Exploring the Impact of Customer Relationship Management on Customer Satisfaction in the Banking Industry

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ABSTRACT

Customer relationship management (CRM) has become increasingly important in the services sector, and particularly within the banking industry, as institutions compete to build and retain long-term customer relationships. This study examines the impact of CRM on customer satisfaction in the banking industry of Pakistan, with CRM as the independent variable and customer satisfaction as the dependent variable. CRM is operationalized through six sub-dimensions: service quality, customer database, relationship development, employee behavior, physical environment, and interaction management. Using an explanatory, quantitative research design, a structured questionnaire comprising 26 five-point Likert-scale items was administered to customers of banks operating in Pakistan, yielding 256 usable responses. Data were analyzed in IBM SPSS using reliability testing, descriptive statistics, correlation, and multiple regression analysis. The results show that all six sub-dimensions of CRM are positively correlated with customer satisfaction, and that CRM as a whole has a statistically significant, positive impact on customer satisfaction in the banking sector. Regression results indicate that service quality, customer database, employee behavior, and interaction management are significant predictors of customer satisfaction. At the same time, relationship development and physical environment are not statistically significant in this model. The findings suggest that banks should prioritize service quality and staff conduct, alongside efficient handling of customer problems, in order to strengthen customer satisfaction.

Keywords: CRM, Customer Satisfaction, Service Quality, Customer Database, Relationship Development, Employee Behavior, Physical Environment, Interaction Management, Banking Industry.

INTRODUCTION

All organizations, and financial institutions in particular, are shaped by developments in the broader business environment. Today, firms do not simply aim to satisfy customers; they compete to do so more effectively than their rivals, in order to achieve their strategic goals. A central objective for any organization is to sustain customer satisfaction and to orient its strategy, operations, and processes around the customer. The importance of customer satisfaction cannot be overstated: satisfied customers act as a form of free advertising for a financial institution, and retaining existing customers is widely recognized as easier and more cost-effective than acquiring new ones. Financial institutions, therefore, design their strategies around customer retention, which requires staff who are customer-focused and service-oriented. Contemporary banking loyalty and relationship-marketing evidence supports these retention and service-orientation principles (Kim et al., 2024; Rosário & Casaca, 2023).

Customer relationship management (CRM) refers to the practices, technologies, and strategies that organizations use to manage and analyze interactions with customers throughout the customer lifecycle, with the goal of improving retention and driving business growth. CRM combines technology with process integration to establish, automate, and coordinate activity across marketing, sales, and customer service. A recent systematic review and meta-analysis of the banking-loyalty literature, covering studies from banking markets including Pakistan, India, and China, found that customer satisfaction is the factor most consistently and frequently linked to customer loyalty across banking markets worldwide (Kim et al., 2024), underscoring why CRM, as a central driver of satisfaction, continues to receive sustained research attention.

CRM began as a database-management function, in which customer records were organized in spreadsheets and retrieved largely for marketing purposes. Over time, this evolved into relationship marketing, incorporating techniques such as data mining, and has since matured into a comprehensive approach for managing the full customer lifecycle. CRM is no longer confined to large corporations; it is now considered essential to competitive advantage across almost all forms of enterprise, including banking, and a systematic literature review of relationship-marketing research confirms that these activities significantly shape customer satisfaction, trust, commitment, and communication quality, the factors that ultimately determine whether a customer is retained over the long term (Rosário & Casaca, 2023).

Banks, insurers, and other professional service institutions increasingly recognize CRM's role in helping them acquire new customers, retain existing ones, and increase customer lifetime value. Effective CRM requires close coordination between information technology and marketing functions in order to retain customers over time. Because satisfied customers behave as advocates for the institution, protecting and retaining existing customers is simpler and more cost-effective than acquiring new ones; banks are therefore increasingly building strategies around customer retention and training staff to be more customer- and service-oriented. Banking evidence likewise links CRM capability and complaint handling to stronger customer satisfaction and loyalty outcomes (Al Karim et al., 2024; Akter & Ahmad, 2024).

Customer satisfaction can be defined as the degree to which customers' needs, wants, and expectations are met throughout a product or service experience, which in turn shapes repurchase behavior and customer loyalty. It is widely regarded as a central determinant of customer retention. CRM functions as the applied framework that organizations use to manage their relationships with customers in pursuit of greater profitability, improved performance, and stronger customer loyalty. This relationship is consistently reported in contemporary banking and CRM research (Kim et al., 2024; Aini & Safitri, 2022).

PROBLEM STATEMENT

Competitive pressure within the financial sector makes it essential for banks to maintain direct, high-quality contact with customers in order to build strong relationships and achieve satisfaction. A central challenge is that CRM has become a multi-faceted and complex construct, shaped by numerous interacting factors, and prior research has used varying measures to capture it. As a result, many organizations struggle to identify precisely which CRM measures and dimensions have the greatest effect on customer satisfaction and loyalty — an issue that matters increasingly as competition intensifies and service offerings become harder to differentiate. Identifying which components of CRM most strongly influence customer satisfaction is therefore a critical issue for the banking industry, particularly given the intense competition among financial institutions. This study addresses that issue through the research questions and hypotheses outlined below. The need to distinguish the effects of individual CRM dimensions is also evident in recent relationship-marketing and banking studies (Rosário & Casaca, 2023; Akter & Ahmad, 2024).

LITERATURE REVIEW

CRM and Customer Satisfaction in the Banking Sector

Customer satisfaction consistently emerges as one of the most influential drivers of customer loyalty in banking. A systematic review and meta-analysis of 44 empirical studies on bank customer loyalty, published between 2012 and 2024 across markets including India, Pakistan, Indonesia, and China, found that among ten commonly studied loyalty antecedents, including trust, service quality, image, and commitment, customer satisfaction showed the strongest and most consistent relationship with customer loyalty (Kim et al., 2024). This reinforces why CRM, as the primary organizational mechanism for driving satisfaction, continues to attract sustained empirical attention. A parallel systematic literature review of relationship-marketing research similarly concluded that firms' relationship-marketing and CRM activities significantly shape customer satisfaction, trust, commitment, and communication quality, which together determine whether a customer is retained over the long term (Rosário & Casaca, 2023).

In the banking sector specifically, CRM's individual components do not all carry equal weight. A study of 326 Bangladeshi bank customers found that customer orientation and technology capability significantly strengthened competitive advantage through the mediating effect of customer loyalty, while customer knowledge alone did not (Al Karim et al., 2024). Similarly, research on Bangladeshi commercial bank customers found that customer satisfaction mediates the relationship between banks' broader service-marketing activities and customer loyalty, underlining satisfaction's role as the mechanism that converts good service into durable loyalty (Maniruzzaman & Raihan, 2026).

Direct empirical studies confirm this pattern in banking specifically. In Bangladesh, a study of 108 bank customers in Chattogram found that, among three core CRM constructs, complaint handling had the strongest positive effect on customer satisfaction, followed by service quality, with employee behavior showing a moderate but significant effect (Akter & Ahmad, 2024). A separate quantitative study of 300 bank customers likewise found that CRM practices were positively associated with satisfaction, particularly where customers experienced faster processing times and more personalized service (Tabassum & Chitradevi, 2024).

In the South Asian banking context most relevant to the present study, research on Islamic and conventional banks in Pakistan has repeatedly linked service-quality dimensions — responsiveness, reliability, assurance, empathy, and tangibility to customer satisfaction among both internal (employee) and external (customer) stakeholders (Jawaid et al., 2023). Relatedly, a study of 442 online banking customers in Pakistan during the Covid-19 pandemic found that e-service quality significantly improved e-loyalty, and that this relationship was fully mediated by customers' satisfaction with the online banking experience (Khan et al., 2023), underscoring satisfaction's role as the mechanism connecting service delivery to loyalty even as banking channels shift toward digital platforms. Comparable evidence from Islamic banks in neighboring Bangladesh similarly indicates that customers' perceptions of banking service quality predict both satisfaction and positive word-of-mouth (Rahman et al., 2023).

CRM Sub-Dimensions and Customer Satisfaction

Service quality. Service quality is consistently identified as one of the strongest predictors of customer satisfaction in banking. Among Indian retail-bank customers, service-related determinants significantly shaped customer satisfaction, and this effect was further strengthened when customers held a favorable perception of the bank's overall reputation (Biswas et al., 2022). In Jordan, a study of 173 bank customers found that satisfaction improved substantially when staff were skilled. Banks provided assurance, prompt responses, reliable technology, and strong security and privacy protections (Khashman, 2023), while a separate study of 421 Jordanian e-banking customers found empathy, responsiveness, assurance, security, and trust to be the service-quality dimensions with the greatest impact on satisfaction (Kanfar, 2023). Comparable evidence from 399 bank customers in Nepal found that communication and assurance were significant predictors of customer satisfaction, together with overall service quality. At the same time, empathy and responsiveness showed weaker effects (Upadhyaya et al., 2024). A related Nepalese study confirmed the broader link between service quality, satisfaction, and loyalty in commercial banks (Adhikari et al., 2024).

Customer database and CRM technology. Banks' ability to collect, store, and act on customer information underpins personalized service delivery. Evidence from online banking in Pakistan shows that well-executed e-service quality, which depends on accurate underlying customer data and reliable systems, drives satisfaction and, through it, customer loyalty (Khan et al., 2023). In Bangladesh, technology capability was found to significantly strengthen banks' competitive advantage. This effect operated through customer loyalty rather than directly (Al Karim et al., 2024), suggesting that CRM technology's benefits for satisfaction and retention are often indirect.

Although banking is a distinct service context, adjacent information-systems research shows that users' evaluations of technology-mediated services depend on dependable data handling, system quality, security, and automation. Evidence spans SaaS ERP adoption (Mughal et al., 2022), VoIP communication (Sarwar & Humair

Nawaz, 2021), OCR-based assessment (Malik et al., 2023), smart-home security (Khan et al., 2024), smart-gas safety systems (Shah et al., 2024), and quality-of-experience assessment for over-the-top services (Bamboat et al., 2024).

Related studies on intelligent recognition, smart-class analytics, public-service blockchain platforms, and emergency-response systems likewise highlight the value of accurate, secure, and responsive technology-enabled interactions (Khani et al., 2024; Ali et al., 2025; Dashnyam et al., 2025; Aziz et al., 2026). Broader work on digital-policy frameworks and computer-vision applications further shows that technological capability operates within governance and user-interaction constraints (Shah et al., 2025a, 2025b). Together, this adjacent evidence supports treating CRM technology and interaction management as complementary parts of the customer's service experience.

Relationship development. Sustained relationship-building activity is central to CRM's effect on customer outcomes. Evidence from the banking sector shows that CRM-based relationship-marketing dimensions — trust, communication, commitment, and conflict handling significantly predict customer loyalty (Zegullaj et al., 2023), and systematic-review evidence confirms that this relationship generalizes across markets and time periods (Rosário & Casaca, 2023). Mediation evidence reinforces this picture: among 271 retail banking customers, service quality significantly strengthened customer trust and commitment, which were themselves confirmed as direct predictors of customer loyalty (Redda & van Deventer, 2023); research on Saudi banking customers similarly found that customer trust mediates the effect of customer knowledge management and satisfaction on loyalty (Albarq, 2023), while Islamic-banking evidence shows satisfaction mediating the relationship between service quality, CRM, and loyalty (Aini & Safitri, 2022).

Employee behavior. Front-line staff shape customers' overall experience of a bank. Research in Bangladesh's banking sector found employee behavior to be a significant, moderate-strength predictor of customer satisfaction, alongside service quality and complaint handling (Akter & Ahmad, 2024).

Physical environment. The physical servicescape of a bank branch — its layout, ambiance, and design — continues to shape customer experience even as digital banking expands. A study of 1,346 retail banking customers found that the human element of service partially mediates the relationship between self-service technology and customer satisfaction, and that this mediation is itself moderated by customers' perception of the branch atmosphere (Mason et al., 2022), indicating that physical and human factors interact rather than operating independently. A recent meta-analysis synthesizing prior servicescape research confirms this general pattern, finding that individual servicescape dimensions affect consumer satisfaction to differing degrees depending on the service sector and the surrounding consumer culture (Wang et al., 2025), underscoring that physical-environment effects in banking should not simply be assumed to mirror those found in retail or hospitality settings.

Interaction management. How banks manage customer touchpoints and resolve problems is a recurring theme in recent CRM research. Complaint handling was found to be the single strongest CRM-related predictor of customer satisfaction among Bangladeshi bank customers, ahead of both service quality and employee behavior (Akter & Ahmad, 2024), suggesting that responsive, well-managed customer interaction may carry particular weight in South Asian banking markets.

Taken together, this literature indicates that CRM's individual sub-dimensions consistently relate to customer satisfaction in banking. However, their relative strength varies by context, with complaint handling and service quality tending to dominate in South Asian markets specifically. However, comparatively few studies test all six sub-dimensions — service quality, customer database, relationship development, employee behavior, physical environment, and interaction management together within a single Pakistani banking sample. The present study addresses this gap.

CRM Research Model

This explanatory research identifies the fundamental sub-dimensions of CRM that shape customer satisfaction. Building on the literature reviewed above, the model in Figure 1 proposes that service quality, customer database, relationship development, employee behavior, physical environment, and interaction management jointly determine customer satisfaction in the banking sector.

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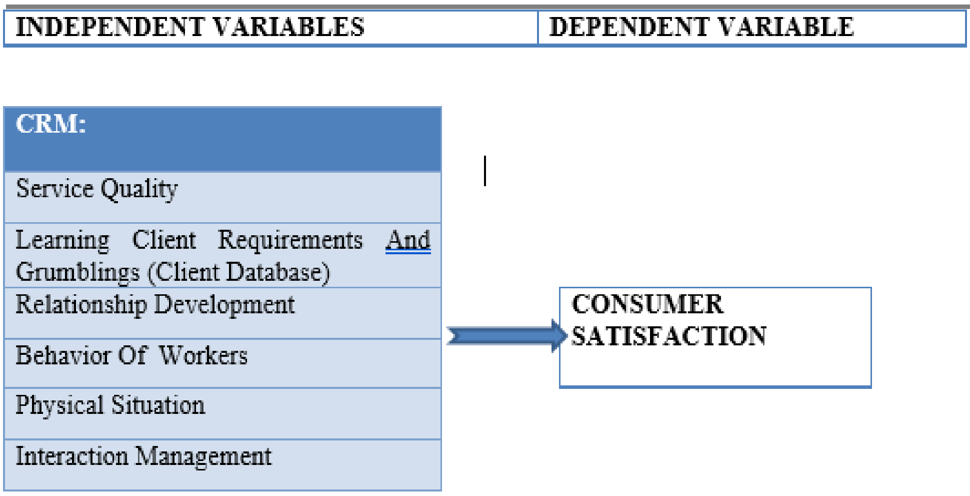

Figure 1. Research Model

Research Hypotheses

The research hypotheses are as follows:

H1: There is a positive relationship between customer relationship management (CRM) and customer satisfaction in the banking industry.

H2: There is a relationship between service quality and customer satisfaction in the banking industry.

H3: There is a relationship between the customer database and customer satisfaction in the banking industry.

H4: There is a relationship between relationship development with clients and customer satisfaction in the banking industry.

H5: There is a statistically significant relationship between the behavior of bank employees and customer satisfaction in the banking industry.

H6: There is a relationship between the physical environment of the bank and customer satisfaction.

H7: There is a relationship between interaction management and customer satisfaction.

RESEARCH METHODOLOGY AND PROCEDURES

This study adopts a descriptive research design, drawing on both primary and secondary data sources. To meet the study's objectives, the data-collection instrument was designed to align with the constructs under investigation. A structured questionnaire was developed for this purpose, comprising two main parts. The first part captured respondents' demographic characteristics — length of relationship with their bank, gender, level of qualification, and the bank they primarily use. The second part addressed the CRM sub-dimensions and their effect on customer satisfaction, using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire contained 22 items measuring the independent variable (CRM) and 4 items measuring the dependent variable (customer satisfaction).

Sampling Technique

The customers of participating banks constituted the target population for this study. A simple random sampling technique was applied.

Sample Size

The study population comprised customers of banks operating in Pakistan. A randomly selected sample of

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customers across various banks in Pakistan formed the sample for this study. A total of 350 questionnaires were distributed via WhatsApp and email, of which 256 usable responses were returned. Respondents were customers of National Bank of Pakistan, Bank Al Habib, Meezan Bank, Standard Chartered Bank, HBL, United Bank Ltd, Bank Alfalah, Al Baraka Bank, Summit Bank, Bank of Khyber, Bank of Punjab, Silk Bank, Askari Bank, Allied Bank, MCB, Habib Metro Bank, Dubai Islamic Bank, Bank Islami, and JS Bank, all operating in Pakistan.

Instrument of Data Collection

Data were collected using a closed-ended questionnaire based on a five-point Likert scale, administered online via Google Forms.

PRESENTATION ANALYSIS

Demographic Analysis

Frequency Analysis

Statistics						
N	**Gender**	**Age**	**Qualification**	**Occupation**	**Years of Dealing with the Bank**	**Name of Bank Dealing With**
Valid	256	256	256	256	256	256
Missing	0	0	0	0	0	0

Table 1. Frequency Analysis

A total of 256 respondents completed the survey questionnaire.

Gender

Gender				
Category	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
Female	81	31.6	31.6	31.6
Male	175	68.4	68.4	100.0
Total	256	100.0	100.0	

Table 2. Gender

Of the 256 respondents, 81 (31.6%) were female, and 175 (68.4%) were male.

Age	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
21 – 30	81	31.6	31.6	31.6
31 – 40	79	30.9	30.9	62.5
41 – 50	44	17.2	17.2	79.7
Above 50	37	14.5	14.5	94.1
Less than 21	15	5.9	5.9	100.0
Total	**256**	**100.0**	**100.0**	

Table 3. Age

Respondents spanned a range of age groups. Of the 256 participants, the largest share (31.6%) fell into the 21–30 age bracket, while the smallest share (5.9%) was younger than 21.

Qualification

Qualification				
Qualification	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
Doctorate	19	7.4	7.4	7.4
Graduate	99	38.7	38.7	46.1
Intermediate/A Level	57	22.3	22.3	68.4
Masters	60	23.4	23.4	91.8
Matriculation/O Level	19	7.4	7.4	99.2
Other	2	0.8	0.8	100.0
Total	256	100.0	100.0	

Table 4. Qualification

Respondents also varied in educational attainment. Of the 256 participants, the largest group (99 respondents, 38.7%) held a graduate-level qualification, while the smallest group (2 respondents, 0.8%) fell into the "other" category.

Occupation

Table 5. Occupation

Respondents' occupations also varied. Of the 256 participants, the largest group (147 respondents, 57.4%) worked in the private sector, while the smallest group (16 respondents, 6.3%) were students.

Years of Dealing with the Bank

Years of Dealing with the Bank				
Period	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
1–5 years	47	18.4	18.4	18.4
11–15 years	61	23.8	23.8	42.2
6–10 years	93	36.3	36.3	78.5
Above 16 years	55	21.5	21.5	100.0
Total	256	100.0	100.0	

Table 6. Years of Dealing with the Bank

The largest group of respondents (93, 36.3%) had dealt with their bank for 6–10 years, while the smallest group (47, 18.4%) had done so for 1–5 years.

DESCRIPTIVE STATISTICS

	N	Minimum	Maximum	Mean	Std. Deviation
Service Quality	256	1.00	5.00	4.2510	.53665
Customer Database	256	1.00	5.00	4.0247	.59832

Behavior of Employees	256	1.00	5.00	4.2917	.58597
Relationship Development with the client	256	1.00	5.00	3.9941	.69766
Physical Environment	256	1.00	5.00	4.1164	.60277
Interaction Management	256	1.00	5.00	4.1250	.61286
Customer Satisfaction	256	1.00	5.00	4.2422	.51061
Valid N (listwise)	256				

Table 7. Descriptive Statistics

Regression Analysis

The data collected for this study were entered into SPSS and subjected to a reliability test (Table 7), which confirmed that the data were reliable and suitable for statistical analysis. Regression analysis was then used to test the study's hypotheses.

Model Summary				
Model	**R**	**R Square**	**Adjusted R-Square**	**Std. Error of the Estimate**
1	.925[a]	.856	.852	.19613

Table 8. Model Summary

The table above presents the regression results for CRM as the independent variable and customer satisfaction as the dependent variable. The R value is 0.925, the R-square value is 0.856, and the adjusted R-square value is 0.852. Ozili (2022) notes that, in social science research, R-squared values between 0.10 and 0.50 are generally considered acceptable provided the explanatory variables are statistically significant; the model's R-squared of 0.856 substantially exceeds this benchmark, indicating a strong overall fit.

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	56.906	6	9.484	246.554	.000
Residual	9.578	249	.038		
Total	66.484	255			

Predictors: (Constant), Interaction Management, Relationship Development, Service Quality, Behavior of Employees, Customer Database, Physical Environment. Dependent Variable: Customer Satisfaction.

Table 9. ANOVA

The table above shows a statistically significant regression outcome, with a Sig value below 0.05, indicating that customer satisfaction is dependent on CRM. The regression analysis, therefore, supports the hypothesis.

Coefficients

Model	B	Std. Error	Beta	t	Sig.
(Constant)	.242	.107		2.268	.024
Service Quality	.265	.034	.278	7.810	.000
Customer Database	.125	.031	.146	4.075	.000
Behavior of Employees	.287	.033	.329	8.771	.000

Relationship Development with the client	-.012	.026	-.017	-.474	.636
Physical Environment	.033	.038	.039	.869	.385
Interaction Management	.256	.034	.307	7.453	.000

Table 10. Coefficients

The results indicate that service quality ($B = 0.265$, $p < .05$), customer database ($B = 0.125$, $p < .05$), employee behavior ($B = 0.287$, $p < .05$), and interaction management ($B = 0.256$, $p < .05$) are significant, positive predictors of customer satisfaction. Relationship development with clients ($B = -0.012$, $p = .636$) and physical environment ($B = 0.033$, $p = .385$) were not statistically significant predictors in this model.

CONCLUSIONS

This study set out to examine the impact of CRM on customer satisfaction, with a view to understanding how it fosters customer loyalty in the banking industry of Pakistan. The sample comprised customers of banks operating across Pakistan, with CRM's sub-dimensions serving as the independent variables and customer satisfaction as the dependent variable. The findings show that CRM's sub-dimensions are collectively responsible for shaping customer satisfaction. This suggests that banks should place greater emphasis on the quality of service provided to customers and on resolving customer problems and complaints promptly, since these were the factors most strongly associated with customer satisfaction in this sample.

RECOMMENDATIONS

Banks should be seen as a source of added value tailored to customer needs, and should treat CRM as a strategic tool for achieving competitive advantage through customer satisfaction. Based on the conclusions above, the following recommendations are proposed:

1. Banks in Pakistan should conduct dedicated training programs for front-line staff, equipping them to manage customers effectively by applying core CRM principles within the financial industry.
2. Bank management should improve the processes and procedures used to handle customer complaints and problems promptly, as this can strengthen both CRM outcomes and customer satisfaction.
3. Banking institutions should pay particular attention to the physical environment and the quality of staff interaction with customers, both of which are closely linked to customer satisfaction.

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