

Service Quality Measurement in Cooperative Banking Sector

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Abstract:- Service quality has grown to be a key component of the banking industry's success and repute. Since nearly everyone in industrialised nations has used financial services at some point in their life, banks must determine the elements that guarantee long-term success to continue in this fiercely competitive industry. Although there have been many studies about banking service quality throughout the years, the literature review shows that there have been comparatively few studies on cooperative banks. Investigating consumers' perceptions and expectations of cooperatives customer perceptions of service quality is the goal of this study. The project also seeks to count the dimensions of a modified SERVQUAL model's anticipation and perception scales and test a self-administered questionnaire was used to gather the data, and it had 22 pairs of items for evaluating respondents' expectations and perceptions of service quality on a 7-point Likert scale. Three months in 2019 were spent gathering the data for this investigation. According to the study's findings, clients have high standards for the quality of cooperative banking services. Customers that participated in the sample exhibited discontent with the calibre of banking services, as shown by the overall negative disparity between expectations and perceptions held by bank customers. This study advances our understanding of banking service quality and offers practical data that bank management may utilise to deliver excellent service quality and raise customer satisfaction levels.

Keywords:- SERVQUAL, Service Quality, Factor Analysis, Reliability Analysis, Banking Sector.

I. INTRODUCTION

The criteria that guarantee long-term success must be identified by banks in order to thrive in this fiercely competitive industry. As a result, in the banking industry, service quality is now crucial for success and recognition. The banking industry, in particular cooperative banks, is undergoing significant upheaval right now. The effects of the global financial crisis are still being felt in India, along with rising consumer expectations for higher service standards, intense competition, and altered legal frameworks. These are a few of the elements pressuring banks to concentrate on their clients' demands. These days, "the bank goes to the client instead of waiting for the consumer to come to the bank" (Firdaus et al., 2010). There are currently 27 cooperative bank branches in North Delhi, offering consumers and others comparable services. This study seeks to determine the aspects of anticipated and perceived quality service in the

banking industry, the degree of customer expectations and perceptions, and the validity of the suggested expectations & perceptions scale. Although there are other factors that affect customers' decisions to pick or continue using a specific bank's services, most marketing analysts believe that the quality of service is an important component that can affect customers' overall happiness and loyalty. This study is broken split into a series of sections. An overview of the key research ideas is given first. The presentation & discussion of the findings are next made, followed by a description of the research technique employed in this study. The key study findings, restrictions, and recommendations for further research are presented in the final part, the conclusion.

➤ *Concept of service quality*

Over the past three decades, both academics and practitioners have given the idea of service quality a lot of thought. Although service quality has been defined in a number of ways, there is still no agreement on what it means. According to Gronroos (1984), service quality is the result of a consumer's comparison of their expectations and perceptions. Similar to this, Parasuraman, Zeithaml, and Berry (1985) defined service quality as the gap between what customers expected and how they perceived the service they received. Customer expectations are used as a starting point for measuring service quality. When performance goes above and above expectations, quality is thought to be high, and when performance falls short of expectations, quality is thought to be low. The most used model for measuring service quality is the SERVQUAL model. It was developed by Parasuraman et al. in 1985 and was later refined. Initially the model had 10 dimensions of service quality, which were later reduced to five dimensions that consumers use to evaluate service quality:

- Reliability - ability to provide accurate and dependable service
- Assurance - ability of employees to inspire trust and confidence
- Tangibles- the physical surrounding and appearance of employees
- Empathy- individualized attention provided to customers
- Responsiveness- willingness to help customers by providing prompt service.

➤ *Bank service quality measurement*

There are a number of researchers who have adopted SERVQUAL for measuring service quality in the banking sector (Bahia and Nantel, 2000; Bhat, 2005; Amudha and Banu, 2007; Ladhari et al., 2011; Rahaman et al., 2011; Rakesh, R., 2012; Sulieman, 2013; Ilyas et al., 2013; Lau et al., 2013; Panda, and Kondasani, 2014). Avkiran (1994)

adopted SERVQUAL and developed the BANKSERV model to measure service quality in retail banking as perceived by customers. The BANKSERV model obtained four dimensions of service quality: staff conduct, credibility, communication, and access to teller service. Bahia and Nantel (2000) as well used the SERVQUAL model and developed a new scale for perceived service quality in retail banking. The proposed scale, called banking service quality (BSQ), had 31 items and six dimensions, namely: effectiveness and assurance, access, price, tangibles, services portfolio and reliability. Aldaigan and Buttle (2002) developed a new scale, called SYSTRASQ, to measure service quality perceptions of bank customers. Their 21-item scale consists of four dimensions: service system quality, behavioural service quality, service transactional accuracy, and machine service quality. Most recently Vanparia and Tsoukatos (2013) tested SERVQUAL, SERVPERF, BSQ and BANKQUAL for measuring the service quality of public and private banks in India. The purpose of their study was to find which of these models is the most effective for measuring service quality in banks. They discovered that the BANKQUAL scale has the highest reliability in comparison to other instruments tested in their research.

II. RESEARCH METHODOLOGY

Empirical study was conducted to achieve the given research goals, and the primary data were gathered using a modified SERVQUAL scale. Through the use of a self-administered questionnaire, the main data were gathered. The research measured participants' expectations and perceptions of the quality of banking services using a modified SERVQUAL scale with 22 pairs of items. The core data used

in this empirical study was gathered using a modified instrument with two components, expectations and perceptions, each with 22 questions and a total of 44 questions. The dimension "availability," which is associated with simple navigation inside a bank, readily available and understandable information, and practical operating hours, was introduced in addition to the five already present dimensions. We utilised a 7-point Likert scale, ranging from 1 for "strongly disagree" to 7 for "strongly agree," to measure expected and perceived service. Demographic inquiries made up the third section. This covered things like gender, age, education level, economic situation, and how often you used banking services and went to the bank. A convenience sample was used to gather the data for this study over a three-month period in 2020. There were 200 surveys in all, and 165 of them received thoughtful and accurate responses. This results in an 82.5 percent response rate. Descriptive statistics, a t-test, an exploratory factor analysis, and a reliability analysis were carried out to meet the study's goals. The demographics of the respondents were examined using descriptive statistics, as well as the expectations and views of bank customers about service quality. Furthermore, t-test was performed to determine the significance of differences between perceived and expected scores of service quality. Principal component analysis with varimax rotation was employed to derive factors from bank service attributes for the expectation and perception scale. Cronbach's alpha coefficients were calculated to test reliability.

III. RESULTS AND DISCUSSION

The socio- demographic distribution of the collected data is as follow:

Demographic Characteristic of Respondents			
Items	Percentage	Items	Percentage
Gender		Age Group	
Male	54.4	18 to 25	12.3
Female	45.6	26 to 45	39.8
Education Level		46 to 65	36.4
Under Graduate	3.1	Above 65	11.5
Graduate	43.7	Bank Visit Frequency	
Post Graduate	40.8	1-2 times per month	68.5
Others	12.4	3-5 times per month	26.3
Frequency of using e-banking		6 or more time per month	5.2
1-2 times per month	26.8	Economic Status	
3-5 times per month	21.3	Employed	57.8
6 or more time per month	17.4	Unemployed	12.4
I don't use this service	32.5	Student	14.6
Others	2	Retired	15.2

Table 1: Socio- demographic distribution

Male (54.4%) and female (45.6%) respondents made up roughly an equal percentage of the study's total respondents by gender. Nearly 40% of the respondents, in terms of age distribution, were between the 26–45 age range. Regarding education, the respondents' average level of education was graduate (43.7%), postgraduate (40.8%), and roughly 58 percent were in the workforce. Only 15% of respondents who were retired used cooperative banks' services, and 14% of respondents who were students did as well. In terms of how often they use e-banking, 64 percent of respondents said they do it frequently, while 32.5% said they never use the service. More over half of the respondents said they go to the bank once or twice a month.

Table 2 shows the analytical findings for respondents' expectations and perceptions of the quality of bank services, as well as statistically significant variations in the mean scores. The average customer expectation score is close to 6, with the lowest expectation being "offering new products, services, and perks" and the greatest expectation being "Understanding customers' individual needs," with the rest of the service quality related items scoring close to the same.

The range of mean customer impression ratings was around 4.7. The consumer perception score for "proper parking facility" was the lowest, suggesting that the parking space is not well-customized. Respondents gave the bank's "modern-looking technical equipment" a good rating. The total mean score for perceived service quality (M=4.7) shows a medium, but insufficiently high, opinion of service quality among bank clients. Negative gaps are revealed by analysing the variations between expectation and perception ratings for each item. The item "suitable parking facilities" had the biggest gap.

Furthermore, a paired sample t-test was used to assess the discrepancies between predicted and perceived results (Table 2). The findings show that there is, for all dimensions, a statistically significant discrepancy between consumers' perceptions and expectations of service quality. All of the variables' assessed levels of confidence are lower than 0.05. To determine the key elements that most effectively explain consumers' expectations and perceptions of bank service quality, exploratory factor analysis was carried out.

TEST		EXPECTATION	PERCEPTION
Kaiser-Meyer-Olkin's (KMO)Test		0.857	0.958
Bartlett's Sphericity Test	Chi-square value	6455.158	9823.684

Table 2: T-test Result value

The Kaiser-Meyer-Olkin value for both scales were high - expectations (0.857) and perceptions (0.958), indicating sufficient items for each extracted factor. Bartlett's Test for both scales (expectations - $\lambda^2=6454.159$, Sig.=0.000; perceptions - $\lambda^2=9824.713$, Sig.=0.000) was also significant, meaning that strong correlations exist between the items in each factor.

After the scales were confirmed to be appropriate for factor analysis, the principal component approach with varimax rotation was applied. The table below shows the findings of the factor and reliability studies of bank customers' expectations. Five components were identified during the study of the expectations scale, and together they accounted for 69.8% of the total variation in the data. Many of the factor loadings were higher than 0.6, indicating a moderately good correlation between the items and the factors on which they were loaded.

Cronbach's alpha coefficients of the extracted factors varied from 0.712 to 0.908. TheCronbach alpha value for the

overall expectations scale was 0.923. These values indicate a high reliability of the expectations scale. After examining the item descriptions, the five factors for the expectations scale were interpreted as follows:

Factor 1 - "responsiveness" contains six items referring to bank staff availability, knowledge and willingness to help, as well as providing prompt and error-free service.

Factor 2 - "tangibles" gathered six items related to the tangible aspect of bank service (bank location, cleanliness and tidiness of bank, easy orientation inside the bank and modern equipment).

Factor 3 - "assurance" includes four items related to staff kindness, politeness and trustworthiness as well as their ability to provide customer individual intention.

Factor 4 - "reliability" contains three items referring to delivering services when promised and understanding customers' specific needs.

Factor 5 - "presentation of bank products" includes three items that are related to materials and facilities that help in presenting new products, services and benefits.

Table 2: Mean, SD , Gap and T value analysis table

Table : Analysis Result

S.no	Attribute		Expectation		Perception		Gap	T-Value	
	Var. Code	Description	Mean	S.D	Mean	S.D			
Tangibility									
1	T1	Modern looking technical equipments	6.63	0.893	5.53	1.063	-1.1	16.772	
2	T2	Visually appealing physical facilities	6.41	1.106	5.02	1.162	-1.39	18.381	
3	T3	Appropriately dressing of bank staff	6.7	0.723	5.44	1.232	-1.26	22.571	
4	T4	Attrctive looking printed material	6.55	0.861	4.9	1.266	-1.65	24.049	
5	T5	Cleanliness in bank	6.74	0.603	5.08	1.343	-1.66	24.494	
6	T6	Convenient Locatiom	6.67	0.715	4.82	1.438	-1.85	23.723	
7	T7	Proper parking facility	6.55	0.986	3.8	1.69	-2.75	32.938	
Mean Tangibles			6.6071429	-	4.941429	-	1.66571	-	
Reliability									
8	R1	Performing service at the promise time	6.81	0.845	4.36	1.405	-2.45	34.167	
9	R2	Understanding customers' specific needs	6.89	0.69	4.37	1.445	-2.52	29.4	
10	R3	Correctly performed service from thevery first time	6.59	0.825	4.27	1.454	-2.32	26.197	
11	R4	Error-free service	6.65	0.762	4.25	1.477	-2.4	29.262	
Mean Reliabilty			6.735	-	4.331905	-	2.35095	-	
Responsiveness									
12	S1	Inform customer about the exact timewhen service will be performed	6.63	0.845	4.27	1.375	-2.36	29.363	
13	S2	Providing a prompt service	6.67	0.69	4.25	1.395	-2.42	31.324	
14	S3	Bank staff availability	6.59	0.825	4.24	1.335	-2.35	29.824	
15	S4	Bank staff has time to answer customers question	6.65	0.762	4.28	1.369	-2.37	31.992	
Mean Responsiveness			6.635	-	4.26	-	2.37516	-	
Assurance									
16	A1	Trustworthy bank staff	6.71	0.601	4.38	1.338	-2.33	33.08	
17	A2	Kindness and politeness in bank staff	6.76	0.528	4.96	1.384	-1.8	31.913	
Mean Assurance			6.735	-	4.67	-	2.27419	-	
Empathy									
18	E1	Providing individual attention	6.58	0.842	4.4	1.326	-2.18	30.115	
19	E2	Presenting new products, service and benefits	6.39	1.159	4.45	1.386	-1.94	22.49	
Mean Empathy			6.485	-	4.425	-	2.10484	-	
Availability									
20	B1	Easy orientation in bank area	6.63	0.756	4.71	1.356	-1.92	24.668	
21	B2	Available and clear information	6.72	0.554	4.49	1.377	-2.23	31.668	
22	B3	Convenient opening hours	6.68	0.845	4.2	1.51	-2.48	30.876	
Mean Empathy			6.6766667	-	4.466667	-	2.14247	-	
Overall mean of attributes							6.6456349	4.515833	-2.15222

Table 4; Factor and reliability analysis for Expectation and Perception scales

EXPECTATION					PERCEPTION				
Items	Factor Loading	EigenValue	% ofVar	Alpha Value	Items	Factor Loading	EigenValue	% ofVar	Alpha Value
N=22					N=22				
Factor 1		4.438	20.174	0.908	Factor 1		10.055	45.704	0.971
R3	0.676				S4	0.861			
R4	0.769				S3	0.842			
S1	0.805				S2	0.839			
S2	0.769				A2	0.836			
S3	0.777				R2	0.831			
S4	0.687				A1	0.829			
Factor 2		3.846	17.483	0.852	S1	0.825			
T1	0.61				R3	0.823			
T3	0.805				R4	0.815			
T5	0.837				E1	0.798			
T6	0.738				B2	0.785			
T7	0.681				B1	0.778			
B1	0.52				R1	0.734			
Factor 3		2.4	12.271	0.661	E2	0.692			
A1	0.666				Factor 2		19.082	64.797	0.891
A2	0.862				T3	0.819			
E1	0.438				T2	0.8			
B2	0.753				T4	0.771			
Factor 4		2.422	11.009	0.768	T5	0.771			
B3	0.722				T1	0.751			
R1	0.799				T6	0.517			
R2	0.692				Factor 3		1.697	7.713	-
Factor 5		1.951	8.869	0.712	T7	0.906			
T2	0.65				B3	0.643			
T4	0.792								
E2	0.605								
Total		15.057	69.806	0.9753	Total		30.834	72.51	0.965

The analysis for the perceptions scale extracted three factors that explained 72.510% of the total variance in the data. However, one factor (Factor 3) contains fewer than three items and cannot be considered as a factor.

IV. CONCLUSION

The following findings emerged from the study's examination of consumers' expectations and perceptions of bank service quality:

According to the findings of the descriptive research, bank clients have generally high standards for the quality of their services. With regard to "performing service at the agreed time," "staff warmth and politeness," "accessible" and

clear information," and "clean and tidy bank," the highest standards were set.

The results of descriptive analysis for bank customers' perceptions show that perceived service quality is not very satisfactory. The greatest perceptions were associated with "visually attractive physical facilities," "suitably dressed and groomed bank employees," "clean and tidy bank," and "modern appearing technological equipment." These findings show that most bank clients are content with the physical look of the bank and its employees.

We conclude from the study's findings that cooperative banks fall short of what their clients want. With regard to "visually appealing parking area," "convenient operating

hours," "performing service at the promised time," "offering a timely service," and "error-free service," the biggest discrepancy was seen.

A sizable negative gap for the aforementioned categories suggests that banks should train their personnel to be more prompt, dependable, and responsible.

The ratings for respondents' expectations and perceptions were compared, and it became clear that there were considerable variations in all bank features. Bank marketing managers should focus more on marketing efforts and refrain from making exaggerated promises to customers in order to eliminate gaps between expected and perceived service levels.

Five variables were found by exploratory factor analysis for the expectations scale, of which four are shared with the original SERVQUAL model (responsiveness, tangibles, assurance, reliability). This study did not support the SERVQUAL model's original inclusion of the dimension "empathy."

The perceptions scale's exploratory component analysis yielded two factors: "service performance," which included items related to the intangible part of bank service, and "tangibles," which included items related to the tangible aspect of service excellence.

The Cronbach alpha value for the total expectations and perceptions scales is over 0.90, according to the results of reliability study, indicating that both scales are quite trustworthy.

This study adds to our understanding of banking service quality and offers helpful data that bank management might utilise to deliver excellent service quality and raise customer satisfaction levels. It has been demonstrated that a modified version of the SERVQUAL scale is trustworthy and appropriate for usage by bank management to improve knowledge of customer expectations and provide service as promised.

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