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Examining service quality in public banks: A consumer perspective

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Abstract
This research examines service quality in public banks from the perspective of consumers. The analysis explores the connection between "Customer Satisfaction" and factors that might influence it, including elements like "Reliability," "Responsibility," "Empathy," "Assurance," and "Tangibility." The findings reveal a strong and positive correlation ($p < 0.001$) between customer satisfaction and empathy, with a substantial estimate of 0.526 (C.R. = 4.244). This suggests that empathy plays a critical role in shaping customer satisfaction, highlighting the importance of emotional intelligence in interactions between bank staff and customers. Interestingly, the analysis found no significant relationships between customer satisfaction and the other examined factors (reliability, responsibility, assurance, and tangibility). This implies that within the context of this model, factors like dependability, resilience, and teamwork may not have a significant impact on customer satisfaction in public banks. Overall, the study emphasizes the importance of prioritizing empathy within public banks to enhance customer satisfaction.

Keywords: Public bank, service quality, SERVQUAL model, and customer satisfaction

Introduction
Service quality is a critical determinant of customer satisfaction and loyalty in the banking industry (Santos, 2003) [4]. As public banks play a significant role in the financial landscape, understanding and enhancing service quality from a consumer perspective is paramount. This study aims to examine service quality in public banks through the lens of consumer experiences and perceptions.

Over the years, service quality has emerged as a key competitive differentiator in the banking sector (Parasuraman *et al*., 1985) [2]. Consumers expect efficient, reliable, and personalized services from their banking institutions, regardless of whether they are public or private entities (Zeithaml *et al*., 1990) [5]. However, the unique nature of public banks, often operating under regulatory frameworks and mandates, may present distinct challenges and opportunities in delivering service excellence.

Consumer perceptions of service quality encompass various dimensions, including reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman *et al*., 1988) [3]. These dimensions collectively shape the overall service experience and influence customer satisfaction and loyalty (Gounaris *et al*., 2010) [1]. Therefore, public banks must assess and address these dimensions effectively to meet consumer expectations and maintain competitiveness in the market.

Despite the growing importance of service quality in public banks, there remains a gap in empirical research examining this topic from a consumer perspective. While studies have explored service quality in the banking sector more broadly, few have specifically focused on the unique dynamics and challenges faced by public banks in delivering quality services to their customers.

By investigating service quality in public banks from a consumer perspective, this study seeks to contribute to the existing body of knowledge in several ways. Firstly, it aims to provide insights into the specific service quality dimensions that are most salient to consumers of public banks. Secondly, it aims to identify areas of strength and improvement in service delivery, thereby informing strategic initiatives aimed at enhancing customer satisfaction and loyalty.

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Finally, by understanding consumer perceptions and experiences, this study can assist public banks in developing targeted interventions and policies to better meet the needs and expectations of their clientele.

This research endeavours to shed light on the intricacies of service quality in public banks from a consumer perspective, ultimately aiming to foster improved service delivery and customer outcomes in the public banking sector.

Review of literature

Service quality in the banking sector has been extensively researched, with studies focusing on various dimensions of service delivery and their impact on customer satisfaction and loyalty. This section provides a review of relevant literature about service quality in public banks from a consumer perspective.

Parasuraman, Zeithaml, and Berry (1985) [2] introduced the SERVQUAL model, which identified five dimensions of service quality: reliability, responsiveness, assurance, empathy, and tangibles. Subsequent studies have applied this framework to assess service quality in various industries, including banking. Parasuraman, Zeithaml, and Berry (1988) [3] developed a multiple-item scale based on these dimensions, enabling researchers to measure consumer perceptions of service quality effectively.

In the banking sector, service quality has been found to significantly influence customer satisfaction and loyalty (Santos, 2003) [4]. A study by Gounaris, Dimitriadis, and Stathakopoulos (2010) [1] examined the effects of service quality and satisfaction on customers' behavioural intentions in e-banking. They found that perceptions of service quality positively influenced customers' intentions to continue using e-banking services and recommend them to others.

While much of the literature on service quality in banking has focused on private institutions, there is a growing recognition of the importance of studying service quality in public banks. Public banks, often operating under government mandates and regulations, face unique challenges in delivering quality services to their customers. Despite these challenges, research suggests that public banks can achieve high levels of service quality and customer satisfaction through effective management and strategic initiatives (Barros *et al*., 2011) [6].

However, there is still a dearth of empirical studies specifically examining service quality in public banks from a consumer perspective. This gap presents an opportunity for researchers to explore the intricacies of service delivery in public banking institutions and identify areas for improvement.

The literature reviewed highlights the importance of service quality in the banking sector and its impact on customer satisfaction and loyalty. While much research has focused on private banks, there is a need for more studies examining service quality in public banks. By understanding consumer perceptions and experiences, researchers can contribute to the development of strategies and policies aimed at enhancing service quality and customer outcomes in public banking institutions.

Conceptual framework

The conceptual framework for studying service quality in public sector banks from the customer perspective is based on the SERVQUAL model (Parasuraman *et al*., 1985) [2]. This model has five elements: trust, responsiveness, assurance, empathy, and tangibility. These measures serve as a basis for assessing customers' perceptions of service quality in the banking industry.

In our study, we used the modified SERVQUAL model according to the context of public sector banks. This modified policy incorporates other factors related to public banking institutions, such as government regulation, organizational structure, and resource allocation and these factors may affect service delivery as well as customer experience.

The model also considers customer expectations and preferences as important determinants of service quality. Understanding and meeting customer expectations is essential to increasing satisfaction and loyalty.

In addition, the conceptual framework includes the impact of service quality on various customer outcomes including satisfaction, loyalty, and attitudinal perceptions Positive perceptions of service quality may lead to higher customer satisfaction, increased loyalty, and mouthing a good recommendation

Overall, the conceptual framework provides a perspective on service quality in public banks, including traditional SERVQUAL dimensions and other factors specific to the public banking environment using this framework, we aim to gain insights into the motivations and effects of quality management for customer satisfaction and loyalty.

Research methodology
Objective
The objective of this study is to assess service quality in public banks from a consumer perspective, utilizing the SERVQUAL model as a theoretical framework. Specifically, the study aims to:

Evaluate customer perceptions of service quality across the dimensions of reliability, responsiveness, assurance, empathy, and tangibles.

Hypotheses
Based on the research objectives, the following hypotheses are formulated.

H_1: There is a positive relationship between the dimensions of service quality (reliability, responsiveness, assurance, empathy, and tangibles) and customer satisfaction in public banks.

Sampling technique
The study utilizes a stratified sampling technique to select participants. The population of interest consists of customers of public banks. Stratification is based on demographic factors such as age, gender, income level, and geographical location. This ensures representation from diverse segments of the customer base. A sample size of 150 participants is chosen to provide sufficient statistical power for the analysis.

Data collection
Data is collected through structured surveys administered to customers of public banks. The survey instrument is designed to capture customer perceptions of service quality, government regulations, organizational structure, resource allocation, satisfaction, loyalty, and behavioural intentions. The survey is distributed electronically or in person, depending on the convenience of the participants.

Data analysis

Data analysis is conducted using statistical software packages such as Excel, SPSS (Statistical Package for the Social Sciences), and AMOS (Analysis of Moment Structures). Descriptive statistics are used to summarize the demographic characteristics of the sample and the distribution of responses. Inferential statistics, including correlation analysis and regression analysis, are employed to test the hypotheses and examine relationships between variables.

Data analysis

Table 1: Demographic Profile of Data

Demographic	Frequency	Percentage
Gender		
Male	69	46.0
Female	81	54.0
Age		
Below 20 Years	19	12.7
20 - 30 Years	61	40.7
30 - 40 Years	35	23.3
40 - 50 Years	3	2.0
More than 50 Years	32	21.3
Marital Status		
Married	31	20.7
Unmarried	119	79.3
Qualification		
School Level	27	18.0
Diploma	33	22.0
Undergraduate	44	29.3
Postgraduate	32	21.3
Other	14	9.3
Occupation		
Student	10	6.7
Government Employee	51	34.0
Private Employee	41	27.3
Businessman	23	15.3
Other	25	16.7
Monthly Income		
Below Rs. 10000	17	11.3
Rs. 10000 - Rs. 20000	15	10.0
Rs. 20000 - Rs.30000	55	36.7
Rs. 30000 - Rs. 40000	44	29.3
More than Rs. 40000	19	12.7

Table 2: Variables with respective factor codes

Variable	Variable Code
The Bank provides good service quality.	RE1
The Bank provides service on time.	RE2
The bank staff is reliable in solving problems related to their service.	RE3
The bank correctly performs service from the very beginning.	RE4
The bank employees quickly reacted to my request.	RS1
The bank employees are also willing to help.	RS2
The bank employees are quick to solve my query.	RS3
In the bank, I do not spend much time waiting in line.	RS4
The bank employees maintain hygiene.	TN1
The bank has a well-organized layout.	TN2
The bank's physical facilities are visually appealing.	TN3
The bank employees are always well dressed, which gives a professional experience to the customers.	TN4
The bank employees are polite to the customers.	EM1
The bank employees show concern in solving customers' problems at the bank.	EM2
The Bank considers my wishes and needs.	EM3
The bank employees understand my specific needs regarding service.	EM4
The bank employees know to answer my question.	AS1
The bank employees are trustable.	AS2
Information provided by the bank employees is clear and understandable.	AS3
I feel safe in the money transaction at the bank.	AS4
Reliability factors affect customer satisfaction.	SC1
Responsibility factors affect the customer's satisfaction.	SC2
Empathy factors affect the customer's satisfaction	SC3
Assurance factors affect the customer's satisfaction.	SC4

Reliability test

In this study, assessing internal consistency is crucial for gauging coherence among analysed variables. Cronbach's Alpha, a statistical measure, is used for this purpose. A value above 0.8 indicates strong internal consistency, while over 0.7 is considered reliable and acceptable, denoting satisfactory coherence among the variables.

Table 3: Reliability Statistics

Cronbach's Alpha	N of Items
0.898	24

The results of the above table indicate the value of Cronbach's alpha is 0.914, showing high internal consistency, which means the study can proceed further with KMO and Bartlett's test.

Sampling Adequacy

Kaiser-Meyer-Olkin (KMO) assesses sample adequacy, while Bartlett's test checks variable correlation. For factor analysis, KMO should exceed 0.5, and Bartlett's test requires a p-value less than 0.05 to indicate variable correlation.

Table 4: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.781
Bartlett's Test of Sphericity	Approx. Chi-Square	1849.256
	Df	276
	Sig.	.000

*Source***:** Computed data

The table shows a KMO value of 0.870, indicating adequate sample size, and Bartlett's Test p-value of 0.000, suggesting a variable correlation. As both conditions are met, factor analysis is deemed appropriate for data analysis.

Total Variance Explained: The table showcases extracted factors, their Eigenvalues, percentage of variance, and cumulative percentage of variance. Eigenvalues represent the variance explained by each factor. Factors with Eigenvalues below one is omitted. The first factor elucidates (23.244%) of the variance, followed by the second (12.610%), third (12.088%), fourth (10.190%), fifth (7.180%), and sixth (5.053%) factors. Together, they expound 69.794% of the variance, exceeding the 60% threshold. To enhance factor scores, rotation via the Oblimin method is implemented.

Table 5: 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.	5.578	23.244	23.244	5.578	23.244	23.244	3.043	12.679	12.679
2.	3.026	12.610	35.853	3.026	12.610	35.853	2.964	12.349	25.029
3.	2.901	12.088	47.942	2.901	12.088	47.942	2.937	12.236	37.264
4.	2.446	10.190	58.132	2.446	10.190	58.132	2.935	12.227	49.492
5.	1.723	7.180	65.312	1.723	7.180	65.312	2.509	10.455	59.946
6.	1.213	5.053	70.365	1.213	5.053	70.365	2.500	10.419	70.365
7.	.762	3.177	73.542						
8.	.660	2.749	76.291						
9.	.614	2.558	78.849						
10.	.554	2.309	81.158						
11.	.522	2.175	83.333						
12.	.506	2.109	85.442						
13.	.453	1.886	87.328						
14.	.436	1.815	89.144						
15.	.385	1.603	90.746						
16.	.367	1.528	92.275						
17.	.329	1.372	93.647						
18.	.302	1.257	94.904						
19.	.266	1.107	96.011						
20.	.249	1.037	97.048						
21.	.230	.956	98.005						
22.	.193	.804	98.809						
23.	.154	.641	99.450						
24.	.132	.550	100.000						
Extraction Method: Principal Axis Factoring.									

*Source***:** Computed data

Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis (CFA) is essential for validating correlations based on a predetermined theory. Amos software is used for this study. The initial step involves creating a confirmatory model. The model below includes indicator loadings, p-values, and estimate values. Indicator loadings ideally exceed 0.6, preferably surpassing 0.7. Values below 0.6 are excluded from the model.
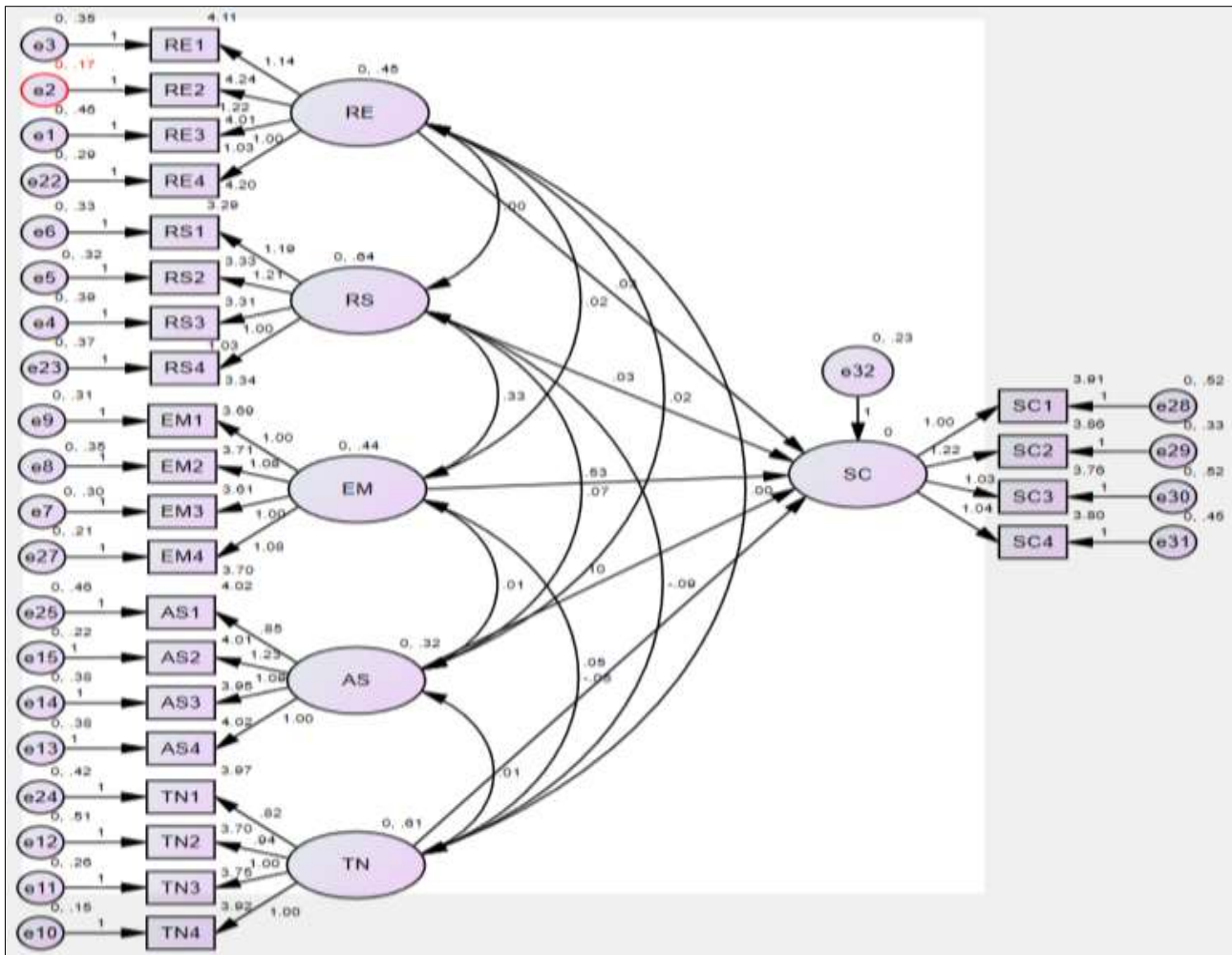
Fig 1: Confirmatory Factor Analysis (CFA) Model: Indicator Loadings, p-Values, and Estimate Values Using Amos Software

Table 6: Summary of Results

	CR	AVE	MSV	MaxR(H)	RS	RE	EM	TN	AS
RS	0.832	0.548	0.379	0.901	0.740				
RE	0.809	0.510	0.002	0.893	0.004	0.714			
EM	0.864	0.563	0.379	0.879	0.616	0.038	0.751		
TN	0.807	0.503	0.020	0.893	-0.141	-0.002	-0.093	0.709	
AS	0.734	0.598	0.021	0.821	0.145	0.043	0.021	0.021	0.631

The table summarises results including CR, AVE, and MSV computations. CR exceeds 0.7 for all constructs, and CR surpasses AVE. AVE is over 0.5, and AVE exceeds MSV. Hence, all validity and reliability criteria are satisfied

Model fit Indices

Table 7 presents model fit assessment results, examining indices like CFI, TLI, NFI, GFI, AGFI, and RMSEA. Good model fit is indicated by CFI and TLI values of 0.9 or higher, with CFI surpassing TLI. Additionally, RMSEA and square mean should be below 0.05 for adequacy.

Table 7: Model fit indices

Model fit indices	Value	Acceptable criteria	Literature
Likelihood Ratio (χ 2/df)	1.274	≤ 4	Wheaton *et al*. (1977) [16]
Comparative Fit Index (CFI)	0.96	>0.95, 0.9 and >0.8(acceptable)	Bentler (1990) [8]
Tucker-Lewis Index (TLI)	0.93	>0.9	Bonnet & Bonnet (1980) [9]
RMSEA	0.043	<0.05	Hu and Bentler (1990) [8]
NFI	0.94	>0.9	Bollen (1989) [17]
GFI	0.91	>0.9	Hu and Bentler (1990) [8]

The above table reflects the index value of the required model fit indices. All the values of the model fit indices met the acceptable criteria

Hypothesis Testing

H₁: There is a positive relationship between the dimensions of service quality (reliability, responsiveness, assurance, empathy, and tangibles) and customer satisfaction in public banks.

Table 8: Regression Weights

			Estimate	**S.E.**	**C.R.**	**P**
SC	<---	RE	.035	.075	.462	.644
SC	<---	RS	.026	.088	.295	.768
SC	<---	EM	.526	.124	4.244	***
SC	<---	AS	.102	.096	1.058	.290
SC	<---	TN	.053	.065	.802	.423

Interpretation
The above table represents that only the Empathy factor has significantly affected customer satisfaction In this case we are rejecting the null hypothesis and rest of the case we are accepting the null hypothesis.

Conclusion
The analysis reveals several relationships between the variable "Customer Satisfaction" and its potential predictors, including "Reliability," "Responsibility," "Empathy," "Assurance," and "Tangibility." Among these, the relationship between "Customer Satisfaction" and "Empathy" emerges as statistically significant ($p < 0.001$), with a substantial positive estimate of 0.526 (C.R. = 4.244). This finding suggests that "Empathy" significantly impacts "Customer Satisfaction," indicating a notable association between emotional intelligence and social cohesion. However, the relationships between "Customer Satisfaction" and the other variables, namely "Reliability," "Responsibility," "Assurance," and "Tangibility," are found to be non-significant ($p > 0.05$). This implies that factors such as resilience, resilience skills, adaptability, and teamwork do not exert a significant influence on social cohesion within the context of this model. Consequently, while emotional intelligence appears to play a pivotal role in fostering social cohesion, other factors may not be as salient in this particular scenario.

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