

An Empirical Study on the Service Quality Gap in selected Private and Public Sector Banks in National Capital Region

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Abstract

Revolution in the field of Information Technology and digitization has impacted the service sector including Banking Industry; that is one of the major contributors to India's GDP. However, even this industry is not devoid of experiencing the Gaps between the Customers' Expectations and Customers' Perceived Service Delivery. This causes dis-satisfaction and seems to result in Customers' grievances/complaints. All Indian Banks following the guidelines of Reserve Banks of India and operating under the jurisdiction of Banking Ombudsman offer similar services but still there is likelihood of variation in terms of service quality. Excellence in customer service is the most important tool for sustained growth.

Sample of 1000 bank customers including 500 customers from top 5 private sector banks and 500 customers from top 5 public sector banks are surveyed in National Capital Region. SERVQUAL service quality model of five factors developed by Parasuraman et al. (1988) is used to prepare thirty statements for collecting primary data for factor analysis. Three prominent factors (each with eigen value more than one) are extracted from the data. These three factors resulting from factor analysis (labelled as "Caring and Personal Attention by Bank Staff", "Updation Regarding Services Provided" and "Tangibility") explain a total of 56.80 percent of variations in the entire data set and are further used to analyse the gaps between customers' expectations and customers' perceived service delivery. And these factors are also used to compare the levels of service quality provided by private and public sector banks. We conclude from this study that there exist significant service quality gaps in terms of "Caring and Personal Attention by Bank Staff" and "Tangibility". Also the public sector banks lag behind the private sector banks on these dimensions of service quality. This research paper reveals that service quality is not too much significant in minimizing the complaints raised by customers.

Keywords: SERVQUAL, Service Quality, Service Quality Gap, Customer Complaints

Introduction

Increasing competition especially after economic globalization and uplift in technology has pressurized Indian Banks to improve upon the services provided to customers. Today's customer wants high quality service, more personalization, quick redressal of grievances, timely updates, pleasant visual appearance, comfortable environment, etc. These expectations of customers are rising very fast and it imposes challenge on Indian organizations including banks to meet such expectations and gain competitive advantage. Amount of information and ease of accessibility has made customers more informative with higher expectations.

1.1 Ever RISING Customers' Expectations: What delights a customer today is what he expects tomorrow. The prevailing competition to win and retain potential

customers and gain competitive advantage always benefits the customer at gainful position. Introducing a new scheme/product to delight a customer by one organization compels its rivals to follow-up with an equivalent or better option for customers. And the same product/scheme does not remain delightful anymore as this is what the customer expects now. A well-informed customer with more options keeps higher and ever rising expectations from service provider.

1.2 Variation in Service Quality: Standardization of services in banking industry is not attainable as each bank provides variety of services. The variation in services provided by banks develops excellence for service quality. Being an intangible commodity service quality is likely to vary across various private and public sector banks.

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1.3 Gaps in Service Quality: The difference between the customer expectations regarding the service quality and the actual perceived delivery of service is referred to as gap in service quality. Zero gap score implies that organization is able to meet customer's expectations making customer satisfied; positive gap score implies that quality of service delivered exceeds customer's expectations; whereas a negative gap score alerts that customer is dis-satisfied with the quality of service rendered.

1.4 COMPARISON Between Private and Public Sector Banks: Sai and Vinay (2015) discovered that majority of customers prefer private sector banks over public sector banks because of more emphasis on building customer relationship and modern infrastructure. Public sector banks need to focus upon the reduction of service gaps in order to compete in the global market place (Dhar and Kushwah, 2009).

Review of Literature

Gaining new customers is about five times costlier than the retention of existing customers (Kotler and Keller, 2006). As a result, most companies deliver first-class service to customers because high class service is likely to enhance customer satisfaction (Simons and Kraus, 2005). As a result high quality service is delivered by many companies in order to enhance customer satisfaction. Today's customer of 21st century keeps higher demands and expectations for service quality in comparison to the customers of 1970s and 1980s. Today's customer is aware of the options available and consequently the raised expectations have pressurized public sector banks to improve upon and face the competition imposed by private banks. Survival of banks requires development of mechanisms to achieve desired competitive changes in their system.

Among the Indian Banks providing better service to customers, the key differentiator is the service quality, i.e. consistency in providing the needed service quality is the prime factor to differentiate one from another (Selvakumar 2015). According to Karim and Chawdhury (2014), service quality has become a very necessary for customer satisfaction and in every dimension of service quality the banks need to satisfy their customers. Kheng et al. (2010) found that satisfaction has mediating effect on relationships between service quality and customer

loyalty. Bharwana et al. (2013) observed that if the organization's management is conscious about the service quality, then it shall increase customers' satisfaction resulting in customers' loyalty and consequently the customers will be committed to the organization.

Biju (2017) suggested that providing enhanced quality of service in banking would be able to create a complete lot of satisfied customers, which would direct towards efficiency and performance in the banking landscape. While keeping SERVQUAL model as quality management framework, Bihari and Mahapatra surveyed 60 bank customers and identified reliability, responsiveness and assurance as the main factors to be focused upon by banks.

Ananth et al. (2010) surveyed 200 customers of private sector banks and discovered that empathy and accessibility show bigger gaps between customer expectation and perception of service quality. Tripathi (2013) concluded in the research that in order to improve customers' satisfaction, the public sector banks need to take a lot of care about reliability, assurance, empathy and responsiveness as important determinants. Customers' expectations of service quality in banks are high while the perceived quality of service delivered is quite lower across public sector banks. It is suggested that banks need to work upon improved CRM and understand the changing needs and expectations of its customers. While studying the customer's perception of service quality of State Bank of India, Santhiyavalli (2011) performed analysis on the five dimensions and noticed the highest average gap score of 3.20 shown by "empathy" and very less average gap score of 1.570 shown by "assurance". In context of tangibility dimension of service quality, modernized equipment and attractive materials were suggested by Khurana (2013) when large gap in service quality was discovered by her on studying ten banks in Haryana. Padhy and Swar (2009) surveyed about 440 bank customers and revealed that poor service quality in the case of public banks is mainly because of deficiency in tangibility, lack of responsiveness and empathy. They suggested lot of scope for improvement on service quality as the expectations of bank customers are not fully met. Rathee et al. (2014) found highest gap in reliability and empathy and suggested private banks to reduce the gap by providing individual personal attention to understand

customer specific needs. It was suggested that private banks need to train their employees to treat the customers with empathy.

According to Bose and Gupta (2013), the new generation private sector banks are perceived to provide better quality of services in comparison to public sector banks. The managers of public sector banks were suggested to focus upon the assurance dimension of service quality, i.e. the behavior and response of bank's staff should instil the trust and confidence among its customers. However, in context of perception of service quality, Dash and Saxena (2012) found that public banks excel over private banks. According to them unexpected collapse of International Banks resulted in customers becoming more cautious about private banks and it consequently increased trust in public sector banks.

Dhar and Kushwah (2009) surveyed a convenient sample of 400 bank customers and explored noticeable difference in the expectations of customers from private and public sector banks. Also the perceptions of bank customers found to be different in context of delivered service quality between private and public sector banks. Franklin and Arul (2014) found that expectations and perception of service quality are higher in the case of private sector bank customers in comparison to public sector bank customers. Among the quality dimensions of tangibles, responsiveness and empathy the private bank customers are highly satisfied in comparison to public bank customers. However, it was also noticed by them that assurance is the only dimension in which the expectation, perception and service gap were better in public sector banks in comparison to private sector banks. Gupta et al. (2013) surveyed a sample of 250 bank customers from Delhi/NCR region and supported the analysis that private banks are successful in implementing tangible factors and satisfying their customers while on the other hand public sector banks need to improve upon their relationship with customers by ensuring their satisfaction.

Lohani and Bhatia (2012) collected data from 410 bank customers of Lucknow and showed that the dimensions reliability, responsiveness and assurance are the most important dimensions of service quality and customer satisfaction both in the case of private as well as public

sector banks. And the public sector banks need to improve their tangibility (infrastructure and ambience) to compete with private sector banks. They suggested in context of responsiveness and empathy scores that public sector banks need to impart training on stress management and public dealing to their employees.

Both the private and public sector banks need to improve the quality of services (Paul et al., 2016). According to them banks need to emphasize more on the quality of services render to customers instead of heavily spending on staff and ambience; and banks should focus on the well-defined needs of customers rather than selling/pushing of undesired products.

After surveying 437 bank customers (including 220 private bank customers and 217 public bank customers), Mushtaq and Malik (2012) realized that in case of public sector banks assurance, availability of product and product convenience were not too worthy determinants in satisfying customers and in case of private sector banks reliability and tangibility were not noteworthy. They revealed that most of the customers of public banks were relatively older, less knowledgeable and avail one particular bank services since long. Therefore their knowledge about the services offered by other banks was not much resulting in lower expectations. While on the other hand, most of private bank customers were found to be younger and more knowledgeable to do better comparison between services offered by different banks. Therefore, their high expectations and less perceived service quality lessen the satisfaction level.

Banerjee and Sah (2012) used the SERVQUAL model while collecting the primary data from a convenient sample of 230 respondents in the state of West Bengal. They noticed that dimensions of tangibility, reliability and responsiveness in private sector banks are significantly higher in score in comparison to public sector banks. However, score of dimension assurance is significantly higher in public sector banks than private sector banks implying that customers' perceived risk in banking transactions are less in case of public sector banks in comparison to private sector banks. It was found that customers expect better services in private sector banks but public sector banks are better in assertion and generating confidence in customers.

Rather (2013) mentioned that private banks have well understood the Indian customer inspite of less experience in Indian market. He suggested public sector banks to re-invent their marketing approach to remain competitive.

Singh and Khurana (2010) focused on three banks of each sector and surveyed 200 bank customers. It was found that there is no significant difference among the private and public sector banks with regard to time a customer spends in transaction like deposit/withdraw of cash or purchase of demand draft. This implies all banks whether private or public normally take the same time for these transactions. Akhtar et al. (2016) surveyed 100 bank customers and revealed significant relationship among service features, service quality and customers' complaints.

Theoretical Framework:

According to Lewis and Boom (1983), service quality is a measure of how well the service delivered matches the customer's expectations. SERVQUAL (later called as RATER) service quality model was developed by a group of American authors, Parasuraman et al. (1988). SERVQUAL originally identified ten elements (namely, tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/knowing customers and access) of service quality which later got collapsed into five factors as:-

- i) **TANGIBLES:** Physical facilities, fixtures, equipment, visual appeal.
- ii) **Reliability:** Delivery of service dependably and accurately as promised.
- iii) **RESPONSIVENESS:** Readiness to help customers and providing service promptly.
- iv) **Assurance:** Employees' knowledge and courtesy to build up trust.
- v) **Empathy:** Paying individual attention, more personalization and care.

Zeithaml et al. (2011) explained five gaps responsible for experiencing poor service quality by customers. These five gaps are as follows: -

i) Gap 1: Listening Gap

It is the difference between customer expectations of service and company understanding of those

expectations. The service providers do not always understand what requirements mean excellence of quality for consumers.

ii) Gap 2: Service Design and Standards Gap

It is the difference between management perception regarding customers' expectations and the laid service quality specification.

iii) Gap 3: Service Performance Gap

It is the discrepancy between service quality specification and service delivery. This gap may arise through service personnel being poorly trained, incapable or unwilling to meet the set service standard.

iv) Gap 4: Communication Gap

It is the due to difference between service delivery and external communication. Consumer expectations are highly influenced by statements made by company representatives and advertisements. The gap arises when these assumed expectations are not fulfilled at the time of delivery of the service.

v) Gap 5: Customer Gap

It is the difference between the customer's expectations and perceptions. Customer expectations are reference points that customers bring into the service experience whereas customer perceptions are the assessments of actual service experiences/delivered.

$$\text{Gap 5} = f(\text{Gap 1, Gap 2, Gap 3, Gap 4})$$

This implies that Customer Gap is function of Service Provider's Gaps

Customer Gap Score on Service Quality Dimensions is calculated as:-

$$\text{Customer Gap Score} = E - P$$

Where E = Customer's Expectation for Service

P = Customer's Perception Regarding Actual Service Delivered

Level of Service Quality is taken to be inversely proportional to Service Quality Gap, i.e. lesser is the Service Quality Gap, higher the Level of Service Quality and vice versa.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Barlett's test of Sphericity are used to justify the sample adequacy and use of factor analysis. To extract the number factors, principal component analysis using varimax rotation is performed during factor analysis.

Cronbach's Alpha reliability statistics is used to support the internal consistency of closely related items as a group.

To test the stated research hypothesis, paired sample t-test is used:-

$$t = \frac{\frac{\sum d}{N}}{\sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{N}}{N(N-1)}}$$

where,

d= difference between the matched scores

N= Number of pairs of scores

d.f.=N – 1

Karl Pearson's coefficient of correlation "r" is used to study the association between service quality and number of complaints:-

$$r = \frac{\sum(x-\bar{x})(y-\bar{y})}{\sqrt{\sum(x-\bar{x})^2} \sqrt{\sum(y-\bar{y})^2}}$$

Where, \bar{x} - mean of X variable
 \bar{y} - mean of Y variable

Research Methodology

NCR has been selected as area for research study. NCR is known for its infrastructure, vast population and market potential. It is a market place of attraction for many business players in service sector.

Selected banks and bank customers are focused upon. Exploratory research (secondary sources and literatures review/discussions) and descriptive research (statistical survey collecting primary & secondary data and quantitative tools for analysis) is used.

RESEARCH Objectives:

- 1) To identify the gaps between the customer's expectations and actual delivery of services by the selected banks.
- 2) To compare the level of service quality between the private and public sector banks.

- 3) To understand the significance of service quality in minimizing the complaints registered by the bank customers.

RESEARCH HYPOTHESIS:

H01: There is no significant gap between the banking services delivered and customers' expectations.

- **H01a:** There is no significant gap between the expectations of customers and actual perceived delivery of service in terms of "Caring and Personal Attention by Bank Staff".
- **H01b:** There is no significant service gap between the expectations of customers and actual perceived delivery of service in terms of "Updation Regarding Services Provided".
- **H01c:** There is no significant service gap between the expectations of customers and actual perceived delivery of service in terms of "Tangibility".

H11: There exists significant gap between the banking service delivered and customers' expectations.

- **H11a:** There exists significant gap between the expectations of customers and actual perceived delivery of service in terms of "Caring and Personal Attention by Bank Staff".
- **H11b:** There exists significant service gap between the expectations of customers and actual perceived delivery of service in terms of "Updation Regarding Services Provided".
- **H11c:** There exists significant service gap between the expectations of customers and actual perceived delivery of service in terms of "Tangibility".

H02: There is no significant difference between the levels of service quality provided by private and public sector banks.

- **H02a:** There is no significant gap between the service quality of private and public sector banks in terms of "Caring and Personal Attention by Bank Staff".
- **H02b:** There is no significant gap between the service quality of private and public sector banks in terms of "Updation Regarding Services Provided".
- **H02c:** There is no significant gap between the service quality of private and public sector banks in terms of "Tangibility".

H12: There exists significant difference between the levels of service quality provided by private and public sector banks.

- **H12a:** There is a significant gap between the service quality of private and public sector banks in terms of “Caring and Personal Attention by Bank Staff”
- **H12b:** There is a significant gap between the service quality of private and public sector banks in terms of “Updation Regarding Services Provided”.
- **H12c:** There is a significant gap between the service quality of private and public sector banks in terms of “Tangibility”.

Sampling Plan:

Universe: Private and Public Sector Banks of NCR

Sample Size and techniques: Sample selection of 5 private sector banks (namely, ICICI Bank, HDFC Bank, Axis Bank, Yes Bank, Kotak Mahindra Bank) and 5 public sector banks (State Bank of India, Bank of Baroda, Punjab

National Bank, Canara Bank and Union Bank of India) on the basis of Net Profit earned. On the basis of judgmental (purposive) sampling technique, 1000 bank customers are selected from National Capital Region (NCR) for the study.

RESEARCH Analysis TOOLS: Statistical tools (both descriptive and inferential tools) are used to analyze the data and draw conclusions. Software such as MS-Excel and SPSS are used.

SERVQUAL model based on five quality dimensions namely, Reliability, Assurance, Tangibles, Empathy and Responsiveness is used to prepare thirty statements for collecting primary data for factor analysis and to analyse the gaps between customers’ expectations and customers’ perceived service delivery.

Data Analysis:

Table 1:
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.978
Bartlett's Test of Sphericity	Approx. Chi-Square	1.78E+04
	df	435
	Sig.	0

As shown in Table 1, KMO statistics is 0.978. This KMS statistics being more than 0.5 implies that we can use factor analysis for the set of data. Since the p-value as 0.000 associated with the chi-square value is less than 0.5, therefore Barlett’s test of sphericity supports that fact

that correlation coefficient matrix is significant. Sample size of 1000 bank customers is much more than five times the variables used. Hence, use of factor analysis is justified.

Table 2:

COMMUNALITIES			
Variable	Statement	Initial	Extraction
B_1	Bank equipped with modern fixtures.	1	0.662
B_2	Physical facilities within bank are visually appealing.	1	0.633
B_3	Materials (ATM/Debit Card, Passbook, etc.) associated with banking services are visually appealing.	1	0.691
B_4	Bank Staff is friendly & Courteous.	1	0.606
B_5	Bank Staff is neat, clean and well dressed.	1	0.554
B_6	Bank Staff keeps promises.	1	0.583
B_7	Operating Hours for attending customers are convenient.	1	0.524
B_8	Bank Staff gives priority to customer's interest.	1	0.612
B_9	Personal attention is given.	1	0.596
B_10	Bank Staff gives prompt service.	1	0.625
B_11	Bank Staff is able understand specific needs of customers.	1	0.561
B_12	Bank Staff tells exactly when the services will be delivered / performed.	1	0.54
B_13	Bank Staff is always willing to help customers.	1	0.645
B_14	Bank Staff responds promptly to the queries.	1	0.612
B_15	Bank Staff sincerely attempts to solve customers' problems.	1	0.637

B_16	Records/transactions are error free.	1	0.525
B_17	Bank sends regular updates about account status.	1	0.536
B_18	Behaviour of Bank Staff instills confidence in customers.	1	0.542
B_19	Customers feel safe and secure in the transactions with the bank.	1	0.515
B_20	Bank's Staff is knowledgeable enough to answer customers' questions instantaneously.	1	0.572
B_21	Bank's Staff Members are well trained.	1	0.561
B_22	Waiting time for transactions at bank is reasonable.	1	0.592
B_23	Parking Area for Vehicles.	1	0.465
B_24	Bank maintains strict confidentiality with the personal details of its customers.	1	0.483
B_25	Sufficient number ATM is readily available.	1	0.319
B_26	Range of services provided is consistent with the latest innovations in banking services.	1	0.618
B_27	Bank charges reasonable service charges.	1	0.527
B_28	Bank informs the customers about any changes in the service charges well before in time.	1	0.623
B_29	Bank provides complete range of services.	1	0.553
B_30	Bank has sufficient number of open tellers.	1	0.528

Extraction Method: Principal Component Analysis

As shown in Table 2, thirty statements are prepared while using the dimensions of SERVQUAL model for further factor analysis.

Table 3:

Reliability Statistics (SUPPORTING internal consistency of 30 ITEMS as a group)	
Cronbach's Alpha	N of ITEMS
0.961	30

Calculated value of Cronbach' Alpha is found to be 0.961 (Ref. Table 3). This indicates very high reliability of the measure in context of service quality of selected banks. It supports the internal consistency of the set of 30 items closely related as a group. It thus passes the validity check.

To extract the number factors, principal component method is used. As per this method first factor explains the largest portion of total variance; and is known as principal factor. Kaiser Guttman method states that the number of factors to be extracted should be equal to the number of factors having an eigenvalue of atleast one (Chawla and Sondhi, 2014).

Table 4:
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.537	48.458	48.458	14.537	48.458	48.458	7.293	24.311	24.311
2	1.372	4.574	53.031	1.372	4.574	53.031	5.689	18.963	43.275
3	1.132	3.775	56.806	1.132	3.775	56.806	4.059	13.532	56.806
4	0.856	2.854	59.66						
5	0.822	2.739	62.4						
6	0.741	2.471	64.87						
7	0.671	2.236	67.106						
8	0.651	2.169	69.275						
9	0.614	2.047	71.322						
10	0.596	1.986	73.308						
11	0.561	1.871	75.18						
12	0.533	1.776	76.956						
13	0.514	1.714	78.669						
14	0.495	1.651	80.32						
15	0.467	1.558	81.878						
16	0.457	1.523	83.401						
17	0.443	1.476	84.877						
18	0.431	1.436	86.313						
19	0.41	1.368	87.68						

20	0.408	1.36	89.041					
21	0.39	1.301	90.342					
22	0.379	1.262	91.604					
23	0.36	1.199	92.803					
24	0.346	1.155	93.958					
25	0.34	1.134	95.091					
26	0.323	1.078	96.169					
27	0.318	1.058	97.227					
28	0.3	0.999	98.226					
29	0.269	0.897	99.124					
30	0.263	0.876	100					

Extraction Method: Principal Component Analysis

Analysing the Table 4, three factors (each with eigen value more than one) can be extracted from the data. These three factors resulting from factor analysis explain a total of 56.80 percent of variations in the entire data set. After

the varimax rotation is performed, the percentage variation explained by first, second and third factors are 24.31%, 18.96% and 13.53% respectively.

Table 5:

Rotated Component Matrix			
Variable	Component		
	Factor 1	Factor 2	Factor 3
B_1	0.199	0.32	0.721
B_2	0.278	0.222	0.712
B_3	0.184	0.175	0.792
B_4	0.649	0.107	0.417
B_5	0.519	0.096	0.525
B_6	0.665	0.282	0.248
B_7	0.563	0.343	0.299
B_8	0.701	0.244	0.246
B_9	0.703	0.241	0.208
B_10	0.637	0.428	0.191
B_11	0.629	0.353	0.201
B_12	0.566	0.42	0.207
B_13	0.697	0.339	0.211
B_14	0.648	0.4	0.18
B_15	0.672	0.349	0.252
B_16	0.472	0.528	0.154
B_17	0.34	0.418	0.496
B_18	0.449	0.314	0.492
B_19	0.494	0.458	0.247

B_20	0.533	0.461	0.275
B_21	0.491	0.488	0.285
B_22	0.442	0.615	0.137
B_23	0.133	0.619	0.254
B_24	0.457	0.5	0.155
B_25	0.224	0.507	0.111
B_26	0.299	0.63	0.362
B_27	0.363	0.597	0.198
B_28	0.331	0.693	0.181
B_29	0.285	0.492	0.479
B_30	0.191	0.576	0.4

Table 5 showing rotated components matrix helps for factor loading. Using 0.63 as cut-off factor for naming the factors, we find that Factor 1 comprises of variables B_4, B_6, B_8, B_9, B_10, B_13, B_14 and B_15. This Factor 1 can be related to “Caring and Personal Attention by Bank

Staff”. Factor 2 comprises B_26 and B_28. The factor can be labelled as “Updation Regarding Services Provided”. And the Factor 3 comprises B_1, B_2 and B_3. This Factor 3 can be labelled as “Tangibility”.

Table 6:

Reliability Statistics (SUPPORTING internal consistency of 8 ITEMS AS a group for Factor 1)	
Cronbach's Alpha	N of ITEMS
0.913	8

The value of Cronbach Alpha as 0.913 (Ref. Table 6) indicates very high reliability and thus supports the internal consistency of the eight extracted items closely

related as a group for Factor 1 “Caring and Personal Attention by Bank Staff”. It passes the validity check.

Table 7:

Reliability Statistics (SUPPORTING internal consistency of 2 ITEMS AS a group for Factor 2)	
Cronbach's Alpha	N of ITEMS
0.727	2

The value of Cronbach Alpha as 0.727 (Ref. Table 7) indicates acceptable reliability and thus supports the internal consistency of the two extracted items closely

related as a group for Factor 2 “Updation Regarding Services Provided”. It passes the validity check.

Table 8:

Reliability Statistics (SUPPORTING internal consistency of 2 ITEMS AS a group for Factor 3)	
Cronbach's Alpha	N of ITEMS
0.805	3

The value of Cronbach Alpha as 0.805 (Ref. Table 8) indicates good reliability and thus supports the internal consistency of the three extracted items closely related as

a group for Factor 3 “Tangibility”. It passes the validity check.

Gap Analysis: While using SERVQUAL Model as the base model, three prominent factors are extracted associated with respective variables with the help of Factor Analysis

on SPSS. The Service gap score is calculated by subtracting average gap score of customers’ perception from that of customer’s expectations with the help of MS-Excel.

Table 9:

Average Gap Score in CASE of Selected Indian Banks			
Factor 1: Caring and Personal Attention By Bank Staff			
Variable	Expectation (E)	Perception (P)
B_4	4.2472	3.7628	0.4844
B_6	4.2342	3.6026	0.6316
B_8	4.2134	3.5606	0.6528
B_9	4.1532	3.4534	0.6998
B_10	4.1592	3.5025	0.6567
B_13	4.2322	3.5245	0.7077
B_14	4.1962	3.5175	0.6787
B_15	4.2174	3.5646	0.6528
Total:-	33.653	28.4885	5.1645
Average Gap Score = $\sum(E-P) / N$ Where, N is the number of VARIABLES in factor			0.6456
Factor 2: Updation Regarding Services Provided			
B_26	4.1211	3.6192	0.5019
B_28	4.1471	3.5115	0.6356
Total:-	8.2682	7.1307	1.1375
Average Gap Score = $\sum(E-P) / N$			0.5687
Factor 3: Tangibility			
B_1	4.1762	3.7397	0.4365
B_2	4.0671	3.7457	0.3214
B_3	4.0721	3.6867	0.3854
Total:-	12.3154	11.1721	1.1433
Average Gap Score = $\sum(E-P) / N$			0.3811

Table 10:

Paired Sample t-test between Expectation of Service and Actual Perceived Delivery of Service						
Factor	Mean of Expected Service	Mean of Actual Perceived Delivery	Difference between two Mean VALUES	t-value statistics	t-critical	p-value
Caring and Personal Attention By Bank Staff	4.206625	3.5610625	0.6456	26.085	2.3646	0.000
Updation Regarding Services Provided	4.1341	3.56535	0.5687	8.508	12.7062	0.074
Tangibility	4.1051	3.7240	0.3811	11.446	4.3026	0.008

Table 9 and Table 10 are analysed to test H01 / H11 research hypothesis. In context of “Caring and Personal Attention by Bank Staff”, we find magnitude of calculated value of t-test statistics = 26.085 (more than critical value 2.3646 at 5% level of significance) associated with p-value 0.000 (less than 0.05) resulting in the rejection of null hypothesis H01a and acceptance of alternative hypothesis H11a. Thus, we notice that there is a significant service gap between the expectations of customers and actual perceived delivery of service in terms of “Caring and Personal Attention by Bank Staff”.

In context of “Updation Regarding Services Provided”, we find magnitude of calculated value of t-test statistics = 8.508 (less than critical value 12.7062 at 5% level of significance) associated with p-value 0.074 (more than 0.05) resulting in the acceptance of null hypothesis H01b and rejection of alternative hypothesis H11b. Thus, we notice that there is a no significant service gap between the expectations of customers and actual perceived delivery of service in terms of “Updation Regarding Services Provided”.

In context of “Tangibility”, we find magnitude of calculated value of t-test statistics = 11.446 (more than critical value 4.3026 at 5% level of significance) associated with p-value 0.008 (less than 0.05) resulting in the rejection of null hypothesis H01c and acceptance of

alternative hypothesis H11c. Thus, we notice that there is a significant service gap between the expectations of customers and actual perceived delivery of service in terms of “Tangibility”.

Table 11

Average Gap Score in CASE of Private Sector Banks			
Factor 1: Caring and PERSONAL Attention By Bank Staff			
Variable	Expectation (E)	Perception (P)	Gap Score = E – P
B_4	4.32	3.958	0.362
B_6	4.284	3.752	0.532
B_8	4.2545	3.718	0.5365
B_9	4.21	3.704	0.506
B_10	4.226	3.646	0.58
B_13	4.274	3.666	0.608
B_14	4.238	3.668	0.57
B_15	4.2625	3.718	0.5445
Total:-	34.069	29.83	4.239
Average Gap Score = $\sum(E-P) / N$ Where, N is the number of VARIABLES in factor			0.5299
Factor 2: Updation Regarding SERVICES Provided			
B_26	4.176	3.7775	0.3985
B_28	4.176	3.626	0.55
Total:-	8.352	7.4035	0.9485
Average Gap Score = $\sum(E-P) / N$			0.4742
Factor 3: Tangibility			
B_1	4.266	3.996	0.27
B_2	4.106	3.894	0.212
B_3	4.12	3.844	0.276
Total:-	12.492	11.734	0.758
Average Gap Score = $\sum(E-P) / N$			0.2526

Table 12

Average Gap Score in CASE of Public Sector Banks			
Factor 1: Caring and PERSONAL Attention By Bank Staff			
Variable	Expectation (E)	Perception (P)	Gap Score = E – P
B_4	4.1743	3.5671	0.6072
B_6	4.1844	3.4529	0.7315
B_8	4.1723	3.4028	0.7695
B_9	4.0962	3.2024	0.8938
B_10	4.0922	3.3587	0.7335
B_13	4.1904	3.3828	0.8076
B_14	4.1543	3.3667	0.7876
B_15	4.1723	3.4108	0.7615
Total:-	33.2364	27.1442	6.0922
Average Gap Score = $\sum(E-P) / N$ Where, N is the number of VARIABLES in factor			0.7615
Factor 2: Updation Regarding SERVICES Provided			
B_26	4.0661	3.4609	0.6052
B_28	4.1182	3.3968	0.7214
Total:-	8.1843	6.8577	1.3266
Average Gap Score = $\sum(E-P) / N$			0.6633
Factor 3: Tan gibility			
B_1	4.0862	3.4829	0.6033
B_2	4.0280	3.5972	0.4308
B_3	4.024	3.529	0.495
Total:-	12.1382	10.6091	1.5291
Average Gap Score = $\sum(E-P) / N$			0.5097

Table 13

Paired Sample t-test between Service Gap Scores of Private and Public Sector Banks						
Factor	Mean of Gap Score of Private Sector Banks	Mean of Gap Score of Public Sector Banks	Difference between two Mean VALUES	t-value statistics	t-critical	p-value
Caring and Personal Attention By Bank Staff	0.5299	0.7615	-0.2316	-9.521	2.3646	0.000
Updation Regarding Services Provided	0.4742	0.6633	-0.1891	-10.711	12.7062	0.059
Tangibility	0.2526	0.5097	-0.2571	-6.74	4.3026	0.02

Table 11, Table 12 and Table 13 are analysed to test H02 / H12 research hypothesis. In context of “Caring and Personal Attention by Bank Staff”, we find magnitude of calculated value of t-test statistics = $|-9.521| = 9.521$ (more than critical value 2.3646 at 5% level of significance) associated with p-value 0.000 (less than 0.05) resulting in the rejection of null hypothesis H02a and acceptance of alternative hypothesis H12a. Thus, we notice that there is a significant gap between the service quality of private and public sector banks in terms of “Caring and Personal Attention by Bank Staff”. Also the mean of gap score of private sector banks is lower than that of public sector banks, therefore it implies that private banks’ staff members provide better caring and personal attention to customers in comparison to public sector banks.

In context of “Updation Regarding Services Provided”, we find magnitude of calculated value of t-test statistics = $|-10.711| = 10.711$ (less than critical value 12.7062 at 5% level of significance) associated with p-value 0.059 (more

than 0.05) resulting in the acceptance of null hypothesis H02b and rejection of alternative hypothesis H12b. Thus, we notice that there is no significant gap between the service quality of private and public sector banks in terms of “Updation Regarding Services Provided”.

In context of “Tangibility”, we find magnitude of calculated value of t-test statistics = $|-6.74| = 6.74$ (more than critical value 4.3026 at 5% level of significance) associated with p-value 0.02 (less than 0.05) resulting in the rejection of null hypothesis H02c and acceptance of alternative hypothesis H12c. Thus, we notice that there is a significant gap between the service quality of private and public sector banks in terms of “Tangibility”. Also the mean of gap score of private sector banks is lower than that of public sector banks; therefore it implies that private banks provide much better and modernized infrastructure/fixtures, more visually appearing materials and presentable staff in comparison to public sector banks.

Table 14

Association Between Service Quality and No. of Complaints		
Name of Bank	Average Service Gap Score	%age of Customers Complained
AXIS BANK	0.6093	48
HDFC BANK	0.3063	47
ICICI BANK	0.4483	49
KOTAL MAHINDRA BANK	0.5403	49
YES BANK	0.3803	48
BANK OF BARODA	0.651	47
CANARA BANK	0.4853	49
PUNJAB NATIONAL BANK	0.8343	48
STATE BANK OF INDIA	0.716	51
UNION BANK OF INDIA	0.492	49

Source: Primary Data Obtained

An increased average gap score implies inferior service quality. Using the data of Table 14, Coefficient of correlation between Average Gap Score and %age of Customers Complained is found to be +0.25 implying that there is a positive correlation between the two variables of interest, i.e. as the average service gap score increases (i.e. decrease in service quality), the %age of customers' complaints is likely to increase. However, this value of coefficient of correlation is association with p-value of 0.48 (more than 0.05) and probable error of 0.19, which indicates that this correlation is not much significant.

Major Findings and Conclusion

The difference between the customer expectation and actual perceived service provided to customer is considered as service gap. This study reveals that there exists significant service gaps in terms of "Caring and Personal Attention by Bank Staff" and "Tangibility"; and low gap in terms of "Updation Regarding Service Provided". Therefore, it is suggested that that Indian banks should pay more individualized attention to its valued customers and win their confidence. Bank staff needs to be more friendly, active and cooperative to its customers. Also the Indian banks need look into the dimensions of improving its materials (e.g. ATM Cards, Passbook, etc.), equipment, modern fixtures and physical facilities within the bank premises, etc. and ensure that everything is visually appealing to customers and customers feel comfortable to use them.

Public sector banks seem to seriously lag behind the private sector banks in terms of "Caring and Personal Attention by Bank Staff" and "Tangibility". It is recommended that public sector banks need to motivate and train its staff members to provide better attention and individual care to customers. Staff members need to be more presentable and visually appealing. Also the infrastructure and material of public sector banks need to be modernized to sustain the tough competition from new generation private sector banks.

Timely and prompt action can help banks to reduce service gaps and build-up long lasting relationship with customers. Though it sounds to decrease the number of complaints raised by customers but the analysis of Table 14 does not support this well. It seems that improved

service quality may further increase customers' expectations and consequently the service quality gaps sustains. Thereby, improvement in service quality does not significantly contribute in minimizing the number of complaints raised by bank customers. And banks are likely to continuously strive hard to retain its existing customers while continuously improving the efficiency of complaint redressal system along with the uplift of delivered service quality.

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