. It starts with all of the 22 original

statements categorized into five in the form of a questionnaire and a 7-point scale is used to collect the customers' expectations and perceptions. The difference between these expectations (E) and perceptions (P) is the gap score which is then averaged (both weighted and un-weighted). Simple descriptive statistics are used for data analysis. The methodology is presented below stepwise.

Step 1: Designing SERVQUAL Instrument

Designing SERVQUAL instrument is very much important as data will be captured through this. The simple way of doing it is adopting the original instrument as designed by Parasuraman et al. (1988) with 22 statements in 5 categories. In this study, the researcher has used the original instrument as given below in detail.

Strongly Disagree						Strongly Agree
1	2	3	4	5	6	7
Expectations			**Perceptions**			**Gap Score**
Tangibles	**E**		**Tangibles**	**P**		**E - P**
E1. Excellent banking companies will have modern looking equipment.	5.9		P1. XYZ bank has modern looking equipment.	2.4		
						3.5
E2. The physical facilities at excellent banks will be visually appealing.	6.8		P2. XYZ Bank's physical facilities are visually appealing.	2.9		
						3.9
E3. Employees at excellent banks will be well groomed.	5.8		P3. XYZ Bank's employees are well groomed.	3.2		
						2.6
E4. Materials associated with the service (such as pamphlets or statements) will be visually appealing at an excellent bank.	4.7		P4. Materials associated with the service (such as pamphlets or statements) are visually appealing at XYZ bank.	3.1		
						1.6
Total	23.2			11.6		11.6
Average Gap Score [Total of E-P/4]						2.9
Reliability	**E**		**Reliability**	**P**		**E - P**
E5. When excellent banks promise to do something by a certain time, they do.	4.8		P5. When XYZ bank promises to do something by a certain time, it does so.	3.2		
						1.6
E6. When a customer has a problem, excellent banks will show a sincere interest in solving it.	5.6		P6. When you have a problem, XYZ bank shows a sincere interest in solving it.	3.1		
						2.5
E7. Excellent banks will perform the service right the first time.	5.8		P7. XYZ bank performs the service right the first time.	2.7		
						3.1
E8. Excellent banks will provide the service at the time they promise to do so.	6.1		P8. XYZ bank provides its service at the time it promises to do so.	3.4		
						2.7
E9. Excellent banks will insist on error free records	6.8		P9. XYZ bank insists on error free records	2.8		
						4.0
Total	29.1			15.2		13.9
Average Gap Score [Total of E-P/5]						2.78
Responsiveness	**E**		**Responsiveness**	**P**		**E - P**
E10. Employees of excellent banks will tell customers exactly when services will be performed.	6.3		P10. Employees in XYZ bank tell you exactly when services will be performed.	3.4		
						2.9
E11. Employees of excellent banks will give prompt service to customers.	5.3		P11. Employees in XYZ bank give you prompt service.	3.2		
						2.1

Strongly Disagree						Strongly Agree
1	**2**	**3**	**4**	**5**	**6**	**7**
Expectations			**Perceptions**			**Gap Score**
E12. Employees of excellent banks will always be willing to help customers.	6.4		P12. Employees in XYZ bank are always willing to help you.	3.1		
						3.3
E13. Employees of excellent banks will never be too busy to respond to customers' requests.	5.7		P13. Employees in XYZ bank are never too busy to respond to your queries.	1.3		
						4.4
Total	23.7			11		12.7
Average Gap Score [Total of E-P/4]						3.18
Assurance	**E**		**Assurance**	**P**		**E - P**
E14. The behavior of employees in excellent banks will instill confidence in customers.	5.8		P14. The behavior of employees in XYZ bank instills confidence in you.	2.2		
						3.6
E15. Customers of excellent banks will feel safe in transactions.	5.3		P15. You feel safe in your transactions with XYZ bank.	3.2		
						2.1
E16. Employees of excellent banks will be consistently courteous with customers.	4.8		P16. Employees in XYZ bank are consistently courteous with you.	2.6		
						2.2
E17. Employees of excellent banks will have the knowledge to answer customers' questions.	6.4		P17. Employees in XYZ bank have the knowledge to answer your questions.	3.6		
						2.8
Total	22.3			11.6		10.7
Average Gap Score [Total of E-P/4]						2.68
Empathy	**E**		**Empathy**	**P**		**E – P**
E18. Excellent banks will give customers individual attention.	6.8		P18. XYZ bank gives you individual attention.	4.2		
						2.6
E19. Excellent banks will have operating hours convenient to all their customers.	6.2		P19. XYZ bank has operating hours convenient to all its customers.	3.1		
						3.1
E20. Excellent banks will have employees who give customers personal attention.	5.6		P20. XYZ bank has employees who give you personal attention.	2.3		
						3.3
E21. Excellent banks will have their customer's best interests at heart.	6.0		P21. XYZ bank has your best interest at heart.	2.2		
						3.8
E22. The employees of excellent banks will understand the specific needs of their customers.	6.5		P22. The employees of XYZ bank understand your specific needs.	3.4		
						3.1
Total	31.1			15.2		15.9
Average Gap Scores [Total of E-P/5]						3.18

Respondents are advised to put a value between 1 and 7 against each statement twice; one for expectations and another for perceptions. Then the gap score is calculated and averaged as given above.

Step 2: Calculation of Un-weighted Score

Gap scores for five different categories as calculated in step 1 is averaged to compute un-weighted average score as given below:

	Categories	Gap Scores
1.	Average score for Tangibles	2.90
2.	Average score for Reliability	2.78
3.	Average score for Responsiveness	3.18
4.	Average score for Assurance	2.68
5.	Average score for Empathy	3.18
	Total	**14.72**
	Average (Total/5) Un-weighted Score	**2.944**

Step 3: Assigning Weights

This step is the extension of the SERVQUAL score and is only required if weighted score is calculated. Putting weights against each of the five dimensions is critical and tactful because the amount of weight represents the relative importance of the dimensions to the customer. The questionnaire has a separate page asking each respondent to put relative weight against each dimensions. The points against each of the dimensions are totaled and averaged to normalize it. Total 100 points has been allocated and among these, five dimensions as stated below have been calculated considering respondents' viewpoint on it:

	Dimensions	Points
1.	The appearance of the banks physical facilities, equipment, personnel, and communication materials (Tangibles).	13
2.	The banks ability to perform the promised service dependably and accurately (Reliability).	23
3.	The bank's willingness to help customers and provide prompt service (Responsiveness).	21
4.	The knowledge and courtesy of the bank's employees and their ability to convey trust and confidence (Assurance).	31
5.	The caring, individual attention the bank provides to its customers (Empathy).	12
	Total	**100**

Step 4: Calculation of Weighted Score
Step 2 and step 3 will give us weighted score that comes through the calculation as stated below:

Dimensions	Un-weighted Score (Step 2)	×	Weights (Step 3)	=	Weighted Score
Tangible	2.90	×	0.13	=	0.377
Reliability	2.78	×	0.23	=	0.639
Responsiveness	3.18	×	0.21	=	0.669
Assurance	2.68	×	0.31	=	0.831
Empathy	3.18	×	0.12	=	0.382
Total Weighted Score					2.898

Step 5: Analyze and Take Necessary Actions
Finally, the score should be analyzed to find out the weak areas where more attention is required. The gap score indicates the extent of gap in service quality. The larger the gap score is, the more is the dissatisfaction . Overall score under each category and total can be presented in a single table to get an overall picture as shown below:

Dimensions	Expectations (E)	Perceptions (P)	Total Gap Scores (E -P)	Average Gap Score	Weightings (W)	Weighted Score
Tangible	23.2	11.6	11.6	2.90	0.13	0.377
Reliability	29.1	15.2	13.9	2.78	0.23	0.639
Responsiveness	23.7	11.0	12.7	3.18	0.21	0.669
Assurance	22.3	11.6	10.7	2.68	0.31	0.831
Empathy	31.1	15.2	15.9	3.18	0.12	0.382
Total						**2.898**

The dimension Empathy has the highest average gap score (un-weighted). But after the adjustment with weights, the score becomes 0.382 that is no more the highest. Thus, the weight has a lot of implication. Individually, the customers are very

much dissatisfied in this category. But they believe that it should have less weight at the time of calculating aggregated score. On the basis of weighted score, the dimension Assurance got the highest score. It means that the performance of the bank in this category is not good and it should give sufficient attention to all of the subcategories under this dimension.

This type of analysis may be done across the companies within the same industry to have an idea regarding competitive position in terms of service quality via customer satisfaction. This analysis may also be done within the company over different periods of time to analyze the improvements. If the gap score reduces gradually, the service quality improves leading to more customer satisfaction.

CONCLUSION

Superior service quality is widely acknowledged as a driver of perceived value, which, in turn, will enhance customer loyalty (Parasuraman and Grewal, 2000) and improve the provider's image, sales and profitability (Buzzell and Gale, 1987; Gummesson, 1993). Thus, the service provider should ensure superior service quality to bag customer loyalty. The study of customer satisfaction on a regular basis and taking steps to ensure more satisfaction should be a regular practice.

Work done by Parasuraman, Zeithaml and Berry between 1985 and 1988 provides the basis for the measurement of customer satisfaction with a service by using the gap between the customer's expectation of performance and their perceived experience of performance. This provides the measurer with a satisfaction "gap" which is objective and quantitative in nature. Work done by Cronin and Taylor propose the "confirmation/disconfirmation" theory of combining the "gap" described by Parasuraman, Zeithaml and Berry as two different measures (perception and expectation of performance) into a single measurement of performance according to expectation. According to Garbrand, customer satisfaction equals perception of performance divided by expectation of performance. These are some variants of SERVQUAL tool to measure customer satisfaction (http://psychology.wikia.com).

Use of SERVQUAL in banks is not uncommon. Here, it has been used for analyzing service quality of a bank in terms of deposit services provided by the bank. Such analysis is helpful in identifying the weak areas where immediate action is warranted. For example, the current study concludes that the customers are not so much satisfied in terms of "Assurance". The score value individually may mean nothing; still, it may reflect the ranking (thrust areas) and improvements as compared with earlier years or periods. Finally, the dimensions as used here may be replicated to customize it with the typical nature of services under consideration.

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