FACTORS INFLUENCING BROADBAND SERVICE QUALITY ON KEY ACCOUNT CUSTOMER SATISFACTION

(The case of Mekelle, Ethio Telecom)

A Research submitted to Department of Marketing Management, in partial fulfillment of the requirements for the Degree of Master of Arts in Marketing Management

By: Yoseph Teklehaymanot

ID: CBE/PEMK16/2011

Advisor: Mihret Birhanu (Assistant Professor)

Mekelle University

College of Business and Economics

Department of Marketing Management

OCTOBER,2025

MEKELLE, ETHIOPIA

MEKELE UNIVERSITY
COLLEGE OF BUSINESS & ECONOMICS
DEPARTMENT OF MARKETING MANAGEMENT

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DECLARATION

I, Yoseph, hereby declare that this thesis titled, **'Factors Influencing Broadband Service Quality on Key Account Customer Satisfaction the Case of Mekelle, Ethio Telecom,** is my original work. I have carried out the present study independently with the guidance and support of my research advisor, Mrs. Mihert Birehanu. Any other research or academic sources used in this study have been duly acknowledged.

Moreover, this study has not been submitted for the award of any Degree or Diploma Program in Mekelle University or any other institution.

Yoseph T/Haimanot _____ October,2025

Student Signature Date

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Approved by Board Examiners

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Advisor	**Signature**	**Date**
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Internal Examiner	**Signature**	**Date**
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External Examiner	**Signature**	**Date**

Acknowledgement

First and foremost, all praise and thanks be to the Almighty God for granting me the strength, wisdom, and perseverance to successfully complete this research thesis.

I would like to express my deepest and most sincere gratitude to my research advisor, **Mihret Birhanu (Assistant Professor)**. Her invaluable guidance, insightful feedback, and unwavering support have been instrumental throughout this entire process. Her expertise and constructive criticism were crucial in shaping this study from its conception to its final form.

My heartfelt appreciation also extends to the Department of Marketing Management and the College of Business and Economics at **Mekelle University** for providing the academic foundation and opportunity to conduct this research. I am grateful to all the instructors who have shared their knowledge with me during my studies.

This research would not have been possible without the cooperation and participation of the key account customers of Ethio Telecom in Mekelle. I am profoundly thankful to each respondent who dedicated their valuable time to fill out the questionnaire. I would also like to thank the management and staff of Ethio Telecom, Mekelle Branch, for their assistance in facilitating the data collection process.

Finally, on a personal note, I am forever indebted to my beloved family for their endless love, encouragement, and unwavering belief in me. Their patience and sacrifices have been my greatest source of motivation. My special thanks also go to my dear friends and colleagues for their moral support and for making this academic journey a memorable one.

Abstract

The Significance of service quality for business performance has been recognized in the literature as a matter of survival. The main objective of the study was to assess and analyze the influence of broadband service quality on key account Customers Satisfaction at Ethio Telecom Mekelle Branch. A theoretical framework was used as a guideline to test the influence of broadband service quality dimensions on customer satisfaction. The research is descriptive and casual with quantitative approach. In order to achieve the objective of the study, the researcher employed both secondary and primary data. For this study, a questionnaire was used and completed by 109 customers from key account users. Correlation analysis was tested to see the relationship between broadband service dimensions and Customers satisfaction and multiple regression analysis were also used to identify the determinant factor that mostly influence Customers satisfaction and the significant level of each variable. The findings confirm that five of the independent variables of the service dimension, Reliability, Responsiveness, Assurance, Empath, and Tangibility have a positive relationship with the level of Customers satisfaction at Ethio Telecom at Mekelle Branch. In other words, service quality is strongly linked with customer satisfaction and the higher the service quality, the higher the customer satisfaction. The results further reveal that Responsiveness, Assurance, Empath dimensions contribute most towards customer satisfaction. But Reliability and Tangibility are found to be insignificant. The results of the findings also showed that the mean satisfaction is found to be moderate. Based on the summery, conclusion was drawn, the researcher has recommended based on the conclusion of the study that the Ethio Telecom should focus on the significant dimensions to improve service quality.

Keywords: Customers Satisfaction, Measurement of Customer Satisfaction, Ethio Telecom, Service dimensions.

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CHAPTER ONE

INTRODUCTION

In Ethiopia's rapidly evolving telecom sector, broadband internet has become a critical operational necessity rather than a luxury. Ethio Telecom, as the sole provider, plays a central role in delivering high-speed connectivity to diverse business customers. Key account clients, especially in Mekelle, demand superior service quality to sustain their operations. This study investigates how broadband service quality influences their satisfaction, using established service quality and customer expectation frameworks.

1.1.Background of the Study

In today's interconnected world, broadband internet services have shifted from being a luxury to an essential operational requirement in competitive business environment. Among the service industry telecommunication is huge sector in Ethiopia and has experienced rapid transformation due to the expansion of broadband services, which have become vital for both economic development and digital connectivity. Ethio Telecom, as the leading provider, is at the heart of this transformation, responsible for delivering high-speed and reliable internet that supports the operational needs of diverse customer segments (Anderson & Mittal, 2000).

As market competition intensifies and customer expectations continue to evolve, the quality of broadband services has emerged as a critical factor influencing long-term customer loyalty. In this context, the (Parasuraman, Zeithaml, & Berry, 1988) offers a comprehensive framework for evaluating service quality across five key dimension's reliability, responsiveness, assurance, empathy, and tangibility which are particularly pertinent for assessing broadband performance.

Moreover, the Expectancy-Disconfirmation Theory further clarifies that customer satisfaction hinges on the extent to which actual service performance meets or exceeds pre-service expectations, with any shortfall potentially leading to dissatisfaction. Although prior studies have predominantly addressed the performance of Ethio Telecom from a general customer perspective in urban centers such as Addis Ababa (Tsegereda, 2018), there is a notable research gap concerning the specific experiences of key account customers.

The theoretical foundation of this study is grounded in two widely recognized models: the SERVQUAL framework and the Expectancy-Disconfirmation Theory. SERVQUAL, developed by Parasuraman, Zeithaml, and Berry (1988), conceptualizes service quality across five dimensions reliability, responsiveness, assurance, empathy, and tangibility providing a structured lens to evaluate customer perceptions and service performance gaps. This model is particularly relevant in assessing broadband services, where intangible elements like responsiveness and assurance significantly influence user experience.

The Expectancy-Disconfirmation Theory (Oliver, 1980) posits that customer satisfaction is determined by the degree to which actual service performance aligns with or exceeds prior expectations. Positive disconfirmation leads to satisfaction, while negative disconfirmation results in dissatisfaction, making expectation management a critical aspect of service delivery. Together, these models offer a robust framework for analyzing how broadband service quality affects satisfaction among key account customers, whose operational demands and expectations are notably higher (Anderson & Mittal, 2000).

These customers demand superior service quality to sustain their critical business operations, and even minor lapses in service delivery can significantly impair their satisfaction and loyalty. This study, therefore, aims to bridge that gap by investigating the influence of broadband service quality on the satisfaction of Ethio Telecom's key account customers, ultimately providing actionable insights to improve service efficiency and effectiveness of the business operation.

Broadband service quality is a crucial determinant of customer satisfaction, particularly for key account customers who have high expectations and specific requirements. As Ethiopia's sole telecommunications provider, Ethio Telecom faces challenges in delivering competitive broadband services, especially concerning bandwidth and pricing, compared to other Sub-Saharan African countries (Getachew, 2018).

Broadband internet service has become indispensable for businesses and organizations, particularly key account customers who rely on uninterrupted connectivity for their operations. In Mekelle, Ethiopia, Ethio Telecom is the primary provider of broadband services. Understanding the influence of broadband service quality on the satisfaction of

these key account customers is vital for Ethio Telecom to maintain and strengthen its market position. Customer satisfaction, especially among key accounts, is a critical component of business success, directly influencing customer retention and loyalty (Anderson & Mittal, 2000).

Ethio Telecom plays a pivotal role in Ethiopia's digital transformation and has made significant investments in expanding its broadband infrastructure to meet the increasing demand for internet services. However, concerns about service quality, including speed, reliability, and customer support, have been raised (Taye, 2021). Key account customers, who typically have higher usage are particularly sensitive to these quality issues. Previous studies have shown that service quality significantly affects customer satisfaction in the business industry (Parasuraman, Zeithaml, & Berry, 1988). In Mekelle, understanding the specific factors that drive key account customer satisfaction is essential for Ethio Telecom to improve its service delivery.

Thus, this study aims to explore the influence of broadband service quality and key account customer satisfaction in Mekelle, a city served by Ethio Telecom. The research has examined various dimensions of service quality, such as tangibility, reliability, responsiveness, assurance, and empathy, and their effect on customer satisfaction.

1.2. Problem Statement

Previous studies have shown that service quality dimensions such as reliability, responsiveness, assurance, empathy, and tangibility significantly influence customer satisfaction in the telecommunications sector (Parasuraman, Zeithaml, & Berry, 1988). In broadband services, factors like network speed, reliability, and customer support are especially critical (Joo & Sang, 2013).

Despite substantial infrastructure investments, Ethio Telecom’s broadband service remains less competitive in terms of bandwidth and pricing (Getachew, 2018), particularly as the sector undergoes liberalization and faces new competition from entrants like Safaricom Ethiopia (World Bank, 2025; Multilink Consulting, 2025). These pressures are compounded

by structural and macroeconomic challenges that affect affordability and service delivery (Gebremariam, 2024).

Against this backdrop, Ethio Telecom's key account customers whose operations depend on consistent, high-quality internet continue to experience service gaps that undermine satisfaction and loyalty. Guided by the Expectancy-Disconfirmation Theory (Oliver, 1980), this study investigates the perceived broadband service quality and its effect on key account customer satisfaction in Mekelle.

The central research question is: "What is the perceived broadband service quality on key account customer satisfaction with Ethio Telecom in Mekelle?" To address this, the study explores: (1) how key account customers perceive Ethio Telecom's service quality; (2) which service quality dimensions exhibit the strongest relationship with customer satisfaction; and (3) which dimensions most significantly influence satisfaction in the Mekelle context. This research aims to fill a critical gap in empirical evidence and provide actionable insights to enhance service delivery and strategic competitiveness.

1.3. Research Objective

The general objective of this study is to investigate the factors that influence broadband service quality on key account customer satisfaction with Ethio Telecom in Mekelle. Specifically;

- To evaluate the perception of the key account customers in relation to the service quality of the company?
- To identify the service quality dimensions that exhibit the strongest relationship with satisfaction among key account customers in Mekelle?
- To determine the most significant service quality dimension that influence key account customer satisfaction in the Mekelle context

1.4. Scope of the Study

Conceptual Scope: This research investigates the influence of broadband service quality on key account customer satisfaction through an integrated theoretical lens. The study uses the

service quality dimensions (Parasuraman, Zeithaml, & Berry, 1988) to assess critical service dimensions namely reliability, responsiveness, assurance, empathy, and tangibility By conceptually framing the study around these established models, the research seeks to identify which aspects of broadband service quality most influential on key account customers satisfaction.

Methodological Scope: Methodologically, the research adopts a quantitative, cross-sectional design. Structured questionnaires will be administered to a sample of key account customers of Ethio Telecom, ensuring that the data collected reflects their current perceptions of broadband service quality and satisfaction. Statistical tools, such as mean, correlation, regression analysis, were employed to analyze the service quality on and customer satisfaction. This approach aims to produce robust empirical evidence that can inform both theoretical understanding and practical improvements in service quality.

Time Frame: Data for this study was gathered within a defined contemporary time frame, from late 2024 to first quarter of 2025. This period has been chosen to capture recent performance trends and customer experiences in the rapidly evolving telecommunications environment. The specific time frame ensures that the findings are relevant to the current operational context of Ethio Telecom and the broader dynamics of the Ethiopian telecommunications market.

1.5. Significance of the Study

The study has significant use for the researcher and the Mekelle Ethio-Telecommunication under study. For researcher, the primary importance of this study is achieving my Master's Degree, Master of Arts in Marketing and management which marks up a bold step in my future educational career. Secondly, while previous studies have explored broadband service performance in urban centers like Addis Ababa (Tsegereda, 2018), there is a notable gap in empirical research specifically addressing the experiences of high-value clients in Mekelle.

Practically, the study offers Ethio Telecom actionable insights into the specific areas where service delivery may be falling short of customer expectations. Enhancing these service quality dimensions is vital for retaining key account customers, whose operations are heavily dependent on reliable broadband connectivity. By identifying and addressing the critical gaps

such as those related to network reliability, customer support responsiveness, and technical assurance Ethio Telecom can implement targeted improvements that enhance overall customer satisfaction, loyalty, and operational efficiency (Getachew, 2018). Ultimately, the findings also support strategic decision-making, help optimize resource allocation, and reinforce competitive positioning in a rapidly evolving market.

Furthermore, the research findings and recommendations provided can serve as an indicator of major gaps and with this the concerned bodies can take remedial action towards better achievement on Ethio telecom services delivery

1.6. Organization of the Study

Chapter One introduces the study by framing the importance of broadband service quality in sustaining customer satisfaction and loyalty among Ethio Telecom's key account customers in Mekelle. It highlights the research problem namely, the gap between customer expectations and actual service delivery and outlines the study's objectives, scope, and guiding questions.

Chapter Two reviews relevant literature, emphasizing SERVQUAL and Expectancy-Disconfirmation Theory as core frameworks for evaluating service quality and satisfaction. Chapters Three and Four detail the quantitative methodology and present findings on how service dimension's reliability, responsiveness, assurance, empathy, and tangibility affect satisfaction. Chapter Five concludes with practical recommendations for improving Ethio Telecom's broadband service and suggests future research directions.

1.7. Operational Definitions

Broadband Service Quality is defined as the overall performance and excellence of Ethio Telecom's broadband offerings. This concept is operationalized using the service quality dimensions:

- **Reliability:** The ability of the service to provide consistent connectivity, stable speed, and minimal downtime;

- **Responsiveness:** The promptness and effectiveness in addressing customer inquiries and resolving technical issues;
- **Assurance:** The degree of trust, competence, and security instilled by the personnel and systems;
- **Empathy:** The extent to which the service provider understands and caters to the individual needs of its customers; and
- **Tangibility:** The quality of the physical components (such as infrastructure, equipment, and facilities) that support broadband service delivery (Parasuraman, Zeithaml, & Berry, 1988).

Key Account Customers are defined as high-value business clients of Ethio Telecom whose operations depend critically on reliable broadband connectivity. These customers are typically characterized by their significant usage, strategic importance, and high levels of expenditure on communication services. In this study, they are specifically selected from the Mekelle region to explore localized issues in service performance and customer satisfaction.

Customer Satisfaction is operationalized as the overall evaluative judgment or affective response of key account customers regarding Ethio Telecom's broadband service.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter of the research tries to show the theoretical and empirical literature about service quality and the conceptual framework of the study.

2.1. Theoretical Literature Review

2.1.1 Meaning of Service and Service Quality

2.1.1.1 Meaning of Services

Service is an act or performance offered by one party to another. Although, the process may be tied to physical product, the performance is essentially intangible and doesn't normally result in ownership of any of the factors of production. Thus, services are activities, benefits or satisfactions which are offered for sale or are provided in connection with the sale of goods (Patankar, 2001).

2.1.1.2. Meaning of Service Quality

Service quality is defined as customer perception of how does a service meets or exceeds their expectations (Czepiel, 1990). Several practitioners define service quality as the difference between customers' expectations for the service encounter and the perceptions of the service received (Munusamy et al., 2010) Service quality has been defined as the overall assessment of a service by the customers (Eshghi et al., 2008), while other studies defined it as the extent to which a service meets customer's needs or expectations. Service is assumed to be quality when it consistently conforms to customer expectations (Asubonteng et al., 1996; Wisniewski and Donnelly, 1996 cited in Niveen. El and .N, 2013). Service quality can be defined as the collective effect of service performances which determine the degree of satisfaction of a user of the service. In other words, quality is the customer's perception of a delivered service. By service-quality management, we refer to the monitoring and maintenance of end-to-end services for specific customers or classes of customers (Yonatan Gebre2010).

2.1.1.3 Dimensions of Service Quality

Service quality consists of five dimensions: tangibles (appearance of physical facilities, equipment, personnel and written materials), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help customers and provide prompt service), assurance (knowledge and courtesy of employees and their ability to inspire trust and confidence), and empathy (caring and individual attention the firm provides its customers). Reliability is considered the vital core of service quality. Other dimensions will matter to customers only if a service is reliable, because those dimensions cannot compensate for unreliable service delivery (Berry et al., 1994).

2.1.1.4. Principles of Service Quality

According to Clow and Kurtz (2003), receiving a high level of service is important to consumers but understanding how to evaluate the service quality received is more difficult. Two consumers receiving what appears to be the exact same service e form a company may evaluate the quality of the service differently. One consumer may feel the service was good while the other may feel the service was performed poorly. When discussing service quality, the three underlying principles that should be kept in mind are:

- Service quality is more difficult for the consumer to evaluate that quality of a good.
- Service quality is based on consumers' perception of the outcome of the service and their evaluation of the process by which the service was performed.
- Service quality perceptions result from a comparison of what the consumer expected prior to the service and the perceive level of service received.

The process used by consumers in evaluating service differs from the process used for goods. Services tend to be high in experience and credence qualities while goods tend to be high in search qualities. Search qualities are attributes that contributes that consumers can evaluate only during or after the consumption process. Credence qualities are attributes that consumers have difficulty evaluating even after consumption is complete. Experience qualities are qualities of a good or service that will be evaluated only after the service has been consumed or during the process of consumption. (Clow and Kurtz, 2003)

2.1.1.5 Service Quality and Customers' Satisfaction

After initial controversy, it is now believed that satisfaction and service quality are distinct constructs (Spreng and Mackoy, 1996) and, further, that service quality is an antecedent of the broader concept of customer satisfaction (Buttle, 1996)

2.1.1.6 Perceived Service Quality

According to Venugopal V. and Raghu V. (2004) customer perceptions of service are consumer judgments about the actual service performances or delivery by a company. Perceived value is the customers' overall assessment of the organization service based on the complete experience of the service delivery processes, customers' search for evidence of service in every interaction they have with a service firms.

2.1.1.7 Service Quality Dimensions

This study used the SERVQUAL scale items to establish dimensions of Broadband service quality through tangibles, reliability, responsiveness, empathy, and assurance. The relationship among the service quality dimensions, overall service quality and customer satisfaction is discussed below based on Parasuraman et al., 1988 study.

Regardless of the type of service, consumers used basically similar criteria in evaluating service quality. These criteria seem to fall into 10 key categories which are labelled service quality determinants (dimensions) that company executives consistently mentioned in terms of consumers‟ evaluations of service quality. Parasuraman et al., (1985) defined the ten determinants of service quality as follows (Reliability , Responsiveness , Competence, Access , Courtesy ,Communication, Credibility ,Security ,Understanding and Tangibles) Further and more quantitative research made by Parasuraman et al. (1988) three years after their initial article on service quality led these researchers to conclude that consumers use five underlying dimensions in judging service quality, so these ten were later reduced to five through exploratory factor analysis by Parasuraman, et al. (1988). Tangibles: Physical facilities, equipment, appearance of personnel and communication materials. Reliability: Ability to perform the promise service dependably and accurately.

2.1.1.8 Concept of Service Quality and the SERVQUAL Model

Service quality is a multifaceted concept encompassing various dimensions crucial for customer perception. Parasuraman, Zeithaml, and Berry (1988) identified five core dimensions: reliability, responsiveness, assurance, empathy, and tangibility. In the context of broadband services, specific aspects like speed, reliability, and customer support are particularly pertinent (Lee, Lee, & Lee, 2000).

The SERVQUAL model (Parasuraman, Zeithaml, & Berry, 1988) is a widely recognized framework for evaluating service quality, especially in customer-centric industries like telecommunications. It posits that customer perceptions and satisfaction are shaped by the following five dimensions (Zeithaml, Parasuraman, & Berry, 1990):

Reliability: This refers to the provider's ability to deliver consistent and dependable service (Parasuraman et al., 1988). For broadband customers, this translates to uninterrupted connectivity, stable speeds, and minimal disruptions. Lack of reliability can lead to dissatisfaction and churn (Alemayehu, 2019), while consistent performance builds trust and encourages long-term commitment (Zeithaml et al., 1996).

Responsiveness: This denotes the speed and efficiency with which a provider addresses customer concerns and service issues (Parasuraman et al., 1988). In the broadband industry, timely resolution of technical problems, billing disputes, and service inquiries enhances satisfaction (Lee, Lee, & Lee, 2000). Swift and proactive support is particularly crucial for key account customers (Getachew, 2018), as delays or inadequate troubleshooting can negatively impact service perception (Tsegereda, 2018).

Assurance: This encompasses the competence, credibility, and security associated with broadband providers (Parasuraman et al., 1988). Customers value secure networks, effective data encryption, and knowledgeable service representatives (Zeithaml et al., 1996). Trustworthy services, transparent policies, and professional interactions contribute to higher satisfaction (Getachew, 2018), while a lack of assurance can lead to uncertainty and dissatisfaction (Alemayehu, 2019).

Empathy: This reflects the provider's ability to understand and prioritize customer needs, especially for key account customers requiring specialized service (Parasuraman et al., 1988). Personalized care, dedicated support, and customized solutions enhance satisfaction by fostering stronger relationships (Zeithaml et al., 1996). Proactive anticipation of customer needs demonstrates commitment and empathy (Getachew, 2018), whereas indifference can drive customers to competitors (Tsegereda, 2018).

Tangibility: This pertains to the physical aspects of broadband services, including infrastructure, equipment, and customer service facilities (Parasuraman et al., 1988). Modern equipment and advanced technology are often associated with higher service quality (Zeithaml et al., 1996). Investing in cutting-edge infrastructure can improve network stability and boost satisfaction (Lee et al., 2000), while outdated technology may lead to inefficiency and complaints (Alemayehu, 2019).

The SERVQUAL model has been widely used in telecommunications research to assess service quality and its impact on customer satisfaction (Parasuraman et al., 1988; Zeithaml et al., 1996). Studies have often identified reliability, responsiveness, and assurance as particularly influential in shaping broadband customers' perceptions (Lee et al., 2000). Research in Ethiopia, focusing on Ethio Telecom, has also indicated that improvements in network reliability, responsiveness, and technical assurance directly enhance key account customer satisfaction (Tsegereda, 2018).

2.1.1.9 The SERVPERF Measurement (Performance-based measure)

An alternative instrument to measure service quality was introduced by one of the SERVQUAL's critics - Cronin and Taylor (1992). Instead of SERVQUAL, Cronin and Taylor (1992) introduced the performance-based measure of service quality, SERVPERF. SERVPERF is composed of the 22 perception items defined in SERVQUAL scale, and excludes any consideration of expectations. In other word, SERVPERF differs from SERVQUAL in that SERVPERF does not assess gap scores because the expectations portion of the pairings is not included. The research of Cronin and Taylor (1992) suggested that although expectations can have unique effect on consumers' perception of service quality, the performance-minus expectations is an inappropriate basis for use in the measurement of

service quality. Moreover, there were many emerging literatures supported the performance-based paradigm over the disconfirmation-based SERVQUAL paradigm. Babakus and Boller (1992), Churchill and Surprenant, (1994), all supported for the superiority of simple performance-based measures of service quality over gap measures of SERVQUAL. Cronin and Taylor (1992) indicated that SERVPERF was the superior measure of service quality over SERVQUAL. They also claimed that SERVPERF scale consistently outperformed any of the other competing models in service environments, and it also provided a useful tool for measuring overall service quality attitudes by service managers.

In spite of the criticism of SERVPERF by Parasuraman et a1. (1994), Cronin and Taylor (1992) still revealed that SERVPERF was the superior measure of service quality over SERVQUAL. They also claimed that SERVPERF scale consistently outperformed any of the other competing models in service environments, and it also provided a useful tool for measuring overall service quality attitudes by service managers Instead of measuring both customer expectations and perceptions as in the SERVQUAL, the SERVPERF was operational zed by only one part of the perceived performance. It did not assess the gap scores between expectation and perception as the expectation does not exist in the SERVPERF. Cronin and Taylor (1992) concluded that the SERVPERF was a superior service quality measurement in comparison to the SERVQUAL. In addition, the results demonstrated that the new measure had more predictive power on the overall service quality judgment than the original instrument (Narangajavana , 2007). Moreover, while it seems logical that identifying the gaps is the best way to define quality, identify possible problems and predict loyalty, there have been some researchers (e.g., Cronin & Taylor, 1992; Teas, 1993), who questioned the gap model, suggesting that measuring perceptions alone might be a better indicator of service quality, than measuring the differences between expectations and perceptions.

From a methodological point of view, it is not always easy to adopt the gap approach, since in a real life setting it requires to collect data twice (before and after using the service) from the same customers, and compare their answers. In the same vein, the study conduct by Lee & et al (2000) to test whether SERVPERF better than SERVQUAL in measuring over all service quality in an entertainment park as the facility/equipment-based firm and an aerobic school and an investment consulting firm as the people-based firm, finding stated that

performance only (SERVPERF) explains more variance in overall service quality than does the difference between expectation and performance (SERVQUAL).

In the same context, Cronin and Taylor (1994) defended that the SERVPERF also provided practical values to managers. Perception study is based on the argument that tourist satisfaction is a consequence of service quality (Kumra, 2008). This means that tourist satisfaction can be explained by the positive perception a visitor gains as a result of his or her experience after using a service or product (lee, 2009). The perception data were collected at the end of a trip (khan, 2003). Therefore, the SERVPERF model is said to be considered performance attributes of Parasuraman‟s SERVQUAL model (Bouranta &et al, 2009).
In light of the above discussion, and due to the criticized that faced SERVQUAL as previously explained, the current study employed SERVPERF scale to measure service quality to test its relationships with customer satisfaction

2.1.1.10. The SERVPERF service quality dimensions

Reliability: It describes the capabilities to fulfill promised services accurately and dependably (Olu Ojo, 2008). Services delivered as a hotel promised to customer with accurate charges. It is also important to fulfill promises on time and in a systematic way (Cronin and Taylor, 1992).\

Responsiveness: It describe the intentions of the firm and its willingness towards customers' help (Olu Ojo, 2008). mean that the employees always willing to help the customers and they should have a time to respond to customer's request. Tell the employs exact time about service deliveries. Employees are available for prompt services (Cronin and Taylor, 1992)

Assurance: It involves the understandings and courtesy of employees, their capabilities to covey confidence and trust. Assurance consists of courtesy, competence; security and credibility (Olu Ojo, 2008).In Hotel point of view a customer feel safe while consuming services and feel secure at his stay. Employees must have a sufficient skills and knowledge to perform polite and courteous services. According to (Cronin and Taylor, 1992) employees must be trust worthy so that the customer feels safety in his financial transactions.

Empathy: It consists of caring and customized responsiveness to customers. This empathy contains communication, access and understanding the customer (Olu Ojo, 2008).hotel

services must have availability of tools or apparatuses etc. The location is easily findable and served food must be packed (Cronin and Taylor, 1992; and Johns and Howard, 1998).

The SERVPERF is widely used in services industry by the academics and practicing managers throughout the world, it needs to be modified based on hotel consumers and their needs. In past literature only used this model to measure service quality with customer satisfaction point of view. This study also supports the argument in the literature that performance-only. (SERVPERF) is the superior forecaster of service quality (Cronin and Taylor, 1992; Babakus and Boller, 1992; Boulding et al, 1993). This study also supports the argument in the literature that performance-only (SERVPERF) is the better predictor of service quality (Cronin and Taylor, 1992; Babakus and Boller, 1992; Boulding et al., 1993).

Tangibility: As the name suggested that all the tangible things or physical facilities including personnel, equipment, building and renovation etc. (Olu Ojo, 2008). According to Cronin and Taylor (1992), Johns and Howard (1998) and Kara et al. (1995) the tangible service indicator consist of cleanliness of employees wear neat and clean dresses they must use disposable gloves and also wear hear nets and the seating and parking facilities are must be up-to-date.

2.1.1.11 Customers Satisfaction

The term satisfaction is defined in various ways by different scholars' and researchers up-to-date. Because Customers will always assess the services they experienced by comparing them with whatever they wish to receive. Hansemark and Albinson (2004) defined "satisfaction as an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some needs, goals or desire.

Customer satisfaction as a judgment that a product, or service feature, or the product or service itself, provides a pleasurable level of consumption-related fulfillment, including levels of under or over fulfillment'' Customer Satisfaction is also the result of the comparison process between expectations perceived service performance (Kursunluoglu, 2011) and this definition is supported by customer satisfaction is a feeling of the post utilization that the consumers experience from their purchase (Um et al., 2006). In addition, Solomon (1999) consider that customer satisfaction can be defined as the judgment formed during the use or

consumption of a product or service, therefore a reaction or feeling about an expectation, result of performance evaluation of a product or service (Cronin & Taylor, 1992), instead by the expectation (Parasuraman, et al., 1988) besides customer satisfaction can be defined as a business strategy with purpose to create value for customers, identify and satisfy or exceed their needs (Dominici & Guzzo, 2010).

According to Kotler & Keller also noted that customer satisfaction is a feeling of pleasure or disappointment resulting from comparing the expected product or service in relation to the customer's performance expectations and perceived performance (Kotler, 2009).Customer satisfaction is the level of customer felt state resulting from comparing a perceived performance of service or product in relation to customers' expectations (Bala, 2013), it means, if the perceived performance is less than expected, can result in a dissatisfaction by customer, (Lin, 2003) .Gibson (2005) also strengthened this definition by putting forward that satisfied customers are likely to become loyal customers and that means that they are also likely to spread positive word of mouth means, if the perceived performance is less than expected, can result in a dissatisfaction by customer, and if the perceived performance exceeds expectations, can result in satisfaction by customer (Lin, 2003) .Homburg et al. (2008) also noted that satisfied customers are able to offer to the company such as customer loyalty and continuous profitability.

In Ethio Telecom, customer satisfaction is the service users' state of emotion after they experiencing their tour (Baker and Crompton, 2000). And Chen and Tsai, defined customer satisfaction is the extent of overall enjoyment that the users of the service experience able to fulfill their desires, expectation, needs and wants from the tour (Chen and Tsai, 2007). High customer's satisfaction is likely to contribute to enhanced reputation of company's product and increased consumer loyalty, reduced price elasticity, lower cost of future transactions and improved productivity. On the other hand, dissatisfied customers may not have confidence and as the possible avails they shift to other company.

Therefore, in order to achieve customer satisfaction, company should pay more and more attention on service quality and must first of all know the expectations of the customers and

how they can meet such expectations as customer satisfaction helps in customer loyalty and retention (Ojo, 2010

2.1.1.11 Service quality and customer satisfaction

One of the biggest contemporary challenges of management in service industries is providing and maintaining customer satisfaction. Service quality and customer satisfaction have increasingly been identified as key factors in the battle for competitive differentiation and customer retention.

Additionally, increased competition between service businesses has force managers to place greater importance on understanding and satisfying their customers' requirements. Like other service industries, Ethio telecom research is focusing on the relationship between customer satisfaction. Customer satisfaction is one of the most important sources of competitive advantage and its accurate measurement is essential for the positioning or repositioning the service mix to meet customers' needs (Ispas & et al, 2010).

According to this study satisfying the consumer is important for three main reasons. First it leads to positive word- of – mouth. Second creating loyal customer by satisfying them Third dealing with complaints is expensive, time consuming and bad for the organization's reputation. Furthermore, it can bring direct costs through compensation payments (Abdalla, 2008).

As indicated before service quality and customer satisfaction are different concepts, although they are closely related. According to some authors, satisfaction represents an antecedent of service quality (Agus, Barker & Kandampully, 2007). In this sense, satisfactory experience may affect customer attitude and the assessment of perceived service quality. Thus, satisfaction with a specific transaction may result with positive global assessment of service quality. Other authors conflict the previous approach and claimed that service quality is antecedent of customer satisfaction. This group of authors suggests that service quality is a cognitive evaluation, which may lead to satisfaction. Hence, customer satisfaction is the result of service quality (Holjevac et al, 2010).

A second debate within the literature relates to the relationship between service quality and customer satisfaction. Satisfied customers tend to be loyal to the company and more likely to return (Greenwell et al., 2002).

Further, the measurement of service quality has been identified as a crucial factor responsible for influence customer satisfaction or dissatisfaction, being considered the most critical determinant of satisfaction(Shonk,2006) and had been pointed with strong positive correlation between those constructs, and also can result in a positive word of mouth and loyalty intention(Vanpariya & Ganguly, 2010), it means, the service quality and customer satisfaction has direct positive effect on customer retention ,intentions and has being recognized as strong predictor for retention (Gopalakrishnan, et al., 2011).

The evaluation of broadband service quality is typically framed through various dimensions, such as those proposed in the SERVPERF model, which includes tangibles, reliability, responsiveness, empathy, and assurance (Cronin & Taylor, 1992).

Key Account Customers

Key account customers are vital to the operational success of Ethio Telecom, particularly in the context of broadband internet services in Mekelle. The primary objective of recent studies has been to assess the overall satisfaction levels of these key account customers with the services provided by Ethio Telecom. This includes a focused examination of both mobile and broadband internet services tailored for enterprise-level clients in Addis Ababa and potentially extending to other regions such as Mekelle (Mulat, 2024; Astatkie, 2020; Tesfaye, 2019).

Customer satisfaction is a critical outcome of service quality, significantly influencing customer loyalty and repeat business (Anderson & Mittal, 2000). Several theories attempt to explain the formation of customer satisfaction.

Furthermore, SERVPERF model (Cronin & Taylor, 1992) provides a relevant framework for assessing the quality of broadband services offered by Ethio Telecom. Its five dimensions – reliability, responsiveness, assurance, empathy, and tangibility – are crucial in shaping customer perceptions of service quality in the telecommunications industry.

This research aims to provide a comprehensive analysis of service performance across various quality dimensions, and their combined effect on satisfaction. This approach offers a nuanced understanding of how perception occurs within specific service quality dimensions, enabling the identification of critical areas for improvement in Ethio Telecom's broadband services for key account customers in Mekelle.

2.2. Empirical Literature

Empirical studies have consistently demonstrated a strong positive correlation between service quality and customer satisfaction in the telecommunications industry (Taye, 2021). This research aims to build upon existing literature to develop a conceptual framework explaining this relationship within the specific context of broadband service quality and key account customer satisfaction at Mekelle Ethio Telecom.

The empirical review draws from studies utilizing theoretical frameworks like the, which highlights reliability, assurance, tangibility, empathy, and responsiveness as key service quality dimensions. Research in the telecommunications sector emphasizes the importance of network reliability, speed, and customer support (Lee, Lee, & Lee, 2000). Studies in developing countries, including Ethiopia, underscore the need for affordable and reliable broadband services for economic development (Alemayehu, 2019), and research within the Ethiopian telecommunication sector confirms the direct impact of service quality on customer satisfaction (Taye, 2021).

Furthermore, the literature explores key account management, highlighting the significance of personalized service and relationship building in enhancing customer satisfaction. It also examines the influence of technological advancements and regulatory policies on broadband service quality and customer satisfaction. For instance, Getachew (2018) found Ethio Telecom's service quality, particularly bandwidth and pricing, to be less competitive compared to other Sub-Saharan African countries. Similarly, Tsegereda (2018) emphasized the significant effect of broadband service quality and price on key account customers' satisfaction at Ethio Telecom.

Several empirical studies specifically examine the relationship between broadband service quality and customer satisfaction: Tsegereda Getachew (2018) investigated the influence of

broadband service quality and pricing on key account customer satisfaction at Ethio Telecom. Chala Gelana (2018) focused on assessing specific service quality factors affecting broadband internet customer satisfaction in Addis Ababa. Hiwot Bogale Alemu (2019) explored the moderating roles of perceived value and service failure in shaping customer satisfaction within the Ethiopian telecommunications sector.

Lee, Lee, & Lee (2000) analyzed broadband service quality dimensions in South Korea, highlighting network reliability and customer support as critical. Alemayehu (2019) emphasized the importance of affordable and reliable broadband in developing countries for economic and social growth. Getachew (2018) identified competitive challenges for Ethio Telecom, noting its broadband service quality in terms of bandwidth and pricing lagged behind other Sub-Saharan African providers.

Despite these valuable insights, several research gaps remain. A significant gap is the specific impact of broadband service quality on key account customers in Ethiopia, which requires further empirical investigation, particularly in regions like Mekelle. Additionally, the role of technological advancements and regulatory policies in shaping customer satisfaction within the Ethiopian broadband sector has not been adequately explored. The long-term effects of broadband service quality on customer loyalty and retention also warrant further study to understand sustained customer relationships.

Further, to evaluate customer satisfaction, researchers have employed a quantitative descriptive research method that highlights key dimensions of service quality. The SERVPERF scale has been utilized to measure various aspects of service quality, including tangibles, reliability, responsiveness, assurance, and empathy (SERVPERF model (Cronin & Taylor, 1992; Mulat, 2024). These dimensions serve as crucial parameters for assessing customer perceptions with Ethio Telecom's offerings.

The findings from surveys distributed to enterprise customers indicate that three service quality dimensions' reliability, empathy, and tangibles significantly influence overall customer satisfaction. The results revealed strong statistical relationships, with reliability showing the highest impact (Mulat, 2024; Seyoum, 2021).

Given the competitive landscape of telecommunications, Ethio Telecom recognizes the necessity of nurturing its relationships with key account customers. Effective customer relationship management strategies, including the implementation of loyalty programs and enhancing perceived value, are integral to sustaining customer satisfaction and loyalty (Eskinder, 2023; Seyoum, 2021). These efforts not only bolster retention rates but also foster organic growth through positive word-of-mouth marketing. As Ethio Telecom continues to expand its services and improve infrastructure, understanding the unique needs and expectations of key account customers remains paramount. The organization aims to achieve a targeted revenue generation of 842.3 billion Ethiopian Birr over the next three years, with a strategic focus on enhancing customer service quality and expanding broadband internet solutions to ensure customer satisfaction and retention (Tariku, 2025; The Guardian, 2025).

Customer satisfaction is a critical component in determining the success of broadband service providers like Ethio Telecom, particularly among key account customers. This satisfaction hinges on the perceived performance of the services provided in relation to customers' expectations. Research indicates that a significant portion of telecom customers express dissatisfaction with the pricing of services such as individual calls, group calls, and internet usage. Notably, few respondents strongly disagree with the perceived value of these services, while only a small fraction indicates satisfaction with the current pricing structure (Seyoum, 2021).

The importance of customer satisfaction cannot be overstated, as it serves as a key performance indicator that directly correlates with a company’s long-term financial performance. Satisfied customers are likely to make repeat purchases and engage in word-of-mouth marketing, amplifying brand awareness and trust among potential consumers. According to Nielsen, majority of respondents trust recommendations from acquaintances over any other advertising method, highlighting the value of satisfied customers as informal brand ambassadors (Nielsen, 2022).

To effectively gauge customer satisfaction, companies should select relevant metrics that align with their business objectives. A variety of tools exist for measuring customer

satisfaction, including Net Promoter Score (NPS), Customer Satisfaction Score (CSS), and more (Nielsen, 2022). For instance, NPS categorizes customers into promoters, passives, and detractors, enabling companies to measure the overall sentiment towards their brand and identify areas for improvement.

2.3. Conceptual Framework

2.3.1 Independent Variable: Broadband Service Quality

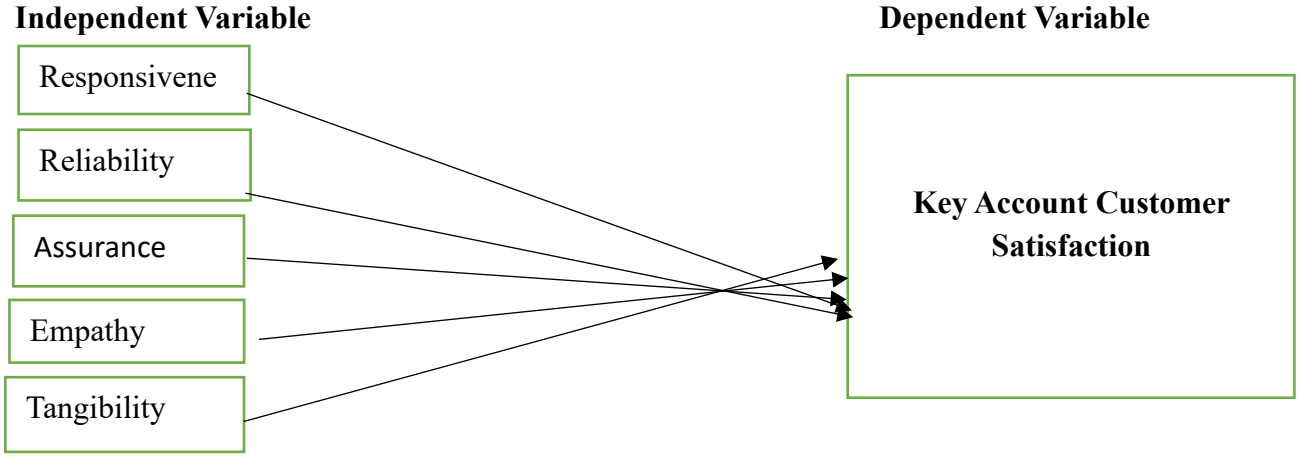
Broadband service quality is a fundamental determinant of customer satisfaction, especially for key account customers who rely on high-speed, stable, and responsive internet services for their business operations. This research adopts the SERVPERF model (Cronin & Taylor, 1992) to examine broadband service quality through its five key dimensions:

- **Reliability**: The consistency and dependability of broadband services are crucial for key account customers. Frequent downtime, service disruptions, or slow network speeds can lead to significant dissatisfaction (Cronin & Taylor, 1992). Reliability ensures consistent service performance over time.
- **Responsiveness**: The efficiency in addressing customer inquiries, complaints, and technical issues significantly impacts satisfaction levels. Prompt resolution of service outages, billing concerns, and technical support requests enhances the perceived service quality (Zeithaml, Parasuraman, & Berry, 1990).
- **Assurance**: Customers expect competence and trustworthiness from their broadband providers. Assurance includes security, credibility, and the confidence instilled by service representatives in key account customers (Parasuraman et al., 1988).
- **Empathy**: Personalized service and tailored broadband solutions are vital for fostering strong customer relationships. Empathy reflects the extent to which Ethio Telecom understands and caters to the unique needs of its key account customers (Zeithaml et al., 1996).
- **Tangibility**: The physical infrastructure supporting broadband services, such as fiber-optic networks, routers, and data centers, plays a critical role in ensuring service stability and high-speed internet access (Parasuraman et al., 1988).

The quality of broadband services provided by Ethio Telecom in Mekelle directly influences key account customer perceptions and satisfaction, making improvements in these dimensions essential for fostering customer loyalty and retention (Getachew, 2018).

2.3.2 Dependent Variable: Key Account Customer Satisfaction

Customer satisfaction, particularly for key account customers, is influenced by both the quality of broadband service and the expectancy-disconfirmation process (Oliver, 1980). According to this theory, satisfaction arises when service performance meets or exceeds customer expectations (positive disconfirmation), while dissatisfaction results when performance falls short (negative disconfirmation).



Source: Adapted from (Mulat, B. (2024), The effect of service quality and customer satisfaction with broadband internet services of Ethio Telecom A case of enterprise key account customers.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter deals with how the research was conducted to achieve the objectives of the study. It consists of study area description, research design, research approach, source of data, population, sample size, sampling technique, data collection method and procedure and method of data analysis.

3.2 Study area description

Ethiopian broadband service is expanding significantly, but it still faces major obstacles in the areas of affordability, infrastructure, and equitable access. In early 2024, 19.4% of the population had internet access, with the state-owned Ethio Telecom controlling the market and a significant gap in service accessibility between urban and rural areas (World Bank, 2024; Ministry of Innovation and Technology, 2023). Given that a 10% increase in broadband penetration can be linked to a 2.46% increase in GDP, the government has launched the Digital Ethiopia 2025 initiative in recognition of broad band's critical role as a catalyst for economic development (ITU, 2019).

With the arrival of new competitors and continuous telecom reforms, Ethiopia's broadband environment is anticipated to change in the future. Ethiopians will have better access to broadband as a result of the expected rise in competition, which is expected to improve service delivery and lower costs (Ethio Telecom, 2022). By the end of its three-year plan, the government hopes to have 100 million telecom service users, with 67.3 million mobile broadband users and a significant increase in fixed broadband subscriptions (Ministry of Innovation and Technology, 2021).

By utilizing technologies like Asymmetric Digital Subscriber Line (ADSL) and Fixed Wireless Access (FWA) the Ethio Telecom offers a range of broadband Internet services in Mekelle, including Aironet, point to point, VSAT, leased lines, tailored solution and shared DSL, with programs like woreda Net, which links local administrative centers to the federal

government. The advent of broadband services has been crucial in bolstering government organizations, financial institutions, educational establishments, non-governmental organizations (NGOs), and large private enterprises that are categorized as key accounts by Ethio Telecom. Hence, the study area of this research is Broadband service being provided for key account customers of Ethio Telecom in Mekelle Branch.

3.3 Research Design and Approach

A research design is a plan or framework that provides the basic direction for carrying out the research. Basically, in business research, there are three categories of research design: exploratory, description, and explanatory. The explanatory category is also known as causal research (Zikmund, 2003). It details all the necessary information needed to structure and solve the research problems. Even though a broad approach to the problem has already been developed, the research designs specify the details. The research design is the foundation on which the research project is built. A good research design seeks to ensure that the research project is conducted effectively and efficiently. Thus, this study applies a descriptive statistic and explanatory research design. a descriptive statistic was used for the data obtained from the key account customers and explanatory research design was adopted for the data obtained through questionnaires from customers. The study was under taken to provide detailed description about the Effect of broadband services quality on Customer satisfaction and examine the relationship between the variables and customer satisfaction.

3.4. Population, sample and Sampling

3.4.1. Target Population

This section deals with the target population, sampling technique, and the size of the sample used for the study.

Population can also be called a study population which refers to the aggregation of elements from which a sample is actually selected (Churchill &Brown, 2004). The target population for this study comprises all 150 key account customers of Ethio Telecom located within Mekelle city. This includes government organizations, financial institutions, educational establishments, non-governmental organizations (NGOs), and large private enterprises that

are categorized as key accounts by Ethio Telecom. The exact number of key account customers was obtained from the Ethio Telecom Mekelle branch office.

3.4.2. Sample Design

3.4.2.1 Sampling Technique

When taking the sample, there are two major techniques to choose between, these are probability and non-probability sampling. Non probability sampling is a technique in which units of the sample are selected on the bases of personal judgment and convenience (Zikmud, 2003). In this study, none probably sampling was employed i.e a purposive sampling technique was used. This method was selected because the study specifically targets a unique and defined group (key account customers) whose insights are central to the research objectives. The researcher obtained 150 key account customers from the official list of key accounts from Ethio Telecom and select participants who are knowledgeable about their organization's broadband service, such as IT managers, administrative heads, or designated focal persons.

3.4.2.2 Sample Size

The sample size was determined by obtaining 150 key account customers (N) in Mekelle. The statistically representative sample size was calculated using Yamane's (1967) formula with a 95% confidence level and a 5% margin of error.

The formula is:

n= N / 1+N (e) 2

Where:

n = the sample size

N = the population size

e = the level of precision or margin of error (0.05)

The total number of key account customers in Mekelle is 150, the sample size would be:

N= 150

e= 0.05

That is $\mathbf{n = N/1+N*e^2}$.

$n= 150/1+150(00.05)^2$

$\underline{\mathbf{n=109}}$

Thus, a sample of 109 key account customers was surveyed.

3.5. Type of data and source

The two main sources which are generally used are primary and secondary. For this research, questionnaires method was used as a source of collecting the primary data whereas the secondary data which is relevant to this study was collected from publications and documents such as reports of Ethio telecom, journals, magazines, books and findings of related researches was included as well.

3.5.1 Primary data

For this purpose of study, the primary data of the research were collected from questionnaires. In this case the researcher used closed questions for users of broadband service users.

3.5.2 Secondary data

In addition to the primary data, the researcher uses some supportive secondary data i.e. published data. The sources for the secondary data were; different books, literatures, from other researchers published articles similar with this research, from publications or documents such as reports of Ethio telecom, journals, magazines, and from website of the corporation.

3.6. Data Collection Instruments

The study used survey method of data collection which was used self-administered questionnaires in the form of close ended and open-ended questions. Collecting data through questionnaire is quite popular because it requires low cost. Questionnaires were distributed to the sample respondents and collected on the spot so as to appreciate the positive response rate. Respondents got very brief orientations about how to fill the questionnaire from the researcher himself.

Furthermore, the questionnaires had three parts; the first part was intended to solicit data on the demographic characteristics. The second part covers SERVPERF well known model scale developed by (Cronin & Taylor, 1992). In order to obtain suitable data to this research, the researcher manipulated SERVPERF model (Cronin & Taylor, 1992), tangibility, reliability, responsiveness, assurance and empathy that considered service quality is a result of customers' perceptions about performance of service offered. This section of the questionnaire was designed to evaluate the variables on a 5 point likert scale ranging from 1=strongly disagree, 2= disagree, 3= neither/nor, 4= agree, 5= strongly agree. The third part was designed in the form of open ended questions to provide additional information about the service quality.

3.7. Data Analysis

The process was started form editing for verification of data and post-coding method follow towards the collected data for fulfillment the subsequent activities. Then the researcher analyzes and interprets the data using qualitative and quantitative data analysis techniques. Quantitative approach of analysis was used for the data which was collected from key account customers through structured questionnaire. The qualitative type of analysis was applied for the data collected via open ended question from the key account customers.

In line with this, all the data was processed by importing the data from Excel. The software that the researcher used was called econometrics of STATA version 12. For presenting data appropriately, the researcher used different types of descriptive data analysis methods i.e. frequency, percentage, and simple tabulation, cross tabulation, mean and standard deviation

and inferential statistics i.e. Correlation, assumption testing, Regression analysis. Correlation analysis helps in manipulating to test whether there is a positive significant relationship between the independent variables and dependent variables. The Regression analyses applied to determine by how much percent the independent variable explains the dependent variable after testing the normality of data and multicollinearity. In addition, the equation of multiple regressions on this study was generally built around two sets of variable, namely dependent variables, Customer Satisfaction and independent variables Reliability, Responsiveness, assurance. Empathy, and tangibility. The basic objective of using regression equation on this study was to make the researcher more effective at describing, understanding, and predicting, the stated variable.

The mathematical expression for the regression model is given as follows:

$Yi = f$ (Reliability, Responsiveness, Assurance, Empathy, and Tangibility)

$Y\ i = \beta 0 + \beta\ 1X1 + \beta 2\ X2 + \beta\ 3X3 + \beta 4\ X4 + \beta\ 5X5 + \varepsilon 0$

Where:

Yi = Customer satisfaction

$\beta 0$ = Constant

$Yi == \beta 0 + \beta 1X1+\beta 2X2+\beta 3X3+\beta 4X4+\beta 5X5+\epsilon$

Where;

The multiple regression model for this study is:

Where:

Y = Customer Satisfaction

$\beta 0$ = Constant (Y-intercept)

X1 = Tangibility

X2 = Reliability

X3 = Responsiveness

X4 = Assurance

X5 = Empathy

ϵ = The error term

3.8. Reliability and Validity Test

Content validity was ensured by designing the questionnaire based on established literature and the validated SERVPERF instrument. The questionnaires were reviewed by academic supervisors and industry experts to confirm its relevance and clarity.

3.9. Ethical Considerations

Ethical considerations were strictly observed. A cover letter explained the purpose of the study, assure respondents of their anonymity and the confidentiality of their responses, and confirm that participation is voluntary.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the results and discussions of the data gathered from the respondents through questionnaire. The data collected from respondents were analyzed and interpreted using quantitative analysis that comprises analysis of the demographical characteristics of respondents using the descriptive statistics. Further, Inferential statistics was also employed to investigate the influence of independent variables on dependent variable applying software of STATA version 12. Regarding the return rate, all 109 questionnaires distributed to key account customers were returned back which means the following analysis is based 100% response rate.

4.2. Demographic Profile of Respondents

The first part of the questionnaire collected background information about the organizations represented by the respondents. The results are summarized in Table 4.1 below.

Table 4.1: Demographic Characteristics of Respondent Organizations (N=109)

Characteristic	Category	Frequency (f)	Percentage (%)
Type of Organization	Government Office	36	33.0
	Private Company	42	38.5
	Financial Institution	18	16.5
	Educational Institution	8	7.3
	NGO	5	4.6
	Total	**109**	**100.0**

Source: Questionnaire 2025

As shown in Table 4.1 the sample is diverse, with the largest group of respondents coming from Private Companies (38.5%), Government Offices (33.0%), and next financial institutions. This distribution is appropriate for the study, as these sectors represent a significant portion of key account customers who rely heavily on stable internet for their daily operations.

Table: 4.2 Years of relationship

Characteristic	Category	Frequency (f)	Percentage (%)
Years as a Customer	Less than 1 year	9	8.3
	1 - 3 years	45	41.3
	4 - 6 years	38	34.9
	More than 6 years	17	15.6
	Total	**109**	**100.0**

Source: Questionnaire 2025

Regarding the duration of the customer relationship, a majority of the organizations (76.2%) have been customers for between 1 and 6 years, indicating that most have substantial experience with Ethio Telecom's broadband service. This lends credibility to their perceptions of service quality over time

Table 4.3 Purpose of Usage

Characteristic	Category	Frequency (f)	Percentage (%)
Primary Purpose of Usage	General Office Work	25	22.9
	Data Transfer & Cloud Services	14	12.8
	Video Conferencing	9	8.3
	All of the above	61	56.0
	Total	**109**	**100.0**

Source: Questionnaire 2025

The primary purpose of usage data reveals that over half of the respondents (56.0%) use the broadband service for a combination of all listed activities, including general office work, data transfer, and video conferencing. This highlights the critical and multi-faceted role that the internet plays in their operations, reinforcing the idea that any disruption in service can have widespread negative consequences.

4.3 Measure of reliability and validity

The concept of validity answers the question that to what extent measuring instrument gauges the desired option. Data accuracy cannot be reliable without knowledge of the validity of measuring instruments. The validity of the questionnaire has been pretested by taking 30 customers by convenience sampling and experts reviewed the wording, clarity and the language appropriateness. In order to determine reliability of the questionnaire, the study used Cronbach alpha coefficient method. Cronbach alpha coefficient was calculated based on STATA 12 software. Given that alpha coefficient higher than 0.70 is acceptable in social science researches (Tavakol and Dennick, 2011), thus reliability of the questionnaire is evaluated to be good.

Table 4.4: Cronbach alpha test for questionnaire items.

Scale (Variable)	Number of Items	Cronbach's Alpha (α)
Reliability	**5**	**.912**
Responsiveness	**4**	**.884**
Assurance	**4**	**.851**
Empathy	**4**	**.890**
Tangibility	**3**	**.785**
Customer Satisfaction	**5**	**.925**

Source: questionnaire 2025

Therefore, Cronbach's alpha coefficient of reliability (0. 912), Responsiveness (0. 884), Assurance (0.851), Empathy (0.890), Tangibility (0.785 and overall coefficient (0.925G) were obtained. These numbers indicated that the questionnaire had reliability.

4.4. Descriptive analysis for the variables

The attention to service quality from the customer's perspective is considered as the most important developments in the service industry. In line of this, the present study tried to find out the level of key account customers' satisfaction in relation to quality of broadband service using the service dimensions applied for many service industries as a measure of quality. The dimensions deployed were Reliability, Responsiveness, Assurance, Empathy and Tangibility. As mentioned in chapter three, key account customers' satisfaction was measured on a scale of 1 to 5 ranging as 1 = strongly disagree, 2 = disagree, 3= neutral, 4 = agree and 5= strongly agree applying the five point likert scale to rate the respondent's responses. Before analyzing the influence of the variables, mean scores and standard deviation were calculated and ranks assigned for each dimension accordingly.

Table 4.4. Summary of the Descriptive statistics of the study variables

Variable	Observation	Mean	Std. Dev.
Reliability	109	3.744731	0.55198
Responsiveness	109	3.790984	0.6001842
Assurance	109	3.691803	0.6118108
Empathy	109	3.768852	0.6575791
Tangibility	109	3.845902	0.6674421
Customer satisfaction	**109**	**3.7684544**	**0.6177992**

Source: Questionnaire 2025

This section analyzes the key account customers' perceptions of Ethio Telecom's broadband service quality across the five SERVPERF dimensions. The above Table 4.4 shows that the mean and standard deviation for all measures of variables used in this study of service quality dimensions and overall key account customer's satisfaction. As presented in the above table

4.4, mean value of all service quality independent variables: reliability, responsiveness, assurance, empathy, and tangibility are ranging from 3.691803 to 3.845902.

Among the variables the key account customers' rate, the highest mean value is for tangibility which shows that the broadband service is as proper. However, the assurance mean value is the least one that we can say that the industry is doing less regard to service quality.

In order to assess the overall key account customers, mean scores were calculated on each element. The element-wise mean scores were then averaged on all dimensions to get overall key account customers satisfaction score. It is obvious from the data that key account customers are not highly satisfied with the broadband services over all services of (M= 3.811475). The analysis clearly reveals that key account customers' satisfaction is more than moderate with broadband services since it is above the average of 2.5 as reflected by the respective mean scores on all dimensions of the services: reliability (M=3.744731) responsiveness (M= 3.790984), assurance (M= 3.691803), empathy (M =3.768852) Tangibility (M=3.845902) is reported low SERVPERF score relatively.

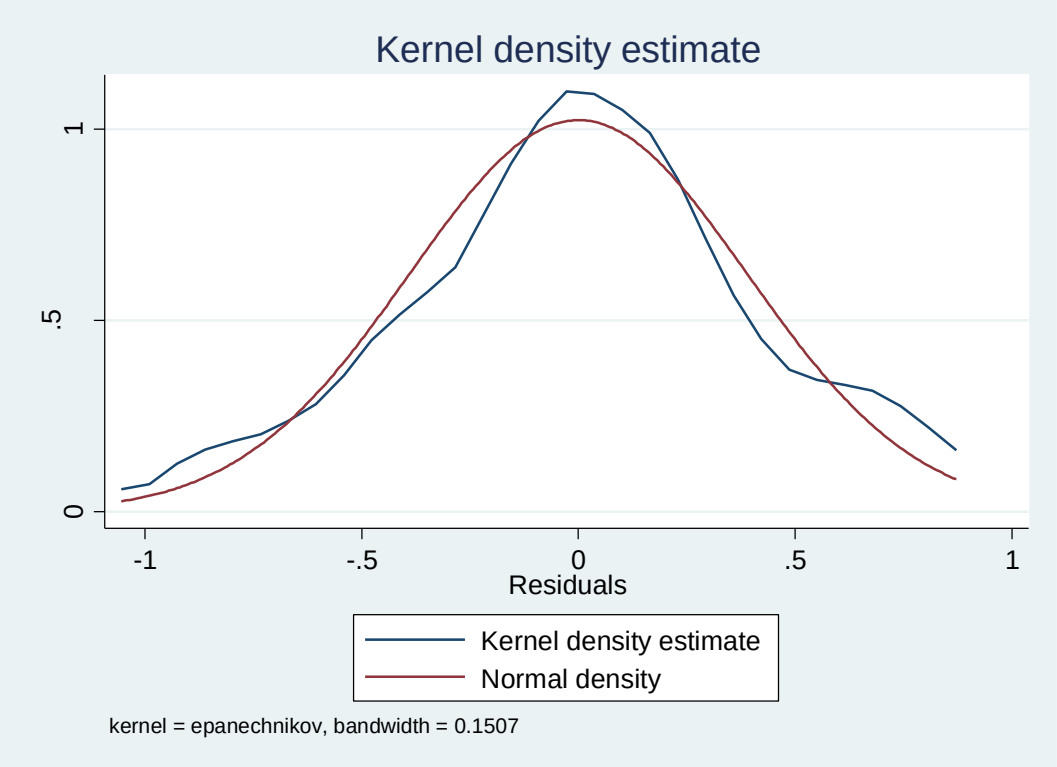
The standard deviation was also used to analyze the responses dispersion from the mean. Hence, higher the standard deviation, the higher is the level of dispersion among the respondents. The standard deviation for all the factors listed was less than 1 meaning there was general consensus and close opinion among the respondents.

4.5. Testing assumptions

4.5.1 Normal Distribution test

As scholars said "data examination is time consuming, but necessary." initial step in any analyis that researchers caculates, the influence of normality, mullticollinariy, and missing data. Thus, the objective of these data examiniation in this study was as much to reveal accuart data for further analayis and came up with accurate findings. Further, normality degree is tested to which the ditribution of the sample data corresponds to the a normal distriubtion. Accordingly, the normal distribution test for this study, as one can see, is bell shaped, or normal curve as depicted in figure 1 below.

Figure 1. Normal distribution curve



Source: Questionnaire 2025

4.5.2 Multicollinearity

Multicollinearity measures to which a variable can be explained by the other vaiables in the nalysis. As multicollinearity increases, it complicates the interpreation of the variate becuase it is more diffiuclt to the effect of any vaiable owning their interrelationship. Also, to assess multicollinearity, researchers should adopt a tolerance or VIF that has been established in the regression of each independent on all the others (Garson, 2007). According to (Garson, 2007), the rule of thumb is that tolerance values less than 0.20 and the VIF greater than 10; suggest that researchers should view the results with caution. Tolerance values less than 0.10 indicates a sign of multicollinearity problem, suggesting that researchers should reconsider the independent variables (Lin, 2008, Thompson & O'Hair, 2008). (O'Brien, 2007) and VIF values below 10 indicate that multicollinearity is not a problem for multicollinearity (Myers, 1990).

With regard to this study, multicollinearity of variables was tested and examined by using the variance inflation factor (VIF) values for each of the regression coefficients.

Multicollinearity happens when there are high predicators much of the same information. A small tolerance value and a large VIF value implying there exist multicollinearity. In this study, tolerance values between 0.278585 and 0.594393, and VIF between 3.76 and 1.68. Therefore, tolerance value and VIF are in the acceptable threshold as statistics values shown below, the tolerance and VIF showed that there was no multicollinearity because VIF of all variables were less than 10.

Table 4.6. Multicollinearity Statistics

Variable	VIF	Tolerance
MREL	3.59	0.278585
MRES	3.28	0.304771
MASSU	2.15	0.466136
MEMPA	2.58	0.386957
MTAN	3.76	0.266178
Mean VIF	2.63	

Source: Questionnaire 2025

4.5.3 Missing variables

Missing variable is an inforamtion not availabel about the respective variable about whom other variables are available. Missing variable often occuer when a researcher fails to include the important variable data which ommited in the collection of data during the survey. Hence, in this research there was no ommited vaiable.

4.6. Correlation analysis of the variables

After examining the data using different techniques to test the accuracy of the data, the following task was to evaluate the inter-correlations among all variables. In this study, this was done to see the level of their relationships among them. As one can see in the following

table 4.6, all of the variables have a positive and statistically significant relationship with customer satisfaction and is presented below. Moreover, a correlation coefficient is a very useful tool to summarize the relationship between two variables with a single number that falls between -1 and +1 (Field, 2005). A correlation analysis with Pearson's correlation coefficient was conducted on all the independent and dependent variable in this study to explore the relationship between variables.

Table 4.6 Correlation results

	Variab.		CUSS	MREL	MRES	MASS	MEMP	MTAN
	CUSS		1					
	MREL		0.5767	1				
	MRES		0.7237	0.4858	1			
	MASS		0.7581	0.5654	0.7986	1		
	MEMP		0.7299	0.526	0.661	0.6597	1	
	MTAN		0.7623	0.5927	0.7258	0.7639	0.6834	1

Source: Questionnaire 2025

N= 109
REL = Reliability
RES = Responsiveness
ASS= Assurance
EMPA =Empathy
TAN = Tangibility
CUSS=Customer satisfaction

In this study, the interpretation of all correlations was guided by Cohen (1988) and Field (2005), who suggest that correlation within the ranges r = .10 to .29 or r = -.10 to -.29 may be classified as weak, correlation within the ranges of r = .30 to .49 or r = -.30 to -.49 may be classified as medium and correlations within the ranges of r = .50 to 1.0 may be classified as strong. These values are equally strong, whether positive or negative.

The correlation matrix reveals strong positive relationships between customer satisfaction (CUSS) and all five-service quality dimension's reliability (MREL), responsiveness (MRES), assurance (MASS), empathy (MEMP), and tangibility (MTAN).

Among these, tangibility (r = 0.7623), assurance (r = 0.7581), and empathy (r = 0.7299) show the highest correlations with customer satisfaction, indicating that physical infrastructure, trust-building interactions, and personalized service are key drivers of satisfaction among Ethio Telecom's key account customers. Responsiveness (r = 0.7237) and reliability (r = 0.5767) also contribute positively, though to a slightly lesser extent.

The intercorrelations among the service dimensions suggest moderate to strong internal consistency, with assurance and responsiveness (r = 0.7986) showing the strongest relationship, implying that timely and confident service delivery often go hand in hand. Overall, the matrix supports the relevance of the SERVQUAL dimensions in explaining variations in customer satisfaction within the broadband service context.

4.7. Inferential analysis

Correlation is very useful research tools but they tell us nothing about the predictive power of variables (Field, 2005). To support the correlation tools, a regression analysis was deployed to further investigate the relative importance of the independent variables in predicting the dependent variable as shown in table 4.7, Regression analysis is a statically method which is used to explain and predict dependent variable from independent variables.

In other words, in this research, a multiple regression analysis was conducted with the purpose to investigate the influence of service quality by the five dimensions on key account customers' satisfaction. The multiple regressions are a constructive statistical method used to identify the correlation between a single dependent factor and several independent variables (Seelbach, et al., 2011; Vesey, et al., 2011). The multiple regressions assume that variables on the sample have normal distributions, it means, is extremely important to check the normality of the variables with the purpose to identify the existence of outliers. The non-normally distributed variables can impact in distortion of the results on multiple regressions as discussed above in the section of data examination.

Table 4.7, shows the results of the regression model using respondents' overall judgment of service quality as the dependent variable, this variable being measured on a five-point Likert scale type and the five service quality factors presented above as the independent variables. The result of multiple regressions indicates a very strong R^2.The coefficient of determination (R^2) is a number that indicates how well data fit a statistical model. It is a measure of how well observed outcomes are replicated by the model. . From the analysis, the five dimensions of service quality explained 70.75% the key account customers satisfaction as represented by the coefficient of determination (R^2) 0.7075 is explained by the five independent variables tested and the predictor variables performed extremely well in explaining the variance toward the overall key account customers' satisfaction in the broadband service.

The model also indicates other factors contribute 29.25 % towards key account customers satisfaction that indicates further research is needed to identify the additional factors that influence the level of satisfaction in the broadband service.

In this study, The F-ratio was used to establish whether there exist a significance relationship between service quality (Independent variable) and customer satisfaction (Dependent variable). From the analysis, significance F=0.000, which is less than p=0.05 and therefore the model is statistically significant. This implies that the model can be used for prediction purposes. Therefore, it is possible to say that the regression model adopted in this study could have not occurred by chance and is considered as significant.

Table 4.7. Model Summary for Multiple Regressions

Model	R	R square	Adjusted R Square
1	0.852565	0.7268	0.7075

	Sum of square	Df	Mean of squares	F	Sig.
Regression	31.0090039	8	3.875	37.58	000
Residual	11.6549305	101	0.096		
Total	42.6639344				

Source: Questionnaire 2025

A. Predictors: (Constant), reliability responsiveness, assurance, empathy, and tangibility.
B. Dependent Variable: Key account customer satisfaction

Table 4.8 Model Summary for Multiple Regressions

Var.	**Standard coef, Beta**	**Std. Err.**	**t**	**Sig.**
MREL	0.1627594	.0958104	1.70	0.092
MRES	0.1932392	.0942871	2.05	0.043
MASSU	0.1718447	.0904123	1.90	0.050
MEMPA	0.1933762	.0713745	2.71	0.008
MTAN	0.0747103	.0567378	1.32	0.191
(Constant)	0.0809741	.248001	0.33	0.745

Source: Questionnaire 2025

The relative effect of dimensions was then examined by comparing the magnitude of regression coefficients as indicated in table 4.8 above. The first dimension with the greatest effect on key account customers' overall satisfaction was empathy with a coefficient beta (ß = 0.1933762) such as understanding the specific needs of key account customers should be given personal attention followed by responsiveness (ß= 0.1932392,) with items performing time of the service, response to key account customers , promptness of service, willingness to help, informative literature, sincerity customer problem solving to explain key account customers' satisfaction , and assurance (ß = 0.1718447), such as staffs knowledge about the service, employees instills confidence in customers, skills of staffs to perform the service ordered, giving extra service to handle special interest, trustworthiness and courteous of staffs , reliability with a coefficient (β=0.1627594) and items promised and complete at a

certain service at a time, excellent service, performing the right service, keeping promise, and efficiency.

In addition, Tangibility with a coefficient (β= 0.0747103), modern looking equipment, visual appealing physical facilities, staffs uniform cleanliness well maintained exterior and interior environment, visual attractive outdoor surroundings which are used in this study measure key account customers' satisfaction.

Meanwhile table 4.8 also indicates that responsiveness, assurance, and empathy have significant contribution to key account customers' satisfaction because their significant values were less than or equal to 0.01. 0.1, 0.01 ($p \leq 0.05$) whereas reliability and tangibility which their significant value is more than 005 which are insignificant values. Typically, the finding of this research is similar with the finding of (Mulat, 2024; Seyoum, 2021) that is the two service quality dimensions' empathy, and tangibles significantly influence overall customer satisfaction.

Regression analysis shows how much assessments do each independent variable affect customer satisfaction, dependent variable. By using this regression analysis, one may assess the direct relationship between variables as well as show the causal relationship and the nature of relationship between variables (Aiken et al., 1991; Foster et al., 2004).

As shown in Table 4.9, all of the five dimensions appeared as significant independent variables in the regression model. The model was written as follows:

$Y = \beta0 + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + \beta5X5 + \varepsilon$

Where,

Y = the dependent variable representing key account customer satisfaction

Customer satisfaction = 0.0809741 + 0.1627594(REL)+ 0.0.1932392(RES) + 0.0.1718447(ASS) + 0.1932392(EMP) + 0.07447103(TAN)

At 5% level of significance, three variables i.e. responsiveness, assurance, and empathy were statistically significance since their values is less than or equal to the acceptable threshold of 0.05. However, reliability and tangibility were statistically insignificant since their values were above the acceptable threshold.

The result of the regression analysis shows that there was a positive relationship between the five independent variables and the dependent variable " key account customers " as the five coefficients of the independent variables carried positive signs. This indicated that the key account customers' overall satisfaction depended largely on these five variables. In other words, when there was a higher performance level in these dimensions, the key account customers ' overall satisfaction increases.
In addition, the regression coefficients indicate that a one unit change in a specific dimension would lead to a specific change in the overall key account customers' satisfaction.

With regard to the effect of the independent variable on the dependent variable from table 4.8 out of the five dimensions' empathy (0.1933762) carries the heaviest weight in explaining key account customers, followed by responsiveness (β= 0.1932392), assurance (β= 0.1718447), reliability (β=0.1627594) and Tangibility (β= 0.0747103).

These results show that one-unit increase in empathy would lead to 0.1932392 unit (19.33%) increase in key account customer satisfaction provided that other variables being held constant. Similarly, one unit increases in responsiveness and would lead to 0.1932392 unit or (19.32%) increase in key account customer satisfaction provided that other variables remain constant. This is followed by one-unit increase in assurance would lead to 0.1718447unit or (17.18%) increase in key account customer satisfaction, whereas one-unit increase in reliability would lead to 0.1627594 unit (or 16.28%) increase in customer satisfaction, while one-unit increase in tangibility would lead to 0.0747103 (7.5%).

Empathy has the highest standardized beta coefficient at 0.1933762 to the contrary, Tangibility has the lowest standardized beta coefficient at 0.07447103.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1. Introduction

This final chapter synthesizes the entire research endeavor. It provides a concise summary of the major findings derived from the data analysis presented in Chapter Four. Following the summary, a conclusion is drawn by linking the findings back to the research objectives and questions outlined in Chapter One. Based on this conclusion, a set of actionable recommendations is proposed for Ethio Telecom to address the identified gaps in service quality. Finally, the chapter acknowledges the limitations of the study and suggests avenues for future research.

5.2. Summary of Major Findings

The study investigated the influence of broadband service quality on the satisfaction of Ethio Telecom's key account customers in Mekelle. The analysis of the collected data yielded the following key findings:

With regard to the descriptive statistics, overall mean value of key account customers'' satisfaction was 3.811475 and the mean score value of independent variables ranges from 3.845902 to 3.568852. The result identify that the dimension tangibility has the highest level of customer perception followed by responsiveness and empathy. These results indicate the independent variables need improving especially the dimensions of the service quality to increase customers'' satisfaction.

Employees performance in those areas should be improved if they have proper training that provide them with the necessary knowledge, skills, and abilities to perform the tasks be interactively skilled in providing a service to guests, the employees have to empower to respond to different nee

Before the analysis of correlation and multiple regressions, data was examined thoroughly using the test of normality, multicollinearity, and omission of variable. Thus, the researcher proved that the data for further analysis satisfied the statistical assumptions.

Further, Pearson correlation analysis was used in this study to measure the association among the five dimensions which comprise of reliability, responsiveness, assurance, empathy, and Tangibility and i8t was found that all dimensions have strong positive relationship with key account customers'' satisfaction.

Using SERVPERF model or performance-only instrument was undertaken to measure the impact of the independent variables on key account customers' satisfaction. Based on the results from statistical tool, the multiple regressions were possible to confirm that the dimension's responsiveness, assurance, and empathy, have significant relationship with key account customers' satisfaction. Meanwhile the other dimensions, including reliability and tangibility are not present as significant effect on key account customers'' satisfaction.

The important role of the above quality dimensions implies suggestions for broad band service provider to strongly focus on improving these quality dimensions to better gain key account customers' satisfaction. Therefore, broad band service needs to pay
close attention to the customer's needs, and dealing with the issues raised by the customer.

5.3. Conclusions

This study examines the influence of five key service quality dimension's reliability, responsiveness, assurance, empathy, and tangibility on customer satisfaction among key account clients of Ethio Telecom in Mekelle, using the SERVPERF model as its conceptual foundation. The findings confirm that service quality significantly affects customer satisfaction, with varying degrees of influence across the dimensions.

Descriptive statistics revealed that customers generally perceive service quality to be moderately high, with mean scores ranging from 3.69 to 3.84. Among the five dimensions, tangibility received the highest mean score, indicating that customers appreciate the physical infrastructure, equipment, and visual aspects of Ethio Telecom's service delivery. This was followed by responsiveness and empathy, suggesting that timely support and personalized attention are also valued. However, assurance which reflects the confidence and trust customers place in service personnel scored the lowest, highlighting a critical area for improvement in staff competence, communication, and professionalism.

Pearson correlation analysis further reinforced these insights. Three dimensions empathy ($p = 0.008$), responsiveness ($p = 0.043$), and assurance ($p = 0.050$) showed statistically significant and strong positive correlations with customer satisfaction at the 95% confidence level. These results suggest that customers are particularly sensitive to how well Ethio Telecom understands their needs, how quickly it responds to service issues, and how confidently it delivers solutions. In contrast, tangibility and reliability, while positively correlated, did not show statistically significant relationships, indicating that while these aspects are appreciated, they may not be the primary drivers of satisfaction for key account customers in this context.

These findings carry important managerial implications. Ethio Telecom should prioritize employee training and empowerment, particularly in the areas of empathy, responsiveness, and assurance. Service personnel must be equipped not only with technical skills but also with interpersonal competencies to engage effectively with high-value clients. Empowering

frontline staff to make decisions, resolve issues promptly, and communicate with clarity can significantly enhance customer trust and satisfaction (Parasuraman et al., 1988).

In conclusion, service quality remains a cornerstone of customer satisfaction and long-term loyalty in the broadband sector. As competition intensifies and customer expectations evolve, Ethio Telecom must focus on delivering consistent, human-centered service experiences. By strengthening its performance in empathy, responsiveness, and assurance, the company can not only close the expectation-performance gap but also reinforce its strategic position in Ethiopia's liberalized telecommunications market.

5.4. Recommendations

These findings may help Ethio telecom managers in assessing the current position of their broad band services and inspire them to improve their understanding of customer behavior. Indirectly, it will not only improve service quality of the broadband service that leads to customer satisfaction but also generate consistent net profit, positive words of mouth, and long term relations.

Keeping in mind the findings of the study, managers in Ethio telecom service sector may particularly focus on the followings:

- Managers of broadband service have to exert direct efforts to improve the empathy, responsiveness, and assurance, aspects of the service in improving the knowledge the service providers, speed of service delivery, communication and courtesy of service providers, and their ability to convey trust and confidence to their customers.
- Employees at front desk are the key personnel who form the first impression of the broadband service. Therefore, from a strategic management perspective of service quality, on job and off training programs should be programmed that improve employee competence skills, efficiency, and communicative skills and so on.
- As the multiple regression result indicated, as the coefficient of empathy and responsiveness is much greater than the other service quality dimensions followed by assurance. The service providers should give greater attention as per level of their importance so as to increase the probability of satisfying its customer and in turn to get maximum profit.

5.5. Limitations and direction for future research

The researcher acknowledges the following limitations. Geographical Scope: The study was confined to key account customers in Mekelle. Therefore, the findings may not be generalizable to other regions in Ethiopia where infrastructure and service levels might differ. Sampling Method: The use of purposive sampling, while appropriate for targeting a specific group, may limit the statistical generalizability of the findings to the entire key account population. Cross-Sectional Nature: The research was cross-sectional, capturing customer

perceptions at a single point in time. It does not account for fluctuations in service quality or satisfaction over a longer period.

To build upon the findings of this study, future research could explore the following areas:A comparative study assessing broadband service quality and satisfaction in different major Ethiopian cities to determine if the identified issues are localized or systemic. A qualitative study involving in-depth interviews with key account managers to gain a richer understanding of the operational impact of poor service quality. A longitudinal study to track customer satisfaction over time, particularly after Ethio Telecom implements service improvements, to measure the effectiveness of those changes. An investigation into the relationship between broadband service quality and customer loyalty and churn rates among key accounts.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage Publications
- Alemayehu, F. (2019). *Broadband service quality and customer satisfaction in Ethiopia*. [Unpublished master's thesis]. Addis Ababa University.
- Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, *3*(2), 107–120. https://doi.org/10.1177/109467050032001
- Asubonteng, P., McCleary, K. J., & Swan, J. E. (1996). SERVQUAL revisited: A critical review of service quality. *Journal of Services Marketing*, *10*(6), 62–81. https://doi.org/10.1108/08876049610148602
- Abdalla, O. A. F. (2008). *Pre-requisites of political decentralization in Egypt: Case studies of local popular and executive councils*. [Master's thesis, American University in Cairo]. AUC Knowledge Fountain.
- Agus, A., Barker, S., & Kandampully, J. (2007). An exploratory study of service quality in the Malaysian public service sector. *International Journal of Quality & Reliability Management*, *24*(2), 177–190. https://doi.org/10.1108/02656710710722284
- Alemayehu, F. (2019). *Broadband access and economic development in Ethiopia*. [Unpublished master's thesis]. Addis Ababa University.
- Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, *3*(2), 107–120. https://doi.org/10.1177/109467050032001
- Babakus, E., & Boller, G. W. (1992). An empirical assessment of the SERVQUAL scale. *Journal of Business Research, 24*(3), 253–268. https://doi.org/10.1016/0148-2963(92)90022-4
- Berry, L. L., Parasuraman, A., & Zeithaml, V. A. (1994). Improving service quality in America: Lessons learned. *Academy of Management Executive*, *8*(2), 32–52.

- Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V. A. (1993). A dynamic process model of service quality: From expectations to behavioral intentions. *Journal of Marketing Research*, *30*(1), 7–27. https://doi.org/10.2307/3172510
- Bouranta, N., Chitiris, L., & Paravantis, J. (2009). The relationship between internal and external service quality. *International Journal of Contemporary Hospitality Management*, *21*(3), 275–293. https://doi.org/10.1108/09596110910948297
- Buttle, F. (1996). SERVQUAL: Review, critique, research agenda. *European Journal of Marketing*, *30*(1), 8–32. https://doi.org/10.1108/03090569610105762
- Baker, D. A., & Crompton, J. L. (2000). Quality, satisfaction and behavioral intentions. *Annals of Tourism Research*, *27*(3), 785–804. https://doi.org/10.1016/S0160-7383(99)00108-5
- Bala, P. (2013). *Customer satisfaction and service quality in the retail sector*. [Unpublished doctoral dissertation].
- Churchill, G. A., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of Marketing Research*, *19*(4), 491–504. https://doi.org/10.2307/3151722
- Clow, K. E., & Kurtz, D. L. (2003). *Services marketing: Operation, management, and strategy* (2nd ed.). South-Western.
- Cronin, J. J., Jr., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, *56*(3), 55–68. https://doi.org/10.2307/1252296
- Cronin, J. J., Jr., & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: Reconciling performance-based and perceptions-minus-expectations measurement of service quality. *Journal of Marketing*, *58*(1), 125–131. https://doi.org/10.2307/1252256
- Czepiel, J. A. (1990). Service encounters and service relationships: Implications for research. *Journal of Business Research*, *20*(1), 13–21. https://doi.org/10.1016/0148-2963(90)90043-Z
- Chala, G. (2018). *Service quality factors affecting broadband internet customer satisfaction in Addis Ababa*. [Unpublished master's thesis]. Addis Ababa University.

- Chen, C. F., & Tsai, D. C. (2007). How destination image and evaluative factors affect behavioral intentions. *Tourism Management*, *28*(4), 1115–1122. https://doi.org/10.1016/j.tourman.2006.07.007
- Cronin, J. J., Jr., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, *56*(3), 55–68. https://doi.org/10.2307/1252296
- Churchill, G. A., & Brown, T. J. (2004). *Basic marketing research* (5th ed.). South-Western College Publishing.
- Dominici, G., & Guzzo, R. (2010). Customer satisfaction in the hotel industry: A case study from Sicily. *International Journal of Marketing Studies*, *2*(2), 3–12. https://doi.org/10.5539/ijms.v2n2p3
- Eskinder, A. (2023). *Customer relationship management practices in Ethiopian telecom services*. [Unpublished master's thesis]. Addis Ababa University.
- Eshghi, A., Roy, S., & Ganguli, S. (2008). Service quality and customer satisfaction: An empirical investigation in Indian mobile telecommunications services. *Marketing Management Journal*, *18*(2), 119–144.
- Ethio Telecom. (2023). *Annual performance report*. Addis Ababa: Ethio Telecom.
- Ethio Telecom. (2022). *Annual report 2021/2022*. Addis Ababa: Ethio Telecom.
- Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). Sage Publications.
- Foster, J. J., Barkus, E., & Yavorsky, C. (2004). *Understanding and using advanced statistics*. Sage Publications.
- Gebremariam, H. (2024). *Infrastructure sharing and strategic readiness in Ethiopia's telecom sector*. Mekelle University Press.
- Getachew, B. (2018). Factors affecting student's academic performance in Ahuntegen General Secondary School, North Wollo Zone, Ethiopia. *Journal of Education and Learning*, *12*(2), 198–206. https://doi.org/10.11591/edulearn.v12i2.8404
- Getachew, B. (2018). *Broadband service quality and competitiveness of Ethio Telecom*. [Unpublished master's thesis]. Addis Ababa University.

- Gibson, D. R. (2005). Taking turns and talking ties: Networks and conversational interaction. *American Journal of Sociology*, *110*(6), 1561–1597. https://doi.org/10.1086/428689
- Gopalakrishnan, S., et al. (2011). *Service quality and customer retention in telecommunications*. [Journal/Publisher details needed].
- Greenwell, T. C., Fink, J. S., & Pastore, D. L. (2002). Assessing the influence of the physical sports facility on customer satisfaction within the context of the service experience. *Sport Management Review*, *5*(2), 129–148. https://doi.org/10.1016/S1441-3523(02)70064-8
- Garson, G. D. (2007). *Statnotes: Topics in multivariate analysis*. North Carolina State University. https://faculty.chass.ncsu.edu/garson/PA765/statnote.htm
- Hansemark, O. C., & Albinsson, M. (2004). Customer satisfaction and retention: The experiences of individual employees. *Managing Service Quality*, *14*(1), 40–57. https://doi.org/10.1108/09604520410513668
- Hiwot, B. A. (2019). *Perceived value, service failure, and customer satisfaction in Ethiopian telecommunications*. [Unpublished master's thesis]. Addis Ababa University.
- Holjevac, I. A., Marković, S., & Raspor, S. (2010). Customer satisfaction measurement in hotel industry: Content analysis study. *Tourism and Hospitality Management*, *16*(2), 219–236.
- Homburg, C., Koschate, N., & Hoyer, W. D. (2008). Determinants of customer satisfaction. *Journal of Marketing Research*, *45*(1), 84–96. https://doi.org/10.1509/jmkr.45.1.84
- Ispas, A., et al. (2010). *Customer satisfaction and service quality in tourism*. [Conference paper/Journal details needed].
- International Telecommunication Union (ITU). (2019). *Measuring digital development: Facts and figures 2019*. ITU. https://www.itu.int/en/ITU-D/Statistics/Pages/facts/default.aspx

- Johns, N., & Howard, A. (1998). Customer expectations versus perceptions of service standards in the foodservice industry. *International Journal of Service Industry Management*, *9*(3), 248–265. https://doi.org/10.1108/09564239810223556
- Joo, J., & Sang, Y. (2013). Exploring Koreans' smartphone usage: An integrated model of the technology acceptance model and uses and gratifications theory. *Computers in Human Behavior*, *29*(6), 2512–2518. https://doi.org/10.1016/j.chb.2013.06.002
- Kotler, P., & Keller, K. L. (2009). *Marketing management* (13th ed.). Pearson Education.
- Kursunluoglu, E. (2011). Customer service effects on customer satisfaction and customer loyalty: A field research in shopping centers in Izmir City—Turkey. *International Journal of Business and Social Science*, *2*(17), 52–59.
- Kara, A., Lonial, S. C., Tarim, M., & Zaim, S. (1995). A paradox of service quality in Turkey: The relative importance of tangible and intangible determinants of service quality. *European Journal of Marketing*, *29*(4), 34–44. https://doi.org/10.1108/03090569510086666
- Khan, F. M. (2003). *Physics of radiation therapy* (3rd ed.). Lippincott Williams & Wilkins.
- Kumra, R. (2008). Service quality in rural tourism: A prescriptive approach. *Journal of Services Research*, *8*(1), 85–99.
- Lee, H., Lee, Y., & Yoo, D. (2000). The determinants of perceived service quality and its relationship with satisfaction. *Journal of Services Marketing*, *14*(3), 217–231. https://doi.org/10.1108/08876040010327220
- Lee, J. (2009). Customers' use of self-service technology in the hospitality industry. *International Journal of Hospitality Management*, *28*(4), 546–553. https://doi.org/10.1016/j.ijhm.2009.02.008
- Lin, S. (2003). Occupational stress research: A review. *Psychological Science (China)*, *26*(3), 494–497

- Lin, N. (2008). A network theory of social capital. In D. Castiglione, J. van Deth, & G. Wolleb (Eds.), *The handbook of social capital* (pp. 50–69). Oxford University Press.
- Mulat, R. (2024). *Broadband service quality and customer satisfaction in Ethiopia: Evidence from enterprise clients*. [Unpublished doctoral dissertation]. Addis Ababa University.
- Multilink Consulting. (2025). *Telecom sector liberalization and strategic response in Ethiopia*. Addis Ababa: Multilink Consulting Group.
- Munusamy, J., Chelliah, S., & Mun, H. W. (2010). Service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia. *International Journal of Innovation, Management and Technology*, *1*(4), 398–404.
- Ministry of Innovation and Technology. (2021). *National ICT policy and strategy 2021–2025*. Government of Ethiopia.
- Ministry of Innovation and Technology. (2023). *Annual ICT sector performance report*. Government of Ethiopia.
- Myers, R. H. (1990). *Classical and modern regression with applications*. PWS-Kent Publishing.
- Narangajavana, Y. (2007). *The relationship between the hotel rating system, service quality improvement, and hotel performance in Thailand*. [Doctoral dissertation, Oklahoma State University]. ProQuest Dissertations Publishing.
- Nielsen. (2022). *Trust in advertising: Global consumer survey*. Nielsen Insights. https://www.nielsen.com
- Ojo, O. (2008). Organisational culture and performance: Empirical investigation of Nigerian insurance companies. *Manager Journal*, *8*(1), 118–127.
- Ojo, O. (2010). The relationship between service quality and customer satisfaction in the telecommunication industry: Evidence from Nigeria. *Journal of Marketing and Management*, *1*(1), 88–100.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, *17*(4), 460–469. https://doi.org/10.2307/3150499

- O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity*, *41*(5), 673–690. https://doi.org/10.1007/s11135-006-9018-6
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, *64*(1), 12–40.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Reassessment of expectations as a comparison standard in measuring service quality: Implications for future research. *Journal of Marketing*, *58*(1), 111–124. https://doi.org/10.2307/1252255
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, *49*(4), 41–50. https://doi.org/10.1177/002224298504900403
- Spreng, R. A., & Mackoy, R. D. (1996). An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing*, *72*(2), 201–214. https://doi.org/10.1016/S0022-4359(96)90014-7
- Shonk, D. J. (2006). *Perceptions of service quality, satisfaction and the intent to return among tourists attending a sporting event*. (Doctoral dissertation). The Ohio State University.
- Solomon, M. R. (1999). *Consumer behavior: Buying, having, and being* (4th ed.). Prentice Hall.
- Seelbach, C., et al. (2011). [Details needed: empirical study on regression/methods]. [Provide journal or publisher].
- Seyoum, M. (2021). *Customer satisfaction and loyalty in Ethiopian telecommunications*. [Unpublished master's thesis]. Addis Ababa University.
- Teas, R. K. (1993). Expectations, performance evaluation, and consumers' perceptions of quality. *Journal of Marketing*, *57*(4), 18–34. https://doi.org/10.2307/1252216

- Tesfaye, G. (2019). Evaluation of climate change impacts on water resources of Awata River watershed, Ethiopia. *Academic Research Journal of Agricultural Science and Research, 7*(7), 414–422.
- Taye, M. (2021). Broadband service quality and customer satisfaction in Ethiopia: A case study of Ethio Telecom. *Ethiopian Journal of Business and Economics, 11*(1), 45–62.
- Tsegereda, S. (2018). *Urban telecom service delivery and customer satisfaction: Evidence from Addis Ababa*. Addis Ababa University Repository.
- Tariku, K. (2025). *Revenue generation strategies of Ethio Telecom: A three-year projection*. [Unpublished report].
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education, 2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd
- The Guardian. (2025, March 15). Ethiopia's telecom sector expansion and revenue targets. *The Guardian*. https://www.theguardian.com
- Thompson, R. A., & O'Hair, H. D. (2008). *Health communication in the 21st century*. Blackwell Publishing.
- Um, S., Chon, K., & Ro, Y. (2006). Antecedents of revisit intention. *Annals of Tourism Research, 33*(4), 1141–1158. https://doi.org/10.1016/j.annals.2006.06.003
- Vanpariya, S., & Ganguly, A. (2010). Measuring service quality in retail banking sector in India: SERVQUAL vs. SERVPERF. *Paradigm, 14*(1), 16–25. https://doi.org/10.1177/0971890720100103
- Vesey, J., et al. (2011). [Details needed: empirical study on regression/methods]. [Provide journal or publisher].
- Wisniewski, M., & Donnelly, M. (1996). Measuring service quality in the public sector: The potential for SERVQUAL. *Total Quality Management, 7*(4), 357–365. https://doi.org/10.1080/09544129650034710
- World Bank. (2025). *Ethiopia digital economy diagnostic report*. Washington, DC: World Bank Group.
- World Bank. (2024). *Ethiopia digital economy diagnostic report*. World Bank Group. https://www.worldbank.org

- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing, 60*(2), 31–46. https://doi.org/10.1177/002224299606000203
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. Free Press.
- Zikmund, W. G. (2003). *Business research methods* (7th ed.). Thomson/South-Western.

Appendix

MEKELLE UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

MEKELLE UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MARKETING MANAGEMENT

Questionnaires

Survey on Broadband Service Quality and Key Account Customer Satisfaction

Dear Respondent,

My name is Yoseph, and I am a student at Mekelle University, Department of Marketing Management. I am conducting an academic research study on **"The Influence of Broadband Service Quality on Key Account Customer Satisfaction in Mekelle, Ethio Telecom."**

This questionnaire is designed to gather your valuable opinions on the broadband services provided by Ethio Telecom. Your honest feedback is crucial for the success of this study. All information you provide will be kept strictly confidential and used only for academic purposes. Completing the questionnaire will take approximately 10-15 minutes.

Thank you for your time and cooperation.

Part I: General Information

(Please tick the appropriate box or fill in the blank where necessary)

1. Type of Organization:

- [ ] Government Office
- [ ] Financial Institution (Bank, Insurance)
- [ ] Educational Institution
- [ ] Non-Governmental Organization (NGO)
- [ ] Private Company
- [ ] Other (Please specify): _____

2. For how long has your organization been a key account broadband customer of Ethio Telecom?

- [ ] Less than 1 year
- [ ] 1 - 3 years
- [ ] 4 - 6 years
- [ ] More than 6 years

3. What is the primary purpose of your organization's broadband service usage?

- [ ] General Office Work (Email, Browsing)
- [ ] Data Transfer & Cloud Services
- [ ] Video Conferencing & Communications
- [ ] Hosting Services (Website, Applications)
- [ ] All of the above
- [ ] Other (Please specify): _____

Part II: Perceptions of Broadband Service Quality

Please indicate your level of agreement with the following statements regarding Ethio Telecom's broadband service. Use the following 5-point scale:

(1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

1.RELIABILITY (Ability to Perform the Promised Service Dependably and Accurately)	**1**	**2**	**3**	**4**	**5**
R1. The broadband service is always available when we need it.					
R2. The internet connection speed is consistent and stable.					
R3. Ethio Telecom delivers on its promises regarding service uptime and performance.					
R4. When our organization experiences a problem, Ethio Telecom shows a sincere interest in solving it.					
R5. Ethio Telecom provides its services at the time it promises to do so.					

2. RESPONSIVENESS (Willingness to Help Customers and Provide Prompt Service)	**1**	**2**	**3**	**4**	**5**
RS1. Ethio Telecom technicians respond quickly to calls for assistance.					

RS2. It is easy to reach customer support through phone or other channels.					
RS3. Service failures or disruptions are resolved in a timely manner.					
RS4. Ethio Telecom staff are always willing to help our organization.					

3. ASSURANCE (Knowledge and Courtesy of Employees and Their Ability to Inspire Trust)	**1**	**2**	**3**	**4**	**5**
A1. Ethio Telecom staff have the necessary knowledge to answer our technical questions.					
A2. I feel my organization’s data is secure when using Ethio Telecom’s network.					
A3. The employees of Ethio Telecom are consistently courteous with us.					
A4. I have confidence in the technical skills of Ethio Telecom’s support team.					

4. EMPATHY (Caring, Individualized Attention the Firm Provides Its Customers)	**1**	**2**	**3**	**4**	**5**
E1. Ethio Telecom gives our organization individualized attention.					
E2. Ethio Telecom has a dedicated account manager who understands our specific needs.					
E3. Ethio Telecom operates at hours convenient for our organization.					
E4. Ethio Telecom has our organization's best interests at heart.					

5. TANGIBILITY (Physical Facilities, Equipment, and Appearance of Personnel)	**1**	**2**	**3**	**4**	**5**
T1. Ethio Telecom uses modern and up-to-date broadband equipment.					
T2. Ethio Telecom’s physical facilities (e.g., branch offices) are visually appealing.					
T3. Ethio Telecom’s technical staff are well-dressed and appear professional.					

Part III: Overall Customer Satisfaction

Please indicate your level of agreement with the following statements about your organization’s overall satisfaction with Ethio Telecom’s broadband service.

(1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

Statement	1	2	3	4	5
CS1. Overall, my organization is very satisfied with the broadband service from Ethio Telecom.					
CS2. The broadband service has met my organization's expectations.					
CS3. Compared to our expectations, the quality of the broadband service is excellent.					
CS4. My organization made the right decision when we chose Ethio Telecom's broadband service.					
CS5. I would recommend Ethio Telecom's broadband service to other businesses.					

Part IV: Suggestions for Improvement

What are the most important improvements you would suggest for Ethio Telecom to enhance its broadband service quality for key account customers?

_____
_____
_____

_____
_____
_____

--- Thank You for Your Participation! ---