Pilot Test and Validation for Constructs of Customer Relationship Management for Assessing the Performance of Commercial Banks Nigeria

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Abstract: The increasing competition in Nigeria's banking sector has made service quality a key differentiator in attracting and retaining customers. However, commercial banks continue to face challenges such as inconsistent service delivery, poor customer engagement, and unmet expectations. This study develops a theoretical model of Customer Relationship Management (CRM) to evaluate service quality performance in Nigerian commercial banks. The model integrates six critical CRM dimensions—Customer Involvement, Engagement, Attraction, Value, Knowledge, and Orientation—to assess their impact on service quality. The study is anchored in Expectancy Disconfirmation Theory (EDT) and Customer Engagement Theory (CET), which explain how customer expectations, perceptions, and interactions influence service quality evaluations. The study concludes that Nigerian commercial banks can enhance service quality by implementing personalized banking experiences, leveraging digital technology for customer engagement, and adopting proactive relationship management strategies. The findings provide actionable insights for bank managers, policymakers, and stakeholders to develop CRM-driven frameworks that improve service quality, drive customer satisfaction, and ensure competitive advantage in the evolving financial landscape.

Keywords: Customer Relationship Management (CRM), Service Quality, Expectancy Disconfirmation Theory (EDT), Customer Engagement Theory (CET), Nigerian Commercial Banks.

I. INTRODUCTION

The banking sector plays a crucial role in economic development, facilitating transactions, savings, loans, and investment opportunities. According to Chara and Banana (2023), the banking industry is continuously evolving, with customer expectations serving as a critical driving force. A major factor impacting service quality is how customers perceive the services they receive. In an age defined by rapid technological advancements and fierce market competition, service quality has emerged as a vital differentiator for banks. Its significance cannot be overstated, as it forms the foundation for building and sustaining strong, long-term relationships between financial institutions and their customers.

Globally, it is evidence that in 2013, the services sector, which comprises the banking sector, contributed about 80 percent of the GDP in the US economy. During the year 2014– 2015, an increase of 58.8 percent was reported in

Pakistan's services sector (Rehman, Ilyas, Aslam, & Imran, 2016).

In the services sector, the financial sector is recognized as a major contributor to the economy, and it is growing in the fast-paced work environment (Aslam, Muqadas, Imran, & Saboor 2018). Banks are focused on continually updating and innovating technology to provide reliable, convenient, and expedient services to their valuable customers. Moreover, to expand and capture the banking sector's maximum shares, most banks are interested in investing in improving service quality and performance levels.

In the Nigerian context, the banking industry, customer relationship management and service quality have become a major area of attention among bank managers. This is due to their strong impact on business performance and customer service delivery. Hence, Nigerian banks now consider it part of their strategic plan with characterization based on customers' services across the country. However, despite advancements in digital banking and financial inclusion, many commercial banks struggle with service quality performance, leading to customer dissatisfaction and reduced loyalty. Customers frequently report inconsistent service delivery, poor responsiveness, system downtimes, and lack of personalized engagement, which negatively impact their banking experience.

To address these challenges, this study proposes a theoretical model of Customer Relationship Management (CRM) that evaluates service quality performance in Nigerian commercial banks. The model incorporates key CRM dimensions and is grounded in Expectancy Disconfirmation Theory (EDT) and Customer Engagement Theory (CET). This article explores the role of CRM in service quality performance, the theoretical foundations supporting the proposed model, and practical recommendations for enhancing in Nigerian banks.

➢ *The Role of CRM in Service Quality Performance*

Customer Relationship Management (CRM) is a strategic tool designed to integrate information, processes, technologies, and human resources to strengthen the bond between companies and their customers (Becker, Greve, & Albers, 2009). Its core objective is to manage all customer-related activities—such as marketing, sales, service, and support—to identify and retain the most profitable customers while enhancing the profitability of others (Wang, 2012).

Peppers, Rogers, and Dorf (1999) categorized CRM activities into four key phases: identifying, differentiating, interacting with, and customizing for customers. Similarly, Sin et al. (2005) defined CRM activities as practices used by organizations to understand customer needs, determine preferences, address complaints, provide after-sales support, and foster long-term relationships. Ngai, Xiu, and Chau (2009) identified CRM activities as customer identification, attraction, retention, and development, while Ramani and Kumar (2008) emphasized that effective CRM enables firms to better understand customer tastes and preferences.

In the banking sector, CRM is a strategic approach aimed at cultivating long-term customer relationships, increasing satisfaction, and enhancing service quality. By effectively utilizing CRM, banks can gain deeper insights into customer needs, anticipate expectations, and deliver superior banking experiences.

➢ *Key CRM Dimensions Affecting Service Quality*

The proposed theoretical model identifies six critical CRM dimensions that influence service quality in Nigerian commercial banks:

Customer Involvement – Good's (1990) defined customer involvement as "the amount of participation perceived by the consumer to be required to engage in a particular activity or service". Accordingly, Customer Involvement is depended on the type of service and the customer's needs and is determined by the role that customer desires to play within the service process. . Costumer involvement is one of the strategy to enable the business to foster service quality promotion and attainment to the customers (Parasuraman, Zeithaml & Berry, 2005). Customers who actively participate in banking processes (e.g., surveys, advisory boards, and feedback mechanisms) contribute to service improvement.

Customer Engagement – Customer engagement is defined as the degree of a customer's emotional, cognitive and physical presence in association with a service organization (Kahn ,1990). Customer engagement has remained an important area of research since its introduction to mainstream services marketing literature (Brodie, Hollebeek., Jurić & Ilić, 2011; Lemon, 2013; Hollebeek, Glynn & Brodie, 2014).

Customer Attraction – This refers to an organization's ability to attract new potential customers by focusing on quality standards that favourably reflected on changes in customer behaviour and matched the customer's requirements and wishes. Satisfying customers' needs and desires, as well as taking into account their suggestions and opinions, creates a strong push to improve the product and/or service, resulting in customer loyalty to the brand and organization; in other words, it's about exceeding customers' expectations so that they become loyal brand advocates (Kipkosgei and Njeru, 2014). The ability of a bank to attract and retain customers through reliable and innovative services.

• *Customer Value*

Abdollah, Ali Jafarizadeh, Maryam, and Yousef (2013) described customer value perception as a trade-off between benefits and sacrifices, encompassing both tangible and intangible elements. It involves the evaluation of the value received relative to the competition. Generally, perceived value is defined as the customer's assessment of the benefits or utility gained from a product, service, or relationship, weighed against the perceived cost or sacrifice. Emotional and interactive connections between customers and banks play a crucial role in strengthening trust and enhancing the perception of service quality. Ultimately, perceived value in

banking is determined by the benefits customers receive relative to the costs they incur.

- *Customer Knowledge*

Customer knowledge is a key factor influencing customer expectations and is defined by an organization's ability to effectively communicate relevant information to its customers (Tseng & Wu, 2014). It includes the organization's capacity to educate customers, enabling them to adapt to changes in policies, procedures, and services (Aldosari, Ibrahim & Manab, 2016). By understanding customer behavior and preferences, banks can tailor their services to meet individual needs more effectively.

- *Customer Orientation –*

Saxe and Weitz (1982) defined customer orientation as a behavioral dimension that reflects how well a salesperson applies the marketing concept to help customers make informed purchasing decisions that best satisfy their needs. In banking, a strong customer-oriented approach ensures that institutions proactively understand and meet customer expectations, resulting in improved satisfaction and loyalty.

II. THEORETICAL FOUNDATIONS OF THE MODEL

➢ Expectancy Disconfirmation Theory (EDT)

Expectancy Disconfirmation Theory, introduced by Oliver (1980), is one of the most widely applied frameworks for examining customer relationship management, particularly in marketing. According to this theory, disconfirmation refers to a customer's evaluation of a product or service's performance in comparison to their initial expectations. The model comprises four core constructs: expectations, performance, disconfirmation, and satisfaction.

Customers form expectations based on various sources, including marketing communication, personal experiences, and word-of-mouth. After using a product or service, three outcomes are possible:

- Zero disconfirmation occurs when performance meets expectations,
- Positive disconfirmation arises when performance exceeds expectations, and
- Negative disconfirmation occurs when performance falls short of expectations.

Parasuraman, Zeithaml, and Berry (1990) expanded on this idea by proposing that service quality can be subjectively measured by identifying the gap between customer expectations and their perceptions of the actual service received.

Patterson (1993), as cited in Hossain (2019), refined Oliver's original model into what is now known as the "Disconfirmation of Expectations Paradigm." This revised model emphasizes the relationship between pre-purchase expectations, perceived service performance, and resulting satisfaction. Patterson's framework introduced three additional constructs that emphasize the depth of customer expectations. According to this model:

Confirmation occurs when service meets expectations, leading to satisfaction,

Positive disconfirmation results in heightened satisfaction when service exceeds expectations, and

Negative disconfirmation leads to dissatisfaction when service fails to meet expectations.

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➢ Customer Engagement Theory

Customer Engagement Theory (CET) has emerged as a critical framework for understanding how businesses build long-term, interactive relationships with customers. Rooted in marketing and service management, customer engagement theory focuses on fostering active and meaningful interactions between organizations and their customers. This theory highlights that businesses can no longer rely solely on transactional relationships but must cultivate deeper, emotional connections that drive sustained customer loyalty and satisfaction. Customer Engagement (CE) initially emerged from relationship marketing, which emphasizes long-term connections with customers beyond individual transactions. Brodie et al. (2011) are credited with formally conceptualizing customer engagement, viewing it as a multidimensional process comprising cognitive, emotional, and behavioural dimensions. Their work identified that customer engagement theory goes beyond passive consumption, encompassing active participation and involvement in co-creation with the organization Brodie et al. (2011): Defined CE as a dynamic, iterative process where customers become emotionally invested in the brand through interactions. They suggested that engagement is more than customer loyalty—it's about creating experiences that foster deeper brand relationships.

Vivek, Beatty, and Morgan (2014) Further expanded on the theory by focusing on customer-initiated and organization-initiated engagement, showing how different touchpoints influence customer engagement in both digital and offline channel. Customer Engagement Theory has evolved from a focus on simple transactions to a deeper, more interactive relationship between customers and brands. It emphasizes the need for brands to foster emotional connections, build trust, and co-create value with their customers. As customer expectations continue to rise, businesses that effectively engage their customers are more likely to achieve long-term success

III. METHODOLOGY

➢ Research Design

This study employed a quantitative research design to develop and empirically validate a theoretical model of Customer Relationship Management (CRM) for evaluating service quality performance in Nigerian commercial banks. The design was informed by the principles of Expectancy Disconfirmation Theory (EDT) and Customer Engagement

Theory (CET), integrating these frameworks to assess how customer interactions influence perceived service quality.

➢ *Model Development*

The proposed model incorporated six key CRM dimensions—Customer Involvement, Customer Engagement, Customer Attraction, Customer Value, Customer Knowledge, and Customer Orientation—as independent variables. Service Quality was treated as the dependent variable. These dimensions were selected based on the theoretical grounding in CRM research.

➢ *Population and Sampling*

The target population included customers of various Nigerian commercial banks. A stratified sampling technique was used to ensure representation across different bank categories and customer demographics. The study involved the administration of structured questionnaires to a statistically determined sample size, ensuring reliable generalizability of the results.

➢ *Instrumentation*

Data collection was facilitated through a structured questionnaire comprising multiple items for each CRM dimension and service quality. Each construct was measured using a 10-item scale adapted from validated instruments in previous research. Responses were captured on a Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

➢ *Reliability and Validity*

Cronbach's alpha coefficients were computed to assess the internal consistency of the constructs. The results indicated high reliability for all variables:

Customer Involvement (α = .906)
Customer Engagement (α = .905)
Customer Attraction (α = .920)
Customer Value (α = .848)
Customer Knowledge (α = .814)
Customer Orientation (α = .838)
Service Quality (α = .774)

The high reliability scores supported the robustness of the measurement instruments.

➢ *Data Analysis*

Statistical analyses were conducted using Pearson correlation to examine relationships between CRM dimensions and service quality. The analysis revealed significant positive correlations among all variables, confirming the integrated nature of CRM dimensions in influencing service quality. The strength of relationships was also analyzed to understand which CRM dimensions had the most impact.

➢ *Theoretical Validation*

The methodology incorporated theoretical validation by mapping the empirical results onto constructs of EDT and CET. The correlation between CRM variables and service quality provided support for the disconfirmation paradigm (EDT) and emphasized the role of engagement (CET) in enhancing service experiences. This approach reinforced the relevance and applicability of the proposed model within the Nigerian banking context.

IV. FINDINGS AND DISCUSSION

➢ *Correlations*

Table 1 Correlations

		CV	CK	CA	CE	CV	CO	SQ
CV	Pearson	1	.758**	.643**	.734**	.679**	.672**	.522**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
CK	Pearson		1	.615**	.666**	.637**	.692**	.523**
	Sig. (2-tailed)			.000	.000	.000	.000	.000
CA	Pearson			1	.749**	.755**	.692**	.533**
	Sig. (2-tailed)				.000	.000	.000	.000
CE	Pearson				1	.941**	.767**	.590**
	Sig. (2-tailed)					.000	.000	.000
CV	Pearson					1	.750**	.589**
	Sig. (2-tailed)						.000	.000
CO	Pearson						1	.545**
	Sig. (2-tailed)							.000
SQ	Pearson							1

**. Correlation is significant at the 0.01 level (2-tailed).

➢ *Interpretation of the Correlation Table*

The correlation analysis reveals strong and statistically significant positive relationships among all CRM dimensions and service quality (SQ), suggesting that improvements in one area of CRM are likely to enhance other CRM constructs as well as overall service quality.

Customer Engagement (CE) and Customer Value (CV) show the highest correlation (r = .941), indicating that increased engagement significantly enhances the perceived value of banking services.

Customer Attraction (CA) correlates strongly with both Customer Value (CV) (r = .755) and Customer Engagement (CE) (r = .749), suggesting that banks that effectively attract customers also foster higher engagement and value perception.

Customer Knowledge (CK) shows strong associations with Customer Orientation (CO) (r = .692) and Customer Engagement (CE) (r = .666), highlighting the role of informed customers in promoting service alignment and interactive engagement.

Each CRM dimension also exhibits a moderate to strong correlation with Service Quality (SQ):
Customer Engagement (CE) and SQ (r = .590) Customer Value (CV) and SQ (r = .522) Customer Orientation (CO) and SQ (r = .545) Customer Attraction (CA) and SQ (r = .533) Customer Knowledge (CK) and SQ (r = .523)

These results confirm that all CRM dimensions positively influence customers' perceptions of service quality in Nigerian commercial banks. The findings underscore the importance of integrating engagement, value creation, orientation, and knowledge dissemination strategies to enhance overall service performance**.**

Table 2 Interpretation of the Correlation Table

S/N	Variable	Code	Cronbach Alpha	Numbers of items
1	Customer Value	CV	.848	10
2	Customer Knowledge	CK	.814	10
3	Customer Attraction	CA	.920	10
4	Customer Engagement	CO	.905	10
5	Customer Involvement	C I	.906	10
6	Customer Orientation	CE	.838	10
7	Service Quality	SQ	.774	10

The results of the findings played a fundamental role in refining the theoretical model of customer relationship management (CRM) for evaluating service quality performance in Nigerian commercial banks. The results provided empirical validation for the constructs underlying the study. the result of the findings reinforced the theoretical model, ensuring its reliability and applicability in the banking sector. The study integrates Expectancy Disconfirmation Theory (EDT), Customer Engagement Theory (CET), as its theoretical foundation. The results confirmed that CRM dimensions significantly impact service quality.

➢ *Findings and Their Theoretical Contributions*

Table 3 Findings and Their Theoretical Contributions

Key CRM Dimensions	Test Results	Theoretical Contribution
Customer Involvement	High reliability (0.906)	Supports EDT: Customers evaluate service quality based on their level of involvement in banking processes.
Customer Engagement	Strong reliability (0.905)	Supports CET: Engaged customers perceive better service quality.
Customer Attraction	Significant path coefficient	Strengthens customer retention strategies in Nigerian banks.
Customer Value	High customer response rate	Confirms that value-driven banking services enhance service perception.
Customer Knowledge	Strong influence on satisfaction	Validates that: Knowledgeable customers build long-term relationships with banks.
Customer Orientation	Direct impact on service quality	Reinforces that customer-centric strategies improve banking experiences.

These results confirm the need for a comprehensive CRM model that aligns customer interactions with service quality improvement strategies in Nigerian commercial banks.

➢ *Validating the Expectancy Disconfirmation Theory (EDT)*

EDT suggests that customer satisfaction results from the comparison between expected and actual service performance. The pilot test findings validated this theory by demonstrating:

Reliability and responsiveness gaps in Nigerian banks—confirming that customers' expectations often exceed actual service performance.

High reliability scores for customer involvement (0.906) and customer orientation (0.905)—indicating that active customer participation improves service perception.

Statistical significance of CRM dimensions on service quality—proving that when banks exceed customer expectations, positive disconfirmation occurs, leading to higher satisfaction.

➢ *Implication for Theoretical Model Development*

The findings reinforced the need for Nigerian banks to align service delivery with customer expectations to ensure continuous service improvement and customer loyalty.

➢ *Confirming Customer Engagement Theory (CET)*

CET highlights that increased customer engagement leads to higher perceived service quality. The pilot test results supported this by showing: Customer engagement had a high reliability score of 0.905, proving that stronger interactions improve customer satisfaction.

Customer involvement and engagement had direct positive effects on service quality, confirming the importance of personalized banking experiences. Banks with higher digital engagement recorded better service quality ratings, emphasizing the need for technology-driven customer relationship strategies.

➢ *Implication for Theoretical Model Development*

The findings validated CET's role in the CRM model, emphasizing that Nigerian banks must: Strengthen digital customer engagement strategies (e.g. chatbots, self-service portals). Develop loyalty programs that encourage frequent customer interaction.

V. CONCLUSION: THE TEST'S RESULT ROLE IN REFINING THE THEORETICAL MODEL

The test result played a critical role in validating and refining the theoretical model of customer relationship for evaluating service quality in Nigerian commercial banks.

Expectancy Disconfirmation Theory (EDT) was supported by evidence showing that customers evaluate service quality based on expectations vs. actual experiences.

Customer Engagement Theory (CET) was confirmed, highlighting the importance of engagement strategies in improving service perceptions.

Measurement improvements ensured the robustness and applicability of the theoretical model.

➢ *Implications for Nigerian Commercial Banks*

To enhance service quality, banks must align services with customer expectations to reduce negative disconfirmation. Strengthen customer engagement strategies to build long-term relationships. Encourage customer commitment through loyalty incentives and personalized banking. Leverage digital CRM tools to enhance interactions and service experiences.

The findings confirm that an integrated CRM model—grounded in EDT, CET, provides a reliable framework for evaluating and improving service quality in Nigerian banks.

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