DEBRE BERHAN UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

MBA PROGRAM

EFFECT OF CUSTOMER RELATIONSHIP MANAGEMENT ON CUSTOMER RETENTION: A CASE STUDY OF COMMERCIAL BANK OF ETHIOPIA BRANCHES IN NORTH SHOA ZONE

BY:

ELSABAT ALEMU ABEBE

THESIS REPORT SUBMITTED TO COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS IN BUSINESS ADMINISTRATION (MBA)

ADVISOR: BUZUYE ZEGEYE ((PHD)

JUNE, 2024
DEBRE BERHAN, ETHIOPIA

APPROVAL SHEET

Debre Berhan University

College Of Business and Economics

Department Of Management

As members of board of examiners of the final open defence examination of the master of art thesis, we certify that we have read and evaluated the thesis prepared by Elsabet Alemu Abebe entitled "***Effect of Customer Relationship Management on Customer Retention: A Case Study of Commercial Bank of Ethiopia Branches in North Shoa Zone***" and have examined the candidate. We recommended that the thesis be accepted as fulfilling the thesis requirements of the degree of Masters in Business Administration.

Board of Examiners

External Examiner

Girma Tadese (PhD)	_____	_____
Name	Signature	Date

Internal Examiner

Gebeyaw Adugna (Assistant Professor)		11/11/2016
Name	Signature	Date

DECLARATION

The researcher hereby declares that the thesis titled "***Effect of Customer Relationship Management on Customer Retention: A Case Study of Commercial Bank of Ethiopia Branches in North Shoa Zone***" is my own work and all sources that have been referred to and quoted have been duly indicated and acknowledged with complete reference.

Name: Elsabet Alemu Abebe

Signature: _____

Date: _____

CERTIFICATION

Debre Berhan University

College of Business and Economics

Department of Management

As Thesis Research Advisor, I hereby certify that I have read and evaluated this thesis prepared, under my guidance, by Dr. Buzuye Zegeye entitled "***Effect of Customer Relationship Management on Customer Retention: A Case Study of Commercial Bank of Ethiopia Branches in North Shoa Zone***". I recommended that it can be submitted as fulfilling the thesis requirement for the degree of masters of business administration.

Name: Buzuye Zegeye (PhD)

Signature____  _____

Date _____

ACKNOWLEDGMENT

First and foremost, I would like to thank the Almighty God, who gave me the commitment and strength to pass various obstacles and complete this research thesis.

I would like to express my deep gratitude to Dr. Buzuye Zegeye for his invaluable comments and expert guidance throughout the research writing process. His mentorship has played a crucial role in shaping the quality and direction of this research.

I extend my sincere thanks and special appreciation to all the respondents who generously contributed their valuable data, which has been instrumental in the successful completion of this study. Their voluntary participation has greatly enriched the research findings.

I am deeply grateful to my partners for their unwavering support and encouragement over the years of my study and throughout the research process. Their constant belief in my capabilities has been a source of strength and motivation.

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABREVIATION

CRM: Customer relationship management

CBE: Commercial bank of Ethiopia

SPSS: Statistical package of for social science

ABSTRACT

This study investigated the effect of customer relationship management (CRM) practices on customer retention within the North Shoa Zone branches of the Commercial Bank of Ethiopia. Both descriptive research design and explanatory research design were used in the study. Questionnaires were used to collect data. Descriptive statistics (mean, standard deviation) and inferential statistics (correlation, regression) were used to analyze the data. Customer perceptions revealed variations in the effectiveness of the bank's CRM practices. While customer focus strategies received moderate to high scores, indicating a generally positive view of the bank's approach to key customers, other areas like customer retention efforts and CRM organization scored lower. Technology-based CRM practices received a moderate score, suggesting potential for improvement, particularly in online banking services. The multiple linear regression analysis revealed a positive influence of all four CRM practices on customer retention, with knowledge management emerging as the most impactful factor, followed by organizing around CRM principles, incorporating CRM technology, and lastly, focusing on key customers. These findings suggest that the Commercial Bank of Ethiopia should prioritize a comprehensive approach to CRM that strengthens all dimensions. While focusing on key customers remains important, the most significant improvements in customer retention are likely to be achieved by bolstering knowledge management practices, implementing a well-organized CRM structure, and investing in advanced CRM technology.

Keywords: *Customer Relationship management, Customer retention, Knowledge management, Key customer focus, Technology based CRM, Commercial Bank of Ethiopia*

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

Customer retention is paramount in the highly competitive banking sector, where acquiring new customers can be costly and time-consuming. Retaining existing customers not only reduces acquisition costs but also fosters loyalty and advocacy, leading to increased profitability and sustainable growth(Alkitbi et al., 2020; Alshamsi et al., 2021; Simanjuntak et al., 2020)

Customer relationship management (CRM) has emerged as a strategic approach for banks to cultivate strong customer relationships and enhance retention. CRM encompasses various interconnected dimensions that work together to create a customer-centric experience..(Al Karim et al., 2023; Simanjuntak et al., 2020)

An identifying and prioritizing high-value customer is crucial for effective CRM(Medjedel & Hamid, 2020). Studies have shown that focusing marketing efforts on key customers through personalized offers and relationship-building activities can lead to increased satisfaction and retention. For instance, research by (Abubakar et al., 2021; Al Karim et al., 2023) found that personalized relationship management practices significantly enhanced customer retention. Aligning organizational structure and processes around customer-centricity is essential for successful CRM implementation (Sofi & Hakim, 2018). Research by (Abubakar et al., 2021; Sofi & Hakim, 2018) revealed that a strong CRM culture characterized by cross-functional collaboration and customer-focused employee behaviors positively impacted customer retention. Studies have shown that knowledge management practices, such as customer data analysis and utilizing customer insights, can lead to improved customer relationships and retention. For example, research by (Al Karim et al., 2023; Medjedel & Hamid, 2020)in Indian banks found that effective customer knowledge management had a significant positive impact on customer satisfaction and retention.

Utilizing customer relationship management (CRM) software can automate tasks, centralize customer data, and facilitate personalized interactions (Yapanto et al., 2021). Studies have shown

that implementing CRM technology can lead to improved customer service efficiency, enhanced communication, and increased customer satisfaction (Al Karim et al., 2023; Umrani et al., 2023). (Adeniyi, 2023; Alemu, 2020) found that investing in CRM technology positively impacted customer retention in banking industry.

Customer retention is a critical aspect of the banking sector, and CRM has emerged as a strategic approach to enhance customer loyalty(Lebdaoui & Chetioui, 2020). This study aims to contribute to the existing body of knowledge by examining the impact of CRM dimensions on customer retention at the Commercial Bank of Ethiopia.

1.2. Statement of the problem

Customer retention is of paramount importance in the banking sector, as it directly affects the profitability and sustainability of banks(Alemu, 2020; Lebdaoui & Chetioui, 2020). In an industry characterized by intense competition and evolving customer expectations, maintaining a loyal customer base is crucial for long-term success(Albaity & Rahman, 2021). Customer Relationship Management (CRM) has emerged as a strategic approach to enhance customer retention.

Empirical evidence from studies conducted worldwide supports the positive impact of CRM dimensions on customer retention. Focusing on key customers enables banks to identify and understand their most valuable customers, tailor products and services to their specific needs, and build strong relationships(Al Karim et al., 2023). Research by (Yim et al., n.d.) Found that a personalized approach to customer management significantly increases customer retention rates. Organizing around CRM involves aligning organizational structures, processes, and resources to ensure a customer-centric approach(Valmohammadi, 2017). In banking sector revealed that banks that effectively organize around CRM experience higher customer retention rates compared to those with fragmented approaches(Yapanto et al., 2021). Managing knowledge is an essential dimension of CRM that allows banks to leverage customer data and insights to enhance customer retention. Research by Lee and Kim (2017) in Ethiopia demonstrated that banks that effectively manage customer knowledge through CRM systems experience higher customer retention rates due to their ability to provide personalized experiences and targeted marketing efforts(FANTU, 2020). Incorporating CRM-based technology is another critical dimension that

enables banks to streamline processes, automate workflows, and leverage advanced analytics for customer retention. A study by (Medjedel & Hamid, 2020; Yapanto et al., 2021)found a positive relationship between the adoption of CRM technology and customer retention.

Previous studies have examined the effect of Customer Relationship Management (CRM) on customer retention in various countries (Anees et al., 2020; Awiti & Otieno, 2021; Manyanga et al., 2022; RATH, 2021; Sugiato et al., 2023). However, there are some studies ((Desta, n.d.; Yemiyamrew, n.d.) on the effect of customer relationship management on customer retention in banking industry. However, they did not incorporate the effect of two very important CRM dimensions (focusing on knowledge management and incorporating CRM based technology) in their studies. As per the report of commercial bank of Ethiopia (2023), the bank could not retain its customers as per their expectation. Therefore, this study aims to fill this research gap by examining the effect of CRM dimensions, namely focusing on key customers, organizing around CRM, managing knowledge, and incorporating CRM-based technology, on customer retention at the Commercial Bank of Ethiopia. Therefore, this study intended to fill this research gap by investigating the effect of CRM dimensions, namely focusing on key customers, organizing around CRM, managing knowledge, and incorporating CRM-based technology, on customer retention at the Commercial Bank of Ethiopia.

1.3. Research questions

This study addressed the following research questions:

1. What is the effect of focusing on key customers on customer retention in the study area?
2. What is the effect of organizing (operational) around CRM on customer retention in the study area?
3. What is the effect of managing knowledge on customer retention in the study area?
4. What is the effect of incorporating CRM-based technology in the study area?

1.4. Objective of the study

The genera objective and specific objectives of the study are stated below:

1.4.1. General objective

The general objective of this study was examining the effect of customer relationship management practice on customer retention in North Shoa Zone branches of Commercial Bank of Ethiopia

1.4.2. Specific objectives

The specific objectives of the study were:

- To determine the extent to which focusing on key customers increased customer retention.
- To scrutinize the effect of organizing (operational) around CRM on customer retention rates.
- To investigate effect of customer knowledge management practices on customer retention.
- To evaluate the role of incorporating CRM-based technology in enhancing customer retention.

1.5. Hypotheses of the study

After reviewing related literatures, the researcher formulates the following research hypotheses:

Ha1: Focusing on key customers has a positive and significant effect on customer retention.

Ha2: Organizing (operational) around CRM has a positive and significant effect on customer retention.

Ha3: Managing knowledge has a positive and significant effect on customer retention.

Ha4: Incorporating CRM-based technology has a positive and significant effect on customer retention

1.6. Significance of the study

The significance of the study examining the effect of customer relationship management (CRM) practice on customer retention in North Shoa Zone branches of Commercial Bank of Ethiopia is multifaceted. For the bank, the findings can provide valuable insights into the effectiveness of their CRM strategies, enabling them to make informed decisions to enhance customer retention, ultimately contributing to sustained profitability and growth. Customers stand to benefit from improved services and experiences as the bank tailors its practices based on the study's outcomes, leading to higher satisfaction and loyalty. Additionally, future researchers can build upon this study to delve deeper into CRM practices in the banking sector, fostering a continuous cycle of knowledge and improvement in customer relationship management.

1.7. Scope of the study

The scope of the study was focus on examining the effect of customer relationship management (CRM) practice on customer retention in the North Shoa Zone branches of Commercial Bank of Ethiopia. The study was been conducted in April 2024 and utilized a cross-sectional survey approach. Data were collected through questionnaires. The study specifically investigated the extent to which focusing on key customers, organizing around CRM, effective customer knowledge management practices, and incorporating CRM-based technology contribute to customer retention within the North Shoa Zone branches of the Commercial Bank of Ethiopia. By using a quantitative research approach and collecting data from multiple sources, the study aimed to provide a comprehensive understanding of the relationship between CRM practices and customer retention in the specified context.

1.8. Operational definitions

Operational definitions of the variables of the study are stated as follows:

- Focusing on key customers: This study defines focusing on key customers as the strategic prioritization and allocation of resources by the Commercial Bank of Ethiopia (CBE) to identify, understand, and fulfill the specific needs of its most valuable customers.
- Organizing around CRM: In the context of this study, organizing around CRM refers to the structural and operational approach adopted by the Commercial Bank of Ethiopia (CBE) to align its processes and resources with the principles of Customer Relationship Management (CRM).
- Customer knowledge management practices: In this study it refers to the Commercial Bank of Ethiopia's ability to gather, analyze, and utilize customer information and insights to enhance customer retention. It includes activities such as data collection, segmentation, profiling, and leveraging customer knowledge to personalize interactions and deliver tailored solutions.
- Incorporating CRM-based technology: In this study it refers to the bank's utilization of technological tools and systems specifically designed to support CRM activities. It involves the implementation and integration of CRM software, customer databases,

analytics tools, and other digital solutions to enhance customer retention through improved efficiency, personalization, and customer experience.

- Customer retention: In this study it refers to the Commercial Bank of Ethiopia's ability to maintain a long-term relationship with its customers, ensuring their continued loyalty and repeat business. It is measured by factors such as customer churn rate, customer satisfaction, customer loyalty, and the frequency of customer transactions.

1.9. Organization of the study

The final paper comprises of five chapters. Chapter one commences with an introduction, offering a study background, articulating the research problem, outlining the objectives and questions, and emphasizing the study's significance. In Chapter two involved a critical analysis of prior studies, theories, and frameworks related to these variables. Chapter three details the research methodology to be employed in this study, elaborating on the research design, sampling techniques, data collection methods, and data analysis procedures. The chapter also encompasses the study's ethical considerations and limitations. Moving to Chapter four, the findings and analysis of the collected data presented. This section showcases the statistical analysis of the collected data on the study variables and the results discussed in relation to the research objectives and questions. Finally, Chapter five encompasses a conclusion and recommendation section.

CHAPTER TWO

LITRATURE REVIEW

2.1. Theoretical Literature

2.1.1. Customer Retention

Customer retention is a critical aspect of maintaining a successful banking sector. In order to retain customers, banks must focus on building strong relationships and providing exceptional customer service(Simanjuntak et al., 2020; Yemiyamrew, n.d.) Research has shown that customers are more likely to remain loyal to a bank if they feel valued and appreciated (Johnson, 2019). This can be achieved through personalized interactions, proactive problem-solving and swift resolution of customer issues (RATH, 2021). In the banking sector, customer retention is crucial for long-term success. Studies have indicated that customer retention is directly linked to profitability in the banking industry (Akintunde & Akaighe, n.d.). Banks must focus on understanding their customers' needs and preferences in order to provide tailored solutions. By offering personalized banking experiences and customized financial products, banks can increase customer satisfaction and loyalty (Abubakar et al., 2021)Furthermore, effective communication and consistent engagement with customers can significantly impact retention rates. Banks can leverage technology and data analytics to identify customer behavior patterns and proactively address any issues or concerns. By continuously adapting to customer demands and delivering exceptional service, banks can build strong relationships, reduce churn rates, and ultimately achieve long-term customer retention(Sugiato et al., 2023)

2.1.2. Customer relationship management

Customer relationship management (CRM) plays a crucial role in the banking sector, with several key variables that contribute to its effectiveness. Focusing on key customers is essential for banks to allocate resources efficiently and provide personalized services(Yapanto et al., 2021). By identifying and prioritizing key customers, banks can assign dedicated relationship managers who can offer tailored solutions and address specific needs. This personalized approach fosters trust and loyalty, leading to higher customer satisfaction and retention rates (Bhattacharya et al., 2018). Organizing around CRM ensures that all departments within the bank

align their efforts to deliver a seamless customer experience (Huang et al., 2016). This collaborative approach enables banks to streamline processes, improve communication, and enhance overall customer satisfaction(Anees et al., 2020; Lebdaoui & Chetioui, 2020).

Effective customer knowledge management practices are vital in CRM implementation within the banking sector. By leveraging customer data, banks can gain valuable insights into customer preferences, behaviors, and needs(Al Karim et al., 2023). This knowledge can be utilized to develop targeted marketing campaigns, personalized product offerings, and proactive customer service. Incorporating CRM-based technology enables banks to efficiently manage customer relationships(Chetioui, 2017). The use of CRM systems and customer analytics tools allows banks to capture, store, and analyze customer data in real-time. This facilitates timely decision-making, enhances customer interactions, and enables proactive customer engagement. By embracing CRM-based technology, banks can effectively manage customer relationships and gain a competitive edge in the dynamic banking industry (Abubakar et al., 2021)

2.1.2. Customer relationship management and customer retention

Customer relationship management (CRM) has a significant impact on customer retention in the banking sector. Implementing effective CRM strategies allows banks to build strong relationships with customers, leading to increased loyalty and retention rates(Abubakar et al., 2021). By understanding customer needs and preferences, banks can tailor their products and services, resulting in higher customer satisfaction and a reduced likelihood of customers switching to competitors. CRM also enables banks to provide personalized customer experiences, which have been shown to positively influence customer retention (Chetioui, 2017). In addition, CRM helps banks identify and address customer issues promptly, resulting in improved customer retention rates(RATH, 2021)By leveraging customer data and analytics, banks can proactively identify potential churn indicators and implement retention strategies to mitigate customer attrition (Ryals et al., 2019). CRM-based technology, such as customer analytics tools and CRM systems, enables banks to effectively manage customer relationships and deliver personalized services, leading to enhanced customer satisfaction and increased customer retention rates (Chetioui, 2017).

2.2. Empirical Literature

Several studies have established a positive and significant relationship between focusing on key customers and customer retention, particularly within the banking sector. Research by (Mendoza et al., 2007; Nguyen & Mutum, 2012) in found that personalized relationship management practices, a key element of focusing on key customers, significantly enhanced customer retention). Similarly, a study by across various industries indicated that tailoring marketing efforts and service offerings to high-value customers led to increased satisfaction and retention (Fan & Ku, 2010; Hong-kit Yim et al., 2004). These findings suggest that dedicating resources towards understanding and fulfilling the specific needs of key customers can foster stronger relationships, loyalty, and ultimately, higher retention rates. Furthermore, within the banking context, studies by in Iran and (Sofi & Hakim, 2018) demonstrated that focusing on customer satisfaction, often driven by personalized attention and catering to specific needs, positively impacted retention. This aligns with the concept of focusing on key customers, as satisfied customers are more likely to maintain a long-term relationship with a bank.

(Sofi & Hakim, 2018) emphasizes the importance of organizational commitment and alignment to CRM principles, suggesting that a customer-focused culture throughout the organization is crucial for successful implementation. This aligns with findings by (Abubakar et al., 2021) in who revealed that integrating CRM practices across different departments fostered collaboration and enhanced customer service quality, leading to higher retention rates (Lee & Rho, 2011). Furthermore, research by (Chetioui, 2017) highlights the role of investing in CRM-specific resources and training in the banking sector. They found that banks with dedicated CRM teams and training programs achieved better customer satisfaction and retention outcomes. Similarly, (Soltani & Navimipour, 2016) propose a comprehensive CRM framework emphasizing the need for customer-centric organizational processes and employee empowerment to deliver superior customer service, leading to loyalty and retention.

Taherparvar et al. (2014) emphasizes the importance of knowledge management as a core dimension of CRM, highlighting its role in gathering and utilizing customer data to tailor service offerings and marketing strategies. This aligns with findings by (Madhovi & Dhliwayo, 2017) who revealed that banks with effective customer knowledge management practices achieved higher customer satisfaction and retention rates. Furthermore, research by (Soltani &

Navimipour, 2016) found a significant positive link between effective customer knowledge management and both customer satisfaction and retention. This suggests that analyzing customer data allows banks to identify customer needs, personalize interactions, and address potential issues proactively, leading to increased satisfaction and loyalty. Studies like the one by (Nora, 2019)further strengthen the connection between knowledge management and customer retention. They found that banks utilizing customer data analytics to personalize marketing campaigns and promotions achieved higher customer engagement and retention rates (Ngugi et al., 2013).

Richard et al. (2007) emphasizes the importance of technology in enabling efficient and effective CRM practices. Studies by (Buttle & Maklan, 2019) propose a framework for CRM, highlighting the role of technology in streamlining customer service processes, facilitating communication, and enabling data-driven decision-making. These advancements can lead to enhanced customer satisfaction and loyalty, ultimately impacting retention rates. Furthermore, empirical evidence from the banking sector reinforces this connection. Research by (Soltani & Navimipour, 2016) found that investing in and utilizing CRM technology significantly enhanced customer retention. They argue that CRM software facilitates targeted marketing campaigns, personalized communication channels, and efficient service delivery, leading to improved customer satisfaction and loyalty.

2.3. Conceptual Framework of the Study

The conceptual framework of a study refers to the theoretical foundation and structure that guides the research design, methodological approach, and data analysis. It provides a framework for identifying key constructs (Focusing on key customers, organizing around CRM, effective customer knowledge management practices, incorporating CRM-based technology and customer retention) and their relationships, as well as outlining the theoretical assumptions and propositions that underlie the research objectives (Creswell, 2014). Based on the objective of this study, the following conceptual framework was developed.

Explanatory Variables

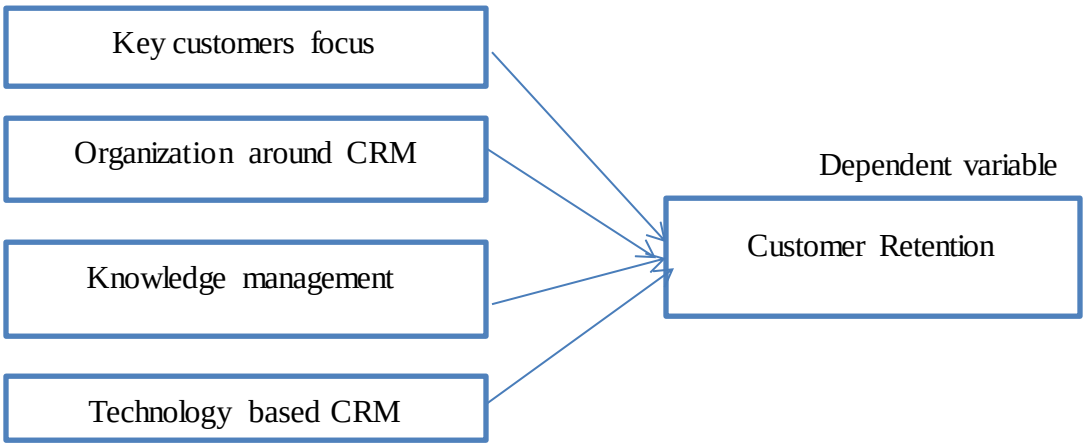

Figure 2:1 Conceptual Framework of the Study

Source: Abubakar et al., 2021; Ngugi et al., 2013; Soltani & Navimipour, 2016

CHAPTER THREE

RESEARCH METHODOLOGY

This section consists of methodology employed in the study. These are research design, research approach, population and sampling techniques, method of data collection and method of data analysis. Moreover, reliability and validity of the data collection instruments, ethical considerations are incorporated in the section.

3.1. Research Design

According to Kothari (2004), the research design describes the plan in which information is obtained from the research participants. The study was employ applied both descriptive and explanatory research designs. Descriptive research design plays a crucial role in providing a comprehensive description and understanding of the variables under investigation. It enables researchers to accurately document and summarize the characteristics, behaviors, and opinions of a specific population or phenomenon (Babbie & Rubin, 2016). In this study, the descriptive research design was utilized to describe the existing status of customer relationship management practices and customer retention at the commercial bank of Ethiopia. Moreover, explanatory research design was employed to investigate the effect of each predictor on customer retention. This approach allowed the researchers to delve into the causal relationships between various factors and customer retention.

3.2. Population and Sampling Technique

The target population is the group of individuals that the intervention intends to conduct research in and draw conclusions from (Babbie & Rubin, 2016). The target population for this study was customers of commercial bank of Ethiopia in North Shoa Zone. Commercial bank of Ethiopia in North Shoa zone has divided its branches in different grades. Three branches were selected from different grades of the bank purposively. The researcher selected. Nigus Haile Melekot branch, Ankober branch and Efesson branches from grade 1, grade 2 and grade 3 branches which were identified as high customer retention problem by North Shoa Zone Commercial Bank of Ethiopia as the year of 2023. In the selected branches there are 65,714 customers from Hence, these customers were the target population of the study. The researcher also used convenience

sampling method to select the respondents from each branch. This method involved giving a number to every respondent in the accessible population (Khotari, 2004).

Sample size was determined as in the following way using Yamane (1973) formula:

$$n = \frac{\square}{1+(\square * \varepsilon^2)}$$

Where: n = sample size; N = the total number of customers and ε = error tolerance.

$$n = \frac{65{,}714}{1+(65{,}714 * 0.05^2)} = 398$$

The sample size for each branch was calculated proportionally to their respective population sizes, employing the proportional sample allocation method. Consequently, the sample size for each stratum is determined as outlined below

$$nK = nK = \square \left(\frac{\square\square}{\square}\right) \square$$

Where; nk = Sample size of k^{th} stratum Nk = Population of the k^{th} stratum, N = Total population size n = sample size.

The summary of the population and sample of the study are shown in Table 3-1 below.

Table 3-1:- Sampling Distribution

Bank grade	Name of the branch	Total customers	Sample size
1	Nigus Haile Melekot Branch	5383	32
2	Ankober Branch	21,969	133
3	Efesson Branch	38,362	233
	Total	65714	398

Source: Commercial Bank of Ethiopia North Shoa Zone Branch, 2023 & Own computation

3.3. Data Types and Method of Data Collection

The primary and secondary sources helped to triangulate data from different perspectives regarding the research problem. The secondary sources of information used to provide the conceptual framework and acquire a general picture of the problem. Primary data refers to original data that is collected first hand by researchers for a specific research project (Kothari,

2004). Gathering primary data is crucial in research as it allows researchers to obtain information that is directly relevant to their research objectives. One common method of collecting primary data is through the use of questionnaires. Questionnaires are structured sets of questions designed to gather specific information from respondents (Mishra & Alok, 2022). Questionnaires offer several advantages in primary data collection. They provide a standardized approach to data collection, ensuring that all respondents receive the same set of questions and reducing potential bias. They also allow for efficient data collection as they can be distributed to a large number of respondents simultaneously (Babbie & Rubin, 2016). Hence, questionnaires were used to collect data from customers.

3.4. Method of Data Analysis

The study employed both descriptive and inferential statistics. From descriptive statistics, mean, standard deviation, frequency and percentage, and from inferential statistics, Pearson correlation and multiple linear regressions were used.

3. 5. Model Specification

For analyzing the relationship between one dependent variable and several independent variables multiple regressions analysis shall be applied (Cohen, 2013). Hence, multiple regression analysis is an appropriate way to check the relationships between independent variables and dependent variable in this study. The model of the study used in the study is stated as follows:

$Y = \beta 0 + \beta_1 X1 + \beta_2 x2 + \beta_3 x3 + \beta_4 x4 + \varepsilon$

Where: Y = Customer retention

X1=Focusing on key customers

X2=Organizing around CRM

X3= Knowledge management p

X4=Incorporating CRM-based technology

$\beta 0$ = Constant; β_1, β_2, β_3, β_4 and β_5 = Beta coefficients of the respective explanatory variables. and ε = error term

3.6. Reliability and Validity

To ensure the accuracy and trustworthiness of the findings, this study was addressing both reliability and validity of the research instrument. Reliability refers to the consistency of the measurement, and Cronbach's alpha was used to assess the internal reliability of the questionnaire (Guion, 2004). In simpler terms, this step checks if the questionnaire yields consistent results when administered multiple times. Validity, on the other hand, focuses on whether the instrument truly measures what it's intended to (Cohen et al., 2017). This study employed two types of validity checks. First, face validity will be established by having experts review the questionnaire and confirm that it appears to measure the intended concepts like CRM practices and customer retention. Second, content validity will be assessed by these experts to ensure the questionnaire comprehensively covers all relevant aspects of these concepts within the context of the study.

Table 3-2 :- Reliability test result

Variables	Number of items	Cronbatch's Alpha
Technology- based Customer relationship management	4	.876
Key customer focus	5	.838
CRM organization	5	.855
Knowledge management	5	.842
Customer retention	4	.855

Source: Survey result, 2024

The table presents the results of a reliability test, specifically Cronbach's Alpha, for various variables. The Cronbach's Alpha values indicate the internal consistency or reliability of the measurement scales used for each variable. Technology-based Customer Relationship Management (CRM) has a Cronbach's Alpha of .876, indicating a high level of internal consistency among the items measuring this variable. Similarly, Key Customer Focus and CRM Organization also demonstrate high internal consistency with Cronbach's Alpha values of .838 and .855, respectively. Knowledge Management and Customer Retention exhibit slightly lower but still acceptable levels of internal consistency with Cronbach's Alpha values of .842 and .855, respectively. These results suggest that the measurement scales for the variables in the study are reliable, as indicated by the high Cronbach's Alpha values. This reliability is crucial for ensuring

that the data collected accurately reflects the constructs being measured, thereby enhancing the validity of any subsequent analyses or conclusions drawn from the study.

3.7. Ethical Considerations

The researcher took letter of support to request permission from the Commercial Bank of Ethiopia, North Shoa Zone respondents in order to collect data from its higher officials and branches managers. Customers were requested their consent to fill the questionnaires and they were instructed not to include their names on the questionnaire to assure that their responses was be kept confidential and used purely for academic purposes. The introduction questionnaire part was designed to persuade people to engage and provide important information about their firm of interest, allowing the researchers to make educated study decisions. Finally, participants were included in the study only if they volunteered.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND DISCUSSION

4.1. Introduction

In this chapter, the data is analyzed and presented to examine the effect of customer relationship management on customer retention in Commercial Bank of Ethiopia branches in north Shoa zone. The study employed descriptive and inferential statistics, utilizing Likert scale points ranging from one to five, with 5 representing strongly agree and 1 representing strongly disagree. Correlation and regression analysis were used to examine the relationship between customer relationship management practices and customer retention. A total of 398 questionnaires were prepared and dispatched to respondents, with 40 questionnaires used for the pre-test. After fulfilling the required standard, 398 final questionnaires were distributed, resulting in a response rate of 87.44%. Ultimately, 348 questionnaires were utilized for analysis. The collected data were analyzed using SPSS software version 23, employing Pearson correlation for measuring the degree of association between different variables and regression analysis to test the effect of independent variables on the dependent variable.

4.2. Demographic information of Respondents

In the following table, the demographic information of respondents is presented. These include the gender of respondents, age, and level of education and marital status of respondents. To get information on these issues the respondents were asked and their responses were analysed as follows.

Table 4-1 :- Gender distribution of respondents

Gender of respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	99	28.4	28.4	28.4
	Female	249	71.6	71.6	100.0
	Total	348	100.0	100.0	

Source: Survey result, 2024

The frequency and percentage distribution of respondents' gender in the study are as follows: 28.4% of the respondents were male, while 71.6% were female. This indicates a higher representation of female respondents in the sample, with a response rate of 87.44%, providing a substantial dataset for analysis. The gender distribution is essential for understanding the composition of the sample and its implications for the study's findings and conclusions.

Table 4-2 :- Age distribution of respondents

Age of respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Up to 35 years	170	48.9	48.9	48.9
	Above 35 years	178	51.1	51.1	100.0
	Total	348	100.0	100.0	

Source: Survey result, 2024

The age distribution of the respondents is as follows: 48.9% of the respondents were up to 35 years old, while 51.1% were above 35 years. This balanced representation of different age groups within the sample provides valuable insights into the impact of customer relationship management on customer retention across various age demographics.

Table 4-3 :- Marital status of respondents

Marital status of respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unmarried	184	52.9	52.9	52.9
	Married	164	47.1	47.1	100.0
	Total	348	100.0	100.0	

Source: Survey result, 2024

The marital status distribution of the respondents is as follows: 52.9% of the respondents were unmarried, while 47.1% were married. This distribution provides insight into the marital composition of the sample and its potential implications for the study's findings.

Table 4-4 :- Education level of respondents

Education status of respondents					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma and below diploma	164	47.1	47.1	47.1
	Above diploma	184	52.9	52.9	100.0
	Total	348	100.0	100.0	

Source: Survey result, 2024

The data on the education level of the respondents reveals that 47.1% had attained a diploma or below, while 52.9% had education levels above diploma. This breakdown offers valuable insight into the educational diversity within the sample, which is crucial for understanding how various educational backgrounds may influence the study's outcomes.

4.3. Descriptive statistics of main variables of the study

The statistical analysis of all variables is summarized using a 5-point Likert scale (from "1" for "strongly disagree" to "5" for "strongly agree"). According to Zaidaton & Bagheri (2009), when a mean score below 3.39 was deemed low, a mean score from 3.40 up to 3.79 was considered moderate, and a mean score over 3.8 was considered as high. Thus, the detail of the analysis is presented as follows.

4.3.1. Customer retention

Table 4-5 :- Descriptive Statistics results of respondents' response to customer retention

Descriptive Statistics of customer retention			
	N	Mean	Std. Deviation
I feel empowered through personalized messages which encourage healthy relations with my bank.	348	1.8276	1.47179
The bank frequently organizes customer meets	348	1.7989	1.42023
The feedback is taken from customers on regular (weekly) basis.	348	1.7902	1.45409
Bank has a culture where customer is given first preference.	348	1.7701	1.45203
Overall mean/standard deviation		**1.7967**	**1.4495**

Source: Survey result, 2024

Table 4-5 shows the descriptive statistics for customer responses regarding their bank's customer retention efforts. Based on the provided descriptive statistics of the respondents' responses to customer retention, it is evident that the mean scores for the statements ranged from 1.7701 to 1.8276, falling below the threshold of 3.39, as classified by Zaidaton & Bagheri (2009). This indicates a low level of agreement with the statements related to customer retention practices within the bank. The standard deviations, ranging from 1.42023 to 1.47179, suggest a degree of variability in the responses, with some distance from the mean. This variability implies diverse perceptions among the respondents.

4.3.2. Knowledge Management

Table 4-6 :- Descriptive Statistics results of respondents' response to knowledge management practice of the bank

Descriptive Statistics of knowledge management			
	N	Mean	Std. Deviation
The bank fully understands the needs of key customers via knowledge leaning.	348	2.3362	1.21430
The Bank's employees are willing to help customers in a responsive manner.	348	2.2299	1.18054
Employees of the bank have enough experience and information about customers.	348	2.2213	1.16129
The Bank provides channels to enable ongoing two way communication between key customers and the Bank	348	2.1897	1.15322
Customers can expect prompt service from employees of the Bank.	348	2.1890	1.16812
Overall mean/standard deviation		**2.2334**	**1.1755**

Source: Survey result, 2024

The descriptive statistics of the respondents' responses to the knowledge management practices of the bank, as summarized in table 8, indicate that the mean scores for the statements ranged from 2.1897 to 2.3362. These scores fall within the moderate range, as classified by Zaidaton & Bagheri (2009), suggesting a moderate level of agreement with the knowledge management practices. The standard deviations, ranging from 1.15322 to 1.21430, indicate a degree of variability in the responses, with some distance from the mean. This variability suggests diverse perceptions among the respondents regarding the bank's knowledge management practices.

4.3.3. Key customer focus strategy

Table 4-7 :- Descriptive results of respondents' response to key customer focus strategy of the bank

	N	Mean	Std. Deviation
The bank provides customized product and service to key customers.	348	3.2816	.83235
The Bank takes customer feedback seriously and replies to them.	348	3.2672	.93313
The Bank makes an effort to find out what key Customer needs.	348	3.2241	.94597
The bank work with individual key customers to customize its offering through ongoing dialogue	348	3.2241	.91814
The Bank strives to constantly surprise and delight its key customers.	348	3.1523	1.06412
Overall mean/standard deviation		**3.2299**	**0.9387**

Source: Survey result, 2024

The descriptive statistics of the respondents' responses to the key customer focus strategy of the ban in table 4-6 indicate that the mean scores for the statements ranged from 3.1523 to 3.2816, with an overall mean of 3.2299. These scores suggest a moderate to high level of agreement with the key customer focus strategies implemented by the bank. The low to moderate standard deviations, ranging from 0.83235 to 1.06412, indicate a relatively low to moderate degree of variability in the responses, with the data points being relatively close to the mean. This suggests a moderate to high level of consistency in the respondents' perceptions of the bank's key customer focus strategies.

4.3.4. **CRM Organization**

Table 4-8 :- Descriptive results of respondents' response to CRM Organization of the bank

	N	Mean	Std. Deviation
The bank has established clear business goals related to customer acquisition, development, retention, and reactivation	348	2.7069	1.44456
The Bank employee encourage customers to use more service of the Bank	348	2.6839	1.40934
What makes the Bank different from its rivals is that it can make good relationship with its customers	348	2.6782	1.40599
The bank structure is meticulously (thoroughly) designed around its customers	348	2.6724	1.41488
The Bank has effective customer recovery strategy including guarantee for service failure.	348	2.6121	1.39640
Overall mean/standard deviation		**2.6707**	**1.4142**

Source: Survey result, 2024

The descriptive statistics of the respondents' responses to the CRM organization of the bank, as summarized in table 4-8, indicate that the mean scores for the statements ranged from 2.6121 to 2.7069, with an overall mean of 2.6707. These scores fall within the low to moderate range, as classified by Zaidaton & Bagheri (2009), suggesting a mixed level of agreement with the CRM practices of the bank. The standard deviations, ranging from 1.39640 to 1.44456, indicate a degree of variability in the responses, with some distance from the mean. This variability suggests diverse perceptions among the respondents regarding the bank's CRM organization.

4.3.5. Technology –based CRM

Table 4-9 :- Descriptive results of respondents' response to Technology –based CRM

	N	Mean	Std. Deviation
The bank maintains a comprehensive database of its customers	348	2.9080	1.58620
The bank is providing reliable internet and mobile banking service to its customers	348	2.8966	1.55983
The bank has a dedicated Customer Relationship Management (CRM) technology in place	348	2.8822	1.54301
The Bank has the right soft and hardware to serve their customers	348	2.8793	1.55117
Overall mean/standard deviation		**2.8915**	**1.5601**

Source: Survey result, 2024

Customer responses regarding the bank's technology-based CRM system indicate a mild level of agreement. The average score across all questions is 2.89, which falls within the "moderate" range according to the pre-defined scale (3.40 to 3.79). While standard deviations however around 1.56, suggesting some variation in opinions, the means for each question remain close. This implies that a fair number of customers view the bank's efforts in this area moderately positively. The highest mean (2.91) is for maintaining a comprehensive customer database, while other aspects like reliable internet banking and sufficient hardware/software score slightly lower. These findings suggest that while the bank has established a basic technology infrastructure for CRM, there's room for improvement in specific areas like online banking services or ensuring customers feel well-supported by the available technology.

4.4. Pearson Correlation Result

This study examined the relationship between CRM practices and customer retention using correlation, which measures the correspondence between random variables. The researcher used the linear product-moment correlation coefficient (also known as Pearson's correlation coefficient or "r") to express the strength of the relationship, with "r" values ranging from -1 to 1. A positive correlation occurs when an increase in one variable leads to an increase in another, while a negative correlation occurs when an increase in one variable leads to a decrease in another. The strongest correlations occur when "r" equals 1 or -1, indicating perfect positive or negative correlations respectively. A value of "r" equal to 0 does not necessarily indicate any correlation. Cohen (1988) categorizes correlation values as small/weak, medium/moderate, or large/strong based on the value of "r."

Table 4-10 :- Pearson Correlation Result

		Customer retention
Knowledge management	Pearson Correlation	.535**
	Sig. (2-tailed)	.000
	N	348
Key customer focus	Pearson Correlation	.186**
	Sig. (2-tailed)	.000
	N	348
CRM organization	Pearson Correlation	.378**
	Sig. (2-tailed)	.000
	N	348
Technology -based Customer relationship management	Pearson Correlation	.635**
	Sig. (2-tailed)	.000
	N	348
Customer retention	Pearson Correlation	1
	Sig. (2-tailed)	.000
	N	348
**. Correlation is significant at the 0.01 level (2-tailed).		
*. Correlation is significant at the 0.05 level (2-tailed).		

Source: Survey result, 2024

This table describes the Pearson correlation results between customer retention and various aspects of CRM practices within the bank, including knowledge management, key customer focus, CRM organization, and technology-based customer relationship management. The Pearson correlation results indicate significant positive relationships between customer retention and knowledge management (r = 0.535**), key customer focus (r = 0.186**), CRM organization (r = 0.378**), and technology-based customer relationship management (r = 0.635**). These correlation coefficients, as measured by Pearson's correlation coefficient, suggest moderate to strong positive associations between customer retention and the various aspects of CRM practices within the bank. The values of "r" falling within the range of 0.186 to 0.635** indicate varying degrees of positive linear relationships, with the strongest association observed between customer retention and technology-based customer relationship management. These findings align with the researcher's use of the linear product-moment correlation coefficient to measure the strength of the relationship, and they provide valuable insights into the impact of CRM practices on customer retention within the bank.

4.5. Multiple Linear Regression Result

4.5.1. Diagnostic test results

#1. Assumption of Multi-collinearity

If there is a high degree of correlation between independent variables, we have a problem that is commonly described as the problem of multi-collinearity it is a condition that happen when some predictor variables in the model are correlated with other predictor variables (Ramadan, 2017). It is a situation in which two or more explanatory variables in a multiple regression model are highly linearly related. In practice, we not often face perfect multi-collinearity in a data set. More commonly, this issue arises when there is an approximate linear relationship among two or more independent variables. We can test this assumption by looking at the coefficients table. As explained by Muijs (2010) Tolerance and Variance Inflation Factors (VIF) do the same thing; tolerance is the amount of variance in the individual variable not explained by the other predictor variables. It varies from 0 to 1; a value close to 1 indicates that the other predictors do not explain the variance in that variable. A value close to 0 implies almost all the variance in the variable is explained by the other variables. This permits us to more formally check that our independent variables are not too highly correlated. To meet multiple regression assumptions, we need tolerance score above 0.2 and VIF scores below 10.

Table 4-11 :- Multi- collinearity test result

Constructs	Collinearity Statistics	
	Tolerance	VIF
Knowledge management	.605	1.654
Key customer focus	.974	1.027
CRM organization	.840	1.191
Technology -based Customer relationship management	.650	1.539

Source: Survey result, 2024

The collinearity statistics, specifically the tolerance and variance inflation factors (VIF), provide insights into the degree of multi-collinearity among the independent variables in the multiple regression model. The tolerance scores for knowledge management, key customer focus, CRM organization, and technology-based customer relationship management are 0.605, 0.974, 0.840, and 0.650, respectively, while the corresponding VIF scores are 1.654, 1.027, 1.191, and 1.539. These scores indicate that the independent variables in the model are not highly correlated, as all

tolerance scores are above 0.2 and VIF scores are below 10, meeting the assumptions for multiple regressions. Therefore, the analysis suggests that there is no significant issue of multi-collinearity among the independent variables, allowing for the reliable estimation of the regression coefficients and the interpretation of their effects on the dependent variable.

#2. Assumption of Normality

According to Darlington, (1968) Regression assumes that variables have normal distributions. This means that errors are normally distributed, and that a plot of the values in the residuals will approximate a normal curve (Keith, 2006). This assumption is used to determine whether the residuals are normally distributed. To perform a hypothesis test about the model parameter, the normality assumption must be met. The normality assumption is about the mean of the residuals is zero (normality of the error distribution). In this study, the normality of the data was checked and as shown in the figure the histogram is bell-shaped, which leads to assume that the residuals are normally distributed the residual mean is zero and standard deviation approaches zero. In this case Histogram is symmetric shows that assumption of normality is met. Thus, no violations of the assumption normally distributed error term.

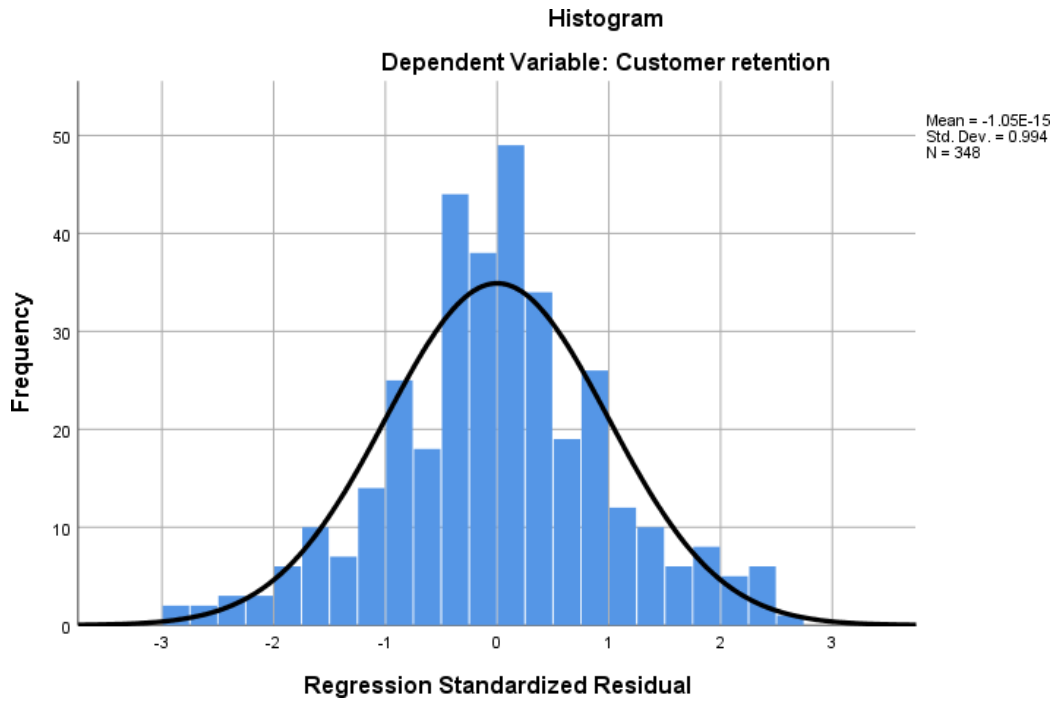

Figure 4:1 Normality test result

Source: Survey result, 2024

#3. **Assumption of Linearity**

Linearity is the degree to which the change in the dependent variable is related and affected by the change in the independent variables the association and relation between the dependent variables and independent variables need to be linear function to perform linear regression analysis (Darlington, 1968). One method of avoiding non-linearity is to use theory of previous research study to inform the current analysis to support in choosing the suitable variables (Osborn & Waters, 2002).I.e. the relationship between the independent variables and the dependent variable can be characterized by a straight line.

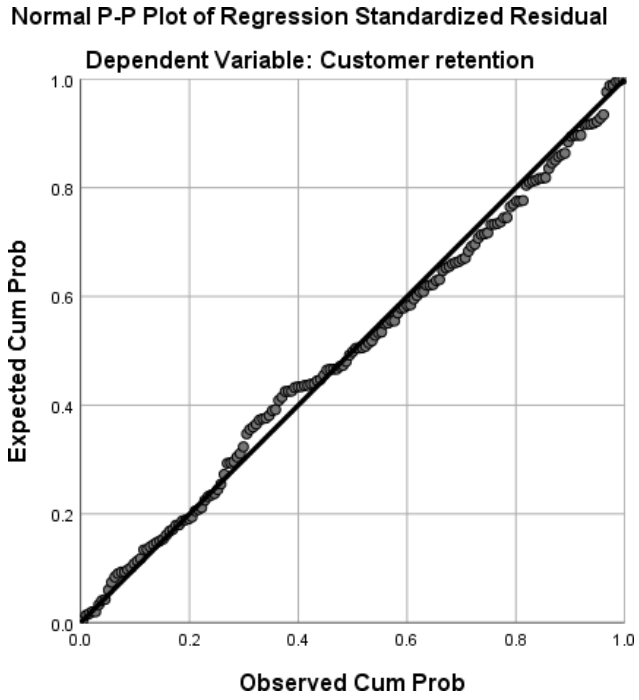

Figure 4:2 Linearity test result

Source: Survey result, 2024

#4. Test of Hetroscedasticity

The variance of the error term is constant across all levels of the independent variable (Kleinbaum et al., 1982). The scatter of the residuals (difference between the predicted value and observed value) should not change as we move along the X-axis (Myers et al., 2012). There should be no obvious overall pattern to the residuals (Fox et al., 2015). The residuals should be randomly and evenly dispersed around the horizontal line of zero on the scatter plot (Cohen et

al., 2003). The residuals are randomly and evenly dispersed as shown the fig below. Thus, there is no problem of hetroscedasticity.

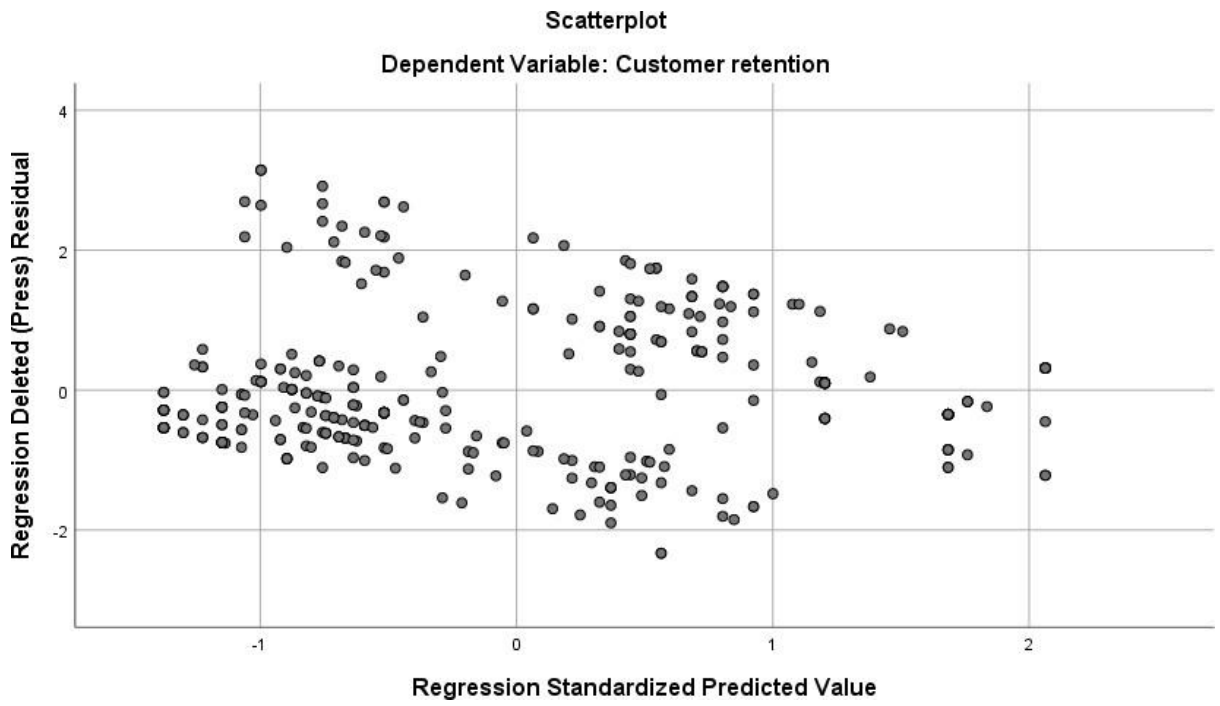

Figure 4:3 Hetroscedasticity test result

Source: Survey result, 2024

4.5.2. Model Summary and ANOVA

Regarding to model fitness, the researcher checked the R-square value from model summary and F-test result from ANNOVA table. The discussion of the result is presented below.

Table 4-12 :- Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.808[a]	.652	.648	.80672
a. Predictors: (Constant), Technology -based Customer relationship management, Key customer focus, CRM organization, Knowledge management				
b. Dependent Variable: Customer retention				

Source: Survey result, 2024

The model summary in table 4-12 indicates that the multiple regression models, incorporating technology-based customer relationship management, key customer focus, CRM organization, and knowledge management as predictors, demonstrates a strong overall fit for explaining customer retention, as evidenced by an R-squared value of 0.652. This R-squared value suggests

that approximately 65.2% of the variability in customer retention is accounted for by the predictors in the model. The adjusted R-squared value of 0.648, which considers the number of predictors, further supports the model's robustness in explaining customer retention. Additionally, the standard error of the estimate, at 0.80672, represents the average distance that the observed values deviate from the regression line, indicating the accuracy of the model's predictions. Overall, these results suggest that the selected CRM-related predictors collectively contribute significantly to explaining customer retention within the bank, providing valuable insights into the relationships between these variables and customer retention.

Table 4-13 :- ANOVA test result

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	418.828	4	104.707	160.889	.000[b]
	Residual	223.225	343	.651		
	Total	642.054	347			
a. Dependent Variable: Customer retention						
b. Predictors: (Constant), technology-based customer relationship management, key customer focus, CRM organization, knowledge management						

Source: Survey result, 2024

The ANOVA test results in table 4-13 indicate a highly significant overall model fit for the multiple regression models, with a regression sum of squares of 418.828, a mean square of 104.707, and an F-statistic of 160.889, yielding a p-value of .000. These results suggest that the combined effect of the predictors (technology-based customer relationship management, key customer focus, CRM organization, and knowledge management) on customer retention is statistically significant. The residual sum of squares is 223.225, indicating the unexplained variability in the dependent variable. Overall, the ANOVA test provides strong evidence that the predictors collectively contribute to explaining the variation in customer retention, supporting the validity of the multiple regression model in this context.

4.5.3. Hypothesis Test Results and Discussion

Table 4-14 :- Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.341	.277		-4.845	.000
	Knowledge management	.597	.053	.465	11.367	.000**
	Key customer focus	.152	.060	.082	2.539	.012*
	CRM organization	.479	.036	.459	13.206	.000*
	Technology -based Customer relationship management	.305	.036	.337	8.546	.000**
a. Dependent Variable: Customer retention						
**. Effect is significant at the 0.01 level. *. Effect is significant at the 0.05 level.						

Source: Survey result, 2024

Based on the regression coefficients provided, the analysis of the impact of key customer focus on customer retention in the North Shoa Zone branches of the Commercial Bank of Ethiopia can be conducted. The unstandardized coefficient for key customer focus is 0.152, with a corresponding standardized coefficient (Beta) of 0.082 ($p < 0.05$). This indicates that for every one-unit increase in key customer focus, there is a 0.152 unit increase in customer retention. However, the standardized coefficient (Beta) of 0.082 suggests a relatively weaker positive relationship. The significance level of $p = 0.012$* indicates that the effect of key customer focus on customer retention is marginally significant at the 0.05 level. Based on these findings, it can be concluded that the impact of focusing on key customers on customer retention in the North Shoa Zone branches of the Commercial Bank of Ethiopia is marginally significant and relatively weaker compared to the other predictors. Therefore, the evidence from the analysis does not strongly support the hypothesis that focusing on key customers has a positive and significant effect on customer retention in this specific context. Further investigation and consideration of additional factors may be necessary to draw a more definitive conclusion regarding the impact of key customer focus on customer retention. This finding is in line with findings of several previous studies (such as Fan & Ku, 2010; Mendoza et al., 2007; Nguyen & Mutum, 2012; Sofi & Hakim, 2018) who found that personalized relationship management practices, a key element of focusing on key customers, significantly enhanced customer retention).

Based on the provided regression coefficients, the analysis of the impact of organizing around CRM on customer retention in the North Shoa Zone branches of the Commercial Bank of Ethiopia can be conducted. The unstandardized coefficient for CRM organization is 0.479, with a corresponding standardized coefficient (Beta) of 0.459 ($p < 0.01$). This indicates that for every one-unit increase in CRM organization, there is a 0.479 unit increase in customer retention. The standardized coefficient (Beta) of 0.459 suggests a strong positive relationship. The significance level of $p = 0.000$* indicates that the effect of organizing around CRM on customer retention is highly significant at the 0.01 level. Based on these findings, it can be concluded that organizing around CRM has a strong positive and significant effect on customer retention in the North Shoa Zone branches of the Commercial Bank of Ethiopia. The evidence from the analysis strongly supports the hypothesis that organizing around CRM has a positive and significant effect on customer retention in this specific context. This finding is consistent with the findings of previous studies (such as Abubakar et al., 2021; Chetioui, 2017; Soltani & Navimipour, 2016) whose findings revealed that a comprehensive CRM framework emphasizing the need for customer-centric organizational processes and employee empowerment to deliver superior customer service, leading to loyalty and retention.

The analysis of the impact of managing knowledge on customer retention in the North Shoa Zone branches of the Commercial Bank of Ethiopia reveals compelling results. The unstandardized coefficient for knowledge management is 0.597, signifying that for every one-unit increase in knowledge management; there is a corresponding 0.597 unit increase in customer retention. Furthermore, the standardized coefficient (Beta) of 0.465, with a significance level of $p < 0.01$, indicates a strong positive relationship and high statistical significance. These findings strongly support the hypothesis that managing knowledge has a positive and significant effect on customer retention in this specific context. This finding is similar with the findings of (Soltani & Navimipour, 2016; Taherparvar et al., 2014; Madhovi & Dhliwayo, 2017; Ngugi et al., 2013) who found a significant positive link between effective customer knowledge management and both customer satisfaction and retention.

Based on the provided regression coefficients, the analysis of the impact of incorporating CRM-based technology on customer retention in the North Shoa Zone branches of the Commercial Bank of Ethiopia can be conducted. The unstandardized coefficient for Technology-based Customer Relationship Management is 0.305, with a corresponding standardized coefficient

(Beta) of 0.337 ($p < 0.01$). This indicates that for every one-unit increase in the incorporation of CRM-based technology, there is a 0.305 unit increase in customer retention. The standardized coefficient (Beta) of 0.337 suggests a strong positive relationship. The significance level of $p = 0.000^{**}$ indicates that the effect of incorporating CRM-based technology on customer retention is highly significant at the 0.01 level. Based on these findings, it can be concluded that incorporating CRM-based technology has a strong positive and significant effect on customer retention in the North Shoa Zone branches of the Commercial Bank of Ethiopia. The evidence from the analysis strongly supports the hypothesis that incorporating CRM-based technology has a positive and significant effect on customer retention in this specific context. This finding is in line with the findings of Buttle & Maklan (2019), Richard et al.(2007), Soltani & Navimipour, (2016) who found that investing in and utilizing CRM technology significantly enhanced customer retention.

Based on the results from the regression analysis, it can be summarized that the four hypotheses are accepted. The summary is depicted in the following table 15.

Table 4-15 Summary of Hypothesis test

Hypotheses	**Standardized β**	**P-value**	**Remark**
Ha1: Focusing on key customers has a positive and significant effect on customer retention in North Shoa Zone branches of Commercial Bank of Ethiopia.	.082	.012	**Accepted**
Ha2: Organizing around CRM has a positive and significant effect on customer retention on customer retention in North Shoa Zone branches of Commercial Bank of Ethiopia.	.459	.000	**Accepted**
Ha3: Managing knowledge has a positive and significant effect on customer retention on customer retention in North Shoa Zone branches of Commercial Bank of Ethiopia.	.465	.000	**Accepted**
Ha4: Incorporating Technology-based CRM has a positive and significant effect on customer retention on customer retention in North Shoa Zone branches of Commercial Bank of Ethiopia.	.337	.000	**Accepted**

Source: Survey result, 2024

Based on the provided regression coefficients, the equation for the model is as follows:

Customer retention = -1.341 + 0.152 Key customers focus + 0.479 Organizing around CRM + 0.597 Knowledge management + 0.305 Incorporating CRM-based technology + e

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary

This study investigates how different customer relationship management (CRM) practices affect customer retention in North Shoa Zone branches of the Commercial Bank of Ethiopia. It aims to determine how much focusing on key customers, organizing around CRM principles, knowledge management, and using CRM technology contribute to customer retention, and ultimately identify which of these practices has the strongest effect. The research employs a mixed approach, using descriptive statistics to establish the current state of CRM and customer retention, and explanatory methods to assess the causal relationships between specific CRM practices and retention rates. Customers from three purposefully chosen branches with varying customer retention challenges were surveyed to gather data. Questionnaires were used to collect information from customers. Finally, the study utilized both descriptive (mean, standard deviation) and inferential statistics (correlation, regression) to analyze the data.

Descriptive statistics results revealed variations in customer perceptions across different aspects of the bank's practices. Customer retention efforts received the lowest overall mean score (1.79), falling below the "low agreement" threshold according to the reference scale. This indicates room for improvement in practices related to keeping customers. Knowledge management practices received a moderate mean score (2.26), suggesting a neutral to somewhat positive perception. Customer focus strategies achieved a moderate to high mean score (3.23), with low to moderate standard deviations, indicating a generally positive and consistent view of the bank's approach to key customers. CRM organization practices garnered a low to moderate mean score (2.67), with some variation in responses, suggesting mixed perceptions of the bank's CRM structure. Finally, technology-based CRM received a moderate mean score (2.89), with standard deviations indicating some variation in opinions. While customers acknowledge a basic technology infrastructure exists, there's room for improvement in areas like online banking services.

The Pearson correlation results reveal positive correlations between customer retention and various CRM practices. A strong positive correlation ($r = 0.635^{**}$) exists between customer retention and technology-based CRM, suggesting that banks with stronger technology-based

CRM systems tend to have higher customer retention rates. Moderate positive correlations are also found between customer retention and knowledge management (r = 0.535), CRM organization (r = 0.378), and key customer focus (r = 0.186).

The multiple regression model incorporating technology-based customer relationship management, key customer focus, CRM organization, and knowledge management as predictors, demonstrates a strong overall fit for explaining customer retention, as evidenced by an R-squared value of 0.652. This suggests that approximately 65.2% of the variability in customer retention is accounted for by the predictors in the model. The adjusted R-squared value of 0.648 further supports the model's robustness in explaining customer retention. Additionally, the ANOVA test indicates a highly significant overall model fit for the multiple regression model, with a regression sum of squares of 418.828, a mean square of 104.707, and an F-statistic of 160.889, yielding a p-value of .000. These results suggest that the combined effect of the predictors on customer retention is statistically significant, providing strong evidence that the predictors collectively contribute to explaining the variation in customer retention.

The effect of key customer focus on customer retention in the North Shoa Zone branches of the Commercial Bank of Ethiopia was found to be marginally significant, with an unstandardized coefficient of 0.152 ($p < 0.05$) indicating a 0.152 unit increase in customer retention for every one-unit increase in key customer focus. However, the standardized coefficient (Beta) of 0.082 suggests a relatively weaker positive relationship, and the significance level of $p = 0.012$* indicates marginal significance at the 0.05 level. In contrast, organizing around CRM was found to have a strong positive and significant effect on customer retention, with an unstandardized coefficient of 0.479 and a corresponding standardized coefficient (Beta) of 0.459 ($p < 0.01$), indicating a 0.479 unit increase in customer retention for every one-unit increase in CRM organization. Managing knowledge also demonstrated a strong positive and significant effect on customer retention, with an unstandardized coefficient of 0.597 and a corresponding standardized coefficient (Beta) of 0.465 ($p < 0.01$). Similarly, incorporating CRM-based technology was found to have a strong positive and significant effect on customer retention, with an unstandardized coefficient of 0.305 and a corresponding standardized coefficient (Beta) of 0.337 ($p < 0.01$). These results provide valuable insights into the impact of different CRM-related factors on customer retention within the specific context of the Commercial Bank of Ethiopia in the North Shoa Zone.

5.2. Conclusion

The study focused on examining the effect of customer relationship management practices (Focusing on key customers, organizing around CRM principles, knowledge management, and using CRM technology) practices on customer retention within the North Shoa Zone branches of the Commercial Bank of Ethiopia, ranking their relative effect. Customer perceptions revealed areas for improvement, with moderate to high scores for customer focus strategies, but lower scores for customer retention efforts and CRM organization. Technology-based CRM practices received a moderate score, indicating room for improvement. The multiple regression model showed that all four factors-focusing on key customers, organizing around CRM principles, knowledge management, and using CRM technology-have a statistically significant positive effect on customer retention, explaining approximately 65.2% of the variation in retention rates. The findings also revealed that knowledge management demonstrating the strongest effect followed by organizing around CRM, incorporating CRM technology and focusing on key customers.

5.3. Recommendations

Based on the study's findings for the North Shoa Zone Commercial Bank of Ethiopia, the following recommendations can be made for each significant variable and recognizing variables that scored well:

- Focusing on Key Customers: While statistically significant, the relatively weak positive relationship suggests that focusing on key customers alone may have a less substantial impact on customer retention compared to other CRM practices. The district ought to consider enhancing its efforts in this area to strengthen the relationship with key customers, potentially through personalized services and targeted marketing strategies.

- Organizing Around CRM Principles: This variable demonstrated a strong positive effect on customer retention. The district is advised to prioritize and improve its organizational structure around CRM principles, ensuring that customer information and interactions are effectively managed and utilized to enhance customer retention.

- Knowledge Management: With the strongest positive effect on customer retention, the district is strongly advised to prioritize and bolster its knowledge management practices.

This may involve improving knowledge sharing among staff, implementing effective training programs, and utilizing customer insights to enhance retention strategies.

- Using CRM Technology: Incorporating CRM technology has shown a strong positive effect on customer retention. The district is recommended to invest in advanced CRM technology to improve customer interactions, streamline processes, and enhance overall customer retention efforts.

- Recognizing the variables that scored well in customer focus strategies, the district is encouraged to continue and potentially strengthen its efforts in this area, ensuring that it maintains a positive approach to engaging and retaining key customers. Additionally, the moderate score for technology-based CRM practices indicates a need for improvement, suggesting that the district should consider enhancing its technology infrastructure, particularly in online banking services, to better support customer retention efforts.

5.4. Limitations of the study and future research directions

This study offers valuable insights into the influence of CRM practices on customer retention within a specific context. However, two limitations are worth noting. First, the study focused on the North Shoa Zone branches of the Commercial Bank of Ethiopia. The generalizability of the findings to other geographical areas or bank institutions might be limited. Future research could explore the applicability of these results across diverse banking contexts. Second, the study relied on self-reported data from customers and interviews with branch personnel. While these methods provided valuable information, potential biases inherent in subjective data collection cannot be entirely ruled out. Future research could incorporate more objective measures of CRM practices and customer retention behavior to strengthen the validity of the findings.

Building on this study, future research directions could delve deeper into specific aspects of CRM practices. For example, investigations into the most effective strategies for identifying and managing key customer relationships or exploring the optimal structure and functionalities of CRM technology within the banking sector could yield valuable knowledge for improving customer retention efforts.

REFERENCES

Abubakar, F. M., Inuwa, M., & Idris, A. A. (2021). *Conceptualizing the Indirect Relationships between E-CRM, Customer Satisfaction and Customer Loyalty: A Proposed Model*.

Adeniyi, M. M. (2023). *Customer Relationship Management and Organizational Performance of Selected Banks in Ogun State, Nigeria*.

Akintunde, O. A., & Akaighe, G. O. (n.d.). *Customer Relationship Management (CRM) and Customer Retention in Nigeria Banking Industry: A Strategic Standpoint*.

Al Karim, R., Alam, M. M. D., & Al Balushi, M. K. (2023). The nexus between CRM and competitive advantage: The mediating role of customer loyalty. *Nankai Business Review International*.

Albaity, M., & Rahman, M. (2021). *Customer Loyalty towards Islamic Banks: The Mediating Role of Trust and Attitude. Sustainability 2021, 13, 10758*.

Alemu, M. (2020). *The Effect of Customer Relationship Management on Customer Satisfaction:(The case of United Bank SC)*.

Alkitbi, S. S., Alshurideh, M., Al Kurdi, B., & Salloum, S. A. (2020). *Factors affect customer retention: A systematic review*. 656–667.

Alshamsi, A., Alshurideh, M., Kurdi, B. A., & Salloum, S. A. (2021). *The influence of service quality on customer retention: A systematic review in the higher education*. 404–416.

Anees, R. T., Nordin, N. A., Anjum, T., Cavaliere, L. P. L., & Heidler, P. (2020). Evaluating the Impact of Customer Relationship Management (CRM) Strategies on Customer Retention (A Study of Fast Food Chains in Pakistan). *Business Management and Strategy*, *11*(2), 117–133.

Awiti, G., & Otieno, P. (2021). Influence Of Customer Relationship Management on Customer Retention in Commercial Banks In Kenya. *International Research Journal of Business and Strategic Management*, *2*(1).

Babbie, E., & Rubin, A. (2016). *Empowerment series: Research methods for social work*.

Buttle, F., & Maklan, S. (2019). *Customer relationship management: Concepts and technologies*. Routledge.

Chetioui, Y. (2017). The impact of CRM dimensions on customer retention in the hospitality industry: Evidence from the Moroccan hotel sector. *Journal of Research in Marketing (ISSN: 2292-9355)*, *8*(1), 652–660.

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Academic press.

Cohen, L., Manion, L., & Morrison, K. (2017). Validity and reliability. In *Research methods in education* (pp. 245–284). Routledge.

Desta, B. (n.d.). *SCHOOL OF POST GRADUATE STUDIES*.

Fan, Y.-W., & Ku, E. (2010). Customer focus, service process fit and customer relationship management profitability: The effect of knowledge sharing. *The Service Industries Journal*, *30*(2), 203–223.

FANTU, K. (2020). *CUSTOMER RELATIONSHIP MANAGEMENT PRACTICE AND ITS EFFECT ON CUSTOMER SATISFACTION: THE CASE OF NIB INTERNATIONAL BANK*.

Guion, R. M. (2004). Validity and reliability. *Handbook of Research Methods in Industrial and Organizational Psychology*, 57–76.

Hong-kit Yim, F., Anderson, R. E., & Swaminathan, S. (2004). Customer relationship management: Its dimensions and effect on customer outcomes. *Journal of Personal Selling & Sales Management*, *24*(4), 263–278.

Kothari, C. R. (2004). *Research methodology*. new Age.

Lebdaoui, H., & Chetioui, Y. (2020). CRM, service quality and organizational performance in the banking industry: A comparative study of conventional and Islamic banks. *International Journal of Bank Marketing*, *38*(5), 1081–1106.

Madhovi, P. G., & Dhliwayo, S. (2017). The relationship between customer relationship management (CRM) and performance in the hotel industry. *African Journal of Hospitality, Tourism and Leisure*, *6*(1), 1–13.

Manyanga, W., Viriri, P., Mashonjowa, P., Ruzvidzo, P., & Manyanga, T. (2022). The impact of electronic customer relationship management on customer retention in zimbabwe's banking sector. *International Journal of Information, Business and Management*, *14*(3), 55–66.

Medjedel, E. A., & Hamid, A. B. A. (2020). Implementing customer relationship management in Al Rajihi Islamic bank: Reality and perspectives. *International Journal of Advanced Research in Islamic and Humanities*, *2*(1), 26–41.

Mendoza, L. E., Marius, A., Pérez, M., & Grimán, A. C. (2007). Critical success factors for a customer relationship management strategy. *Information and Software Technology*, *49*(8), 913–945.

Mishra, S. B., & Alok, S. (2022). *Handbook of research methodology*.

Nguyen, B., & Mutum, D. S. (2012). A review of customer relationship management: Successes, advances, pitfalls and futures. *Business Process Management Journal*, *18*(3), 400–419.

Nora, L. (2019). Trust, commitment, and customer knowledge: Clarifying relational commitments and linking them to repurchasing intentions. *Management Decision*, *57*(11), 3134–3158.

RATH, B. B. (2021). CUSTOMER RETENTION IN BANKS THROUGH CRM: A REVIEW OF SERVICE GAP, CUSTOMER RETENTION AND TRANSFORMATION TRENDS IN INDIAN BANKS FOR A COMPETITIVE EDGE. *CLEAR International Journal of Research in Commerce & Management*, *12*(11).

Richard, J. E., Thirkell, P. C., & Huff, S. L. (2007). An examination of customer relationship management (CRM) technology adoption and its impact on business-to-business customer relationships. *Total Quality Management & Business Excellence*, *18*(8), 927–945.

Simanjuntak, M., Putri, N. E., Yuliati, L. N., & Sabri, M. F. (2020). Enhancing customer retention using customer relationship management approach in car loan bussiness. *Cogent Business & Management*, *7*(1), 1738200. https://doi.org/10.1080/23311975.2020.1738200

Sofi, M. R., & Hakim, I. A. (2018). Customer relationship management as tool to enhance competitive effectiveness: Model revisited. *FIIB Business Review*, *7*(3), 201–215.

Soltani, Z., & Navimipour, N. J. (2016). Customer relationship management mechanisms: A systematic review of the state of the art literature and recommendations for future research. *Computers in Human Behavior*, *61*, 667–688.

Sugiato, B., Riyadi, S., & Budiarti, E. (2023). The effects of customer relationship management, service quality and relationship marketing on customer retention: The mediation role of bank customer retention in Indonesia. *Accounting*, *9*(2), 85–94.

Taherparvar, N., Esmaeilpour, R., & Dostar, M. (2014). Customer knowledge management, innovation capability and business performance: A case study of the banking industry. *Journal of Knowledge Management*, *18*(3), 591–610.

Umrani, W. A., Tariq, B., Bodolica, V., Nawaz, A., & Pahi, M. H. (2023). Corporate entrepreneurship in banks: The role of technology self-efficacy and technology-based customer relationship management. *Journal of General Management*, 03063070231171459.

Valmohammadi, C. (2017). Customer relationship management: Innovation and performance. *International Journal of Innovation Science*, *9*(4), 374–395. https://doi.org/10.1108/IJIS-02-2017-0011

Yamane, T. (1973). *Statistics: An introductory analysis*.

Yapanto, L., Diah, A., Kankaew, K., Dewi, A., Dextre-Martinez, W., Kurniullah, A., & Villanueva-Benites, L. (2021). The effect of CRM on employee performance in banking industry. *Uncertain Supply Chain Management*, *9*(2), 295–306.

Yemiyamrew, M. (n.d.). *THE EFFECT OF CUSTOMER RELATIONSHIP MANAGEMENT ON CUSTOMER RETENTION; CASE OF COMMERCIAL BANK OF ETHIOPIA*.

Yim, F. H., Anderson, R. E., & Swaminathan, S. (n.d.). *Customer Relationship Management: Its Dimensions and Effect on Customer Outcomes*.

APPENDIX

Questionnaire

Debre Berhan University

College of Business and Economics

Department of Management

MBA Program

Dear respondent this questionnaire is prepared to investigate **Effect of Customer Relationship Management on Customer Retention: A Case Study of Commercial Bank of Ethiopia Branches in North Shoa Zone.** The research output is mainly to fulfill the partial requirement of Masters of business administration. The information gathered will be used fully and with due attention for academic purpose only. I therefore, would like to assure you that the data collected will not be misused in any way. Therefore, your genuine, honest and prompt response is valuable input for the quality and successful completion of the paper.

Thank you in advance for your sincere cooperation.

Genera Instructions

- It is not necessary to write your name.
- You are not forced to fill this paper.
- Don't hesitate to ask questions for clarification.

Part One: Socio-Demographic Characteristics of Respondents

1. Gender

Male ☐ Female ☐

2. Age

≤ 35 years ☐

Above 35 years ☐

3. Educational status

Diploma and below Diploma ☐

Degree and above ☐

4. Marital status

Married ☐

Unmarried ☐

Part Two: Measuring questions of independent variables of the study

Pease indicate the extent to which you perceive that the following statements by using five points Likert scale (1=strongly disagree, 2=Disagree, 3=Neutral, 4=agree, 5=strongly agree)

No	Constructs and items of constructs	1	2	3	4	5
Key Customer Focus						
1	The bank provides customized product and service to key customers.					
2	The bank work with individual key customers to customize its offering through ongoing dialogue					
3	The Bank makes an effort to find out what key Customer needs.					
4	The Bank takes customer feedback seriously and replies to them.					
5	The Bank strives to constantly surprise and delight its key customers.					
Knowledge Management						
1	The Bank's employees are willing to help customers in a responsive manner.					
2	The Bank provides channels to enable ongoing two way communication between key customers and the Bank					
3	Customers can expect prompt service from employees of the Bank.					
4	The bank fully understands the needs of key customers via knowledge leaning.					
5	Employees of the bank have enough experience and information about customers.					
CRM Organization						
1	The Bank employee encourage customers to use more service of the Bank					
2	What makes the Bank different from its rivals is that it can make good relationship with its customers					
3	The bank has established clear business goals related to customer acquisition, development, retention, and reactivation					
4	The bank structure is meticulously (thoroughly) designed around its customers					
5	The Bank has effective customer recovery strategy including guarantee for service failure.					
Technology-based CRM						

1	The Bank has the right soft and hardware to serve their customers					
2	The bank maintains a comprehensive database of its customers					
3	The bank is providing reliable internet and mobile banking service to its customers					
4	The bank has a dedicated Customer Relationship Management (CRM) technology in place					

Part Three: Measures of customer retention (Dependent Variable)

Pease indicate the extent to which you perceive that the following statements by using five points Likert scale (1=strongly disagree, 2=Disagree, 3=Neutral, 4=agree, 5=strongly agree)

No	**Customer retention**	1	2	3	4	5
1	The feedback is taken from customers on regular (weekly) basis.					
2	I feel empowered through personalized messages which encourage healthy relations with my bank.					
3	Bank has a culture where customer is given first preference.					
4	The bank frequently organizes customer meets					