# **Innovations**

# **Examining the Effect of Electronic Customer Relationship Management** (E-CRM) on Customer Satisfaction in the Ethiopian Banking Sector

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Abstract: This study investigates the impact of Electronic Customer Relationship Management (E-CRM) practices on customer satisfaction within the rapidly evolving Ethiopian banking sector. As banks increasingly adopt digital platforms for personalized services, E-CRM emerges as a crucial tool for enhancing customer experiences and fostering loyalty. Focusing on dimensions such as customized products, transaction security, alternative payment methods, problem-solving, and online feedback, the research examines their influence on customer satisfaction in three major banks in Addis Ababa: Awash Bank, Bank of Abyssinia, and Dashen Bank. Utilizing the Stimulus-Organism-Response (S-O-R) model, a mixedmethods approach was employed, collecting quantitative data through an online survey of 570 E-CRM users and qualitative insights from secondary sources. Findings reveal a significant positive correlation between E-CRM practices and customer satisfaction (r = 0.498), with transaction security rated highest. Regression analysis confirms that personalized communication and secure transactions significantly enhance satisfaction (Beta = +0.43, t =5.159, p < 0.001). The study highlights the need for banks to prioritize effective E-CRM strategies, particularly in personalization and security, to maintain a competitive edge. It also calls for future research to adopt longitudinal methods and explore broader contexts.

Keywords: E-CRM, customer satisfaction

#### Introduction

In the 21st century, technological advancements have significantly transformed marketing strategies, placing a strong emphasis on building customer relationships. The rise of digital platforms, such as websites, social media, and mobile applications, has enabled organizations to collect vast amounts of customer data, facilitating personalized experiences and more effective relationship marketing (Olupot & Mayoka, 2012). As a result, Electronic Customer Relationship Management (E-CRM) has emerged as a powerful tool for businesses, enabling them to leverage this data to enhance customer satisfaction, retention, and loyalty through personalized interactions and improved communication (Jamali et al., 2017; Adlin et al., 2019).

E-CRM's ability to offer real-time, customized services has been shown to foster long-term relationships and improve business profitability (Mousavai et al., 2015; Rashwan et al., 2019). In the banking sector, specifically, E-CRM practices have been linked to increased customer satisfaction, loyalty, and overall financial performance (Salehi et al., 2015; Oumar et al., 2017). Despite the proven successes of E-CRM in developed economies, its application in emerging markets, particularly Ethiopia, remains underexplored. The Ethiopian government's push for digital transformation, as seen in initiatives like Digital Ethiopia 2025, combined with the rapid expansion of internet access, presents a unique opportunity for E-CRM to enhance customer service and satisfaction within the banking sector.

However, the successful implementation of E-CRM in Ethiopia's banking industry faces specific challenges that are not well documented in the literature. These include the need to adapt global E-CRM strategies to local contexts, address customer expectations, and overcome technological limitations (Mang'unyi et al., 2018). This study seeks to fill this gap by investigating how E-CRM can be optimized to improve customer satisfaction in Ethiopia, thereby contributing to a broader understanding of its role in emerging economies and offering valuable insights for businesses in similar developing markets.

#### Statement of the Problem

The increasing importance of customer relationships has led organizations across various industries to adopt advanced marketing strategies, particularly through technology and effective communication channels (Abdulfattah, 2012). One such strategy, Electronic Customer Relationship Management (E-CRM), has emerged as a vital tool for enhancing customer engagement, personalizing experiences, and improving cost-efficiency in customer acquisition (Adlin et al., 2019; Sittisom, 2020). E-CRM allows banks to interact with customers in real time, providing personalized services that enhance overall customer satisfaction. However, successful implementation of E-CRM necessitates robust data gathering and effective utilization of customer insights (Jamali et al., 2017).

Despite extensive research on E-CRM's effectiveness in developed economies, there is a significant gap in understanding its application within emerging markets like Ethiopia, where digital transformation is progressing and internet penetration is increasing. The Ethiopian banking sector faces unique challenges, including product homogeneity, intense competition, and evolving customer demands (Singh & Chauhan, 2018). Additionally, concerns regarding cybercrime have raised issues about the security of digital banking services, impacting customer trust. Nevertheless, opportunities for E-CRM in Ethiopia are growing, driven by an expanding internet user base and government initiatives such as the Digital Ethiopia 2025 strategy aimed at modernizing the financial sector (Dehghanpouri et al., 2020; Mang'unyi et al., 2018).

Traditional Customer Relationship Management (CRM) practices, which often lack proactive approaches, are increasingly inadequate in meeting the demands of modern consumers. E-CRM, with its proactive and analytical nature, offers a more effective solution for banks striving to thrive in the digital age (Singh & Chauhan, 2018). As customer expectations evolve, banks must focus not only on attracting new customers but also on satisfying and retaining existing ones to maintain profitability and competitive advantage (Abu-Shanab & Anagreh, 2015; Lee-Kelley et al., 2003). In this highly competitive environment, customer satisfaction has become a key differentiator, particularly in the banking sector.

Furthermore, while E-CRM leverages web-based technologies to automate marketing, sales, and customer service processes, enabling banks to provide 24/7 access to services and personalized information (Jamali et al., 2017; Rashwan et al., 2019), research on its effectiveness within the Ethiopian banking context remains limited. Existing studies have primarily focused on developed countries (Mang'unyi et al., 2018), raising concerns about the applicability of Western-developed management models in resource-constrained countries like Ethiopia, where sociocultural and economic differences can significantly impact the adoption and success of strategies like E-CRM (Farh et al., 2004; Budhwar, 2009; Khan et al., 2020).

This study aims to address these gaps by investigating how E-CRM practices influence customer satisfaction in Ethiopian banks and examining the applicability of Westerndeveloped E-CRM models in the Ethiopian context, considering the country's unique cultural, political, technological, and economic landscape. The importance of customer satisfaction in the banking sector is well-established, as satisfied customers are more likely to remain loyal and recommend services to others, creating a positive cycle of customer retention and acquisition. Understanding how E-CRM practices impact customer satisfaction is crucial for banks to remain competitive in the face of heightened competition and the digital transformation of the Ethiopian banking sector.

#### Research Question (RQ):

What is the effect of Electronic Customer Relationship Management (E-CRM) on customer satisfaction in selected commercial banks in Ethiopia?

#### Research Objective:

> To examine the impact of Electronic Customer Relationship Management (E-CRM) practices on customer satisfaction in selected commercial banks in Ethiopia.

#### Literature review

# **Customer Satisfaction: Definition and Importance**

Customer satisfaction is a foundational concept in business that focuses on creating value by meeting customer needs and expectations (Yamuna, 2020). It plays a critical role in determining profitability and consumer well-being (Vetrivel et al., 2020). According to Oliver (2010), customer satisfaction can be defined as the fulfillment response derived from customers' perceptions of their experiences with products or services. This overall evaluation of the consumption experience is integral to understanding customer satisfaction (Johnston, 1995). Kotler and Keller (2016) emphasize that satisfaction occurs when customer expectations are exceeded by actual service performance; conversely, unmet expectations lead to dissatisfaction (Zeithaml et al., 1996). In the banking sector, where services are intangible and competition is intense, customer satisfaction becomes particularly critical. High levels of satisfaction correlate with improved service delivery, long-term profitability, and competitive advantage (Kaura, 2013). Satisfied customers are not only more loyal but also more likely to promote the services through positive word-ofmouth, which fosters repeat business (Basha et al., 2020; Hayati et al., 2020). As banks become more customer-centric, delivering personalized, high-quality services is essential for enhancing satisfaction and strengthening their market position (Vetrivel et al., 2020; Li et al., 2021).

# E-CRM: Concept, Dimensions, and Impact on Customer Satisfaction

The emergence of digital technologies has transformed traditional customer relationship management (CRM), leading to the rise of Electronic Customer Relationship Management (E-CRM). E-CRM leverages digital platforms such as websites, mobile apps, social media, and email to enhance customer satisfaction by facilitating real-time interactions and personalized services (Adlin et al., 2019). It allows banks to gather valuable customer insights, enabling the tailoring of products and communication strategies to better meet customer needs. This shift from traditional CRM to E-CRM underscores the increasing reliance on data-driven insights to improve customer satisfaction.

#### E-CRM incorporates several dimensions that contribute to its effectiveness:

- 1. Customized Products/Services: Tailoring offerings to meet individual preferences (Du et al., 2003; Oumar et al., 2017).
- 2. Transaction Security/Privacy: Ensuring the protection of customer data (Liu et al., 2008; Rashwan et al., 2019).
- 3. Alternative Payment Methods: Providing convenient payment options (Khalifa & Shen, 2005).
- 4. Problem Solving: Efficiently addressing customer inquiries (Khalifa & Shen, 2005; Abdulfattah, 2012).
- 5. Online Feedback: Enabling customers to offer suggestions for service improvement (Abdulfattah, 2012).

6. **FAQs**: Offering self-service options for common questions (Ahmed, 2009).

#### Theoretical Framework: The S-O-R Model

The integration of E-CRM into banking practices represents not only a technological advancement but also a strategic shift in customer engagement. This study uses the Stimulus-Organism-Response (S-O-R) model as its theoretical framework. The S-O-R model suggests that E-CRM practices (the stimulus) influence customers' emotional and cognitive responses (the organism), which, in turn, affect their satisfaction and subsequent behavior (the response). This model provides a novel lens through which to examine the dynamics between E-CRM and customer satisfaction in the Ethiopian banking context.

# In the banking sector, several key dimensions influence customer satisfaction, including:

- Content: The accuracy and comprehensiveness of information on online platforms (Doll et al., 1994).
- Accuracy: Correctness of information, where higher accuracy leads to greater 2. satisfaction (Somers et al., 2003).
- Format: Presentation of information affects usability and satisfaction (Doll et al., 1994).
- Ease of Use: User-friendly platforms enhance customer experience (McHaney et al., 2002).
- Timeliness: Quick resolution of queries is essential for maintaining satisfaction (Somers 5. et al., 2003).
- Safety: The perceived security of online transactions directly influences customer trust and satisfaction (Keen, 1997).

#### **Empirical literature review**

#### E-CRM Evolution and its effect

Electronic Customer Relationship Management (E-CRM) emerged in the mid-1990s alongside the rise of the internet, transforming traditional CRM practices by adapting them to the digital environment (Ismail & Hussin, 2017). Early studies, including Grover (2011), highlighted how E-CRM through e-commerce platforms enhanced customer loyalty and marketing effectiveness. However, challenges such as customer trust and legislative issues were noted. In subsequent years, research by Azila and Noor (2012) and Maroofi et al. (2012) further emphasized the importance of trust and commitment in enhancing E-CRM performance, especially in the banking and mobile services sectors. They established that trust significantly influences customer retention and satisfaction.

The literature also identified key themes in E-CRM, showing its potential to improve customer relationships, service quality, loyalty, and reduce operational costs (Olupot & Mayoka, 2012; Kaur & Kaur, 2016). Recent studies, including Khanh et al. (2021) and Vidya and Shanthi (2021), reinforced the strategic role of E-CRM in enhancing organizational performance, highlighting the need for reliable systems that align with customer needs. Despite its potential, challenges regarding data privacy and security remain persistent. Future research points to emerging technologies and ethical considerations to fully harness E-CRM's potential for customer satisfaction and business growth.

#### **Customer Satisfaction in Banking**

The concept of customer satisfaction in banking has evolved since the 1950s, gaining prominence in the 1970s (Tse & Wilton, 1985; Day & Bodur, 1977). Defined as a pleasurable response to consumption (Oliver, 2010), customer satisfaction in banking includes several dimensions such as service quality, perceived price fairness, and convenience. Chen et al. (2012) developed a model for measuring customer satisfaction in internet banking, identifying six key dimensions: content, accuracy, format, ease of use, timeliness, and safety. Kaura (2013) found that these dimensions, along with service quality, significantly impact customer satisfaction in Indian banks.

Further research by Narteh and Kuada (2014) and Unya thanakorn and Rompho (2014) identified relational and core factors as critical determinants of satisfaction in the banking sectors of Ghana and Thailand. Studies by Bihari and Mahapatra (2016) and Kant and Jaiswal (2017) also emphasized reliability and responsiveness as key factors in customer satisfaction.

In recent studies, the role of technology in banking satisfaction has been increasingly recognized. Banu et al. (2019) applied the Technology Acceptance Model, highlighting the importance of trust and awareness in online banking satisfaction. Vetrivel et al. (2020) found that website efficiency and trust are crucial for customer satisfaction in internet banking. Additionally, studies by Basha et al. (2020) and Li et al. (2021) indicated that service quality, ease of use and security are essential to enhancing customer satisfaction in digital banking, particularly in emerging markets.

### Conceptual framework and proposedstudy Model

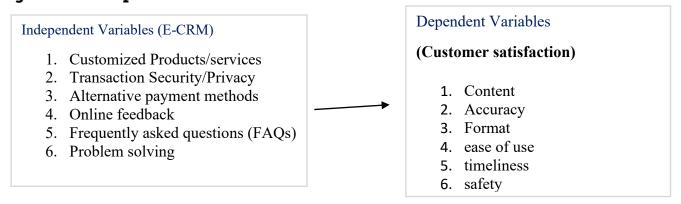
This study investigates the impact of Electronic Customer Relationship Management (E-CRM) on customer satisfaction in the banking sector. E-CRM encompasses critical dimensions such as customized products/services, transaction security/privacy, alternative payment methods, problem-solving, online feedback, and FAQs. These dimensions enhance operational efficiency and foster personalized customer relationships, significantly influencing customer satisfaction and providing a competitive edge (Kaur, 2016; Al-Dmour et al., 2019).

The research is grounded in the Stimulus-Organism-Response (S-O-R) model (Donovan & Rossiter, 1982), positing that E-CRM acts as an external stimulus that influences customers' internal states, leading to specific responses in the form of satisfaction. By utilizing digital

platforms—including websites, mobile apps, and social media—E-CRM delivers tailored products and communication (Mousavai et al., 2015).

The study aims to explore how E-CRM practices affect customer satisfaction through dimensions such as service personalization and security. Key factors assessed will include content relevance, accuracy, ease of use, timeliness, and security (Chen et al., 2012). The proposed model suggests that effective E-CRM positively influences customer satisfaction, thereby enhancing retention, loyalty, and business success—underscoring the need for strategic investment in digital relationship management for sustainable competitive advantage in the banking sector.

Figure 1: Conceptual framework



Source: Adapted from Mulyono & Situmorang (2018) and the author's conceptualization

#### Hypothesis of the study

**H011:** E-CRM has a positive and significant effect on customer satisfaction.

**HA11:** E-CRM does not have a positive and significant effect on customer satisfaction.

#### Methodology

Research philosophy and approach: This study adopts a mixed-methods approach, combining quantitative and qualitative research techniques to explore the impact of E-CRM on customer satisfaction in the Ethiopian banking sector. The pragmatic research philosophy guides this approach, emphasizing the importance of practical applications and real-world relevance.

Research Design: A cross-sectional research design is employed to collect data at a specific point in time, enabling the examination of relationships between E-CRM and customer satisfaction. The target population comprises customers of three selected private commercial banks in Addis Ababa, chosen based on their technology adoption and performance metrics. A sample size of 570 participants is determined using SPSS software, ensuring the representativeness and generalizability of the findings.

Data Collection: Both primary and secondary data sources are utilized in this study. Primary data is collected through a structured questionnaire administered via an online survey. The questionnaire, developed based on relevant literature and translated into English and Amharic, employs a five-point Likert scale to measure respondents' perceptions and attitudes. Secondary data is sourced from academic literature, reports from the National Bank of Ethiopia, and the selected banks' online platforms.

Sampling Technique: Purposive sampling is employed to select participants with relevant characteristics, enhancing the theoretical generalization of the findings. The online survey format facilitates convenience and anonymity, increasing response rates. Initial screening questions ensure that only active E-CRM users from the chosen banks participate in the study.

Data Analysis: Quantitative data is analyzed using descriptive statistics, correlation, and regression analyses through SPSS software. This approach provides a comprehensive overview of the relationships between variables. Qualitative data from interviews and focus group discussions is thematically analyzed to identify key patterns and insights. The data is systematically coded and processed using SPSS to facilitate a robust examination of the research objectives.

Ethical considerations: Ethical considerations are prioritized, ensuring participant privacy and confidentiality throughout the study.

#### Data Quality, Reliability, and Respondent Characteristics

Data Quality: The data preparation process involved meticulous cleaning and organization to ensure accuracy and reliability, resulting in a high response rate of 90.4%. This impressive rate indicates a robust and representative sample of participants.

Respondent Characteristics: The demographic analysis revealed that the majority of respondents were male (54.6%), with a predominant age range of 26-45 years (43.1%). A significant portion of respondents held bachelor's or master's degrees (87.2%), indicating a well-educated sample. Most participants were employed in private organizations (33.6%), followed by government sectors (27.4%). Regarding E-CRM activities, 42.7% of respondents indicated that they chose their bank primarily based on its E-CRM services. Most participants reported using E-CRM services for 3-6 years, engaging with them 3-6 times per week, highlighting strong adoption. The primary sources of information about these services were bank staff and media advertising, with mobile and internet banking being the most utilized.

Reliability Analysis: To assess the reliability of measurement scales, Cronbach's alpha was employed, with values exceeding 0.70 considered acceptable (Nunnally, 1978). The analysis for E-CRM yielded satisfactory results, with alpha values for subdimensions ranging from 0.701 to 0.813, and an overall E-CRM scale value of 0.867. Similarly, customer satisfaction demonstrated high reliability, with individual dimensions ranging from 0.705 to 0.854 and an overall scale of 0.881. These findings validate the reliability of the measurement instruments, enhancing confidence in the analysis of E-CRM's impact on customer satisfaction.

Table 1: Cronbach's Alpha values for E-CRM and Customer Experience variables

Variables		Sub-variables	Number	Cronbach's	Remark
			of	Alpha values	s on
			Items		internal
					Consiste
					ncy
	1.	Customized	4	0.701	Good
		Products/Services			
	2.	Transaction	3	0.737	Good
		Security/Privacy			
	3.	Alternative Payment	3	0.813	Good
ECRM		Methods			
	4.	Problem Solving	3	0.716	Good
	5.	Online Feedback	3	0.725	Good
	6.	Frequently Asked	3	0.705	Good
		Questions			
	Total			0.867	Good
	1.	Content	4	0.750	Good
	2.	Accuracy	2	0.705	Good
Customer	3.	Format	2	0.707	Good
satisfaction	4.	Ease of Use	2	0.720	Good
	5.	Timeliness	2	0.727	Good
	6.	Safety	6	0.854	Good
Total			18	0.927	Good

Source: Author's Computation, (2024)

# Descriptive Analysis, Discussion, and Implications of Findings

This study utilized descriptive analysis to assess electronic customer relationship management (E-CRM) practices in banks and their effect on customer satisfaction. Data collection employed a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), based on the methodology by Anupreet Kaur Mokha (2021). The analysis included descriptive statistics—frequency distributions, percentages, means, and standard deviations—focusing on central tendency measures like the mean and variability measures to illustrate respondents' sentiments and the diversity of opinions regarding E-CRM practices.

The analysis of E-CRM dimensions revealed key insights. "Transaction security and privacy" received the highest mean score of 3.64, underscoring the importance of secure online transactions in building customer trust, in line with Rashwan et al. (2019). This was closely followed by "alternative payment methods" (mean = 3.63) and "customized products and services" (mean = 3.46), indicating customers' preference for convenience and personalization. Conversely, the lowest mean score was for "methods of problemsolving" (3.09), highlighting a critical area for improvement, supported by Sokmen & Bas (2019). The overall composite score for E-CRM practices was a favorable 3.40, reflecting generally positive customer perceptions but indicating the need for enhancements, particularly in problem-solving and accessibility.

The findings have significant implications for banks seeking to improve their E-CRM strategies and overall customer satisfaction. While customers view E-CRM practices positively, specific dimensions, notably problem-solving, require focused attention. Enhancing problem-solving capabilities and ensuring accessible information can lead to greater customer satisfaction. Additionally, the analysis showed high mean scores for "accuracy" and "ease of use" (both 3.98), reinforcing their importance in customer interactions. However, the lower score for "safety" (3.08) indicates that prioritizing data security is essential for fostering trust. These insights can guide banks in optimizing their E-CRM strategies to better meet customer expectations, ultimately strengthening their competitive position in the market.

Table 2: Summary Statistics for E-CRM and customer satisfaction Dimensions or variables

	Sub variables	Mean	Standard deviation	Remark	
1.	TransactionSecurity/ Privacy(TSP)	3.64	0.912	Agree	
2.	alternative payment methods	3.63	0.841	Agree	
3.	customized products and services	3.46	0.759	Agree	
4.	FrequentlyAsked Questions(FAQs)	3.34	0.881	Neutral	
5.	Online Feed-back(OF)	3.22	0.859	Neutral	
6.	ProblemSolving(PS)	3.09	0.866	Neutral	
Overa	Overall ECRM				
1.	Accuracy(A)	3.98	0.737	Agree	
2.	Ease of use	3.98	0.7975	Agree	
3.	Content (C)	3.90	0.697	Agree	
4.	Format (F)	3.89	0.700	Agree	
5.	Timeliness(T)	3.81	0.693	Agree	
6.	Safety(S)	3.80	0.736	Agree	
Overa	Overall Customer satisfaction				

Source: Author's Computation, (2024)

#### Correlation Analysis, Discussion, and Implications of Findings

This study conducted a correlation analysis to explore the relationship between electronic customer relationship management (E-CRM) and customer satisfaction, utilizing a correlation matrix generated through SPSS (version 26). The matrix provides correlation coefficients ranging from -1 (perfect negative correlation) to +1 (perfect positive correlation), with values near 0 indicating no systematic relationship.

The findings demonstrate a significant positive correlation between E-CRM and customer satisfaction, with a Pearson correlation coefficient of r = 0.498. This indicates a strong association, suggesting that enhancements in E-CRM practices are likely to improve overall customer satisfaction. Specifically, the correlation values between 0.3 and 0.49 are classified as moderate positive associations, reinforcing the notion that effective E-CRM strategies are essential for boosting customer satisfaction levels.

These insights not only align with existing literature by confirming the positive relationship between E-CRM practices and customer satisfaction but also provide actionable implications for banks. By refining their E-CRM strategies, banks can enhance service

offerings and strengthen customer satisfaction, ultimately leading to improved customer loyalty and competitive advantage in the market.

Table 3: Pearson correlations (Correlation Matrix)

	Electronics Customer Relationship Management (E-CRM)	customer satisfaction (CS)
Electronics Customer	1	0.498***
Relationship		
Management (E-CRM)		
customer satisfaction (CS)	0.498***	1

Note: The correlation is significant at the 0.01 level (2-tailed) or \*\*\*p<0.001

Source: Author's Computation (2024)

# Multiple Regression Analysis, Discussion, and Implications of Findings

The study employed multiple regression analysis to evaluate the relationship between the dependent variable, customer satisfaction, and the independent variable, electronic customer relationship management (E-CRM). This approach helps determine the extent to which variations in customer satisfaction can be explained by E-CRM practices (Pallant, 2005). Prior to analysis, essential assumptions of validity and reliability were verified using SPSS version 26, ensuring the robustness of the model (Balance, 2004).

The hypothesis tested was: H1: E-CRM has a positive and statistically significant effect on customer satisfaction. The regression analysis yielded a significant positive relationship, with a beta coefficient of +0.43, a t-value of 5.159, and a p-value of less than 0.001, thereby supporting Hypothesis 1. This finding aligns with substantial research in the banking sector, demonstrating that E-CRM practices—such as personalized communication, secure transactions and effective service recovery—enhance customer satisfaction. Studies by Maklan & Klaus (2011) and Addai et al. (2015) emphasize E-CRM's role in strengthening customer relationships, especially during digital transformation.

The results further corroborate literature indicating that E-CRM contributes to improved customer loyalty and satisfaction by anticipating needs and providing responsive service (Tariq et al., 2019; Rashwan et al., 2019). Satisfied customers are more likely to engage in positive word-of-mouth and maintain long-term relationships with their banks, leading to increased retention and reduced churn (Chocholakova et al., 2015; Dhingra & Dhingra, 2013).

These findings hold significant implications for banking institutions. E-CRM systems enable banks to gain a comprehensive understanding of their customers through real-time access

to information, facilitating personalized and efficient service. This holistic view of customer interactions allows banks to address concerns promptly and exceed expectations (Khan & Khawaja, 2013). By consistently delivering high-quality service, banks can strengthen customer relationships, foster trust, and enhance satisfaction. Thus, investing in effective E-CRM systems is vital for banks seeking to build enduring customer relationships and achieve a competitive advantage in the digital landscape.

**Table 4: Summary of Regression Coefficients** 

Model	Standardize d	Coefficientsa			
	Estimates			Sig.	
	(Beta)	S.E(e)	C.R(t)		Remarks
Constant		2.823	6.970		
E-CRM	0.43***	0.161	5.159		H1 supported
Dep	DependentVariable: Customer satisfaction				
	**	0.00°*	1		

Source: Author's Computation (2024)

## Conclusion, implications, and Future Research

This study investigated the relationship between electronic customer relationship management (E-CRM) practices and customer satisfaction within the Ethiopian banking sector. Utilizing the S-O-R (Stimulus-Organism-Response) model, the research demonstrated how E-CRM serves as an environmental stimulus that influences customer satisfaction through cognitive and emotional responses. The findings revealed a significant positive relationship between E-CRM practices and customer satisfaction, highlighting the effectiveness of these strategies in enhancing customer experiences. This research fills a notable gap in the literature, particularly in the context of Ethiopia, where E-CRM adoption is increasing but remains underexplored.

The implications of this study are substantial for both theory and practice. The research contributes to relationship marketing theory by illustrating how E-CRM practices can foster customer loyalty through personalized interactions. From a managerial perspective, banks should focus on enhancing problem-solving capabilities, service quality, and data security, as these areas significantly impact customer satisfaction. The study emphasizes the need for banks to adopt a holistic approach that integrates digital and physical service channels and to continuously adapt to customer feedback.

Future research should explore the long-term effects of E-CRM practices on customer retention and loyalty in the Ethiopian banking sector. Investigating the impact of emerging technologies, such as artificial intelligence and data analytics, on E-CRM effectiveness could also provide valuable insights. Furthermore, studies could examine the comparative effectiveness of E-CRM practices across different cultural contexts within the region, contributing to a broader understanding of customer relationship management in developing markets.

### Limitations, Recommendations, and Future Scope

This study provides valuable insights into the relationship between electronic customer relationship management (E-CRM) practices and customer satisfaction in the Ethiopian banking sector; however, several limitations must be acknowledged.

Limitations: The research design is constrained by its cross-sectional approach, capturing data at a single point in time and thus preventing the establishment of causal relationships between E-CRM practices and customer satisfaction. Additionally, the reliance on customer opinions and attitudes may introduce bias, affecting the reliability of the findings. The dynamic nature of customer behavior and rapidly changing market conditions also poses challenges to the consistency of the results. Lastly, the exclusive focus on private banks in Addis Ababa limits the generalizability of the findings to other sectors and regions.

Recommendations: To address these limitations, future studies should employ longitudinal data collection methods to track changes over time, providing a more robust understanding of causal links. Integrating objective measures and gathering diverse customer perspectives will enhance the trustworthiness of the results. Regular updates to research findings will help maintain their relevance amid evolving customer preferences. Additionally, including both public and private banks and exploring E-CRM practices in other sectors, such as tourism and e-commerce, will broaden the scope of research.

Future Scope: Future research should examine the differences in E-CRM practices and customer satisfaction between public and private banks to provide a holistic view of effectiveness across banking segments. Incorporating employee perspectives on E-CRM implementation will further enrich the understanding of factors driving customer satisfaction. By addressing these aspects, future studies can contribute significantly to the development of effective customer relationship management strategies in diverse contexts.

#### Reference

- 1. Garg, R., Rahman, Z., & Qureshi, M. N. (2014). Measuring customer experience in banks: scale development and validation. Journal of Modeling in Management, 9\*(1), *87–117.*
- 2. Gaskin, J.(2021). Common method bias. Gaskination's Stat Wiki. Retrieved from: statwiki.qaskination.com.
- 3. Gefen, D. (2002). Reflections on the dimensions of trust and trustworthiness among online consumers. The Database for Advances in Information Systems, 33(3), 38–53.
- 4. Gentile, C., Spiller, N., & Noci, G. (2007). How to sustain the customer experience: An overview of experience components that co-create value with the customer. European Management Journal, 25(5), 395-410.
- 5. Gilmore, J. H., & Pine, J. (2002). Differentiating hospitality operations via experiences: Why selling services is not enough. \*Cornell Hotel and Restaurant Administration Quarterly, 43\*(3), 87-96.
- 6. Gremler, D. D., & Brown, S. W. (1996). Service loyalty: its nature, importance, and implications. In B. Edvardsson, S. W. Brown, R. Johnston, & E. Scheuing (Eds.), QUIS V: Advancing Service Quality: A Global Perspective (pp. 1–16). ISQA.
- 7. Grönroos, C.(1995). Relationship marketing: The strategy continuum. Journal of the Academy of Marketing Science, 23(4), 252-254.
- 8. Gummesson, E. (1991). Marketing orientation revisited: The crucial role of the parttime marketer. European Journal of Marketing, 25(2), 60-75.
- 9. Gunadi, W. & Han, K. (2012). The importance of E-CRM in online shopping: A comparison between South Korea and Indonesia. Proceedings of the Global Marketing Conference, Seoul.
- 10. Gupta, J. (2018). Customer experience management in the banking sector. International Journal of Management, IT, and Engineering, 8(2), 75–86.
- 11. Haenlein, M., & Kaplan, A. . (2004). A beginner's guide to partial least squares (PLS) analysis. Understanding Statistics, 3, 283-297.
- 12. Hafeez, S., & Muhammad, B. (2012). The impact of service quality, customer satisfaction, and loyalty programs on customers' loyalty: Evidence from the banking sector of Pakistan. International Journal of Business and Social Science, 3(16), 200–209.
- 13. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (2nd ed.). Sage Publications.
- 14. Hajiyan, H., Aminbeidokhti, A., & Hemmatian, H. (2017). A model of customer loyalty in the retail banking market. Accounting, 3, 95–100.
- 15. Hamid, A. B. A., Mousavi, S. B., & Partovi, B. (2019). Managing E-CRM towards customer satisfaction and quality relationships. Partridge Publishing Singapore.
- 16. Hamidi, H., &Safareyeh, M. (2018). A model to analyze the effect of mobile banking adoption on customer interaction and satisfaction: A case study of m-banking in Iran.

- Electronics and Informatics.
- 17. Hashemi, K. (2012). Customer retention strategies on the Internet (e-CRM): Features and Principles. Journal of American Science, 8(2), 518-522.
- 18. Hayati, S., Suroso, A., Suliyanto, & ElfanKaukab, M. (2020). Customer satisfaction is a mediation between microbanking image, customer relationship, and customer loyalty. Management Science Letters, 10(11), 2561-2570.
- 19. Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the New Millennium. Communication Monographs, 76, 408-420.
- 20. Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis (3rd ed.). The Guilford Press.
- 21. Hayes, A. F., Montoya, A. K., & Rockwood, N. J. (2017). The analysis of mechanisms and their contingencies: process versus structural equation modeling. Australasian Marketing Journal (AMJ), 25(1), 76-81.