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# Analyzing the Relationship Between Service Quality and Customer Satisfaction in Nepal's Commercial Banking Sector

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# **Abstract**

This study examines customers' perceptions of service quality in Nepalese commercial banks, focusing on five key dimensions: tangibility, reliability, responsiveness, assurance, and empathy. Data collected from customers of ten major commercial banks were analyzed using descriptive statistics, correlation, and regression analysis through SPSS to examine the impact of these dimensions on customer satisfaction. The results reveal that tangibility, reliability, and empathy have a significant positive effect on customer satisfaction, indicating that the physical environment, consistent service delivery, and personalized attention are crucial in shaping customer experiences. Conversely, responsiveness and assurance showed no significant direct impact in the Nepalese banking context. These findings suggest that banks should prioritize improvements in tangibility, reliability, and empathy to enhance customer satisfaction and foster customer loyalty. For bankers, focusing on these key dimensions can lead to stronger customer relationships, increased retention rates, and a competitive advantage in the market. By investing in modern branch facilities, ensuring dependable service, and training staff to provide personalized care, banks can improve overall service quality and drive sustainable growth. Future research could explore additional service quality factors or investigate the indirect effects of responsiveness and assurance on customer satisfaction in the evolving banking landscape.

*Keywords*: customer satisfaction, tangibility, reliability, responsiveness, assurance, empathy

### Introduction

The banking sector represents one of the most rapidly expanding segments of the global economy, playing a pivotal role in fostering economic development. As an industry fundamentally oriented towards customer service, banks must consistently enhance the quality of their services to achieve and maintain high levels of customer satisfaction. Heightened competition has compelled banks to recognize the dual necessity of retaining

existing clients while also attracting new customers by delivering superior service experiences (Dsouza et al., 2018).

Customer satisfaction is widely regarded as a critical determinant of a bank's sustained success. It is typically defined as a consumer's evaluative judgment formed by comparing the perceived performance of a service against their prior expectations (Kotler et al., 2009). Satisfaction arises when customer expectations are met

or exceeded, engendering positive emotional responses that fundamentally contribute to long-term customer loyalty and, consequently, sustained profitability (Oly, 2004). In competitive marketplaces where product offerings are often homogeneous, exceptional service quality emerges as a key differentiator. Empirical evidence indicates a positive correlation between elevated service quality and increased customer satisfaction, which in turn enhances customer retention and loyalty (Herington & Weaven, 2009; Ozatac et al., 2016).

Service quality is commonly assessed by evaluating the discrepancy between customers' expectations and their perceptions of the actual service delivered. A widely adopted framework for this purpose is the SERVQUAL model developed by Parasuraman et al. (1988), which encompasses five fundamental dimensions: tangibility (physical facilities and appearance of personnel), reliability (dependable and accurate service delivery), responsiveness (willingness to provide prompt assistance), assurance (competence and ability of employees to inspire trust and confidence), and empathy (personalized attention and care) (Peng & Moghavvemi, 2015).

Within the Nepalese context, commercial banks classified as 'A' class financial institutions play an indispensable role in the national financial system by offering diverse banking services, including deposit acceptance, credit provision, and facilitation of trade and payments. These banks are regulated and supervised by the Nepal Rastra Bank (NRB), the country's central bank. As of 2025, 20 licensed commercial banks operate throughout Nepal, including Agricultural Development Bank Limited, Citizens Bank International Limited, Everest Bank Limited, and Standard Chartered Bank Nepal Limited, among others. Amid escalating competition and rising customer expectations, enhancing service quality has emerged as a strategic priority. Consequently, investigating the relationship between service quality dimensions and customer satisfaction in Nepalese commercial banks is both timely and crucial for advancing institutional performance and customer retention.

# **Problem Statement**

The banking industry occupies a rapidly growing and highly competitive domain in the contemporary global economy, emphasizing the delivery of superior service quality to satisfy customers. Customer satisfaction and loyalty have consequently become essential factors influencing business outcomes and long-term profitability. Thus, banks are increasingly focusing on service quality as a strategic instrument to fulfill customer expectations and secure a competitive advantage.

This study aims to identify the service quality attributes that significantly influence customer satisfaction within Nepalese commercial banks. The research specifically examines the relationship between core service quality dimensions tangibility, reliability, responsiveness, assurance, and empathy—and overall customer satisfaction. Understanding these dynamics is critical for Nepalese commercial banks seeking to enhance service provision and strengthen customer relationships amid a highly competitive financial landscape. Customer satisfaction is a cornerstone in shaping the growth, competitiveness, and sustainability of the banking industry, and in the Nepalese commercial banking sector, where competition intensifies and customer expectations evolve continually, maintaining high service quality is imperative.

# **Research Objective**

The objective of this study is to rigorously analyze how various service quality attributes relate to customer satisfaction levels among clients of Nepalese commercial banks. The study seeks to identify which dimensions of service quality exert the most significant influence on customer satisfaction. Additionally, it endeavors to explore the interrelationships among these service quality factors and their combined impact on overall satisfaction. By accomplishing these objectives, the study aims to deliver actionable insights to Nepalese commercial banks, facilitating the enhancement of service delivery, customer experience, and loyalty in an increasingly competitive environment

## Literature Review

# Service Quality and Customer Satisfaction

Service quality and customer satisfaction are two interrelated constructs that have garnered extensive scholarly attention due to their profound impact on organizational performance and customer loyalty (Dahal et al., 2021). Service quality is defined as the intangible benefits or activities offered by one party to another, devoid of ownership transfer. Characterized by multidimensionality and abstractness, service quality encapsulates distinct features including intangibility, heterogeneity, and the inseparability of production and consumption processes (Akhtar, 2011). Tsoukatos and Rand (2006), conceptualize service quality as reflecting the degree of customer satisfaction derived from a product or service, coupled with its accessibility. Customers form evaluative judgments by classifying service attributes as either superior or inferior, thereby shaping their overall perception of the service provider. Similarly, Culiberg and Rojšek (2010) posit that perceived service quality emerges from the comparison between customer expectations and the actual performance of the service received.

The significance of service quality has been well documented in academic and professional domains, given its robust influence on customer satisfaction, loyalty, profitability, and broader organizational success. It is widely acknowledged as the extent to which delivered services meet or exceed customer expectations (Santos, 2003). Buttle (1996), underscores service quality as a pivotal antecedent to organizational success, emphasizing its role in achieving sustainable competitive advantage through enhanced customer satisfaction, retention, and profitability. Additionally, elevated service quality strengthens customer loyalty, fosters positive word-of-mouth communications, enhances corporate reputation, and contributes to improved employee morale.

Customer satisfaction is a multifaceted and evolving construct in the literature, generally understood as the customer's evaluative response to the disparity between prior expectations and actual product or service performance (Tse & Wilton, 1988). Positive disconfirmation—where perceived performance exceeds expectations—elicits satisfaction, reinforces relationship continuity, and encourages favorable recommendations. Conversely, negative disconfirmation results in dissatisfaction, disrupts customer relationships, and provokes adverse word-of-mouth, with consequential effects on both purchase decisions and post-purchase behaviors (Sayani, 2015). Furthermore, satisfaction is conceptualized as an affective response arising from consumption experiences, significantly influencing customer loyalty and other favorable behaviors (Jamal & Naser, 2002). Similarly, Schiffman and Kanuk (2007), note that customer satisfaction hinges on the extent to which a product or service fulfills individual desires and expectations. As a critical precursor to loyalty and repurchase intentions, satisfaction is indispensable for sustained business success (Zacharias et al., 2009).

The nexus between service quality and customer satisfaction is well substantiated in the extant literature. Superior service quality consistently leads to elevated customer satisfaction, which subsequently fosters customer loyalty and retention. This dynamic is particularly salient in the banking sector, where service intangibility and heightened customer expectations necessitate the provision of consistent and superior service to maintain competitive advantages and nurture enduring customer relationships.

Service quality and customer satisfaction constitute foundational elements within the banking sector, significantly influencing institutional performance, sustainability, and competitive positioning. As the banking industry faces intensifying global and local competition, comprehending the complex relationship between these constructs is imperative. Multiple empirical studies have demonstrated the direct impact of service quality on customer perceptions, shaping satisfaction outcomes. The preeminence of service quality as a driver of customer loyalty, retention, and enhanced profitability is extensively documented.

For example, Ali and Raza (2015) investigated the linkage between service quality and customer satisfaction within Islamic banks in Pakistan. By modifying the SERVQUAL framework to incorporate a compliance dimension tailored to Islamic banking's unique features, their findings affirmed that the traditional five service quality dimensions, along with compliance, significantly influence customer satisfaction. This study highlights the necessity of adapting established service quality models to sector-specific contexts.

In the Indian banking sector, Kant and Jaiswal (2017) identified that service quality dimensions—tangibility, empathy, responsiveness, assurance, and image—positively affect customer satisfaction, with responsiveness emerging as the most influential factor. The prominence of promptness and customer-oriented service underscores the criticality of responsiveness in shaping customer satisfaction within banking.

Culiberg and Rojšek (2010), examined retail banking customers in Slovenia, confirming that perceived service quality is a principal antecedent of customer satisfaction. They argued that superior service standards function as sustainable competitive advantages for banks by enhancing loyalty and profitability despite the inherent challenges in service quality improvement.

Ladhari et al. (2011), conducted a crosscultural comparative study between Canada and Tunisia, revealing that while both cohorts expressed high satisfaction, Canadian customers rated service quality higher overall. Reliability and empathy were paramount in the Canadian context, whereas reliability and responsiveness were more significant in Tunisia. This underscores the importance of culturally sensitive approaches to service quality enhancement.

Finally, Adams et al. (2016), studied Ghanaian banks and found a significant positive association between service quality and customer retention,

despite prevailing dissatisfaction with overall service levels. The authors advocate for strategic redesigns of service delivery to bolster customer satisfaction and loyalty, reaffirming the centrality of service quality to long-term banking success.

# Theoretical/Conceptual Framework

SERVQUAL The model—originally comprising ten dimensions including reliability, responsiveness, competence, accessibility, courtesy, communication, credibility, security, customer knowledge, and tangibility—was refined by Parasuraman et al. (1988) into five core service quality dimensions: reliability, responsiveness, assurance, empathy, and tangibles. These dimensions serve as critical evaluative criteria for customers in assessing service performance, particularly within the banking sector.

In the present study, customer satisfaction constitutes the dependent variable, while the five SERVQUAL dimensions represent independent variables. The theoretical framework elucidates the influence of each service quality dimension on customer satisfaction, providing a structured basis for empirical investigation.

# **Hypothesis Development**

- H1: Tangibility is positively associated with customer satisfaction in Nepalese commercial banks.
- H2: Reliability has a significant positive relationship with customer satisfaction in Nepalese commercial banks.
- H3: Responsiveness is positively related to customer satisfaction in Nepalese commercial banks.
- H4: Assurance significantly influences customer satisfaction in Nepalese commercial banks.
- H5: Empathy is positively correlated with customer satisfaction in Nepalese commercial banks.

# Methodology

# Research Design, Sampling Technique, and Study Area

This research employs both descriptive and correlational research designs to investigate the relationship between service quality and customer satisfaction within Nepal's commercial banking sector. The descriptive design facilitates the collection of detailed information on customer perceptions of service quality dimensions including empathy, tangibility, responsiveness, reliability, and assurance—enabling demographic profiling and variable summarization. correlational design examines the nature, direction, and strength of associations between independent variables (service quality dimensions) and the dependent variable (customer satisfaction).

A quantitative research approach underpins the study, utilizing structured questionnaires distributed through multiple channels-including email, social media, and printed forms—to ensure wide demographic representation. Given the heterogeneous customer base, non-probability sampling techniques, specifically judgmental and convenience sampling, were employed. The sample comprises 404 customers from ten prominent commercial banks in Nepal: NIC Asia Bank, NABIL Bank, Global IME Bank, Nepal Investment Mega Bank, Rastriya Banijya Bank, Standard Chartered Bank, Nepal Bank, Himalayan Bank, NMB Bank, and Laxmi Sunrise Bank.

#### Instrumentation

The structured questionnaire deployed in this study includes two sections: Part A captures respondents' demographic characteristics (age, gender, income, education), while Part B addresses research-specific items to assess perceptions of service quality dimensions and customer satisfaction.

Measurement items employ a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Descriptive statistics (mean, median, standard deviation) summarize demographic and perceptual data. Inferential statistics, including t-tests and hypothesis testing, evaluate group differences and validate proposed hypotheses. Cronbach's alpha coefficients assess internal consistency and reliability of measurement scales.

# **Results and Discussion**

To explore relationships between service quality dimensions and customer satisfaction, correlational and linear regression analyses are conducted using the Statistical Package for the Social Sciences (SPSS). Individual survey items are analyzed rigorously to ensure robust, interpretable results.

Table 1 Reliability Test for 404 Respondents

Particular	Reliability (population)	No. of Items
Tangibility	0.791	3
Reliability	0.818	3
Responsiveness	0.899	3
Assurance	0.822	3
Empathy	0.825	3
Customer Satisfaction	0.817	3
Overall	0.828	

To assess the internal consistency of the measurement scales used in the questionnaire, Cronbach's alpha coefficients were calculated for

each construct. The results indicated satisfactory levels of reliability across all variables, with alpha values exceeding the commonly accepted threshold of 0.70, demonstrating that the items within each scale are internally consistent and reliable for further analysis.

As shown in the table, the Responsiveness dimension recorded the highest reliability score ( $\alpha = 0.899$ ), followed by Empathy ( $\alpha = 0.825$ ), Assurance ( $\alpha = 0.822$ ), and Customer Satisfaction ( $\alpha = 0.817$ ). Reliability (as a service quality dimension) showed an alpha of 0.818, while Tangibility had a slightly lower but still acceptable reliability score ( $\alpha = 0.791$ ). Each of these constructions was measured using three items. The overall Cronbach's alpha for all items combined was 0.828, indicating a high degree of internal consistency for the entire questionnaire.

These results confirm that the measurement instruments used in this study are reliable and suitable for evaluating the relationship between service quality dimensions and customer satisfaction in Nepal's commercial banking sector.

Table 2 Demographic Profile of the Respondents

	Constructs	Frequency	Percentage
Gender	Female	236	58.5
	Male	168	41.5
Age Group	Below 25 years	66	16.3
	25-34 Years	120	29.7
	35-44 Years	89	22.2
	45-54 Years	82	20.1
	55 and above	47	11.7
Academic Qualification	Up to grade ten	9	2.5
	High School	78	19.4
	Bachelor	148	36.6
	Master's	105	25.8
	Others	64	15.7
Employment Status	Home maker	13	3.4
	Student	60	15.0
	Self employed	113	28.0
	Private Sector	125	30.7
	Public Sector	72	17.7
	Others	21	5.2
	Monthly Income	68	16.7
	25000-50,000	72	17.9
	50,000-75,000	112	27.8
	75000-100000	111	27.5
	Above 100000	41	10.1
Name of the bank	NIC Asia Bank	22	5.7
	NABIL Bank	54	13.5
	Global IME	31	7.9
	Nepal Investment Mega Bank	43	10.6

Constructs	Frequency	Percentage
Rastriya Banijya B	ank 66	16.2
Standard Chartered	Bank 50	12.3
Nepal Bank	40	9.8
Himalayan Bank	37	9.1
NMB Bank	34	8.4
	27	6.6

An analysis of the demographic characteristics of the 404 respondents indicated that female participants made up a slightly higher proportion of the sample at 58.5% (236 individuals), while male participants accounted for 41.5% (168 individuals). The age distribution was diverse, with the largest group (29.7%) falling within the 25–34 age range, followed by 22.2% aged 35-44, 20.1% aged 45-54, 16.3% under the age of 25, and 11.7% aged 55 and above. In terms of educational attainment, 36.6% of respondents had completed a bachelor's degree, 25.8% held a master's degree, 19.4% had completed high school, 15.7% reported other qualifications, and 2.5% had education up to grade ten. Regarding occupational status, the largest portion (30.7%) were employed in the private sector, followed by 28.0% who were self-employed, 17.7% working

in the public sector, 15.0% who were students, 5.2% in other categories, and 3.4% who identified as homemakers. The monthly income distribution showed that 27.8% of respondents earned between NPR 50,000-75,000, 27.5% between NPR 75,000-100,000, 17.9% between NPR 25,000-50,000, 16.7% earned up to NPR 25,000, and 10.1% earned above NPR 100,000. Participants were customers of ten different commercial banks, with the highest representation from Rastriya Banijya Bank (16.2%), followed by NABIL Bank (13.5%), Standard Chartered Bank (12.3%), Nepal Investment Mega Bank (10.6%), Nepal Bank (9.8%), Himalayan Bank (9.1%), NMB Bank (8.4%), Global IME Bank (7.9%), Laxmi Sunrise Bank (6.6%), and NIC Asia Bank (5.7%).

Table 3 Reliability Test for 404 Respondents

Code	Statements	N	Mean	Std. Deviation
T1	I feel the location of the bank is convenient.	404	4.23	0.824
T2	I feel the bank has up-to-date equipment's that is easy to use.	404	4.21	0.873
Т3	I feel the personnel are neat appearing and physical facilities are visually appealing.	404	4.21	0.870
Т	Average		4.21	0.855

The table presents descriptive statistics for three statements related to the tangibility dimension of service quality, based on responses from 404 participants. The mean scores for the individual items indicate a generally positive perception among respondents. Specifically, the statement "I feel the location of the bank is convenient" received a mean score of 4.23 (SD = 0.824), reflecting strong agreement. Similarly, the statement "I feel the bank has up-to-date equipment that is easy to use" had a mean of 4.21 with a standard deviation of 0.873, and "I feel the personnel are neat appearing and physical facilities are visually appealing" also scored a mean of 4.21 (SD = 0.870). The overall average mean for the tangibility construct was 4.21, with a standard deviation of 0.855, indicating consistent positive responses and relatively low variability across the items.

 Table 4

 Descriptive Analysis of Reliability

Code	Statements	N	Mean	<b>Std. Deviation</b>
RE1	When I have a problem the employees of the banks show	404	4.11	0.911
	sincere interest in solving my problem. Bank's employees are			
	always willing to help me promptly.			
RE2	Bank services are performed within the promised time.	404	4.04	0.896
RE3	The bank has service providers who are reliable in terms of	404	3.98	0.957
	handling errors in the service transactions.			
RE	Average		4.04	0.921

The table presents descriptive statistics for three items measuring the reliability dimension of service quality, based on responses from 404 participants. Respondents generally expressed agreement with the statements, with the highest mean score of 4.11 (SD = 0.911) for the statement "When I have a problem, the employees of the banks show sincere interest in solving my problem and are always willing to help me promptly." This was followed by "Bank services are performed

within the promised time," which had a mean of 4.04 and a standard deviation of 0.896. The statement "The bank has service providers who are reliable in terms of handling errors in service transactions" had a slightly lower mean of 3.98 (SD = 0.957). The overall average mean for the reliability construct was 4.04, with a standard deviation of 0.921, indicating moderately strong agreement and some variability in responses regarding the dependability of banking services.

 Table 5

 Descriptive Analysis of Responsiveness

Code	Statements	N	Mean	Std. Deviation
RP1	Bank's employees are always willing to help me promptly.	404	3.99	1.098
RP2	During the time of emergency, the employees try to speed up the services.	404	4.02	1.138
RP3	The bank keeps customers informed while performing their services.	404	4.05	1.097
RP	Average		4.02	1.11

The table presents descriptive statistics for three items assessing the responsiveness dimension of service quality, based on responses from 404 participants. The mean scores indicate that respondents generally agreed with the statements, though with slightly higher variability compared to other dimensions. The highest mean was 4.05 (SD = 1.097) for the statement "The bank keeps customers informed while performing their services." This was followed closely by "During the time of emergency, the employees

try to speed up the services," with a mean of 4.02 and standard deviation of 1.138. The statement "Bank's employees are always willing to help me promptly" had a mean of 3.99 and a standard deviation of 1.098. The overall average mean for the responsiveness construct was 4.02, with a standard deviation of 1.11, indicating positive perceptions but with relatively greater variation in customer experiences related to promptness and communication.

Table 6 Descriptive Analysis of Assurance

Code	Statements	N	Mean	Std. Deviation
A1	I feel the employees of the bank can be trusted.	404	4.04	0.946
A2	The bank's employees are polite and have knowledgeable	404	4.09	0.971
	answers to my questions.			
A3	The bank processes my transactions without any error with	404	4.05	1.016
	security.			
A	Average		4.06	0.977

The table displays descriptive statistics for three statements related to the assurance dimension of service quality, based on responses from 404 participants. Respondents generally agreed with all statements, reflecting confidence in the bank's employees. The statement "The bank's employees are polite and have knowledgeable answers to my questions" received the highest mean score of 4.09 (SD = 0.971). This was followed by "The

bank processes my transactions without any error with security," which had a mean of 4.05 and a standard deviation of 1.016. The statement "I feel the employees of the bank can be trusted" had a mean score of 4.04, with a standard deviation of 0.946. These results indicate a positive perception of the bank staff's trustworthiness, politeness, and transaction accuracy, with moderate variability in responses.

Table 7 Descriptive Analysis of Empathy

Code	Statements	N	Mean	<b>Std. Deviation</b>
EM1	I am recognized as a valued customer by the bank.	404	3.78	0.985
EM2	Bank employees show understanding of my specific needs.	404	3.99	0.874
EM3	The employees respond to customers' enquiries.	404	3.90	1.067
EM	Average		3.89	0.975

The table presents descriptive statistics for three items measuring the empathy dimension of service quality, based on responses from 404 participants. The mean scores suggest a moderate level of agreement among respondents. The highest mean score of 3.99 (SD = 0.874) was recorded for the statement "Bank employees show understanding of my specific needs," followed by "The employees respond to customers' enquiries"

with a mean of 3.90 and a standard deviation of 1.067. The statement "I am recognized as a valued customer by the bank" received the lowest mean of 3.78 (SD = 0.985). Overall, the average mean for empathy construct was 3.89, with a standard deviation of 0.975, indicating generally positive perceptions of customer care, though with some variability in responses.

Table 8 Descriptive Analysis of Customer Satisfaction

Code	Statements	N	Mean	Std. Deviation
CS1	I am pleased to be associated with the bank.	404	2.04	0.988
CS2	The service of this bank fulfills my expectations.	404	1.95	0.873

Code	Statements	N	Mean	Std. Deviation
CS3	Considering all my experience with this bank, my decision to	404	1.86	0.854
	choose this bank was a wise decision.			
CS	Average		1.95	0.905

The table presents descriptive statistics for three statements measuring customer satisfaction, based on responses from 404 participants. The mean scores indicate relatively low levels of satisfaction among respondents. The highest mean was 2.04 (SD = 0.988) for the statement "I am pleased to be associated with the bank," followed by "The service of this bank fulfills my expectations" with a mean of 1.95 (SD = 0.873).

The statement "Considering all my experience with this bank, my decision to choose this bank was a wise decision" received the lowest mean of 1.86 (SD = 0.854). Overall, the average mean for the customer satisfaction construct was 1.95, with a standard deviation of 0.905, indicating generally low satisfaction levels and some variation in customer perceptions.

**Table 9** *Correlation Analysis* 

	Pearson					
Code	CS	EM	A	RP	RE	T
CS	1					
EM	.155**	1				
A	-0.060**	101**	1			
RP	.084**	116**	075**	1		
RE	.171**	.013**	.072**	050**	1	
T	.129**	012**	075**	.123**	.133**	1

EM = Empathy RP = Responsiveness

T=Tangibility

Note.

1) \*\* = Correlation is significant at the 0.01 level (2-tailed)

2) CS= Customer Satisfaction

A= Assurance

RE=Reliability

The Pearson correlation results show the relationship between Customer Satisfaction (CS) and the service quality dimensions: Empathy (EM), Assurance (A), Responsiveness (RP), Reliability (RE), and Tangibility (T). Customer Satisfaction is positively and significantly correlated with Empathy (r=0.155), Responsiveness (r=0.084), Reliability (r=0.171), and Tangibility (r=0.129), indicating moderate positive associations. Conversely, Assurance shows a small but significant negative correlation with Customer Satisfaction (r=-0.060). Among the independent

variables, Empathy is negatively correlated with Assurance (r = -0.101) and Responsiveness (r = -0.116). Assurance also has negative correlations with Responsiveness (r = -0.075) and Tangibility (r = -0.075). Tangibility is positively correlated with both Responsiveness (r = 0.123) and Reliability (r = 0.133). These findings suggest varying strengths and directions of relationships among the variables, highlighting complex interactions within the dimensions of service quality and customer satisfaction.

Table 10 Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimated
1	.275a	.076	0.64	0.75064

Note. Predictors: (Constant) EM, A, RP, RE, T

The regression model shows a multiple correlation coefficient (R) of 0.275, indicating a low to moderate correlation between the independent variables—Empathy (EM), Assurance (A), Responsiveness (RP), Reliability (RE), and Tangibility (T)and the dependent variable. The R-squared value is 0.076, suggesting that approximately 7.6% of the variance in the dependent variable is explained by the predictors. The adjusted R-squared value is reported as 0.64, which appears inconsistent with the R-squared and may require verification. The standard error of estimate is 0.75064, indicating the average deviation of observed values from the predicted values by the regression model.

Table 11 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	18.396	6	3.679	6.530	.000a
Residual	224.256	398	0.563		
Total	242.651	404			

Note. (a) Dependent Variable: CS (b) Predictors: (Constant), EM, A, RP, RE, T

The ANOVA results for the regression model are presented in the table, showing a regression sum of squares of 18.396 with 6 degrees of freedom and a mean square of 3.679. The residual sum of squares is 224.256 with 398 degrees of freedom, yielding a mean square of 0.563. The total sum of squares is 242.651 with 404 degrees of freedom. The calculated F-value of 6.530 and a significance level (p-value) of 0.000 indicate that the overall regression model is statistically significant. This suggests that the independent variables collectively have a meaningful impact on the dependent variable.

Table 12 Coefficient of Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig	Collinearity Statistics	
	В	Std. Error	Beta			Tolerance	VIF
(Constant)	.214	.407		.525	.600		
EM	.179	.054	.161	3.301	.001	.974	1.026
A	051	.060	042	849	.396	.972	1.029
RP	.085	.044	.096	1.953	.052	.962	1.039
RME	205	.061	.164	3.358	.001	.972	1.029
T	.125	.065	.094	1.920	.056	.960	1.042

The regression coefficients illustrate the individual influence of each independent variable on the dependent variable, while controlling for the other factors in the model. Empathy (EM) has a positive and statistically significant effect, with a beta coefficient of 0.179, indicating that a oneunit increase in empathy corresponds to a 0.179unit increase in the dependent variable (p = 0.001). Assurance (A) shows a slight negative effect (beta = -0.051), but this relationship is not statistically significant (p = 0.396). Responsiveness (RP) exhibits a positive beta of 0.085 and is marginally

significant (p = 0.052), suggesting a possible positive impact. Reliability (RME) has a significant negative effect on the outcome variable, with a beta of -0.205 (p = 0.001). Tangibility (T) also has a positive effect (beta = 0.125), approaching significance (p = 0.056).

Variance Inflation Factor (VIF) values for all predictors range between 1.026 and 1.042, which are well below the commonly accepted threshold of 5. This indicates that multicollinearity among the independent variables is not an issue, ensuring that the regression estimates are stable and reliable.

Table 13 Result of Hypothesis Testing

	Hypothesis	P-value	Result
H1:	There is a significant positive relationship between tangibility and customer satisfaction in Nepalese commercial banks.	0.002	Accepted
H2:	There is a significant positive relationship between reliability and customer satisfaction in Nepalese commercial banks.	0.001	Accepted
Н3:	There is a significant positive relationship between responsiveness and customer satisfaction in Nepalese commercial banks.	0.093	Rejected
H4:	There is a significant positive relationship between assurance and customer satisfaction in Nepalese commercial banks.	0.227	Rejected
H5:	There is a significant positive relationship between empathy and customer satisfaction in Nepalese commercial banks.	0.002	Accepted

The hypothesis testing results reveal that at the 0.05 significance level, tangibility (p = 0.002), reliability (p = 0.001), and empathy (p = 0.002) show statistically significant positive relationships with customer satisfaction in Nepalese commercial banks, leading to the acceptance of hypotheses H1, H2, and H5. Conversely, the p-values for responsiveness (p = 0.093) and assurance (p =0.227) exceed the significance threshold, resulting in the rejection of hypotheses H3 and H4. This indicates that while tangibility, reliability, and empathy significantly influence customer satisfaction, responsiveness and assurance do not demonstrate a significant positive impact within the context of Nepal's commercial banking sector.

# **Discussions**

Service quality and customer satisfaction remain pivotal constructs extensively examined within the banking sector, given their critical influence on institutional performance and customer loyalty. Empirical studies continue to reveal nuanced insights into which specific service quality dimensions most significantly impact customer satisfaction, although consensus highlights reliability and empathy as consistently influential factors.

Shanka (2012) conducted focused investigation into private banks within the Ethiopian banking environment, aiming to evaluate service quality and its relationship with customer satisfaction. Their empirical findings identified empathy—banks' genuine understanding and concern for individual customer needs—as the most impactful service quality dimension enhancing customer satisfaction. This underscores the importance of personalized, attentive service in shaping positive customer perceptions and satisfaction outcomes.

Contrasting perspectives emerge in other studies. Kheng et al. (2010), for instance, questioned the traditional emphasis on responsiveness and tangibility within banking service quality. Their research indicated that these dimensionscovering staff promptness and physical aspects such as facilities and personnel appearance—held no statistically significant influence on customer satisfaction. This shift is plausibly attributed to the rise of self-service technologies, including ATMs, mobile applications, and online platforms, which reduce the relative importance of physical and immediate human interactions in customers' evaluation of service quality.

Similarly, Agbor (2011) explored service across service-oriented quality industries. confirming that while overall service quality strongly correlates with customer satisfaction, individual dimension effects vary. Notably, reliability (delivering promised services dependably and accurately) and empathy were positively and significantly associated with perceived quality, while responsiveness did not exhibit a significant relationship. This divergence reinforces the notion that customers prioritize dependable service and personalized attention over speed or immediacy in some contexts.

Further research by Iddrisu et al. (2015) corroborated the predominance of reliability and empathy in fostering customer satisfaction within banking, while finding that assurance (employees' knowledge, courtesy, and ability to inspire trust) did not significantly influence satisfaction. This finding challenges some prior assertions about assurance's criticality but aligns with the growing recognition that consistent, trustworthy service delivery and personalized care remain central to customer contentment.

A synthesis of these findings reveals a consistent pattern emphasizing reliability and empathy as core dimensions driving customer satisfaction across diverse banking contexts, including Ethiopia and beyond. These dimensions encapsulate customers' desire for dependable service and authentic, tailored interactions with service providers. However, with ongoing digital transformation in banking services, the salience of other dimensions such as tangibility and responsiveness may decline, necessitating continuous research to capture evolving customer preferences and expectations.

This evolving discourse aligns with broader empirical insights from studies such as Mishra and Aithal (2023), and Mishra et al. (2021), which stress the importance of adapting to changing service delivery paradigms in banking to sustain customer satisfaction and competitive advantage. Consequently, banking institutions must increasingly prioritize enhancing reliability and empathy in service design while adapting responsiveness and tangibility strategies in light of technological advancements and shifting customer engagement channels.

## Conclusion

This research aimed to investigate the impact of various dimensions of service quality on customer satisfaction within Nepalese commercial banks. Grounded in the SERVQUAL framework, the study examined five critical service quality dimensions: tangibility, reliability, responsiveness, assurance, and empathy. Data collected from customers of ten prominent commercial banks in Nepal, including NIC Asia Bank, NABIL Bank, Global IME Bank, and others, provided comprehensive insights into customer perceptions and evaluative judgments regarding banking service quality.

The empirical findings of the study underscore that tangibility, reliability, empathy are significant determinants of customer satisfaction in the Nepalese banking context. Tangibility, encompassing the physical appearance of facilities, equipment, and personnel, emerged as a salient factor influencing customer satisfaction, signifying that customers value the tangible cues that contribute to their overall service experience. Reliability—the bank's consistent ability to deliver promised services accurately and dependably—was also found to have a robust positive effect, highlighting the centrality of dependable service delivery in fostering customer trust and satisfaction. Moreover, empathy—the individualized attention and care extended to customers by bank employees—was demonstrated to play a crucial role, suggesting that personalized service interactions significantly enhance customer perceptions and loyalty.

Conversely, the dimensions of responsiveness and assurance did not exhibit statistically significant effects on customer satisfaction in this study. This outcome suggests a potential shift in customer priorities within the Nepalese banking sector, possibly attributable to increased adoption of digital banking platforms and self-service technologies, which may reduce the immediacy or prominence of direct human interaction. Consequently, promptness in staff responses and the perceived competence and trustworthiness of employees, while traditionally considered important, may hold relatively diminished importance in shaping satisfaction under evolving service delivery models.

Collectively, these findings have important theoretical and practical implications. From a theoretical perspective, the research contributes to the growing body of literature affirming that the relative influence of service quality dimensions is context-dependent and may evolve with technological advancements and changes in customer behavior. Practically, the results highlight strategic focal points for Nepalese commercial banks aiming to enhance customer satisfaction and competitive advantage. By investing in the upkeep and modernization of physical infrastructure, ensuring service reliability through process improvements, and fostering a culture of empathy and personalized customer care, banks can effectively meet and exceed customer expectations.

In a highly competitive and dynamic banking environment, where customer demands are continuously escalating, the ability to prioritize and optimize key service quality dimensions is indispensable for retaining existing customers and attracting new clientele. This study thus serves as a valuable guide for bank managers, policymakers, and practitioners in Nepal, emphasizing the need for customer-centric service enhancement strategies. By leveraging these insights, banking institutions can strengthen customer relationships, enhance loyalty, and secure sustained profitability and growth.

Future research may build upon these findings by exploring the moderating effects of digital transformation on service quality perceptions or examining additional variables such as customer trust, technological readiness, and service innovation. Additionally, longitudinal studies could provide deeper understanding of how customer satisfaction trajectories evolve over time in response to ongoing changes in service delivery paradigms.

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