



ST. MARY UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF MARKETING

FACTORS INFLUENCING CUSTOMER RETENTION THE CASE OF SAFARICOM
TELECOMMUNICATION ETHIOPIA PLC
BY
ENDALKACHEW ASFAW

ADDIS ABABA, ETHIOPIA

JUNE 2024

**ST. MARY UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF MARKETING**

**FACTORS INFLUENCING CUSTOMER RETENTION IN THE CASE OF SAFARICOM
TELECOMMUNICATION ETHIOPIA PLC**

BY

ENDALKACHEW ASFAW

Email: Endalkasfaw8@gmail.com

**A THESIS SUBMITTED TO THE DEPARTMENT OF MARKETING
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF ART IN MARKETING
(MA IN MARKETING)
SAINT MARRY UNIVERSITY**

ADVISOR: MOHAMMED MOHAMMEDNUR (ASST.PROF)

ADDIS ABABA, ETHIOPIA

JUNE 2024

DECLARATION

I, the undersigned, declare that the thesis entitled “*Factors influencing Customer retention The case of Safaricom Telecommunication Ethiopia PLC*” is my original work prepared under the guidance and support of my advisor Mohammed Mohammednur (Asst. Prof). It has been carried out and submitted in partial fulfilment of the requirements for the Degree of Master of Art in Marketing Management to the Institute/ Department of Business Administration; School of Graduate Studies, St Marry University. I also confirm that it has never been presented for a degree or masters in any other university, and that all source of materials used for the thesis have been duly acknowledged.

Endalkachew Asfaw

Name

Signature

Date

ID

Endorsement

The thesis entitled “*Factors influencing Customer retention The case of Safaricom Telecommunication Ethiopia PLC*” submitted by Endalkachew Asfaw in partial fulfillment of the requirements for the award of a master’s degree in marketing management to the School of Graduate Studies, St Marry University, has been carried out under my supervision. Therefore, I hereby approve and recommend that it has fulfilled the thesis requirements and can be submitted to the department for examination as the university advisor.

Mohammed Mohammednur (Asst. Prof.) _____

Name of thesis Advisor

Signature

Date

LETTER OF CERTIFICATION

This is to certify that the thesis prepared by Endalkachew Asfaw, entitled: *Factors Influencing Customer Retention the case of Safaricom Telecommunication Ethiopia PLC* and Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Art in Marketing complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

Signed by the Examining Committee:

Dean Office

Name: Signature: date:

Internal Examiner:

Name: Signature: date:

External Examiner:

Name: Signature: date:

Advisor

Name: Signature: date:

ACKNOWLEDGEMENT

I would like to express my profound gratitude to my research advisor, Mr. Mohammed Mohammednur (Asst.Pro) for his unwavering support, insightful guidance, and invaluable feedback throughout the entirety of this research project. His expertise and dedication have been instrumental in shaping the direction and quality of this work. I am also deeply thankful to the Department of Marketing in Saint Marry University for providing the necessary resources and a conducive environment for conducting my research.

Furthermore, I extend my heartfelt appreciation to my colleague, Tsadiku Setegn (PhD Candidate at Anadulu University, Turkye) and Henok Ezezew, for their exceptional assistance with data collection and analysis. Their technical skills and collaborative spirit significantly contributed to the successful completion of this study. Lastly, I would like to thank my family, friends and coworkers for their constant encouragement and unwavering support throughout this journey.

TABLE OF CONTENTS

ACKNOWLEDGEMENT.....	i
LIST OF TABLES.....	iii
<i>Abstract</i>	v
CHAPTER ONE	1
1. INTRODUCTION	1
1.1. Background of the Study	1
1.2. Statement of the Problem	3
1.3. Research Question	5
1.4. Objective.....	5
1.4.1. General Objective	5
1.4.2. Specific Objective.....	5
1.5. Significance of the Study.....	5
1.6. Scope of the Study	6
1.7. Limitation of the Study	6
1.8. Organization of the Study.....	6
1.9. Definition of Key Terms.....	7
CHAPTER TWO	8
REVIEW OF RELATED LITERATURE	8
2.1. INTRODUCTION	8
2.2. Customer Retention.....	8
2.3. Theoretical Review	9
2.3.1. SERVQUAL Theory	9
2.3.2. Customer Satisfaction Theory	9
2.3.3. Commitment-Trust Theory.....	10
2.3.4. Customer Satisfaction and Retention.....	11
2.3.5. Network Quality and Customer Retention.....	12
2.3.6. Data Speed and Customer Retention	12
2.3.7. Technological Innovation and Customer Retention.....	13
2.3.8. Customer Service and Customer Retention	13
2.3.9. Service Charge and Customer Retention.....	14
2.3.10. Data Security and Privacy	15
2.3.11. Service Coverage and Accessibility	16
2.3.12. Service Personalization in Telecommunications Service.....	16
2.4. Empirical Review	17

2.5.	Conceptual Framework	20
2.6.	Research Hypothesis	22
CHAPTER THREE		23
RESEARCH METHODOLOGY		23
3.1.	INTRODUCTION	23
3.2.	Research Design.....	23
3.3.	Research Approach	24
3.4.	Target Population of the Study	24
3.5.	Sample Size Determination.....	24
3.6.	Sampling Technique	25
3.7.	Data Source and Collection Method	26
3.8.	Data Analysis Method	26
3.8.1.	Multiple linear regression analysis method	26
3.9.	Reliability and Validity of the Data Collection Instrument.....	28
3.9.1.	Reliability.....	28
3.10.	Ethical considerations	28
CHAPTER FOUR.....		30
RESULT, DISCUSSION, AND ANALYSIS.....		30
4.	INTRODUCTION	30
4.1.	Demographics Characteristic of Respondents.....	30
4.2.	Descriptive Analysis	32
4.3.	Inferential Analysis.....	33
4.3.1.	Correlation Analysis	33
4.3.2.	Multiple Regression Analysis	34
CHAPTER FIVE		42
SUMMARY, CONCLUSION, AND RECOMMENDATIONS		42
5.	INTRODUCTION	43
5.1.	Summary of Major Findings	43
5.2.	Conclusions	44
5.3.	Recommendations	44
5.4.	Limitation and Further Study Areas.....	45
Reference		46
Appendix I		53

LIST OF TABLES

Table 1. Test of Reliability	27
Table 2. Education level of respondents	29
Table 3. Occupation of students	29
Table 4. Descriptive statistics for Customer retention, Age and Income of the respondents.....	31
Table 5. Interval of Mean	31
Table 6. Mean statistics of variables	31
Table 7. Correlation	32
Table 8. Collinearity Statistics	34
Table 9. Model Summary	35
Table 10. ANOVA ^a	35
Table 11: Regression coefficient	36
Table 12. Decision summary of the hypothesis	41

LIST OF ACRONYMS

- ❖ ACSI-American Customer Satisfaction Index
- ❖ ANOVA- Analysis of Variance
- ❖ ECSI-European Customer Satisfaction Index
- ❖ GB-Gigabyte
- ❖ GSM- Global System for Mobile Communication
- ❖ MMS-Multimedia Messaging Service
- ❖ SMS-Short Messaging Service
- ❖ STEP-Safaricom Telecommunication Ethiopia PLC

Abstract

The research titled "Factors Influencing Customer Retention of Safaricom Ethiopia" aims to identify and analyze the key factors that affect customer retention within Safaricom telecommunications Ethiopia. The study focuses on several independent variables, including customer satisfaction, service charge, data privacy and security, service coverage and accessibility, network reliability, and customer service, all of which are hypothesized to have a positive relationship with customer retention. Conversely, the study finds that personalized service, technological innovation, and data speed do not significantly impact customer retention. This research aims to enhance understanding of customer retention factors in the telecommunications industry, with a focus on Safaricom Telecom Ethiopia. The findings will help Safaricom retain more customers, improve service quality, and refine its customer retention strategies. Additionally, the study provides policy guidance for Safaricom's management to address retention challenges and outperform competitors. Furthermore, it serves as a reference for industry best practices, offering broader implications for enhancing customer loyalty and satisfaction in the telecom sector.

Methodologically, the researcher employed a descriptive and explanatory research design, utilizing quantitative research approaches to provide a comprehensive analysis. Data were collected through a structured questionnaire, distributed to a sample size of 399 customers, with 379 responses correctly filled and used for analysis. Primary data was the main source of information. The findings of this study offer valuable insights for Safaricom Ethiopia and other telecommunication companies aiming to enhance customer retention by focusing on the identified significant factors. The analysis revealed that customer satisfaction, service coverage and accessibility, network reliability, data privacy and security, customer service, and service charge significantly impact customer retention. These factors were found to play crucial roles in determining whether customers continue to use Safaricom Ethiopia's services. In contrast, data speed, personalized service, and technological innovation did not show a significant effect on customer retention. Recommendations include implementing regular customer feedback systems, investing in network infrastructure and security measures, providing extensive training for customer service representatives, adopting competitive pricing strategies, and developing customer loyalty programs. By focusing on these areas, Safaricom Ethiopia can enhance customer loyalty and reduce churn rates.

Key Words: Customer Retention, Service Quality, Safaricom Ethiopia, Network Reliability Customer Satisfaction

CHAPTER ONE

1. INTRODUCTION

This chapter begins by providing an overview of the research background. It then outlines the statement of the problem, research objectives, research questions, scope and followed by a description of the expected contribution, operational definition of key terms, and an outline of the research proposal.

1.1. Background of the Study

In today's world, telecommunication services serve as the foundation of global connectedness, facilitating communication and information exchange across huge distances. This critical industry shapes how people, corporations, and nations interact, influencing many aspects of daily life and making substantial contributions to societal advancement. The fundamental principle of connectedness underpins all telecommunications services. This service provides the infrastructure and methods for seamless communication across geographical boundaries. Telecommunication services, which include voice conversations, text messages, and high-speed internet connectivity, have become an essential component of our interconnected lives. The ability to communicate instantly with anyone, anywhere, has impacted not only personal interactions, but also worldwide business and organizational operations (Hughes, 2001).

The technological advancements in the telecommunications business have been nothing short of astonishing. Beginning with the introduction of landline telephones, the sector has seen numerous waves of innovation, ranging from widespread adoption of mobile devices to the growth of broadband Internet. As telecommunications services expand, the concept of convergence becomes more visible. The integration of many means of communication—voice, data, SMS, MMS, and video offers users multifaceted platforms for interaction. Integrated communication technologies and the widespread use of smartphones exemplify this convergence, providing users with a myriad of capabilities beyond simple voice communication (Lewis, 2004).

The telecommunication industry is a highly competitive sector where customer retention plays a pivotal role in sustaining business growth and profitability. Understanding the factors that influence customer retention in this industry is essential for companies seeking to reduce churn rates and build long-term customer relationships. One of the primary determinants of customer retention in telecommunications is service quality. According to Aydin and Ozer (2005), service quality significantly impacts customer satisfaction and loyalty. Customers expect reliable and uninterrupted service, clear communication, and quick resolution of issues, which are critical for their continued patronage.

Pricing strategies also play a crucial role in retaining customers in the telecommunication industry. Competitive pricing and perceived value for money are key factors that influence customer decisions to stay with a provider (Kim, Park, & Jeong, 2004). Customers are highly sensitive to price changes and often switch to competitors offering better deals. Additionally, personalized offers and loyalty programs can enhance customer retention by

making customers feel valued and recognized (Blut, Beatty, Evanschitzky, & Brock, 2014). These strategies can mitigate the risk of customers switching to competitors and increase their lifetime value to the company.

Furthermore, the role of customer relationship management (CRM) cannot be overstated in the telecommunication industry. Effective CRM practices, such as personalized communication, proactive customer service, and regular engagement, can significantly enhance customer loyalty (Nguyen & Mutum, 2012). Trust and commitment are also essential components of customer retention. When customers trust their service provider and feel a sense of commitment, they are more likely to remain loyal even in the face of competitive offers (Morgan & Hunt, 1994). Therefore, telecommunication companies must invest in building strong relationships with their customers through consistent and reliable service delivery, transparent practices, and responsive customer support.

A study done by Serkan Aydin and Go˘khan O˘zer (2004), The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market which shows corporate image, perceived service quality, trust and customer switching costs are the major antecedents of customer loyalty, and loyal customers may buy more, accept higher prices, and have a positive word-of-mouth effect. Analysis results showed that perceived service quality is a necessary but not sufficient condition for customer loyalty because there are a lot of other factors which affects customer retention or loyalty.

Research done by Kim et al. (2004) on the effects of customer satisfaction and switching barrier on customer loyalty in Korean mobile telecommunication services and both factors have significant influence on customer loyalty or retention. But the above research has its own limitation like there are other factors influencing customer loyalty, apart from factors suggested in this study like network reliability, technological innovation and area coverage and other accessibility.

Customer retention is an important factor in the telecommunications industry, as competition is severe, and consumers have numerous options. The quality of service has a direct impact on customer satisfaction, including network stability, voice call clarity, internet speed, signal strength, and customer assistance. In an era when connectivity is vital to everyday life, achieving and exceeding customer expectations in these areas is critical for telecom providers. In an age where connection is an essential part of daily life, telecom companies must meet and surpass customer expectations in these areas. A seamless and dependable network that provides continuous connection and high-speed data transfer both upload and download is a critical component of client satisfaction in this market. Prompt and courteous customer support is critical in resolving issues, answering questions, and assuring a great experience. Telecom firms that engage in strong customer service channels, such as online help, call centers, and user-friendly apps, tend to improve customer satisfaction by solving problems and facilitating

smooth interactions. Transparent and straightforward invoicing practices improve client satisfaction. (Danesh et al 2012).

This study seeks to address questions concerning the key drivers or barriers impacting customer loyalty, the effectiveness of existing retention strategies, and the potential gaps in understanding customer needs and preferences. By pinpointing these issues, the researcher aims to provide actionable insight that businesses can leverage to refine their approach and fortify customer retention efforts in a rapidly changing market.

1.2. Statement of the Problem

The study aims to investigate the multifaceted factors influencing customer retention with Safaricom, a new telecom service provider in Ethiopia. By examining elements such as service quality, network reliability, customer support responsiveness, pricing structures, technological innovations, data and internet speed, service coverage and accessibility, and data privacy and security, this research seeks to identify the key determinants that significantly impact customers' overall retention of Safaricom's telecom service. Within two year, Safaricom Ethiopia onboarded or registered more than 7 million subscribers; among these, only 4.1 million customers are 90 days active, 2.6 million customers are 30 days active, and 1 million customers are daily active customers. In addition to that, Safaricom Ethiopia has 4.1 million 90-day active voice customers, 2.6 million active one-month voice customers, 2.3 million 90-day active data users, and 1.9 million one-month active data users. An average voice call used per subscriber is 63.8 minutes, with 3.1 GB of data usage per subscriber and 16.5 SMS per customer. Which implies Safaricom Ethiopia has more than 3 million subscribers who don't use the network, even if they have SIM cards, which shows the availability of gaps. To avoid such types of gaps, the researcher must conduct a study to identify factors that affect customer retention towards Safaricom Ethiopia's service. (*Safaricom Ethiopia Half year financial report HY2024*).

Understanding this factor is crucial for Safaricom to enhance its service, strengthen customer relationships, and maintain a competitive edge in the dynamic telecommunications industry. To the best of the researcher's knowledge, there is only one empirical study in Ethiopia done by Ayinadis (2022) that analyzes the relationship between service innovation, customer satisfaction, and loyalty intention evidence from Ethio telecom. In addition to that there are a lot of studies done by other researchers about customer retention. For instance, Gonzalo Ruiz Díaz (2017), showed the influence of satisfaction on customer retention in mobile phone market. This study examines the determinants of customer satisfaction and customer retention. Ranaweera, C. and Prabhu, J. (2003) adopts a holistic approach that examines the combined effects of satisfaction, trust and switching barriers on customer retention in a continuous purchasing setting. Lewis, M. (2004). Showed the influence of loyalty programs and short-term promotion on customer retention. Another research done by Jungkeun Kim (2019), showed the impact of different price promotions on customer retention. Research done by Thorsten Hennig-Thurau and Alexander Klee (1997) showed the impact of customer satisfaction and quality relationship on

customer retention. The article involves a critical examination of the satisfaction–retention relationship, and the development of a more comprehensive view of the customer’s quality perception. The above research showed only two variables which affect customer retention.

Previous studies, such as those by Gonzalo Ruiz Díaz (2017), Ranaweera and Prabhu (2003), Lewis (2004), Jungkeun Kim (2019), and Hennig-Thurau and Klee (1997), have explored various determinants of customer retention, focusing largely on individual or limited combinations of factors such as customer satisfaction, loyalty programs, price promotions, and service quality. However, existing research often lacks a comprehensive analysis that simultaneously considers multiple critical factors influencing customer retention within the specific context of Safaricom Ethiopia. While Ayinadis (2022) examined service innovation, customer satisfaction, and loyalty intentions in Ethio telecom, the applicability of these findings to Safaricom's unique operational environment remains unexplored. Moreover, Ethiopia's telecommunications market, historically dominated by a single provider until recent liberalization, presents a distinct landscape where Safaricom must strategically retain customers amidst emerging competition.

As the researcher discussed in the above paragraph researchers are doing factors affecting customer retention either in two or three variables. The above studies reviewed different factors that affect customer retention in different sectors. However, this study analyzes factors affecting customer retention in Safaricom Ethiopia which includes Customer satisfaction, network reliability, service charge, service coverage and accessibility, technological innovation, data speed, Customer service, Personalized service, and data privacy and security. In this paper the researcher showed the relationship between customer retention and other factors which is additional for the above research. In addition, that Ethiopia is new for new telecom operators because only one telecom service provider had appeared for the past 100 years so Safaricom must retain its customers to be competitive in the market and to fulfill its vision of digitalizing Ethiopia.

In addition to that this study aims to fill this gap by investigating a broad spectrum of factors—including customer satisfaction, network reliability, service charges, service coverage and accessibility, technological innovation, data speed, customer service, personalized service, and data security and privacy—that collectively impact customer retention at Safaricom Ethiopia. By providing a holistic understanding of these factors, the study seeks to contribute valuable insights for Safaricom's strategic initiatives aimed at enhancing customer retention and achieving its vision of digital transformation in Ethiopia.

Therefore, this study was intended to analyze the factors influencing retention in broader manner considering Safaricom Ethiopia as a point of reference.

1.3. Research Question

- To what degree does network reliability influence customer retention?
- In what way does customer satisfaction influence customer retention?
- How does customer service affect customer retention?
- What is the effect of data speed on customer retention?
- How does technological innovation shape customer retention?
- What role does personalized service play in customer retention?
- How do service coverage and accessibility influence customer retention?
- To what extent do data security and privacy contribute to customer retention?
- What is the impact of service charges on customer retention?

1.4. Objective

1.4.1. General Objective

The general objective of this study is to identify and analyze the specific factor that significantly affects customer retention within the context of Safaricom's telecommunication service in Ethiopia.

1.4.2. Specific Objective

- To investigate the effect of Network reliability or performance on customer retention
- To assess the effect of customer satisfaction on customer retention
- To investigate the impact of data speed on customer retention
- To examine the effect of customer service on customer retention
- To identify the effect of technological innovation on customer Retention
- To examine the effect of personalized service on customer retention
- To assess the impact of service coverage and accessibility on customer retention
- To identify the effect of data security and privacy on customer retention
- To assess the impact of service charge on customer retention

1.5. Significance of the Study

The primary goal of the research is to guide activities, prove theories, and contribute to the development of knowledge. The researcher believes that the findings of this study had a variety of benefits for Safaricom Telecom Ethiopia, including the ability to keep more than half of its clients who have Safaricom SIM cards and rejoin the 07 network, as well as address concerns connected to low customer retention. Furthermore, to provide policy guidance for Safaricom Ethiopia, which means that Safaricom Ethiopia's managers will receive greater knowledge about the challenges that must be addressed to retain consumers, this will allow them to outperform their competitors. Understanding the factors influencing customer retention in the telecommunications industry, particularly with the frame of Safaricom, is crucial for the company's sustained success. And the finding of this

study can assist Safaricom in refining its customer retention strategy, optimizing service quality, and fostering stronger customer relationships. Moreover, the study outcome can have broader implications for the telecom sector, serving as a reference for industry best practice in enhancing customer loyalty and satisfaction.

1.6. Scope of the Study

Geographically the study is limited to the factors influencing customer retention that target customers of Safaricom Telecommunications Ethiopia in Addis Abeba. Conceptually the study focuses on network reliability, customer satisfaction, customer service, data speed, technological innovation, personalized service, area coverage and accessibility, service charge and data security and privacy. The dependent variable is customer retention. The researcher used descriptive and explanatory research design and a quantitative and qualitative research approach.

1.7. Limitation of the Study

While this study aims to provide comprehensive insights into factors influencing customer retention at Safaricom Ethiopia, several limitations should be considered. Firstly, the findings may primarily apply to Safaricom Ethiopia and may not be fully generalizable to other telecom operators or different geographical contexts with distinct market dynamics. External factors such as changes in regulatory policies or economic conditions could also influence customer retention rates, which may not be entirely accounted for in the analysis. Additionally, limitations in sample size or potential biases in participant selection could restrict the study's ability to generalize findings across the entire customer base. Moreover, the complexity of factors influencing customer retention, including customer preferences and competitive actions, presents challenges in capturing and analyzing these dynamics comprehensively. In addition to the research methodology, the researcher uses the survey method, which has its own limitations for this study. Respondents may not feel encouraged to provide accurate answers, respondents may not be fully aware of their reasons for any given answer, and the researcher will include closed-ended questions, which may have a lower validity rate than other question types, so the researcher must change those closed-ended questions into open-ended questions. Despite these limitations, addressing them through rigorous methodology and transparent reporting can enhance the study's validity and contribute valuable insights to Safaricom's strategic initiatives.

1.8. Organization of the Study

This study has five chapters. Chapter one is about an introduction which includes background of the study, statement of the problem, Research questions, objective of the study. Chapter two is about review of related literature, chapter three is about research methodology, Chapter four is about Data analysis and the last chapter is talking about Interpretation, conclusion, and Reporting.

1.9. Definition of Key Terms

- **Customer retention** is a company's ability to turn customers into repeat buyers and prevent them from switching to a competitor.
- **Network reliability** is how long infrastructure works without disruption.
- **Customer satisfaction** is a measure of how products and services supplied by a company meet or surpass customer expectations.
- **Internet Speed** or **Data speed** is the performance of an Internet connection, which is based on the number of bytes per second that data travels from the user's device to the Internet (upload) and from the Internet (download).
- **Customer Care Service** refers to the support and assistance provided to users regarding their inquiries, issues, or service-related matters.
- **Technological innovation** refers to the development and implementation of new or improved technologies, solutions, and services that enhance communication networks, devices, and infrastructure, aiming to provide more efficient, reliable, and advanced communication capabilities.
- **Personalized service** refers to offering services to meet the specific needs and preferences of individual customers.
- **Service coverage** refers to the geographical extent or area where a network provides signal and connectivity.
- **Data security** refers to safeguarding digital information from unauthorized access, breaches, or alterations, ensuring the confidentiality, integrity, and availability of data.
- **Data Privacy** refers to protecting individuals' personal information and ensuring that telecom services adhere to privacy regulation, preventing unauthorized disclosure or misuse of sensitive data.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. INTRODUCTION

This chapter presents the literature review, specifically the literature review focuses on the variables of the study, and the discussion includes customer satisfaction, network reliability, customer care service, technological innovation, service coverage and accessibility and data privacy and security. The review of literature focuses on the effect of the above variables on customer retention.

2.2. Customer Retention

Customer retention has key importance in the field of relationship marketing. Customer retention nowadays is very great importance for the companies. To comprehend and apply marketing principles accordingly it is significant to check theoretically and then appraise empirically customer retention (V. Tamuliene, I. Gabryte, 2014). Biggest problem for the companies in current era to retain their high worthy customers than to acquire new customers. As acquiring new customer in these current difficult realms is too difficult than to retain the new ones. So, in this way companies make different strategies to retain their high-net-worth clients. Researchers and practitioners have now accepted the grandness of employee empowerment at the battlefield level in any industry where quick action is required to deliver high quality service to the customers (B. Kim, et al., 2012).

Retaining your best customers is the cheapest and less expensive way than acquiring new ones. If you want to retain your customers, then the best way is to satisfy them. Satisfaction of your customers will ultimately lead to the increase in profitability of the organization. Much attention has been paid to customer loyalty by practitioners and through literature in recent decades (Nawaz and Usman, 2010). People in the field have used both attitudinal and behavioral measures to define and assess customer loyalty (Zeithaml, 2000). Loyalty, from an attitudinal standpoint, implies a specific desire to continue a relationship with supplier and provider (Reza and Rehman, 2012). Oliver (1997) defined customer loyalty as —a deeply held commitment to re-buy or patronize a preferred product/service consistently in the future, thereby causing repetitive brand purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour.

Furthermore, Reza and Rehman (2012) note that customer loyalty represents the repeat purchase and referring the company to other customers. They also stated that customer loyalty is a figure that may be measured directly by measuring the actual repeated sales to customers. Additionally, due to intense competition in the marketplace, businesses have increased efforts to implement the customer retention strategy to maximize the lifetime value of customers (Boshoff and du Plessis, 2009). It is important to note that Cheng et al. (2011) proposed that it is cost

effective to maintain existing customers than obtaining new ones. To this the authors proceeded to state that the cost of developing a new customer is between five and nine times the cost of maintaining existing customers.

By the same token, (Lee, 2012; Kumar and Vandara, 2011; Boshoff and du Plessis, 2009), believe that the benefits of customer retention are cheap to maintain, are price insensitive, spread free positive word-of mouth, always provide suggestions, and always try the company's new products. Brand loyalty takes precedence in the services sector, especially with regards to those providing services with little differentiations and ones competing in aggressive conditions, for example, the telecommunications sectors (Santouridis and Trivellas, 2010). Therefore, it is incumbent on providers to accommodate customer 's expectations in this tough competitive environment by developing strategies to strengthen brand loyalty. Thus, with regards to the telecommunication sector, it is significant to ensure a good relationship between customers and mobile service providers. Rahman, et al., (2010) stated that to create brand loyalty in customers, companies must help customers acquire new ways of purchasing and reinforce those ways as new habits by reminding them of the value of their purchase while encouraging them to continue purchasing those products in the future.

2.3.Theoretical Review

This section examines relevant theories to the study variables. According to Kombo and Tromp (2009), a theoretical framework is a collection of interrelated ideas based on theories. It is a reasoned set of prepositions derived from and supported by data or evidence and it accounts for or explains phenomena and attempts to clarify why things are the way they are based on theories. A theory is defined as a reasoned statement which is supported by evidence, meant to explain phenomena. It is a systematic explanation of the relationship among phenomena. Mugenda (2008) defines a theory as a framework of explaining phenomena by stating constructs and the laws that inter-relate these constructs to each other.

2.3.1. SERVQUAL Theory

SERVQUAL defines service quality as the difference between a customer's expectations for a service offering and their perceptions of the service received, and it asks respondents questions about both their expectations and their views (Parasuraman et al., 2008). The use of perceived rather than actual service received transforms the servqual measure into an attitude measure that is linked to, but not identical to, satisfaction (Parasuraman et al., 2008). Parasuraman et al. (2008) proposed adjustments to the original servqual measure to address issues with high means and standard deviations on some questions and to gain a direct estimate of each construct's significance to the customer.

2.3.2. Customer Satisfaction Theory

Customer Satisfaction Theory is foundational in understanding the dynamics between customer expectations and their perceptions of a company's products or services. According to this theory, customer satisfaction is achieved when the actual performance of a product or service meets or exceeds the customers' expectations. This

comparison between expectations and perceived performance is central to the Expectancy-Disconfirmation Model, which explains how satisfaction levels can significantly impact customer behavior. When customers experience positive disconfirmation, where performance exceeds their expectations, they are more likely to be satisfied and remain loyal to the brand. Conversely, negative disconfirmation, where performance falls short of expectations, leads to dissatisfaction and potential customer churn (Oliver, 1980).

Research has consistently shown that customer satisfaction is a critical determinant of customer loyalty and retention. Satisfied customers are more inclined to make repeat purchases, provide positive word-of-mouth referrals, and exhibit greater tolerance for minor issues or higher prices (Anderson & Sullivan, 1993). This is why businesses that prioritize customer satisfaction often invest in high-quality products, exceptional customer service, and continuous improvement processes. By doing so, they not only enhance customer satisfaction but also build a loyal customer base that contributes to long-term business success and growth. Ensuring that customers' expectations are consistently met or exceeded is thus essential for fostering satisfaction and loyalty, making Customer Satisfaction Theory a vital framework for businesses aiming to thrive in competitive markets (Fornell et al., 1996).

2.3.3. Commitment-Trust Theory

The Commitment-Trust Theory, formulated by Morgan and Hunt (1994), posits that both commitment and trust are essential elements for successful relational exchanges and play a crucial role in customer retention. According to this theory, commitment refers to the enduring desire to maintain a valued relationship, and trust is defined as the confidence in the partner's reliability and integrity. The theory suggests that these two components are central to relational exchanges because they encourage customers to maintain relationships, reduce their tendency to switch providers, and foster loyalty. Trust reduces the perceived risk associated with the relationship and creates a sense of security, which is critical in maintaining long-term customer relationships (Morgan & Hunt, 1994).

Empirical studies have substantiated the Commitment-Trust Theory's relevance to customer retention. For instance, research has demonstrated that high levels of trust and commitment significantly correlate with increased customer loyalty and lower churn rates. Trust leads to a higher tolerance for service failures, provided that the company handles these failures transparently and effectively. Similarly, commitment engenders a psychological attachment to the company, making customers more resistant to competitive offers. By fostering a trustworthy environment and showing genuine commitment to customer satisfaction, businesses can create strong, loyal customer bases. This theory underscores the importance of relational strategies over transactional approaches, highlighting that long-term relationships built on trust and commitment are more sustainable and profitable (Garbarino & Johnson, 1999).

2.3.4. Customer Satisfaction and Retention

Customer satisfaction is one of the key factors in modern marketing and customers' behavior analysis. If the customers are satisfied with the provided goods or services, the probability that they use the services again increases (*Kaplan & Atkinson, 2009*). Also, satisfied customers will most probably talk enthusiastically about their buying or the use of a particular service; this will lead to positive advertising (*Anderson, 2004*). On the other hand, dissatisfied customers will most probably switch to a different brand; this will lead to negative advertising. The importance of satisfying and keeping a customer in establishing strategies for a market and customer-oriented organization cannot be neglected (*Hollensen, 2015*).

Customer satisfaction has been extensively studied as a critical determinant of customer retention, with numerous researchers highlighting its significant influence. For instance, Oliver (1980) posits that customer satisfaction results from a cognitive comparison between expected and actual service performance. Satisfied customers, whose expectations are met or exceeded, are more likely to exhibit loyalty and continue their relationship with the service provider. This positive evaluation fosters an emotional bond between the customer and the company, reducing the likelihood of switching to competitors. Consequently, businesses that prioritize customer satisfaction through consistent service quality and responsiveness tend to retain their customers more effectively (Oliver, 1980).

Further research by Anderson and Sullivan (1993) supports the notion that customer satisfaction directly impacts customer retention. Their study in the telecommunications industry found that satisfied customers demonstrate higher levels of repeat purchase behavior and are less susceptible to switching, even when competitors offer similar or better prices. This finding underscores the importance of maintaining high satisfaction levels to secure long-term customer loyalty. Anderson and Sullivan also highlight that addressing service failures promptly and effectively can mitigate negative impacts on satisfaction and retention, emphasizing the role of effective service recovery strategies in retaining customers (Anderson & Sullivan, 1993).

In addition, Fornell et al. (1996) in their study of the American Customer Satisfaction Index (ACSI) provide empirical evidence linking customer satisfaction to financial performance and customer retention. They found that companies with higher customer satisfaction scores not only experience lower churn rates but also benefit from positive word-of-mouth and reduced marketing costs. Satisfied customers are more likely to become advocates for the brand, recommending it to others, which further enhances retention through customer referrals. This research demonstrates that investments in improving customer satisfaction yield significant returns in terms of both customer loyalty and overall business performance (Fornell et al., 1996).

2.3.5. Network Quality and Customer Retention

Network quality is considered as the trigger to competitive advantages of telecommunication industry, as it cares to attract and retain the customer. Researchers have identified the association between network service quality and its consequences on customer satisfaction. Chen et al. (2014) pointed out that due to low quality of network, consumers become dissatisfied which led them to switch other network operators. Additionally, poor network superiority tends to lower customer satisfaction toward the mobile service operator, thus it causes increased number of customer complaints (Chen et al., 2011). Khan and Afsheen (2012) have quantified that network quality and price fairness have significant effect on choice the mobile phone operator. So, this relationship has been definite that low network quality has a strong negative influence on customer satisfaction, which eventually affects customer loyalty. Provision of a reliable service which can satisfy customers, is critical for retaining customers and a tool to protect organizations from customer churn (Brown and Gulycz, 2001).

The relationship between service quality and customer satisfaction is somewhat reciprocal. Previous research on this relationship can be divided into two schools of thoughts, one considers a satisfied customer perceived highly about service quality (Brown and Gulycz, 2001), and on the contrary the other argues that service quality leads to customer satisfaction (Antreas and Opoulos, 2003; Cronin and Taylor, 1992; Spreng and MacKoy, 1996). Nevertheless, both schools agree that there is a strong correlation between customer satisfaction and service quality. Availability, reliability, and stability of the network are key in customer satisfaction. Equally, the extent of signal coverage is an important determinant in customer loyalty. With the onset of money transfer services, real time delivery of transactional messages is now essential. To this extent, measurement of customer satisfaction in relation to network performance is important. SERVQUAL model developed by Parasuraman et al (1988) suggested that there is a difference between customer satisfaction and the provider's actual service performance.

Delivering a service performance, which can satisfy customers, is critical for retaining customers and a tool to protect organizations from customer churn (Brown and Gulycz, 2001). Marketing scholars and practitioners equally emphasize on the issue of customer satisfaction or generating loyalty among customers, which helps in maintaining existing cash flows and guarantee stable future (Teas, 1994; Zeithaml et al., 1996). While the manufacturing sector is concerned with the repurchase, most of the services depend on the continuity and thus focus on customer retention (Anderson et al., 1994). In an environment with reduced calling rates such as Kenyan markets, customer satisfaction has now become vital.

2.3.6. Data Speed and Customer Retention

Internet and Mobile telephony impacted 21st generation people across the globe and across all segments of people. Mobile technologies are shaping a new generation (Erickson, 2012). The Internet is used for several different activities along with commercial activities. The growth of the Internet from the mid-1990s onward impacted study, knowledge, sharing communications, business etc. Electronic commerce channels are widely used by the

business world to interact with mobile subscribers and use more competitive advantage (Lee & Lin, 2005). The Internet creates an alternative of traditional market for customers and organizations. This new market is flexible, informative, and easily expandable over a short duration. Internet organizations, web pages and mobile apps enable consumers and business provider to search information about product and services along with feedback, ratings and booking orders (Hoffman & Novak, 1996).

A new marketing reality is opened by the newly discovered communication and information technologies for all the Internet users (Xavier & Pereira, 2017). 21st century, the age of the Internet technology has influenced people's lives in a very short span. The information and communication world has changed by rapid technological development in all aspects. Now, mobile phones are not any luxury items, in fact, they're a need. As prices are lowered due to technological advancement and competitions, so these days every person owns a mobile phone. Mobile handsets are a necessity in life. Telecommunication companies helped to increase economic importance and inspired many researchers to spend a lot of time on teaching and research for this sector (Loebbecke, C.1999). Worldwide smartphone users' projections are around 2.7 billion by the end of 2019. One third of the total world's community was using smartphones at the end of 2017.

2.3.7. Technological Innovation and Customer Retention

Schumpeter (1995) defined innovation as encompassing the entire process, starting from a kernel of an idea continuing through all the steps to reach a marketable product that changes the economy. Technological innovation in telecommunication industry will involve management of innovations strategy, research and development, design and new product, service development, operations, and value service delivery. These are both internal and external drivers of innovations. An innovation is also defined by the Oslo manual (OECD, 2005) as a product, process, marketing method or organizational method that is new (or significantly improved) to the firm, including products, processes and methods that firms are the first to develop and those that have been adopted from other firms or organizations.

Innovation can be defined as a new and original idea that successfully resolves a problem or improves existing product. Innovation deals with processes, products, services, and technology. Cummings (1998) stated that innovation management processes can either be linear or continuous. In the business environment innovation is understood to be a catalyst to growth as it provides unique products and services to consumers. (Dodgson et al., 2008) suggest that innovations are essential for a firm to remain in business.

2.3.8. Customer Service and Customer Retention

Customer service is a system of activities that comprises customer support systems, complaint processing, speed of complaint processing, ease of reporting complaints and friendliness when reporting complaint (Kim, Park, and Jeong, 2004). Customer services are the opportunities for telecom service providers that are added to mobile

network other than voice services in which contents are either self-produced by service provider or provided through strategic compliance with service provider (Kuo, Wu, and Deng, 2009). The improved customer services are the focal point of the telecom service providers for social as well as for economic reasons. From a social point of view, services should be available to the customers on reasonable terms. As far as economic factor is concerned, services should satisfy the needs of the customers (*Zeithamul, 2009*). For developing satisfaction among customers, the telecom service providers need to be extra careful with the customer services they provide. Satisfaction of customer is determined by his evaluation of service provided by a brand (Gustafsson, Johnson and Roos, 2005).

The study of Dabholkar, (2015) shows that when the customers, do not get their complaints considered properly, they start looking for other brands. It happens because either the customer service centers do not handle the complaints, or the customers are not able to address them properly. Sometimes, telecom service providers take considerably longer time to resolve the problems like network coverage or call quality, the customers do not wait for long and hence they lose satisfaction with that brand (*Dabholkar, 2015*). Furthermore, the friendly attitude and courteous behavior of the service workers at service firms leaves a positive impression on the customer which lead towards customer satisfaction (*Soderlund and Rosengren, 2008*). On the other hand, if a telecom service provider lacks in providing services (call drops) to its customers it experiences customer churn. Kim, Park, and Jeong (2004) argued that service provider should provide customer-oriented services to heighten up customer satisfaction. It was also found that the customers get satisfied to a brand more if they get all the needed services accumulated in that very brand (*Lichtenstein et al, 2004*).

2.3.9. Service Charge and Customer Retention

Price/tariff plays a vital role in telecommunication market, especially for the mobile telecommunication service providers. The correlation between service charge and customer loyalty which explains that satisfaction of customers in telecom market depends on factors like attractive call rate, internet browsing fees, price schedule variation and so on. Thus, the service charge of the operators influences the loyalty of users a lot. Service charge seems to be one of the very significant factors to derive satisfaction and make users loyal. In this regard, operators should be more careful in determining and maintaining price structure of call and variety of services offered to customers, otherwise switching tendency of customers across operators will be increased and resulting lessening the loyalty of customers. Service charge appears to be a crucial influence in determining consumer pleasure and loyalty. In this regard, operators should be more attentive in setting and maintaining the pricing structure of calls and the range of services supplied to consumers; otherwise, the inclination of customers to transfer between operators will rise, reducing customer loyalty.

From the consumer's perspective, the monetary cost of something is what is given up or sacrificed to obtain a product. Thus, in studies on related topics, service charge has often been conceptualized and defined as a sacrifice.

There are three components to the concept of service charge: objective price, perceived non-monetary price, and sacrifice. The objective monetary price (simply put, the amount of money paid for product) is not equivalent to the perceived price (that is, the price as understood and recorded in the mind of consumer) since consumers do not always know or remember the actual price paid for a product. Instead, they encode the price in a way that it is meaningful to them (*Zeithaml, 1988*).

The theoretical formation of price perception in services remains largely unexplored (*Varki and Colgate, 2001*). This study suggests that the perception of price fairness plays an important role in any exchange transaction. The feeling of fairness depends on the gain-loss ratio felt by both partners in the exchange. From the consumer's perspective, the gain is the product to be received, whereas the loss is the money to be paid. When a consumer pays a higher price than others do, or when a consumer receives a lesser product than anticipated (either in terms of quantity or quality), perceived negative price inequity occurs. On the other hand, perceived positive price inequity may result from either receiving a larger or better product than others, who paid the same price, or paying a lower price but receiving the same product. Price fairness should have an influence on customer satisfaction as well as on behavioral intentions (*Varki and Colgate, 2001*). This study, then, proposes that the perceived fairness of price should directly affect customer retention, and should also affect it indirectly via customer satisfaction.

2.3.10. Data Security and Privacy

Data privacy refers to the developing interaction between technology and the legal right to, or public expectation of, privacy in the collecting and distribution of personal information. Privacy concerns arise whenever personally identifiable data about a person or persons is acquired and kept, whether in digital form or otherwise. It is legitimate for consumers to question corporations about their service complaints, and service providers are obligated to resolve them. Data protection and privacy are significant issues for telecommunications firms. It is difficult to manage and handle massive amounts of data ranging from billions to trillions of gigabytes and beyond. Undoubtedly, technology has solved innumerable issues and will continue to do so in the future. It is always changing as a solution to the myriad challenges that arise daily (*Jericho Forum, 2007*).

Technology is also attempting to bring solutions to the issue of privacy and data protection. In this paper, we will examine in depth the role of various data protection technologies and privacy-enhancing strategies in addressing this rapidly growing challenge. The concept of privacy in telecommunications is identical to the concept of privacy in other aspects of life. Clark (2008) describes data protection as an umbrella term that encompasses a wide range of solutions for protecting data assets. Upper-layer applications generate and control data, which serves as the foundation for relevant information. Data loss is directly proportionate to income loss, which leads to the enterprise's eventual failure (Clark, 2008). Because data is critical to a company's survival, identifying strategies to limit access to data and ensure its integrity is critical to an IT strategy.

Data is ultimately stored on any type of storage media, including solid-state discs, optical media, and tape, as well as disc media in the form of storage arrays. Some instances include Network-attached storage which handles files for upper-layer applications but is unable to do so consistently without underlying block-level safeguards, including redundant array of cheap discs (RAID), alternate pathing, data replication, and block-based tape backup (Clark, 2008).

Security of company and customer data and information is critical to corporate success. In today's environment, when identity theft is on the rise, small businesses are unfortunately unprepared to face the burden of data security. Some small businesses understand the importance of providing secure storage for their clients' data. They witnessed the effects of incorrect data storage. When clients learn of the loss of their personal information, they begin to reconsider doing business with that organization (Nut, 2008).

2.3.11. Service Coverage and Accessibility

Network coverage refers to the geographical region covered by a service provider's network. Safaricom and Ethio telecom are Ethiopia's two primary telecom service providers, each with their own mobile network. The two providers presently operate 2G, 3G, 4G, and 5G networks. Network coverage varies based on the network being used. Users on networks can move between cells without losing connectivity. Expanding network coverage is especially crucial in the country. Many people rely on it as their principal means of digital access. Network coverage facilitates access to education, employment, social networks, healthcare, goods, and services. It's also worth remembering that network reception is weaker within well-insulated structures (Li & Zhang, 2018).

Service coverage and accessibility are critical factors influencing customer satisfaction and loyalty in the telecommunications industry. Studies often emphasize that robust service coverage ensures that customers can reliably access network services without interruptions, thereby enhancing their overall experience. According to Beltrán-Martín and Bou-Llusar (2020), extensive service coverage contributes significantly to customer satisfaction by providing consistent connectivity, which is essential for both personal and business communications (Beltrán-Martín & Bou-Llusar, 2020).

2.3.12. Service Personalization in Telecommunications Service

Personalization in telecommunications is a key method for increasing customer happiness. It entails tailoring the complete consumer experience, including personalized plans, customer service, and proactive communication. Effective service personalization fosters direct contact between the telecom supplier and the customer, boosting the perceived value of the services. According to the literature, successful adoption of service personalization tactics leads to increased customer satisfaction and retention (B. A. Hathaway, S. M. Emadi, and V. Deshpande, 2022).

2.4. Empirical Review

Alshurideh et al., (2012) conducted a study to determine the extent to which customer satisfaction affects customer retention among Jordan's three major cellular phone companies: Zain, Orange, and Umnia. Measuring the relationship between customer happiness and retention is insufficient without investigating the underlying causes of customer satisfaction. The researcher employed a quantitative approach to test and collect surveys from Jordanian mobile users. The study discovered that customer satisfaction influences customer retention in the Jordanian mobile behavior scenario. This finding is supported, as the researcher discovered a direct relationship between customer-supplier relationship duration and customer happiness. Various mobile services are supplied directly to mobile consumers as well as services provided by call center's also affect customer satisfaction and contribute essentially to customer retention.

Venetis & Ghauri, (2004) discovered that service quality has a significant impact on the maintenance of long-term client connections. Its impact on customer commitment was shown to be greater than that of trust, which is recognized as a significant mediating component in other commercial interactions (Morgan and Hunt 1994). Furthermore, the study discovered that service quality is both substantially associated to consumers' affective commitment and directly related to their behavioral goals. The findings reflect the frequently observed favorable relationship between service quality and client stay intentions (Zeithaml et al., 1996).

The research done by Awuku E, Agyei PM, Gonu E (2023) which assess differences in innovation practices in the telecommunication industry, customer perception of service innovations, and how service innovation practices influence the loyalty of mobile subscribers. The researcher used quantitative research method and they were used descriptive and regression analytical approaches to analyze the study's objectives. The result indicates service innovation practices significantly influence loyalty. Innovative service concepts, innovative service processes, and new technologies significantly influence customer loyalty with the latter having the strongest influence. In addition to that the study done by Benjamin Diaw & Gideon Asare (2018) which examined on the effect of innovation on customer satisfaction in the telecommunication service industry which is highly competitive in Ghana.

Product and service innovation is believed to be the key in satisfying and retaining customers. Data were collected using questionnaire and data analysis tools were employed to assess the relationship between variables (dependent and independent). A significant positive relationship was found between innovation and customer satisfaction and retention. The study also found that marketing innovations introduced in recent years has been a major determinant in customer satisfaction and retention. The researcher recommends that telecommunication companies should invest in providing innovative services by researching current trends to forecast products and services.

Sarwar et al., (2012) conducted research on the effect of customer trust on customer loyalty and retention, as well as the moderating role of cause-related marketing in cellular service operators. The study's findings indicate that while Customer Trust, Customer Loyalty, and Cause Related Marketing all have a positive correlation, Customer Trust and Customer Retention have a negative association in the Pakistani environment.

The research done by Mohato Seleke (2013) which is aimed to determine the influence of network service reliability on customer retention. The study identifies the network services or applications commonly used by the average user on the Internet. A framework for the measurement of the reliability of these network services is developed for third-tier internet service providers (ISPs). Because ISPs have limited flexibility in competitively up scaling the capacity of their physical networks, designing, and delivering compelling value proportions to different ISP market segments largely depend on network service reliability. In this research network service reliability was measured using the accessibility, continuity, and fulfilment (ACF) framework. Customer retention was predicted using multiple regression. The study revealed that network service reliability positively influences customer retention.

Another research done by Ronald Bonuke and Joel Chepkwony (2019) which examines the effect of network quality on customer retention Among mobile phone users in public Universities of Western Kenya Region. The study was guided by the social exchange theory which focused on the fundamental principle that humans in social situations choose behaviors that maximize their likelihood of meeting self-interests in those situations. In taking such a view of human social interactions, social exchange theory includes several key assumptions for example; social exchange theory operates on the assumption that individuals are generally rational and engage in calculations of costs and benefits in social exchanges. Explanatory research was utilized in this study.

Data collected was analyzed by use of descriptive and inferential statistics; specifically, regressions were used to test the hypotheses. The results revealed that Network quality had a negative relationship with customer retention. The study recommends that service providers should identify critical network quality which can help in creating sustainable relationship. The service providers should involve users in designing the appropriate network quality. The study provides new theoretical insight into factors influencing customer retention.

Another research done by Hameed, S., Agha, M.H. & Choudhary, M.A. (2012) which is entitled as the role of data protection technologies, data protection and customer retention had positive relationship. According to the research done by Vilma Tamulienea and Ingrida Gabryte which demonstrates the impact of customer satisfaction, relationship quality and switching costs on customers' retention intentions, mobile operators are recommended to strengthen and improve relationships with customers. The study revealed that a good relationship with the client is important because the quality of relationships has a direct impact on customer retention and customer

satisfaction. Improving relations increases the emotional damages, so the customers are reluctant to change the mobile operator.

The study done by Usman Ahmad Qadri, M Mahmood Shah Khan (2014) which is entitled on the effect of price perception, customer satisfaction, brand image, switching barriers (switching cost, interpersonal relationship, and attractiveness of alternative) and trust towards the Customer retention in the cellular industry of Pakistan. The data was collected from the customers in Lahore who are subscribers one of the cellular companies (Mobilink, U-Fone, Telenor, Warid, and Zong) of Pakistan and the data is analyzed with the help of the multiple regression analysis. Out of seven variables tested it is found that switching barriers (interpersonal relationship and switching cost), brand image, price perception, trust and customer satisfaction have the effect on customer retention. However, customer satisfaction has little to do to increase the customer retention.

Allan S. N. Kihara and Gordon K. Ngugi's (2014) research found that service quality influences customer loyalty in the telecoms industry, and compromising service quality can lose a company revenue. The majority of customers value service quality, and their perception is dependent on the quality they receive. According to the survey, value-added services are a vital factor in consumer loyalty, and businesses should always value-add their services. Customer loyalty is influenced by value-added services, and fairness is regarded as a major aspect. The study discovered that switching obstacles are key issues that affect client loyalty, although on a short-term basis. The study shows that brand and image are equally important determinants in client loyalty.

The study which is done by Rebecca Kapai and Dr. Makori Moronge (2015) that explore the determinants of effective customer retention in the mobile communication industry in Kenya. The specific objectives of the study were to examine how customer satisfaction, customer care service, sales promotion, and price/ tariff structure influence customer retention in the mobile communication industry in Kenya. The study adopted a descriptive survey and the data was analyzed with help of SPSS version 21 and Excel. The study adopted correlation and regression analysis at 5% level of confidence to determine strength and direction of the relationship of the variables under study. The analysis showed that customer satisfaction had the strongest positive influence on customer retention.

In addition, customer care service and sales promotion were positively correlated while price/ tariff structure was negatively correlated to customer retention respectively. The researcher recommends that the organization to develop policies to ensure that there is customer care is well taken care of as it influences customer retention in Airtel Kenya, sales promotion should match with the changing environment, the organization should have a wide range of sales promotion to suit different people, offer continuous sale-promotion to its customers, enact strategies to ensure that there is sale-promotion of Airtel Kenya and appreciated by its customers and the organization should offer more sale-promotion than its competitors and ensure customers are satisfied with the prices offered by the

service provider as the price is an indicator of the quality of service and need for the organization to offer relatively cheaper and affordable products as compared to other mobile companies Rebecca Kapai and Dr. Makori Moronge (2015).

Research carried out by Nitish K Mukherjee and Sandhir Sharma (2019) which is studied on the effect of mobile data services on customer loyalty, retention, and satisfaction in the Indian market. It revolves around mobile data service usage pattern of the customers. It includes the study of reasons of customers for using the mobile data services. Factors pertinent to mobile data services are included in this study to study their impact on customer loyalty, satisfaction, and retention in the Indian market. The research adopts quantitative analysis wherein survey was conducted among the customers in Delhi NCR (National Capital Region), Delhi, Faridabad, Noida, and Gurgaon among mobile data service users of different service providers like BSNL, Airtel, Vodafone, Idea and Jio to determine the factors which influence customer loyalty, retention, and satisfaction in the Indian market.

The findings of the usage pattern of the customers are that most of the customers use mobile data services multiple times a day and for a shorter duration of time that is less than half an hour. The study also found significant impact of factors included in the study on customer loyalty, retention, and satisfaction in the Indian market. Customers' ability to access information whenever needed and to connect to friends and peers using mobile data services are two important independent factors, the study found. This research will benefit the mobile data service providers to understand the factors on which they have to focus more on metro cities of the Indian market. The results can also be utilized by the mobile data service providers to improve upon their services for increasing customer loyalty, retention, and satisfaction in the Indian market.

2.5. Conceptual Framework

A conceptual framework is a research instrument that helps a researcher acquire knowledge and comprehension of the situation being studied, as well as communicate it. A conceptual framework is used in research to outline potential actions or to provide a preferred approach to an idea or notion. Bogdan & Biklen (2003) define a conceptual Framework as a basic structure made up of abstract blocks that represent the observable, experiential, and analytical/synthetical parts of the process or system under consideration. The integration of these pieces completes the foundation for specific intended results. Mugenda (2008) defines conceptual framework as a succinct statement of the event under research supported with a graphical or visual representation of the major factors of the study. Kombo and Tromp (2009) define it as a collection of general concepts and principles drawn from relevant disciplines of study and utilized to frame a subsequent presentation. It is a research instrument designed to help a researcher acquire awareness and comprehension of the situation being studied, as well as communicate this. Bell (2010) defines it as a diagrammatic representation that depicts the link between dependent and independent variables.

A conceptual framework helps a researcher organize their thoughts and conclude a study successfully. It also illustrates the interaction between interconnected concepts and the potential connection between variables (Kombo & Tromp, 2009). The conceptual framework consists of the independent variables, also known as exploratory variables, which are assumed to be the cause of changes in the dependent variable, and the dependent variable, also known as the criterion or predictor variable, which the researcher wishes to explain (Kothari, 2004).



Source: Oliver, R. L. (1980), Fornell, C. (1992), Kim et al (2004), Kim, J., & Park, J. (2019), Ranaweera, C., & Prabhu, J. (2003), Díaz, G. R. (2017),

2.6. Research Hypothesis

H1: Customer satisfaction has a significant effect on customer retention.

H2: Network Quality has a significant effect on customer retention.

H3: Mobile internet or data speed has a significant effect on customer retention.

H4: Technological innovation has a significant effect on customer retention.

H5: Customer care service or Service quality has a significant effect on customer retention.

H6: Service Charge has a significant effect on customer retention.

H7: Data security and privacy has a significant effect on customer retention.

H8: Service Coverage and accessibility has a significant effect on customer retention.

H9: Service personalization has a significant effect on Customer retention.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. INTRODUCTION

This chapter covers the aspects of what data to collect (and what data to ignore), Research design, sampling design, how to collect data (Data collection methods) and how to analyse it (Data analysis method).

Research methodology is a way of explaining how a researcher intends to carry out this research. It is a logical, systematic plan to resolve a research problem. A methodology details a researcher's approach to the research to ensure reliable, valid results that address their aims and objectives. It compasses what data they are going to collect and where from, as well as how it's being collected and analysed. It refers to the practical "how" of any given piece of research. More specifically, it's about how a researcher systematically designed a study to ensure valid and reliable address the research aims and objectives. In other words, the methodology chapter should justify the design choices, by showing that the chosen methods and techniques are the best fit for the research aims and objectives and will provide valid and reliable results. A good research methodology provides scientifically sound findings, whereas a poor methodology doesn't.

3.2. Research Design

The research design aims to create a suitable framework for a study. The selection of a research approach is a critical decision in the research design process because it affects how relevant information for a study will be gathered; nevertheless, the research design process comprises several interrelated decisions. Kassu Jilcha Sileyew (2019). According to Saunders et al. (2012), research design is a plan for answering a specific research topic. It is concerned with the correct administration of research data and the integration of various components, strategies, and methodologies for data collection and analysis.

For this study the researcher used both **descriptive** and **explanatory** research design method. Miller (1991) says that descriptive research portrays an accurate profile of persons, events, or situations. This design offers to the researchers a profile of described relevant aspects of the phenomena of interest from an individual, organizational, and industry-oriented perspective. Therefore, this research design enabled the researchers to gather data from a wide range of respondents on the effects of customer satisfaction, network reliability, internet or data speed, technological innovation, personalized service, service coverage and accessibility, data privacy and security and price structure on customer retention and this helped in analyzing the response obtained.

Descriptive research design aims to describe a population, situation, or phenomenon accurately and systematically. It can answer what, where, when and how questions, but not why questions. A descriptive research design can use a wide variety of research methods to investigate one or more variables. Unlike in experimental research, the researcher does not control or manipulate any of the variables, but only observes and measures them (Shona McCombes, 2023). So, descriptive research design is an appropriate choice to describe variables which can influence customer retention. In addition to the above research method, the researcher used explanatory research design because it is suitable for studies that establish causal relationships between variables cause and effect model, investigating patterns and trends in existing data that haven't been previously investigated (Saunders, 2012). This research has prior studies but some of the variables have not studied before while some are studied but not explained properly that is why the researcher use explanatory research design for this study. The objective of this study is to investigate factors influencing customer retention. So, in this topic there is independent and dependent variables.

3.3. Research Approach

For this study the researcher used **quantitative** research approach. Leedy and Ormrod (2001) alleged that quantitative research is specific in its surveying and experimentation, as it builds upon existing theories. The methodology of a quantitative research maintains the assumption of an empiricist paradigm (Creswell, 2003). The research itself is independent of the researcher. As a result, data is used to objectively measure reality. Quantitative research creates meaning through objectivity uncovered in the collected data. Quantitative research can be used in response to relational questions of variables within the research. The intent is to establish, confirm, or validate relationships and to develop generalizations that contribute to theory” (Leedy and Ormrod, 2001). The findings from quantitative research can be predictive, explanatory, and confirming.

3.4. Target Population of the Study

A population is defined as the entire group under study as specified by the objectives of the research project. The population shape is the largest and most encompassing entity (Alvin Burns -Ronald-Bush, 2017). Target population is a certain group of the population that share similar characteristics and is identified as the intended audience for research. So, the target population of for this study was the customers of Safaricom Ethiopia which is lived in Addis Ababa.

3.5. Sample Size Determination

The word "sample size" refers to the number of people involved in a market research study. Sampling is the process of selecting a subset of individuals from a population to estimate the characteristics of the entire population. The two primary advantages of sampling are faster data collecting and reduced costs. (Kish 1965; Robert 2004). Each observation assesses one or more qualities of visible subjects who are identifiable as separate persons. In market research, the word "sample size" refers to the number of subjects included in the sample.

There are many formulas used for calculating sample size. However, this study follows one of the most common formulas proposed by Yamane's (1967) formula. Because it is simple to use, it is scientific and can be used in case of finite population. According to Safaricom Ethiopia Sales and distribution department around 2.7 million customers are joining 07 network in Addis Ababa. Thus, to calculate the sample size from customers. And the study specifies a 5 percent error term.

$$n = \frac{N}{1+N(e^2)} = \frac{2,700,000}{1+2,700,000(0.05*0.05)} = \mathbf{399 \text{ Customers}}$$

Where,

- n – represents sample size
- N- represents total number of populations' size.
- e- Represents sampling error.
- Assuming 95% confidence level and p=0.5

So, the researcher has 399 Sample size.

3.6.Sampling Technique

After the sample size is determined sampling method is the most important thing. To draw a valid conclusion from the results, the researcher carefully decides how to select a sample that is representative of the group. This is called a sampling method or technique (Shona McCombes, 2019). For this study the researcher used simple random sampling technique. Simple random sampling is a foundational method used in research to select a sample from a population, ensuring that each member of the population has an equal chance of being included. To begin, researchers define the population of interest—in this case, the entire customer base of Safaricom Ethiopia—and compile a comprehensive list or database known as a sampling frame. Each member of this frame is assigned a unique number, enabling random selection through methods like random number generators or tables. This approach guarantees that selections are independent and unbiased, ensuring fairness in representation. Researchers then determine the desired sample size based on statistical considerations such as confidence levels and margins of error. Once selected, individuals from the sample are contacted and data is collected using methods like surveys or interviews. Finally, data analysis techniques are applied to draw conclusions about the broader population, leveraging the sample's representativeness to make reliable inferences. By giving each member of the population an equal chance of selection, this method minimizes selection bias and ensures that the sample accurately reflects the characteristics of the entire population. This enhances the validity and reliability of the study results, allowing researchers to make accurate inferences about the population.

3.7. Data Source and Collection Method

According to Surbhi S (2020), data collecting is crucial to statistical analysis. In research, there are two approaches for gathering information: primary data and secondary data. As a result, the researcher must understand the type of data he or she employed in the study. For this study, the researcher used primary data. As the name implies, primary data is that which is collected for the first time by the researcher. Primary data is real time data, more reliable and accurate. Thus, the researcher used a primary data source because of its relevance to the study, accuracy, reliability and to keep the originality of the data.

A survey is basically a data collection tool for conducting survey research. According to Pinsonneault and Kraemer (1993), a survey is a "means for gathering information about the characteristics, actions, or opinions of a large group of people". Surveys can also be used to determine needs, demand, and impact (Salant & Dillman, 1994). For this study, the researcher employed a structured survey questionnaire. To test customer retention, the researcher used 5-point Likert scale (Strongly Agree, Agree, neutral, disagree, and strongly disagree). In addition to that to measure customer retention the researcher used a questionnaire which was entitled how often do you use our telecom service. Likert scale questions were designed carefully, ensuring they are clear, unbiased and cover the full range of possible responses. This allows the researcher to quantitatively analyze and interpret the collected data effectively. Measuring customer retention involves assessing the ability of a business to retain its existing customers over a specified period.

3.8. Data Analysis Method

According to Scherman, Zimmerman, and Smit (2018), data analysis is the vehicle used to generate and validate interpretations, formulate inferences, and draw conclusions, while Marshall and Rossman (2014) describe data analysis as the process of bringing order, structure, and meaning to the mass of collected data, and similarly, Welman, Kruger, and Mitchell (2005) explain data analysis as a means of statistical techniques that assists us in investigating variables and their So, for this study, the researcher used both descriptive statistics and econometric or inferential statistics analysis. Most statistical tests make assumptions about the variables employed in the study. The data must be thoroughly reviewed and checked for completeness and consistency before being edited, coded, and subjected to various forms of data management to facilitate analysis, after which it can be entered and analysed using descriptive and inferential statistics.

3.8.1. Multiple linear regression analysis method

Multiple linear regression refers to a statistical technique that is used to predict the outcome of a variable based on the value of two or more variables and it **enables analysts to determine the variation of the model and the relative contribution of each independent variable in the total variance** (Gujarati, Porter, & Gunasekar, 2012). The variable that we want to predict is known as the dependent variable, while the variables we use to predict the value of the dependent variable are known as independent or explanatory variables. Under this study, a multiple

regression data analysis technique was used where the dependent variable of the study is Customer retention and the independent variables of the study are: Customer satisfaction, Data speed, Network Reliability, Customer service, Technological innovation, personalized service, Service Coverage and accessibility, Data Privacy and security and Service charge.

Model Specifications

According to Brooks (2008), the process of building a robust empirical model is an iterative one, and it is certainly not an exact science. Often, the final preferred model could be very different from the one originally proposed, and need not be unique in the sense that another researcher with the same data and the same initial theory could arrive at a different final specification. Bearing in mind the aforesaid concepts, Brooks (2008) shows that in the process of model building, a logical and valid approach would be to follow the steps such as; sufficiently capturing relevant variables stated in the general statement of the problem, collection of data relevant to the model, choice of estimation method relevant to the model, statistical evaluation of the model, evaluation of the model from a theoretical perspective and use of the model when a researcher is finally satisfied, thus in light of the above proofs and on the base of selected variables, this study developed the following conceptual model.

$$Y_i = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \beta_5x_5 + \beta_6x_6 + \beta_7x_7 + \beta_8x_8 + \beta_9x_9 + u_i$$

Where, Y_i = Customer retention

β_0 = the constant or y-intercept, $\beta_1 \dots \beta_9$ are the slope/coefficient of each x value in the equation, u_i = error term

X_1 = Customer satisfaction

X_2 = Data speed

X_3 = Network Reliability

X_4 : Customer service

X_5 = Technological innovation

X_6 = Personalized service

X_7 = Service Coverage and accessibility

X_8 = Data Privacy and security

X_9 = Service charge.

3.9. Reliability and Validity of the Data Collection Instrument

Although validity and reliability are two different criteria, both are intertwined in determining the quality of research. Test reliability and validity are two technical properties of a test that indicate the quality and usefulness of the test. According to Black and Babin (2019) reliability and validity, jointly called the “psychometric properties” of measurement scales, are the yardsticks against which the adequacy and accuracy of the measurement procedures are evaluated in scientific research.

3.9.1. Reliability

Reliability in quantitative research refers to the consistency of a measure despite repeated several times and a measure of stability at all times (Kirk, Miller, & Miller, 1986). The reliability of the measurement procedures can be defined as a measure of stability or consistency/ dependability over constructs (Bhattacharya, Das, Bar, & Pal, 2006). The most common measure of internal consistency used by researchers is a statistic called Cronbach’s coefficient Alpha (the Greek letter α), which is a reliability measure designed by Lee Cronbach in 1951. According to Hair, Ortinau, and Harrison (2010), if α is greater than 0.7, it means that it has high reliability and if α is smaller than 0.3, then it implies that there is low reliability.

Table 1. Test of Reliability

This table shows the test of reliability for the Likert scale questionnaire, which is assured that, it, is reliable because its alpha value is above 0.7.

Latent variables	Cronbach's Alpha	No of Items
Customer satisfaction	.927	3
Data speed	.892	3
Network Reliability	.856	3
Customer service	.877	3
Technological innovation	.888	3
Personalized service	.883	4
Service Coverage and accessibility	.803	3
Data Privacy and security	.882	3
Service charge	.882	3

Source: Researcher’s Survey Result, 2024

3.10. Ethical considerations

According to Hart (2005) cited by Gezahagn (2019) “ethics in research, as in everyday life, are a combination of socialization, instinct, discretion and being able to put yourself in the position of others to reflect on and see our actions as others may do”. Certain ethical protocols should be followed by the researcher, the first is

soliciting explicit consent from the respondents and this will be ensured that their participation in the study has not been out of their own choice. The researcher also maintained to aware of the respondents about the objectives of the research and their contribution to its completion. The other ethical measure that was ensured by the researcher is treating the respondents with respect and courtesy (O'Leary, 2004). The researcher collected the data at ease/convenience of respondent to have honest responses to the questionnaire and the other ethical measures that should be followed in the data analysis are to carry out the analysis carefully and ethically for guaranteeing a truthful and verifiable result hence the researcher assured it.

CHAPTER FOUR

RESULT, DISCUSSION, AND ANALYSIS

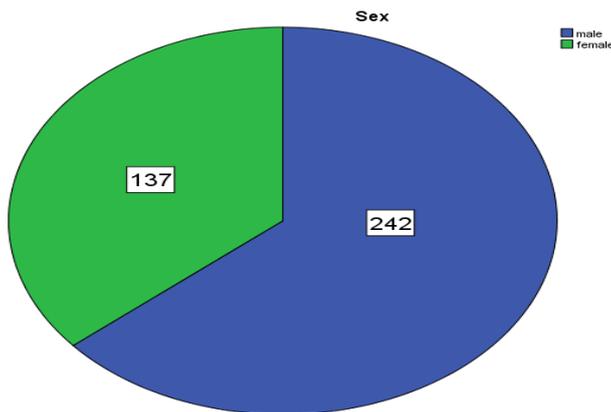
4. INTRODUCTION

This chapter presented the data analysis, presentation, and interpretation of findings on the data collected from 379 customers of Safaricom Ethiopia which is live in Addis Ababa. A total of 399 questionnaires were prepared and distributed but 379 of it were collected and used for final analysis which means so the response rate was 95 percent.

4.1. Demographics Characteristic of Respondents

Gender of the respondents

As it is clearly showed in the following Pie-chart 242 of the respondents are Male while 137 of are Female. Most of the respondent of the study are Male students.



Education level of respondents

		Education			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Basic	14	3.7	3.7	3.7
	Primary	16	4.2	4.2	7.9
	secondary	83	21.9	21.9	29.8
	diploma	58	15.3	15.3	45.1
	degree and above	208	54.9	54.9	100.0
	Total	379	100.0	100.0	

Table 2. Education level of respondents

Interpretation: The above table presents the education levels of respondents in a study, with a total sample size of 379 individuals. Many respondents, 54.9%, have a degree or above, which is the highest educational category represented. This is followed by those with a secondary education, making up 21.9% of the sample. Respondents with a diploma account for 15.3%, while those with only primary education constitute 4.2%. The

smallest group, with basic education, represents 3.7% of the respondents. The cumulative percent column shows the incremental accumulation of these categories, reaching 100% at the highest educational level, indicating that all respondents have been accounted for.

Occupation of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	student	33	8.7	8.7	8.7
	employed	207	54.6	54.6	63.3
	self employed	117	30.9	30.9	94.2
	unemployed	22	5.8	5.8	100.0
	Total	379	100.0	100.0	

Table 3. Occupation of Respondents

Interpretation: The table illustrates the occupational status of 379 respondents. The largest group comprises employed individuals, accounting for 54.6% of the total sample. Self-employed respondents make up 30.9%, indicating a significant portion of the sample is engaged in independent work. Students represent 8.7% of the respondents, while the unemployed group is the smallest, constituting 5.8%. The cumulative percent column reflects the progressive addition of these categories, reaching 100% with the inclusion of the unemployed group, ensuring that the occupational status of all respondents has been comprehensively captured.

Address of respondents

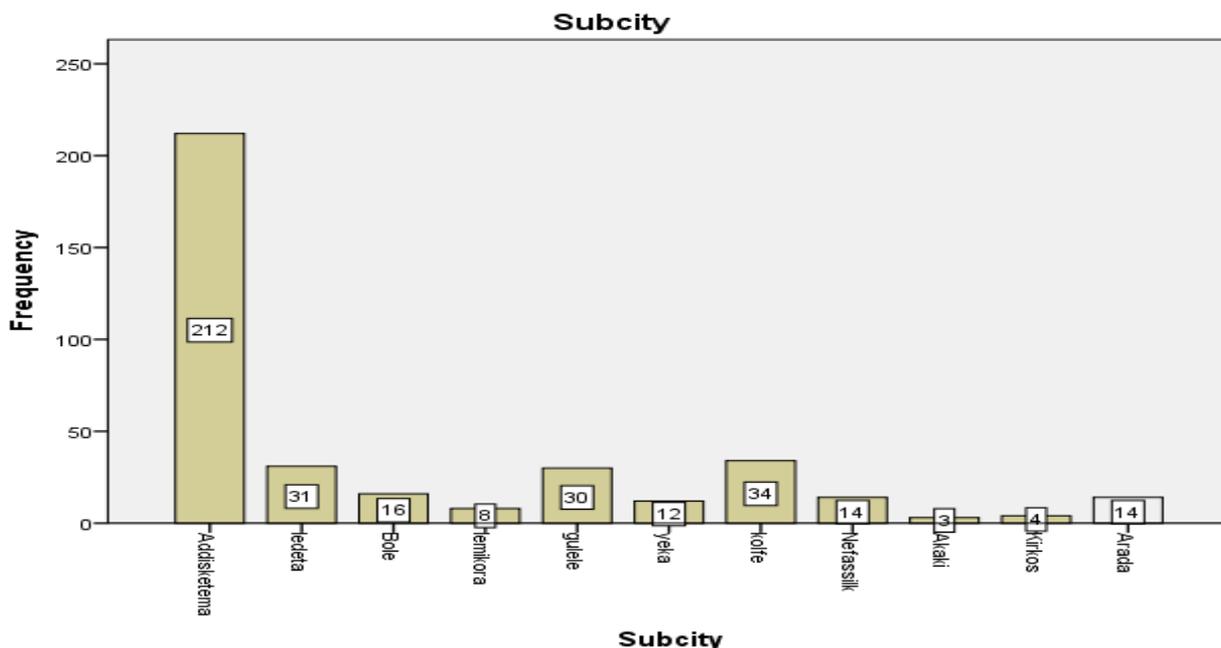


Figure 2. Address of respondents

The bar chart displays the distribution of respondents' addresses across various subcities. Most respondents, 212 out of 379, reside in Addis Ketema, significantly outnumbering other subcities. The next highest concentrations are in Kolfe with 34 respondents and Yeka with 31 respondents. Other subcities such as Gulele (30), Nefas Silk (14), and Arada (14) have relatively smaller groups. Minor representation is seen in Lideta

(16), Akaki (7), Kirkos (4), and Jemo (8). This distribution indicates a heavy skew towards Addis Ketema, suggesting it is the predominant residential area among the respondents, while other subcities show much lower frequencies.

4.2.Descriptive Analysis

The researcher used descriptive statistics such as frequency, percentage, mean and standard deviation.

	N	Minimum	Maximum	Mean	Std. Deviation
Age	379	15	62	29.53	7.736
Income	376	0	250000	13489.03	22389.536
Retention	379	1	24	9.39	4.862
Valid N (listwise)	376				

Table 4. Descriptive statistics for Customer retention, Age and Income of the respondents

Interval of Mean

1	1.00- 1.80	Strongly Disagree
2	1.81- 2.60	Disagree
3	2.61-3.40	Moderately agree
4	3.41-4.20	Agree
5	4.21-5.0	Strongly Agree

Table 5. Interval of Mean

Even though for a categorical variable, the mean cannot be computed but Alhakimi & Alhariry (2014) states that a Likert scale responses must be put on the interval of mean, based on the formula i.e. $\text{Max-Min} / n$ which means $5-1 / 5 = 0.80$ thus the mean of each item ranging from 1- 5 falls within the following interval.

Mean statistics of variables

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Customer satisfaction	379	1.00	5.00	2.9685	1.10130
Data speed	378	1.00	5.00	3.4832	1.03370
Network Reliability	379	1.00	5.00	2.8962	1.07114
customer Service	379	1.00	5.00	2.8074	1.01205
Technological innovation	379	1.00	5.00	3.1689	1.05531
Personalized service	379	1.00	5.00	3.4354	.93406
Service Coverage	379	1.00	5.00	2.9208	.94757
Accessibility					
Data Privacy security	379	1.00	5.00	2.9376	1.05489
Service charge	379	1.00	5.00	3.0387	1.06283
Valid N (listwise)	378				

Table 6. Mean statistics of variables

Based on Alhakimi (2014) interval mean calculation for Likert scale statement above table 5 identifies respondents' response about customer satisfaction is moderately Agree because its interval fall in between 2.61-3.40 i.e. 2.9685 which indicates moderately satisfied about Safaricom Ethiopia telecommunication service. Respondents' average response for Data speed is Agree because its value is between 3.41- 4.20 i.e. 3.4832 which implies the respondents are happy about data speed of Safaricom Ethiopia telecommunication service. Respondents' average response for Network reliability is moderately agreed because its value is between 2.61- 3.40 i.e. 2.892 which implies on average respondents are moderately satisfied about Safaricom Ethiopia network reliability. Respondents' average response for customer service is moderately agreed because its value is between 2.61- 3.40 i.e. 2.8074 which implies on average respondents are moderately satisfied about Safaricom Ethiopia customer service.

Respondents' average response for technological innovation is again moderately agreed because its value is between 2.61- 3.40 i.e. 3.1689 which implies on average respondents are moderately satisfied about Safaricom Ethiopia invention and technological improvement. Respondents' average response for Personalized service is Agree because its value is between 3.41- 4.20 i.e. 3.4354 which implies the respondents are happy about level of effort exerted to each customer (personalized service effort) by Safaricom Ethiopia telecommunication service. Respondents' average response for Service Coverage and Accessibility is moderately agreed because its value is between 2.61- 3.40 i.e. 2.9208 which implies on average respondents are moderately satisfied about Safaricom Ethiopia service coverage and accessibility. Once more respondents' average response for Data Privacy security is moderately agreed because its value is between 2.61- 3.40 i.e. 2.9376 which implies on average respondents are moderately satisfied about data privacy and security practiced by Safaricom Ethiopia Tele communication service. Lastly, respondents' average response for service charge is moderately agreed because its value is between 2.61- 3.40 i.e. 2.9376 which implies on average respondents are moderately satisfied/accepted the price charged against service the company offered.

4.3. Inferential Analysis

4.3.1. Correlation Analysis

The study statistical methodology involved determining the relationship between variables. The level of relationship is determined using spearman's correlation coefficients. The strength and direction of the connection between the two variables is evaluated by spearman's coefficient, which lies between -1.0 and +1.0 (Field, 2005). This study used spearman's correlation coefficient to do a correlation analysis. Spearman's correlation is a non-parametric measure that evaluates the strength and direction of the association between two ranked variables. It assesses how well the relationship between two variables can be described using a monotonic function, without requiring a linear relationship. The coefficient ranges from -1 to 1, where +1 indicates a perfect positive relationship, -1 indicates a perfect negative relationship, and 0 indicates no relationship. This method is less sensitive to outliers and suitable for ordinal data, making it useful when Pearson's correlation assumptions are not met.

Table 7. Correlation

According to the data in the table below, the correlation between Customer satisfaction, Data speed, Network Reliability, Customer service, Technological innovation, personalized service, Service Coverage and accessibility, Data Privacy and security and Service charge with the dependent variable is positive and significant, implying that an increase in any or all the independent variables leads to an increase (facilitate positively) in customer retention. Specifically, the following correlation matrix table display that all the variables have a strong correlation with customer Retention for it is spearman’s value is above 0.5, and it is statistically significant (2- tailed sig)- where p value is less than 0.05(p<0.05)

			Customer Retention
Spearman's rho	Customer_satisfaction	Correlation Coefficient	.848**
		Sig. (2-tailed)	.000
		N	379
	Data_speed	Correlation Coefficient	.594**
		Sig. (2-tailed)	.000
		N	378
	Network_Reliability_E	Correlation Coefficient	.780**
		Sig. (2-tailed)	.000
		N	379
	customer_Service_E	Correlation Coefficient	.841**
		Sig. (2-tailed)	.000
		N	379
	Techinological_innovation	Correlation Coefficient	.548**
		Sig. (2-tailed)	.000
		N	379
	Personalized_service	Correlation Coefficient	.510**
		Sig. (2-tailed)	.000
		N	379
	Serv_Cov_Accesability	Correlation Coefficient	.842**
		Sig. (2-tailed)	.000
		N	379
	Data_Privacy_security_E	Correlation Coefficient	.857**
		Sig. (2-tailed)	.000
		N	379
	Service_charge_E	Correlation Coefficient	.805**
		Sig. (2-tailed)	.000
		N	379

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

4.3.2. Multiple Regression Analysis

4.2.2.2.1. Multiple regression assumption test

Under the multiple regression data analysis methods, the following assumptions must be fulfilled to have a sound analysis result (Gujarati et al., 2012), those are:-

❖ **Linearity**

Linearity is the assumption that the relationship between dependent variables and independent variables can be characterized as linear. The linearity relationship between the dependent and independent variable represented the degree to which the change in the dependent variable is associated with the independent variable (Hair et al., 2013). In a simple sense, linear models predict values falling in a straight line by having a constant unit change (slope) of the dependent variable for a constant unit change of the independent variable (Hair et al., 2013). Because correlation, regression, and other members of the general linear model (GLM) assume linearity, a linearity test is required. This study a check for patterns in the scatter plot of independent variables against student’s entrepreneurial intention and it has been confirmed i.e. there no is linearity problem (See Appendix).

❖ **Multi-Collinearity test**

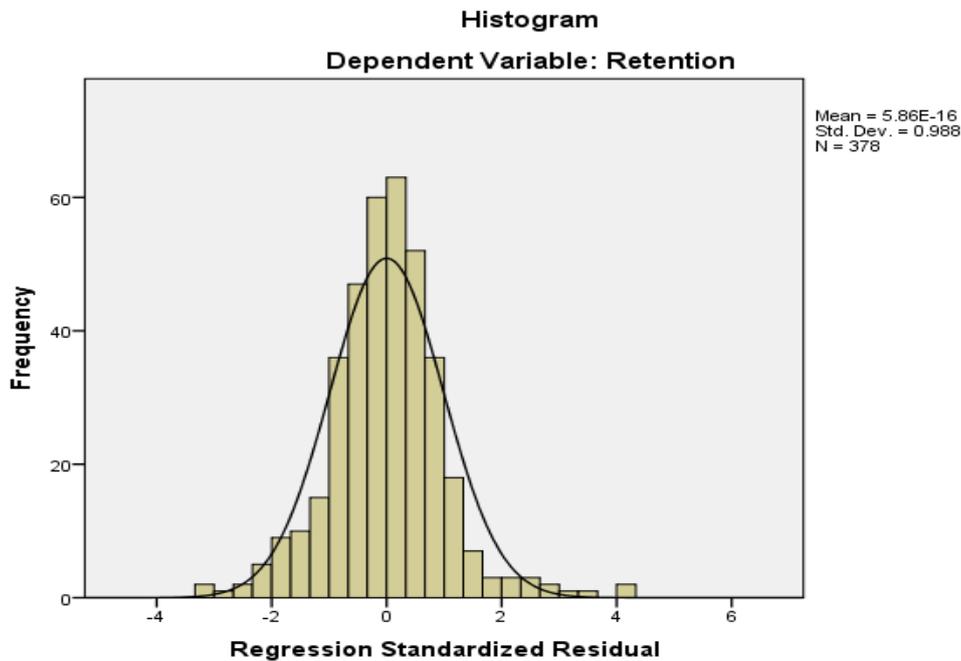
According to Arslan and Altuna (2010), a Multi-collinearity problem exists when the VIF value is greater than 10 and the tolerance value is less than 0.10. In this study, the results of collinearity statistics analysis show that, below table, the VIF value varies between 1.800 and 4.996. The tolerance value is in the range of 0.200-0.555. These values (both VIF and tolerance level) imply that there is no multi- collinearity problem.

Table 8. Collinearity Statistics

	Tolerance	VIF
	.259	3.867
	.507	1.972
	.357	2.800
	.277	3.606
	.490	2.042
	.555	1.800
	.268	3.732
	.200	4.996
	.282	3.550

❖ **Normality test**

In order to examine normality, one has to measure each variable’s skewness, which looks at the lack of symmetry of distribution, and kurtosis, which looks at whether data collected peaks or is flat with relation to a normal distribution(Marczyk, DeMatteo, & Festinger, 2005). The most commonly recommended and mentioned in the literature is for both kurtosis and skewness to be between -2 and +2 (George & Mallery, 2010). As indicated in the table below, the skewness and kurtosis measures for this study are well within the range of between -1.800 and +1.244 values which confirms the data is normal and the following normality histogram shows the data is approximately normally distributed. For further detail **See Appendix II normal P-P plot.**



❖ **Heteroscedasticity test**

Homoscedasticity refers to the assumption that dependent variables exhibit equal variance across the range of predictor variables. This assumption is referred to as the description of data in which the variance of the error terms (ϵ) appears constant over the range of values of an independent variable. The assumption of equal variance of the population ϵ (where ϵ is estimated from the sample value, e) is critical to the proper application of linear regression. This graph plots the standardized values of the model would predict, against the standardized residuals obtained. As we see the predicted values increase (along the X-axis), the variation in the residuals is also roughly similar. Thus, the researcher proves that there are no *heteroscedasticity* problems within the data as the below scatter plot displayed.

4.2.2.3. Regression results and discussions

Table 2. Model Summary

According to the below table, the model or the predictor variables have accounted for 86.3% in the criterion variable (customer retention). The other variables that were not considered in this study contribute to about 13.7% of the variability in the dependent.

Model Summary					
Model	R	R Square	Adjusted R Square		
1	.924 ^a	.863	.849		
a. Predictors: (Constant), Service charge, Technological innovation, Personalized service, Data speed, Network Reliability, Service Coverage and Accessibility, customer service, Customer satisfaction, Data Privacy security					
b. Dependent Variable: Retention					

Table 10. ANOVA^a

The following table shows the overall significance/acceptability of the model from a statistical perspective. The model is significant because the F statistics significance value is 237.212 and the p-value (.000) which is less than the critical value ($p < 0.05$). This indicates the variation explained by the model is not due to chance. In general ANOVA the model is statistically acceptable overall, i.e. the independent variables predict the outcome variable to a significant degree.

Linear	regression	Number of obs	=374
	F (29, 344)	=	88.66
	Prob > F	=	0.0000
	R-squared	=	0.8646
	Root MSE	=	1.8712

Dependent Variable: Customer Retention

Predictors: (Constant), Service charge, Technological innovation, Personalized service, Data speed, Network Reliability, Service Coverage Accessibility, Customer Service, Customer satisfaction, Data Privacy security, Sub-city, income, Age, Education, and Occupation

Table 11: Regression coefficient

The Beta value in the following table indicates the effect of change in the independent variables on dependent variables- customer retention.

Retention	Coef.	Robust Std. Err.	P> t	[95% Conf. Interval]
Customer_satisfaction	.9794838	.1812267	0.000	.6230319 1.335936
Service_charge_E	.5610178	.1883972	0.003	.1904623 .9315732
Data_Privacy_security_E	.7261385	.2160185	0.001	.3012552 1.151022
Serv_Cov_Accesability	1.043248	.228527	0.000	.5937616 1.492734
Network_Reliability_E	.5339958	.156052	0.001	.2270596 .840932
customer_Service_E	1.06088	.212207	0.000	.6434939 1.478267
Personalized_service	-.0939473	.1410543	0.506	-.3713848 .1834902
Technological_innovation	.0400325	.1379001	0.772	-.231201 .311266

Data_speed	-.0648542	.135676	0.633	-.3317131	.2020047
------------	-----------	---------	-------	-----------	----------

Discussions and Interpretations of regression results

Customer satisfaction has a significant positive effect on customer retention for Safaricom Ethiopia, with a coefficient of 0.9795 and a highly significant p-value ($p < 0.001$). This result indicates that as customer satisfaction increases, retention rates improve. Specifically, for each unit increase in customer satisfaction, the retention score increases by approximately 0.98 units, holding other variables constant. This finding aligns with existing literature. For instance, research done by Mohsan et al, (2011) on the Impact of Customer Satisfaction on Customer Loyalty and Intentions to Switch: Evidence from Banking Sector of Pakistan showed that customer satisfaction was positively correlated with customer loyalty. Similarly, research done by Rebecca Kapai and Dr. Makori Moronge (2015) on determinants of customer retention in the mobile telecommunication industry in Kenya: a case of airtel Kenya showed that customer satisfaction had the strongest positive influence on customer retention. In addition, customer care service was positively correlated to customer retention. In practical terms, Safaricom Ethiopia should focus on enhancing customer satisfaction to improve retention rates. This could involve improving service quality, addressing customer concerns promptly, and personalizing services to meet customer needs. Given the high coefficient, even small improvements in customer satisfaction can lead to significant gains in customer retention, underscoring its importance as a strategic priority for the company.

Service charge, measured by the affordability of prices for customers, has a significant positive impact on customer retention for Safaricom Ethiopia. The coefficient is 0.5610, and the p-value is 0.002, indicating that the relationship is statistically significant. This result suggests that as the affordability of service charges increases, customer retention improves. Specifically, for each unit increase in the perceived affordability of service charges, the retention score increases by approximately 0.56 units, holding other factors constant. This finding is consistent with previous studies in the telecommunications industry. For example, research by Azad and Singh (2019) highlighted that pricing strategies significantly affect customer retention. Customers are more likely to remain loyal when they perceive the prices to be fair and affordable. Similarly, a study by Colgate and Lang (2001) found that price perception is a critical factor in customer retention in the mobile phone market. They concluded that customers who perceive prices as fair are more likely to stay with their current service provider.

In the context of Safaricom Ethiopia, this means that maintaining competitive and affordable pricing is crucial for retaining customers. The significant positive impact of service charge affordability on retention indicates that customers value cost-effective services. Therefore, Safaricom should consider pricing strategies that enhance perceived value for money. This could involve offering competitive pricing plans, discounts, or value-added services that justify the cost to the customer. Overall, the analysis underscores the importance of affordable pricing in retaining customers. Safaricom Ethiopia can leverage this insight to optimize their pricing

strategies, ensuring they meet customer expectations and enhance loyalty. This approach not only improves retention rates but also strengthens the company's competitive position in the market.

The impact of data privacy and security on customer retention is significant and positive, with a coefficient of 0.7261 and a p-value of 0.001. This indicates that higher perceptions of data privacy and security lead to better customer retention. Specifically, for each unit increase in the perception of data privacy and security, the retention score increases by approximately 0.73 units, holding other factors constant. This result aligns with existing literature emphasizing the importance of data privacy and security in customer retention. For instance, a study by Jullien et al. (2018) found that Privacy Protection, Security, data privacy and security have positive relationship with customer retention. Customers who feel their data is secure are more likely to remain loyal to the service provider. Similarly, Bélanger and Crossler (2011) highlighted that data privacy is a critical factor influencing customer retention in the digital age. Their research showed that customers are more likely to stay with companies that prioritize data security and privacy. In the context of Safaricom Ethiopia, ensuring robust data privacy and security measures can enhance customer loyalty. The significant positive effect of data privacy and security on retention suggests that customers highly value their data protection.

Therefore, Safaricom should continue to invest in advanced data security technologies and practices to reassure customers about the safety of their personal information. This could involve implementing strong encryption methods, regular security audits, and transparent data handling policies. Overall, the analysis underscores the crucial role of data privacy and security in retaining customers. Safaricom Ethiopia can leverage this insight to strengthen their data protection strategies, which in turn can improve customer trust and loyalty. This approach not only enhances retention rates but also builds a positive reputation for Safaricom in the competitive telecommunications market.

The impact of service coverage and accessibility on customer retention is highly significant and positive, with a coefficient of 1.0432 and a p-value of 0.000. This implies that better service coverage and accessibility substantially increase customer retention. Specifically, for each unit improvement in service coverage and accessibility, the retention score increases by approximately 1.04 units, holding other factors constant. This result is consistent with existing studies in the telecommunications industry. For instance, a study by Rahman (2014) found that network coverage and service availability are critical determinants of customer satisfaction and retention in mobile telecommunications. Similarly, Khurshid, M. (2013) highlighted that network coverage is a significant factor influencing customer loyalty, as customers prioritize uninterrupted and accessible services. In the context of Safaricom Ethiopia, ensuring comprehensive service coverage and easy accessibility can significantly enhance customer retention.

The substantial positive effect of service coverage and accessibility on retention underscores the importance of providing reliable network services across different regions. Safaricom should focus on expanding its network infrastructure to cover remote and underserved areas, ensuring that all customers have access to reliable and high-quality services. Moreover, enhancing accessibility by providing user-friendly service

platforms and efficient customer support can further improve customer retention. This could involve offering multilingual customer support, providing easy-to-navigate service portals, and ensuring quick resolution of service issues. Overall, the analysis highlights the crucial role of service coverage and accessibility in retaining customers. Safaricom Ethiopia can leverage this insight to strengthen their network infrastructure and improve service accessibility, which in turn can boost customer loyalty and retention. This approach not only enhances retention rates but also helps build a competitive advantage in the telecommunications market.

The regression analysis indicates that network reliability has a significant positive effect on customer retention for Safaricom Ethiopia, with a coefficient of 0.5340 (p-value = 0.001). This suggests that an improvement in network reliability satisfaction by one unit leads to an increase in customer retention by approximately 0.534 units, demonstrating a strong correlation between network reliability and customer retention. These findings align with various studies in the telecommunications industry. For instance, Seleke.M (2013) found that network reliability is a critical factor influencing customer satisfaction and retention in mobile network services. Similarly, Karunaratna & Kumara, (2021) highlighted network reliability as a key determinant of customer loyalty and retention, particularly emphasizing its importance in the telecommunications sector.

H. Ting et al (2001) also underscored the significance of network reliability in maintaining a loyal customer base, especially in highly competitive markets. The practical implications for Safaricom Ethiopia are clear: the company should prioritize continuous investment in network infrastructure to enhance reliability. Implementing systems for regular monitoring and quick resolution of network issues is crucial to minimize downtime and disruptions. Additionally, maintaining transparent communication with customers about network improvements and maintenance schedules can help build trust and strengthen customer relationships. In conclusion, the analysis confirms that network reliability is a crucial factor in customer retention for Safaricom Ethiopia. This finding is consistent with other studies, reinforcing the importance of reliable network services in sustaining and improving customer loyalty. Safaricom Ethiopia should focus on enhancing network reliability to ensure higher customer retention rates.

The regression analysis shows that customer service has a significant positive effect on customer retention for Safaricom Ethiopia, with a coefficient of 1.0609 (p-value = 0.000). This indicates that an improvement in customer service satisfaction by one unit leads to an increase in customer retention by approximately 1.0609 units. The relationship is statistically significant, underscoring the critical role of customer service in retaining customers. This result is consistent with numerous studies in the telecommunications industry. For instance, a study by T. Ramayah and Rahim Mosahab (2010) found that high-quality customer service is a significant determinant of customer loyalty and retention in mobile communications. Similarly, Rebecca Kapai and Makori Moronge (2013) emphasized that excellent customer care service significantly enhances customer satisfaction, leading to higher retention rates.

Zeithaml et al. (1996) also identified customer service as a pivotal component of service quality that drives customer loyalty and retention. Additionally, Gustafsson, Johnson, and Roos (2005) highlighted the impact of

customer service on long-term customer relationships, noting that good customer service practices can substantially increase customer retention. For Safaricom Ethiopia, these findings suggest the importance of investing in customer service initiatives to boost retention. This can include comprehensive training programs for customer service representatives to ensure they are well-equipped to handle customer inquiries and issues effectively. Additionally, implementing customer feedback mechanisms can help the company understand customer needs and areas for improvement. Offering personalized and prompt responses to customer concerns can further enhance customer satisfaction and loyalty.

In conclusion, the analysis confirms that customer service significantly impacts customer retention for Safaricom Ethiopia. This finding aligns with other studies in the field, highlighting the importance of excellent customer service in maintaining a loyal customer base. Safaricom Ethiopia should focus on improving customer service to ensure higher retention rates and foster long-term customer relationships.

The regression results for data speed show a coefficient of .0648542 with a p-value of 0.633, indicating that data speed is not statistically significant in predicting customer retention for Safaricom Ethiopia at the conventional significance level of 0.05. This suggests that there is no strong evidence to support the idea that a data speed has a significant impact on their likelihood to stay with Safaricom Ethiopia. While data speed has been found to be a significant factor in customer retention in some telecommunications industry, particularly for mobile service providers, can vary.

The regression result indicates that there is no significant effect of personalized service on customer retention. The negative regression coefficient (-.0939473), along with a high p-value (0.506) and a confidence interval that includes zero, implies that personalized service does not have a reliable or meaningful impact on customer retention in this context. Therefore, other factors may be more influential in driving customer retention, and further investigation into those factors is warranted.

The regression analysis examining the impact of technological innovation on customer retention reveals a coefficient of 0.0400325, a standard error of 0.1379001, a p-value of 0.772, and a 95% confidence interval ranging from -0.231201 to 0.311266. The positive regression coefficient suggests a very slight positive relationship between technological innovation and customer retention. However, the magnitude of this effect is minimal. Furthermore, the high p-value indicates that this relationship is not statistically significant, meaning that there is a 77.2% probability that the observed effect could be due to random chance rather than a true underlying relationship.

Considering these findings, it is essential to consider existing literature on the topic. Studies such as those by Damanpour (1991) and Zhou and Wu (2010) have found that technological innovation can lead to improved customer satisfaction and loyalty, which in turn enhances customer retention. These studies suggest that innovations can provide customers with better service quality, novel features, and greater convenience, thereby fostering a stronger customer relationship

Table 12. Decision summary of the hypothesis

No.	<i>The alternative hypothesis of the study</i>	<i>Decision for H1</i>
H1	<i>Customer satisfaction has a significant effect on customer retention.</i>	<i>Failed to reject</i>
H2	<i>Network Reliability has a significant effect on customer retention.</i>	<i>Failed to reject</i>
H3	<i>Data speed has a significant effect on customer retention.</i>	<i>Failed to reject</i>
H4	<i>Technological innovation has a significant effect on customer retention.</i>	<i>Failed to reject</i>
H5	<i>Customer care service or Service quality has a significant effect on customer retention.</i>	<i>Failed to reject</i>
H6	<i>Service Charge has a significant effect on customer retention</i>	<i>Failed to reject</i>
H7	<i>Data security and privacy has a significant effect on customer retention.</i>	<i>Failed to reject</i>
H8	<i>Service Coverage and accessibility has a significant effect on customer retention.</i>	<i>Failed to reject</i>
H9	<i>Service personalization has a significant effect on Customer retention</i>	<i>Failed to accept</i>

**CHAPTER FIVE
SUMMARY, CONCLUSION, AND RECOMMENDATIONS**

5. INTRODUCTION

The preceding chapter presented the results and discussion, while this chapter deals with a summary, conclusions, and recommendations based on the findings of the study. Accordingly, this chapter is organized into three subsections: Section 5.1 presents the conclusion of the study and 5.2 presents the recommendations in addition to this the chapter contains further research directions.

5.1. Summary of Major Findings

The demographic analysis of the respondents in the study shows that 242 of the respondents are male, while 137 are female, indicating that most respondents are male students. According to Alhakimi's (2014) interval mean calculation for Likert scale statements, respondents' average response about customer satisfaction falls within the "moderately agree" range (2.61-3.40), specifically at 2.9685, indicating moderate satisfaction with Safaricom Ethiopia's telecommunication service. Data speed received an "agree" rating, with a mean score of 3.4832, suggesting respondents are satisfied with the data speed offered. Network reliability, with a mean score of 2.892, was rated as "moderately agreed," indicating moderate satisfaction with network reliability. Customer service also received a "moderately agreed" rating, with a mean score of 2.8074, showing moderate satisfaction with the service provided. Technological innovation, with a mean score of 3.1689, was rated as "moderately agreed," reflecting moderate satisfaction with Safaricom Ethiopia's technological advancements.

Personalized service received an "agree" rating, with a mean score of 3.4354, suggesting respondents are satisfied with the level of personalized service provided. Service coverage and accessibility, with a mean score of 2.9208, were rated as "moderately agreed," indicating moderate satisfaction with service coverage and accessibility. Data privacy and security, with a mean score of 2.9376, received a "moderately agreed" rating, reflecting moderate satisfaction with the data privacy and security measures. Finally, service charge, with a mean score of 2.9376, was rated as "moderately agreed," indicating moderate acceptance of the prices charged by Safaricom Ethiopia.

The study used Pearson's correlation coefficient to determine the relationship between variables. According to Field (2005), Pearson's coefficients range from -1.0 to +1.0, with values from 0.1 to 0.29 indicating weak links, 0.3 to 0.49 indicating moderate associations, and values greater than 0.5 indicating strong relationships. The correlation analysis showed that all variables (customer satisfaction, data speed, network reliability, customer service, technological innovation, personalized service, service coverage and accessibility, data privacy and security, and service charge) have a strong, positive, and significant correlation with customer retention, with Pearson values above 0.5 and p-values less than 0.05.

The regression analysis results indicate that the predictor variables account for 85.3% of the variance in customer retention, with an estimated standard deviation of 1.889. The model's overall significance is confirmed by an F statistic value of 237.212 and a p-value of 0.000, suggesting that the variation explained by the model is statistically significant. Key findings include that customer satisfaction (coefficient: 0.9795, $p < 0.001$), service charge affordability (coefficient: 0.5610, $p = 0.002$), data privacy and security (coefficient:

0.7261, $p = 0.001$), service coverage and accessibility (coefficient: 1.0432, $p = 0.000$), network reliability (coefficient: 0.5340, $p = 0.001$), and customer service (coefficient: 1.0609, $p = 0.000$) significantly and positively impact customer retention. Three variables mean data speed (coefficient: -0.0648542 , $p = 0.633$), technological innovation (coefficient: $.0400325$, $p = 0.772$) and personalized service (coefficient: -0.0939473 , $p = 0.506$) do not significantly predict customer retention. Post-estimation tests confirm the reliability of the model, indicating no issues with multicollinearity, heteroscedasticity, or non-normally distributed error terms.

The data on the education levels of respondents in the study reveals that the majority, 54.9%, have attained a degree or higher, indicating a highly educated sample. This is followed by 21.9% who have completed secondary education, and 15.3% who hold a diploma. Those with only primary education make up 4.2% of the respondents, while the smallest group, with basic education, constitutes 3.7%. The cumulative percent column confirms that all respondents' education levels have been accounted for, reaching a total of 100%. This distribution highlights the predominance of higher education among the study's participants.

5.2. Conclusions

This study aimed to identify and analyze the factors influencing customer retention in the case of Safaricom Ethiopia. Specifically, it investigated the roles of customer satisfaction, service coverage and accessibility, network reliability, data privacy and security, customer service, service charge, data speed, personalized service, and technological innovation in retaining customers.

The analysis revealed that customer satisfaction, service coverage and accessibility, network reliability, data privacy and security, customer service, and service charge significantly impact customer retention. These factors were found to play crucial roles in determining whether customers continue to use Safaricom Ethiopia's services. In contrast, data speed, personalized service, and technological innovation did not show a significant effect on customer retention. The significant impact those variables suggests that Safaricom Ethiopia should focus its efforts on these areas to enhance customer retention. Improving these aspects can lead to higher customer loyalty and reduced churn rates. The lack of significant impact from data speed, personalized service, and technological innovation indicates that these factors might not be as critical in influencing customer retention within the current context.

5.3. Recommendations

Implement Customer Feedback Systems: Regularly gather and analyze customer feedback to identify pain points and areas for improvement. This can include surveys, focus groups, and social media monitoring and focus on delivering consistent and high-quality service experiences.

Infrastructure Development: Invest in expanding the network infrastructure to cover more regions, particularly underserved and rural areas. This will help ensure that more customers have access to reliable service and develop affordable service plans that cater to a wide range of customers, ensuring that cost is not a barrier to access.

Regular Maintenance and Upgrades: Continuously maintain and upgrade the network infrastructure to prevent outages and improve reliability. This includes investing in the latest technologies and conducting routine checks and develop and implement comprehensive disaster recovery and business continuity plans to minimize service disruptions during emergencies.

Enhance Security Measures: Implement robust cybersecurity measures to protect customer data. This can include encryption, secure access controls, and regular security audits. Provide clear communication on how customer data is used and protected.

Training and Development: Invest in training programs for customer service representatives to ensure they have the skills and knowledge to effectively address customer issues and provide excellent service and expand and optimize customer support channels, including phone support, live chat, social media, and email, to provide timely and effective assistance.

Competitive Pricing Strategies: Conduct market research to understand customer price sensitivity and adjust service charges to remain competitive while maintaining profitability and ensure that billing processes are transparent and easy to understand, reducing customer frustration and enhancing trust.

Safaricom Ethiopia should develop and promote customer loyalty programs that reward long-term customers with benefits such as discounts, exclusive offers, and special services and build strong relationships with the community through corporate social responsibility initiatives and community engagement activities.

5.4. Limitation and Further Study Areas

One of the primary limitations is the sample size, which may not be large enough to generalize the findings to the entire population of Safaricom Ethiopia's customers. Additionally, the sample may not be fully representative of the diversity of the customer base in terms of demographics, socioeconomic status, and geographic distribution. Future research should aim to include a larger and more diverse sample to enhance the generalizability of the results. The study employs a cross-sectional design, capturing data at a single point in time. This design limits the ability to infer causality between the variables studied. The findings of this study are specific to Safaricom Ethiopia specifically in Addis Ababa and may not be applicable to other telecommunications companies or regions. The unique market conditions, competitive landscape, and customer expectations in Ethiopia could influence the results. Future studies should consider replicating the research in different contexts to compare and validate the findings across various regions.

Addressing these limitations in future research will enhance the validity and reliability of the findings. Larger, more diverse samples, longitudinal designs, and cross-contextual studies will contribute to a deeper and more comprehensive understanding of the factors influencing customer retention in the telecommunications industry

Reference

1. Alhakimi & Alhariry, (2014). Internal marketing as competitive advantage in banking industry, *Academic Journal of Management Sciences*. Pp-15-22. Vol. 3
2. Allan S. N. Kihara and Gordon K. Ngugi. (2014). influence of use of social media on customer satisfaction. *International Journal of Social Sciences and Entrepreneurship*. Special issue, 79-93.
3. Alshurideh, M., Masa'deh, R., & Al Kurdi, B. (2012). The effect of customer satisfaction upon customer retention in the Jordanian mobile market: An empirical investigation. *European Journal of Economics, Finance and Administrative Sciences*, (52), Pp 101-121.
4. Alvin Burns -Ronald-Bush, (2017) Marketing Research: basic concepts in samples and Sampling. Pp 210
5. Anderson, E. W., & Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12(2), Pp 125-143
6. Anderson, et al. (2004, February). Customer Satisfaction and Share Holder Value. *Journal of Marketing*, 68, 172-185.
7. Antreas, D. A., & Opoulos, A. I. (2003, March). Modeling customer satisfaction in telecommunication: Assessing the multiple transaction points on perceived overall performance of the provider. *Production and Operation Management*, 12(2): 224-245.
8. Arslan, F. M., & Altuna, O. K. (2010). The effect of brand extensions on product brand image. *Journal of Product & Brand Management*.
9. Awuku E, Agyei PM, Gonu E (2023, March). Service innovation practices and customer loyalty in the telecommunication industry. Pp 1-18.
10. Ayinaddis, S. (2022). The relationship between service innovation, customer satisfaction, and loyalty intention in emerging economies: Evidence from Ethio Telecom. *Journal of the Knowledge Economy*, Pp 14.
11. Azad and Singh (2019). A Study on the Effect of Pricing Strategy on Customer Retention in Kurdistan. *International Journal of Supply Chain Management*. VL- 8.
12. B. A. Hathaway, S. M. Emadi, and V. Deshpande. (2022, December). The Influence of Service Personalization, Customer Satisfaction, and Customer Retention in the Telecommunications Industry on Data-Driven Marketing. *Journal of Marketing*. Pp 55-62.
13. Bélanger & Crossler (2011). Privacy in the Digital Age: A Review of Information Privacy Research in Information Systems. *Journal of MIS Quarterly*. Pp 1017-1041.
14. Bell (2010) Project-Based Learning for the 21st Century: Skills for the Future, *The Clearing House: A Journal of Educational Strategies, Issues, and Ideas*, 83:2, 39-43.
15. Beltrán-Martín, I., & Bou-Llusar, J. C. (2020). Service coverage and customer satisfaction: The moderating role of service reliability. *Journal of Business Research*, 110, 409-418.

16. Benjamin Diaw & Gideon Asare (2018, November). effect of innovation on customer satisfaction and customer retention in the telecommunication industry in Ghana: customers' perspectives. *Journal of Research and Reflection in Management Sciences*. 6, Pp 15.
17. Bhattacharya, S., Das, M., Bar, R., & Pal, A. (2006). Morphological and molecular characterization of *Bambusa Tulda* with a note on flowering. *Annals of Botany*, 98(3), 529-535.
18. Black, W., & Babin, B. J. (2019). *Multivariate data analysis: Its approach, evolution, and impact the great facilitator* (pp. 121-130): Springer.
19. Bogdan, R. C., & Biklen, S. K. (2003). *Qualitative Research of Education: An Introductory to Theories and Methods* (4th ed.). Boston: Allyn and Bacon. *Journal of Educational Research*. 5(7), 694-709.
20. Bonuke, R., Otiso, K., & Chepkwony, J. (2014). The effect of network quality on customer retention among mobile phone users in public universities of Western Kenya region. *Journal Title*, 6(1), Pp 2222-2839.
21. Boshoff and du Plessis, (2009). Exploring Service Quality, Switching Barriers, and Customer Loyalty: Mediating Role of Switching Barriers. *Journal of Marketing and Consumer Research*. 12(12):1631-1644.
22. Brooks, C. (2008). *RATS Handbook to accompany introductory econometrics for finance*. Cambridge Books.
23. Brown, S. A., & Gulycz, M. (2001). *Customer relationship management: A strategic imperative in the world of e-business*: New York: Wiley.
24. Chen et al, 2011. The causes of customer satisfaction in telecommunication services: An empirical study. *Proceedings of the 7th International Conference on Advanced Information Management and Service (ICIPM)*.
25. Chen, A., Y. Lu, S. Gupta, and X. Qi, 2014. Can customer satisfaction and dissatisfaction coexist? An issue of telecommunication service in China. *Journal of Information Technology*, 29(3): 237-252.
26. Colgate and Lang (2001). Switching barriers in consumer markets: An investigation of the financial services industry. *Journal of Consumer Marketing*. Pp 332-347.
27. Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed methods approach* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
28. Creswell, J. W. (1994). *Research design: Qualitative & quantitative approaches*. Sage Publications, Inc.
29. Cronin Jr., J. J., & Taylor, S. (1992, July). Measuring Service Quality: A Reexamination and Extension. *The Journal of Marketing*, 56, 55-68.
30. Cumming, B.S. (1998). *European Journal of Innovation Management*. "Innovation Overview and Future Challenges", Vol. 1, 1, pp.21 - 29.

31. Dabholkar, P. A. (2015). How to improve perceived service quality by increasing customer participation. In Proceedings of the 1990 Academy of Marketing Science (AMS) Annual Conference (pp. 483-487). Springer International Publishing.
32. Damanpour, F. (1991). Organizational Innovation: A Meta-Analysis of Effects of Determinants and Moderators. *The Academy of Management Journal*, 34(3), 555-590.
33. Danesh, S.N., Nasab, S.A., Ling, K.C. (2012). The study of customer satisfaction, customer trust and switching barriers on customer retention in Malaysia hypermarkets. *Int. J. Bus. Manag.* 7 (7), (141–150).
34. Deng et al. (2010). Understanding customer satisfaction and loyalty: An empirical study of mobile instant messages in China, *International Journal of Information Management*, Volume 30, Issue 4, Pp 289-300.
35. Díaz, G. R. (2017). The Influence of Satisfaction on Customer Retention in the Mobile Phone Market. *Journal of Retailing and Consumer Services*, 36, 75-85.
36. Dodgson et al (2008). 'The management of Technological Innovation', New York: Oxford University Press, p. 9.
37. Erickson, T. (2012). How mobile technologies are shaping a new generation. *Harvard Business Review*, 8710220361337124465-3271.
38. Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, 56(1), 6-21.
39. Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: Nature, purpose, and findings. *Journal of Marketing*, 60(4), Pp 7-18.
40. Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *Journal of Marketing*, 63(2), Pp 70-87.
41. Gezahagn, A. (2019). Determinants of Employee Engagement in the Banking Industry in Ethiopia: the case of Bank of Abyssinia. Addis Ababa University.
42. Gujarati, D. N., Porter, D. C., & Gunasekar, S. (2012). *Basic econometrics*: Tata McGraw-Hill Education.
43. Gujarati, D.N. (2012) *Basic Econometrics*. Tata McGraw-Hill Education, Noida.
44. Gustafsson, A., Johnson, M. D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of marketing*, 69(4), 210-218.
45. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long range planning*, 46(1-2), 1-12.
46. Hameed, S., Agha, M. H., & Choudhary, M. A. (2012). The Role of Data Protection Technologies: A Case Study. *Life Science Journal*, 9(4), 1270-1279.
47. Hollensen, S. (2015). *Marketing management: A relationship approach*. Pearson Education.
48. Hughes, J. (2001). *Telecommunications technologies reference*. Wiley.

49. Jullien et al (2018). Privacy Protection, Security, and Consumer Retention. SSRN Electronic Journal.
50. Kaplan, R. S., & Atkinson, A. A. (2009). Advanced management accounting. Pearson.
51. Karunaratna & Kumara. (2021). Determinants of Customer Loyalty in the Mobile Telecommunications Sector Customer Loyalty. Journal of Sri Lanka Journal of Management Studies. Pp 30-52. VL-3.
52. Kassu Jilcha Sileyew, (2019). Research Design and Methodology.
53. Khan, S., and S. Afsheen, 2012. Determinants of customer satisfaction in telecom industry: A study of telecom industry Peshawar KPK Pakistan. Journal of Basic and Applied Scientific Research, 2(12): 12833-12840.
54. Khurshid, M. (2013). Determinants of customer loyalty, its causes and influences in telecom industry: A study of mobile telecom industry Peshawar Pakistan. *International Review of Social Sciences*, 1(1).
55. Kim, J. (2019). The impact of different price promotions on customer retention. Journal of Retailing and Consumer Services, 46, Pp 95-102.
56. Kim, M. K., Park, M. C., & Jeong, D. H. (2004). The Effects of Customer Satisfaction and Switching Barrier on Customer Loyalty in Korean Mobile Telecommunication Services. *Telecommunications Policy*, 28(2), 145-159.
57. Kirk, J., Miller, M. L., & Miller, M. L. (1986). Reliability and validity in qualitative research: Sage.
58. Kombo, D. K., & Tromp, D. L. (2006). Proposal and thesis writing: An introduction. Nairobi: Paulines Publications Africa, 10-45.
59. Kothari, C.R. (2004). Quantitative Techniques, 2nd ed., New Delhi: Vikas Publishing House Pvt. Ltd.
60. Kuo, Ying-Feng & Wu, Chi-Ming & Deng, Wei-Jaw. (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Computers in Human Behavior*. 25. 887-896.
61. Lee, 2012; Kumar and Vandara, (2011). Exploring Service Quality, Switching Barriers, and Customer Loyalty: Mediating Role of Switching Barriers. *Journal of Marketing and Consumer Research*. 9(2):73-80.
62. Lee, G. G., & Lin, H. F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management*, 33(2), 161-176.
63. Leedy, P., & Ormrod, J. (2001). Practical Research: Planning and Design (7th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
64. Lewis, M. (2004). The Influence of Loyalty Programs and Short-Term Promotions on Customer Retention. *Journal of Marketing Research*, 41(3), 281-292.
65. Li, T., & Zhang, H. (2018). The impact of telecommunications service quality on customer satisfaction: A case study of China Mobile. *International Journal of Information Management*, 38(1), 132-141.
66. Lichtenstein, D. R., Drumwright, M. E., & Braig, B. M. (2004). The effect of corporate social responsibility on customer donations to corporate-supported nonprofits. *Journal of marketing*, 68(4), 16-32.

67. Loebbecke, C. (1999). Network Integration at CompuNet. In ECIS (pp. 880-894).
68. Lohr, S. L. (2010). Sampling: Design and Analysis. Cengage Learning.
69. Mackoy. (1996, Summer). An empirical examination of a model of perceived service quality and satisfaction, *Journal of Retailing*. Volume 72, Issue 2. Pp 201-214,
70. Marshall, C. and Rossman, G.B. (2014). *Designing Qualitative Research*. Sage Publications, New York.
71. McCombes, S. (2019). *Research design: Types, Methods, and Examples*
72. Mohammed, S., & Sahin, O. (2020). *Service quality perspectives in telecommunication sector: Trust and loyalty investigation*. Publisher.
73. Mugenda, A. G. (2008). *Social science research: Theory and principles*. Nairobi: Applied.
74. Muhammad Alshurideh, Ra'ed (Moh'd Taisir) Masa'deh, and Barween Alkurdi (2012, April). The Effect of Customer Satisfaction upon Customer Retention in the Jordanian Mobile Market: An Empirical Investigation. *Journal of Economics, Finance and Administrative Sciences* 47(47):69-78.
75. Muhsan et al. (2011). Impact of Customer Satisfaction on Customer Loyalty and Intentions to Switch: Evidence from Banking Sector of Pakistan. *International Journal of Business and Social Science*. V.2.
76. Nanda, S. (2005). *The Essential Guide to Doing Research*. Journal Social Change. Pp 167-169
77. Nawaz and Usman, (2010). What Makes Customers Brand Loyal: A Study on Telecommunication Sector of Pakistan. *Journal of Business and Social Science*. V 2, 14.
78. Nitish K Mukherjee and Sandhir Sharma (2019). Effect of Mobile Data Service on Customer Loyalty, Retention and Satisfaction in Indian Industry. *Journal of Advanced Research*. 11(10), Pp 1260-1271.
79. Oliver, 1993; Oliver and Swan, (1989a, 1989). The Roles of Price, Performance, and Expectations in Determining Satisfaction in Service Exchanges. *Journal of Marketing*. Vol. 62, No. 4, pp. 46-61. Published By: Sage Publications, Inc.
80. Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4), 460-469.
81. Oliver, R.L, (1997). *Satisfaction: A Behavioral Perspective on the Consumer*, McGraw-Hill, New York
82. Parasuraman, A., Zeithaml, V. and Berry, L. (2008), "SERVQUAL: A Multi-item scale for measuring Customer Perceptions of Service Quality", *Journal of Retailing*, Vol. 64, pp.12-40.
83. Patrikakis, C., Voulodimos, A., & Giannoulis, G. (2009, June). Personalized location-based services with respect to privacy: A user-oriented approach. In *Proceedings of the 2nd International Conference on Pervasive Technologies Related to Assistive Environments* (pp. 1-5).
84. Pinsonneault and Kraemer. (1993). Research Methodology in management information system. *Journal of Management information system-Special Section: strategic and Competitive information systems archive*, 10, 75-105
85. Rahman, (2014). Factors Affecting Customer Satisfaction in Mobile Telecommunication Industry in Bangladesh. *Journal of Business Management and Education*. Pp 74-93. VL. 12.

86. Ranaweera, C. and Prabhu, J. (2003), "The influence of satisfaction, trust and switching barriers on customer retention in a continuous purchasing setting", *International Journal of Service Industry Management*, Vol. 14 No. 4, pp. 374-395.
87. Raza & Rehman, (2012). Impact of relationship marketing tactics on relationship quality and customer loyalty: A case study of telecom sector of Pakistan. *Journal of African journal of business management*. Pp 5085- 5092. V.6.
88. Rebecca Kapai and Dr. Makori Moronge, (2015, November). Determinants of customer retention in the mobile telecommunication industry in Kenya: a case of airtel Kenya. *Journal of Management*. Vol. 2, 2 (108), pp 1621 – 167.
89. Robert M. Morgan and Shelby Hunt, (1994, July). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing* 58(3):20-38.
90. Ruiz Díaz, G. (2017). The influence of satisfaction on customer retention in the mobile phone market. *Journal of Retailing and Consumer Services*, 36, Pp 75-85.
91. Safaricom Ethiopia Half year financial report HY2024)
92. Salant & Dillman, (1994). *How to conduct your own survey*. Published by Jhon Wiley and Sons.
93. Santouridis, I., & Trivellas, P. (2010). Investigating the impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece. *The TQM Journal*, 22(3), 330-343.
94. Sarwar et al. (2012). The Effect of Customer Trust on Customer Loyalty and Customer Retention: A Moderating Role of Cause Related Marketing. *Journal of Management and Business*. 12(6).
95. Saunders, M., Lewis, P. and Thornhill, A. (2012) *Research Methods for Business Students*. Pearson Education Ltd., Harlow
96. Saunders, M., Lewis, P., & Thornhill, A. (2003). *Research methods for business students*. Essex: Prentice Hall: Financial Times.
97. Scherman, V., Zimmerman, L., & Smit, B. (2018). Mixed method data analysis: An exploratory approach to strengthening inferences about relationships and affinities. *International Journal of Multiple Research Approaches*, 10(1), 57-76.
98. Seleke, M. (2013). The influence of network service reliability on customer retention.
99. Shona McCombes. (2019). *Sampling Methods /Types, Techniques and Examples*.
100. Söderlund, M., & Rosengren, S. (2008). Revisiting the smiling service worker and customer satisfaction. *International Journal of Service Industry Management*, 19(5), 552-574.
101. Surbhi, S. (2020). Difference between Primary and Secondary Data. *Key Differences*. Swedish Generation Y.
102. Tamuliene, V., & Gabryte, I. (2014). Factors influencing customer retention: case study of Lithuanian mobile operators. *Procedia-Social and Behavioral Sciences*, 156, 447-451.
103. Teas, R. K. (1994). Expectations as a comparison standard in measuring service quality: an assessment of a reassessment. *Journal of marketing*, 58(1), 132-139.

104. Thompson, S. K. (2012). *Sampling*. John Wiley & Sons
105. Ting, H., Tan, K-L., Lim, X-J., Cheah, J-H., Ting, Q-H. and Ting, H-B. (2020) 'What determines customers' loyalty towards telecommunication service? Mediating roles of satisfaction and trust', *Int. J. Services, Economics and Management*, Vol. 11
106. Varki, S., & Colgate, M. (2001). The role of price perceptions in an integrated model of behavioral intentions. *Journal of service research*, 3(3), 232-240.
107. Venetis, K., & Ghauri, P. (2004). Service quality and customer retention: Building long-term relationships. *European Journal of Marketing*, 38(11/12), Pp 1577-1598.
108. Walman, C., Kruger, F., and Mitchell, B. (2005). *Research Methodology* (3rd edition). Cape town: oxford university press.
109. Yamane, Y. (1967). Mathematical Formulae for Sample Size Determination. *American Journal of Industrial and Business Management*, Vol.11 Pp 5.
110. Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 31-46.
111. Zeithaml, V. A. (1988, July). Consumer perceptions of price, quality, and value: A mean-end model and synthesis evidence. *Journal of Marketing*, 52: 2-22
112. Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of marketing*, 60(2), 31-46.
113. Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (1996). The gaps model of service quality. *Services Marketing*, 37-49.

Appendix I

Regression Result

Linear regression	Number of obs	=	374
	F(29, 344)	=	88.66
	Prob > F	=	0.0000
	R-squared	=	0.8646
	Root MSE	=	1.8712

Retention	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
Customer_satisfaction	.9794838	.1812267	5.40	0.000	.6230319	1.335936
Service_charge_E	.5610178	.1883972	2.98	0.003	.1904623	.9315732
Data_Privacy_security_E	.7261385	.2160185	3.36	0.001	.3012552	1.151022
Serv_Cov_Accesablity	1.043248	.228527	4.57	0.000	.5937616	1.492734
Network_Reliability_E	.5339958	.156052	3.42	0.001	.2270596	.840932
customer_Service_E	1.06088	.212207	5.00	0.000	.6434939	1.478267
Personalized_service	-.0939473	.1410543	-0.67	0.506	-.3713848	.1834902
Technological_innovation	.0400325	.1379001	0.29	0.772	-.231201	.311266
Data_speed	-.0648542	.135676	-0.48	0.633	-.3317131	.2020047
Subcity						
ledeta	.5488892	.34433	1.59	0.112	-.1283679	1.226146
Bole	.8660594	.69012	1.25	0.210	-.4913265	2.223445
lemikora	1.457566	1.52809	0.95	0.341	-1.54801	4.463142
gulele	.2104289	.4151513	0.51	0.613	-.6061256	1.026983
yeka	-1.018316	.4870094	-2.09	0.037	-1.976207	-.0604247
kolfe	-.0574915	.4509105	-0.13	0.899	-.9443802	.8293972
Nefassilk	-.9688461	.4815681	-2.01	0.045	-1.916035	-.0216574
Akaki	-1.315054	.7743716	-1.70	0.090	-2.838153	.2080451
Kirkos	-.020949	.572127	-0.04	0.971	-1.146256	1.104359
Arada	-.0133101	.4175641	-0.03	0.975	-.8346102	.80799
Age	.0201627	.0127867	1.58	0.116	-.0049873	.0453128
Education						
Primary	-.3729591	.4871146	-0.77	0.444	-1.331057	.5851388
secondary	-.09199	.4160048	-0.22	0.825	-.9102231	.7262431
deploma	-.0269261	.4462881	-0.06	0.952	-.9047231	.850871
degree and above	.2943797	.4133414	0.71	0.477	-.5186148	1.107374
Sex						
female	-.2641491	.2278208	-1.16	0.247	-.7122462	.183948
Occupation_						
employed	-.0703897	.3282452	-0.21	0.830	-.7160099	.5752305
self employed	-.1693182	.3433043	-0.49	0.622	-.844558	.5059216
unemployed	.4833274	.5847386	0.83	0.409	-.6667857	1.63344
Income	-8.06e-06	2.89e-06	-2.79	0.006	-.0000137	-2.38e-06
_cons	-5.001557	.6983763	-7.16	0.000	-6.375182	-3.627932

Heteroscedasticity Test

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of Retention

chi2(1) = 33.82
 Prob > chi2 = 0.0000

Multicollinearity Test

. vif

Variable	VIF	1/VIF
Customer_s~n	4.03	0.248070
Service_ch~E	3.86	0.259274
Data_Priva~E	5.47	0.182722
Serv_Cov_A~y	3.94	0.253692
Network_Re~E	3.04	0.328646
customer_S~E	3.98	0.251069
Personaliz~e	2.01	0.498391
Techinolog~n	2.44	0.410481
Data_speed	2.15	0.465218
Subcity		
2	1.25	0.802125
3	1.15	0.866904
4	1.13	0.883730
5	1.20	0.831902
6	1.08	0.923109
7	1.15	0.870738
8	1.12	0.889267
9	1.10	0.908407
10	1.05	0.955801
11	1.12	0.889008
Age	1.34	0.745063
Education		
2	2.12	0.471081
3	5.91	0.169104
4	4.79	0.208743
5	7.98	0.125289
2.Sex	1.21	0.826340
Occupation_		
2	4.58	0.218175
3	4.30	0.232458
4	1.71	0.586165
Income	1.30	0.768852
Mean VIF	2.67	



ST. MARY UNIVERSITY

FACULTY OF BUSINESS AND ECONOMICS

DEPARTMENT OF MARKETING

A questioner survey prepared to study the factors influencing customer retention the case of Safaricom telecommunication Ethiopia PLC.

Dear respondent, the researcher wants to re-assure you that any information you provide will only be used to serve the purposes of the proposed study; it will never be handed over to any third party to the extent that this act threatens the confidential nature of the information so provided. Please provide accurate and balanced answers and thereby shoulder part of the responsibility in our effort to try to enhance our service.

Address

Sub City : _____

Information about the user

1. Age of the user _____

2. Users' education level

A. Basic

B. Primary

C. Secondary

D. Diploma

E. Degree or above

3. Gender of the user

A. Male

B. Female

4. Occupation:

A. Student

B. Employed

C. Self-employed

D. Unemployed

E. Other (please specify) _____

5. What is your monthly income _____

Please rate your satisfaction level based on your experience with Safaricom's [aspect being measured]. Choose the option that best reflects your experience, where 'Very satisfied' means you are extremely satisfied, 'Satisfied' means you are content but there is room for improvement, 'Neutral' means you have no strong feelings one way or the other, 'Dissatisfied' means you are not happy with the [aspect being measured], and 'Very dissatisfied' means you are extremely unsatisfied.

Retention:

1. How long have you been the customers of Safaricom -----?

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Customer Satisfaction:					
I am satisfied with the overall value I receive from Safaricom					
I am satisfied with the reliability of Safaricom's services					
I am satisfied with the range of products and services offered by Safaricom.					
Data Speed:					
I am satisfied with the consistency of my internet speed with Safaricom					
I am satisfied with the upload speed provided by Safaricom.					
I am satisfied with the download speed provided by Safaricom					
Network Reliability: Voice					
I am satisfied with the consistency of voice calls provided by Safaricom.					

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I am satisfied with the voice quality of Safaricom, including clarity, absence of echo, and minimal tardiness					
I am satisfied with the fast connectivity when I make a call.					
Customer Service:					
I am satisfied with the clarity of information provided by Safaricom's customer service representatives.					
I am satisfied with the professionalism of Safaricom's customer service representatives.					
I am satisfied with the ease of contacting Safaricom's customer service.					
Technological Innovation:					
I am satisfied with the innovation in Safaricom's products and services.					
I am satisfied with the level of technological advancement in Safaricom's services.					
I am satisfied with the digital solutions provided by Safaricom.					
Personalized Service:					
I am satisfied with the customization options offered by Safaricom.					
I am satisfied with the relevance of personalized offers or recommendations from Safaricom.					
I am satisfied with the personalized experiences offered by Safaricom.					

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I am satisfied with the tailored services provided by Safaricom.					
Service Coverage and Accessibility:					
I am satisfied with the availability of Safaricom's services in rural areas.					
I am satisfied with the accessibility of Safaricom's services in urban areas					
I am satisfied with the ease of accessing Safaricom's services on different devices.					
Data Security and Privacy:					
I am satisfied with the level of control Safaricom gives me over my personal data.					
I am satisfied with Safaricom's efforts to inform me about data breaches or security incidents					
I am satisfied with the clarity of Safaricom's privacy policy regarding the use of my personal data.					
Service Charge:					
I am satisfied with the affordability of Safaricom's services.					
I am satisfied with the pricing options offered by Safaricom.					
I am satisfied with the value for money offered by Safaricom's services.					



