**ASSESSMENT OF THE IMPACT OF SERVICE QUALITY**

**ON CUSTOMER SATISFACTION IN TELECOMMUNICATION INDUSTRY: A CASE OF TANZANIA TELECOMMUNICATION CORPORATION LIMITED**

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT**

**FOR THE REQUIREMENTS FOR THE DEGREE OF THE MASTER OF BUSINESS ADMINISTRATION (MBA) DEPARTMENT OF ACCOUNTING AND FINANCE OF THE OPEN UNIVERSITY OF TANZANIA**

**2024**

# CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation titled: “***Assessment of the impact of service quality on customer satisfaction in telecommunication sector: A Case of TTCL***” in partial fulfillment of the requirements for the degree of Master of Business Administration Department of Accounting and Finance of the Open University of Tanzania.

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Signature

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Date

# DEDICATION

This work is dedicated to my family, friends and colleagues as they were indeed a source of encouragement throughout my study period.

# ACKNOWLEDGEMENTS

I find it my absolute duty to extend and express my sincere gratitude to the almighty God who gave me a good health and made my study feasible. My special appreciation goes to my supervisors Dr. Michael J.Mwacha and Dr.Asha Katamba whose tireless instruction and advice enabled this work to be successfully accomplished.The contribution of my family cannot be disregarded for the great role they played towards my career development through their prayers, motivation, moral and financial support.My most profound gratitude goes to the surveyed customers of TTCL for their moral support in provision of relevant information pertinent to this study.

# ABSTRACT

The study sought to assess the impact of service quality on customer satisfaction in telecommunication sector provision services. Specific objectives were: to assess the influence of tangibility of delivered services in satisfaction to customers, to assess the influence of reliability of delivered services in satisfaction to customers, to assess the effect of responsiveness of service providers in satisfaction to customers, to assess the influence of assurance of the delivered services in satisfaction to customers and to assess the influence of empathy of service providers in satisfaction to customers of TTCL.The study used a descriptive research design. The study used a questionnaire to collect data and 90 respondents from the best users of TTCL services were targeted. The study found that there is a significant positive relationship between reliability of delivered services, responsiveness of service providers, assurance of the delivered services and empathy of service providers towards and Customer satisfaction. The study recommended that TTCL management need to timely provide prompt services to their customers, willingness to help customers and readiness to respond to customers’ requests, set operating hours convenient to all the customers and having employees who give customer services with respect to tangibles, reliability, responsiveness, assurance and empathy, Managers should ensure that they perform the services that they promise dependably and accurately and be willing to help customers and provide them with prompt services and TTCL Employee should provide more caring individualized attention to their customers along with ensure that they offer a wide variety of services.

**Keywords:**Service quality,customer satisfaction,tangibles,Empathy

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# LIST OF ABBREVIATIONS

ANOVA Analysis of Variance

SERVQUAL Service quality model

TTCL Tanzania Telecommunication Company Limited

# CHAPTER ONE

# INTRODUCTION

# 1.0 Overview

This chapter comprises of background information of the study, statement of the problem, objectives of the study, research questions also significance of the study and organization of the study.

# 1.2 Background to the Study

The growth in a service sector has been observed across the globe (Adhikari & Das, 2016). This exponential growth in the service sectors has made it difficult for firms to consistently create, share, and sustain memorable customer service experiences (Oakton, 2021). Customers are becoming knowledgeable and selective in terms of buying and consuming services (Juan, *et al.,* 2022). Today the service-oriented products are acknowledged as experiences where everyone in a service system has to create and share value for the customers (Vargo & Lusch, 2014). This view recognizes the significant role of customer feedback in order to improve the quality of services offered. The service providers must have a clear understanding of perceived as well as expected quality of service offered so to create and deliver value for the customers (Nazim *et al.,* 2021).

The customer satisfaction in service products is usually derived from a combination of technical quality as well as functional quality. However, functional quality is considered important as most customers do not have expertise to evaluate the technical quality (Nandan & Geetika, 2020). When customers are satisfied with the service quality, they tend to be loyal with the service organization (Siddiqi, 2021). Loyal customers become the referents in order to attract more customers (Mersha, *et al*, 2022). Hence, achievement of service quality is regarded as a critical success factor for service organizations.

Enhancing customer satisfaction is critical because it is a key to business success of any Water utility. In the competitive economy, customer’s satisfaction has come under limelight due to stiff competition where organizations are trying to take competitive advantage through the human factor and customers (Kamlani, 2019). Customer satisfaction is one of the most significant factors that can aid organizations to increase profits, customer satisfaction leads to customer loyalty which in turn leads to repeat purchases and referrals (Appiah, 2019).

The service quality provided is an important factor of general customer satisfaction, which in chance resulting to customer retention and loyalty. Also, Service quality is regarded as one of the greatest important antecedent of customer loyalty in service businesses (Appiah, 2019). Customer satisfaction is influenced by various service quality drivers which include tangibility, reliability, responsiveness, assurance, empathy, price and location (Appiah, 2019).

In the contemporary business environment keeping customers satisfied saves money as well as increasing profits for organizations as the process of satisfying and retaining current customers is far less expensive than constantly replacing customers (Appiah, 2019). Thus, understanding customers’ satisfaction in utility sector is important not only from economic perspective but also from creation of good image of organization. Understanding the impact of service quality dimensions on customer satisfaction is essential because customer satisfaction is an important factor for sustained business success (Ali & Raza, 2017).

# 1.3 Statement of the Problem

Provision of communication services is a vital service that provides a basic good which is essential to development and individual growth (Ali & Raza, 2017). Lack of communication has a great impact on well-being as well as huge financial cost and loss of economic activity (Ali and Raza, 2017). Access to internet for productive purposes such as family and corporate businesses is essential as it helps in generation of income that helps to improve livelihoods and promote economic growth (Ali and Raza, 2017). However, optimizing on the level of service quality ensures a high level of customer satisfaction which translates to increased sales and profits (Adhikari, and Das, 2019). In Tanzania TTCL is facing a great challenge to satisfy the growing demands for communication due to several reasons such as poor budgetary allocations by the respective governments, ageing pipes, unstable power supply, poor revenue collection, urbanization and corruption (Gowela *et al.,* 2017).

Some of these studies (Agnihotri *et al.,* 2019) focused on access to improve sources of communication, cost of internet bundles and quality and quantity issues. According to researcher’s knowledge, little is known in Tanzanian context about the impact of service quality on customer satisfaction of the respective public communication providers. This study therefore assesses the impact of service quality on customer satisfaction in telecommunication provision services.

# 1.4 Research Objectives

This study has general and specific objectives

# 1.4.1 General Objective

The general objective is to examine the impact of service quality on customer satisfaction in telecommunication sector provision services.

# 1.4.2 Specific Objectives

Specifically, the study sought:

1. To determine the influence of tangibility of delivered services in satisfaction to customers at TTCL
2. To examine the influence of reliability of delivered services in satisfaction to customers at TTCL
3. To investigate the effect of responsiveness of service providers in satisfaction to customers at TTCL
4. To examine the influence of assurance of the delivered services in satisfaction to customers at TTCL
5. To assess the influence of empathy of service providers in satisfaction to customers at TTCL

# 1.5 Research Hypothesis

This study was guided by the following research Hypothesis;

1. Ho: Reliability of delivered services has no significant influence in satisfaction to customers at TTCL
2. Ho: Tangible of the delivered services has no significant influence in satisfaction to customers at TTCL
3. Ho: Responsiveness of service providers has no significant influence in satisfaction to customers at TTCL
4. Ho: Assurance of the delivered services has no significant influence in satisfaction to customers at TTCL
5. Ho: Empathy of service providers has no significant influence in satisfaction to customers at TTCL

# 1.6 Significance of the Study

The findings of this study would help the government by providing them with information to policy makers on the challenges and how to cope with them to improve communication service delivery in the country.The study provides information from the primary sources may help communication authorities to improve the service delivery which is very essential. In addition, study may help reduce communication barriers caused by several reasons if the provision of internet services is improved.This study provides empirical support for management strategic decision in several critical areas of their operation and to provide a justifiable valid and reliable guide in designing workable service delivery improvement strategic for creating and delivering customer value, achieving customer satisfaction, building long term mutually beneficial relationship with customers and achieving sustainable growth in TTCL. Lastly, the study serves as partial fulfillment of the requirements of the award on master’s degree in business administration

# 1.7 Organization of the Study

This dissertation is been organized in five chapters as follows;

Chapter one: Presents the background of the study, statement of the problem, research objectives, research question, and significance of the study and dissertation structure.Chapter two:Presents the operational definitions of key concepts, theoretical, empirical and conceptual framework of the study.Chapter three: Presents the research design, study area, sampling and sample frame, type of data, data collection tools and technique, source of data and data analysis.Chapter four: Provides the presentation of findings.Chapter five: Is all about summary of findings.conclusion and recommendation

# CHAPTER TWO

# LITERATURE REVIEW

# 2.1 Overview

A literature review is an account of what has been published on a topic by accredited scholars and researchers. It enables the researcher to know the kind of additional data needed in the study. It justifies the need for the study and highlights the relationship between the past and the current studies. This chapter discusses the main concept of TTCL service quality delivery and customer satisfaction; it highlights different theories and conceptual models derived from reviewed literatures which are relevant to this study and their implications to the study. Theories are an attempt to draw generalizable findings from specific instances (Fisher *et al,* 2010)

# 2.2 Definition of Key Concepts

# 2.2.1 Service Quality

Selvakumar (2015) defined services quality as a function of the differences between expectation performance along the quality as a function of the differences between expectation and performance along the quality dimensions.Baghla and Garai (2016) suggest that service quality is the extent to which the customer’s perceptions of service either meet or exceed their expectations. In light of this suggestion service quality can therefore be perceived as how good or how bad customers are served by a service provider. Furthermore, service quality is accepted as one of the elements of customer satisfaction (Selvakumar, 2015). But other factors in the service sector such as price, product quality, as well as specific factors such as situational and personal factors have an impact on customer satisfaction (Selvakumar, 2015).

Service quality can be measured in terms of customer perception, customer expectation, customer satisfaction, and customer attitude (Sachdev and Verma, 2014). Ekinci, (2013) indicates that the evaluation of service quality leads to customer satisfaction. Zeithaml, Bitner and Gremler, (2006) clarify that customers perceive services in terms of the quality of the service and how satisfied they are overall with their experiences. Service quality focuses on dimensions of service which are reliability; responsiveness, assurance, empathy and tangibles. Perceived service quality is a component of customer satisfaction.Zeithaml, Bitner and Gremler, (2016) define customer satisfaction as the customer’s evaluation of a product or service in terms of whether that product or service has met the customer’s needs and expectations. Failure to meet needs and expectations is assumed to result in dissatisfaction with the product or service.

# 2.2.2 Customer Satisfaction

Kamlani (2016) defines customer satisfaction as the minimum acceptable levels of service that provide customer satisfaction in the key areas that are critical and where service quality thresholds need to be set. To fall below the minimum threshold in any key area puts one into the danger zone and one’s customer will not be satisfied. In this study, customer satisfaction will be defined as the minimum requirement to meet customer service needs.

Customer satisfaction can be interpreted as the feeling that a person experiences, when an offered service meet up to their expectations. According to Deng *et al.,* (2019) the capacity of a service provider to make satisfaction fulfillment of high degree and it is vital for product separation and building up solid association with customers. Literature accepts that customer satisfaction is an essential element for business success for the long-term (Zeithaml *et al.,* 1996). It is entirely a correct thing that to convey satisfactory (SQ) to consumers, provides organizations an opportunity to isolate themselves in centered markets (Karatepe *et al.,* 2015). Studies also show that service quality has direct impact on behavioral attitudes through satisfaction (Cronin et al., 2017). Other sectors also focus on customer satisfaction likewise in banks. Banks also need to recognize customer’s service demands and how it will affect service delivery and customer’s point of view (Gerrard and Cunningham, 2011), for an insignificant addition of consumer loyalty that can prompt devotion and retention of customer (Bowen and Chen, 2011).

Consumer’s satisfaction and service quality are interconnected and this creates worth for customer. If consumers are provided with the services that they assume, exceeds their expectations, results in customer having a constructive view about the organization. Furthermore, if customers feel they received undervalued services their attitude regarding a given firm will be negative and they may mover their loyalty to potential consumers (Chau & Kao, 2015). If satisfaction exists, then customers will become loyal towards firm but if customers are unsatisfied their loyalty is not guaranteed. Hence special focus should be given by the management on the satisfaction and this starts with delivering quality service (Mohsan et al., 2011).

# 2.3 Theoretical Framework

This study is based on a SERVQUAL model. This model was developed in the mid-1980s by Berry and his colleagues Parasuraman and Seithaml, they began to study service quality determinants and how customer evaluates the quality of services based on the Perceived Service Quality concept. The Five (5) determinants were found to characterize customers’ perception of the service. Now, the five variables that made up what the authors called SERVQUAL were the following five dimensions of service quality: tangibility, reliability, responsiveness, assurance, and empathy:

Reliability is defined as capacity to execute the guaranteed benefit reliably and precisely (Armstrong, 2012). If a company is providing a good service, a company and its staff should be ready to respond to consumer’s queries about products and services offered (Ojo, 2010). According to Toosi and Kohonali (2011), timely responses to requests, is one of the important customer’s expectation. Therefore, this should not be delayed or ignored simply because these are fundamental issues. Online support is offer by some companies that provides customers with instant resolution to their queries.

Assurance is basically courtesy, competence, credibility; security of the firm employees gives to its customer. Parasuraman et al. (1985) interpreted (AS) as information to have cordiality of workers and their capability to motivate confidence and trust. If company’s representatives provide genuine and caring service, customers would want to do business (Zekiri and Angelova, 2011).

Tangibility can be illustrated as the appearance of physical offices, equipment, work force, and correspondence materials. Parasuraman et al. (1985), tangibility can be characterized as the presence of physical offices, staff, and equipment and composed materials. If employees’ neglect or mistreat customers, the customer do not complain every time about their experience as impersonal service. Rather, customer will never return and undoubtedly no organization wants this to happen. (Klemz & Boshoff, 2011).

Empathy can be interpreted as the care, individualized concentration the company provides to its customers (Armstrong, 2012). Customer and employee interactions arereflected through the dimension of empathy (Armstrong, 2012). Gbadeyan and Gbonda (2011) proposed that to attract customers through caring is a key determinant and by providing variety in the features of service products that will fulfill their wants and need in the marketplace.

Responsiveness characterized as the readiness or willingness of workers to give benefit or immediate response to the customer need. Offer quick service and willingness to give assistance to the customers (Armstrong, 2012). Customers highly appreciates to provide service in a timely manner, this aspect should be understood by the good service providers (Ahmed et al., 2010). Moreover, organizations that value efficiency and pay attention towards the services that they are offering, so that it can give them advantage and by using this advantage to keep off competitors (Karim & Chowdhury, 2014).

Tangibility:This determinant is related to the appeal of facilities, equipment and material used by a service firm as well as to the appearance of service employees.

Reliability: This means that the service firm provides its customers with accurate service the first time without making any mistakes and delivers what it has promised to do by the time that has been agreed upon.

Responsiveness: This means that the employees of a service firm are willing to help customers and respond to their requests a well as to inform customers when service will be provided, and then give prompt service. Assurance: This means that employees’ behavior gives customers confidence in the firm and that the firm makes customers feel safe. It also means that the employees are always courteous and have the necessary knowledge to respond to customers’ questions.

Empathy: This means that the firm understands customers’ problems and performs in their best interests as well as giving customers individual personal attention and having convenient operating hour.

# 2.4 Customer Satisfaction

A Customer satisfaction is the ability that an organization possesses to meet the needs of their customers on a regular basis (Perera, 2015) Satisfaction is the state felt by a person who has experienced a performance or outcome that has fulfilled his or her expectations. Satisfaction is thus a function of relative levels of expectation and perceived performance.

Satisfaction is the person’s feelings of pleasure or disappointment resulting from comparing a product’s perceived performance (or outcome) in relation to his or her expectations (Kotler, 2004) According to Kotler (2004), the first task for any business-oriented institution is “to create customers”. However, customers face a vast array of product and service choices, prices as well as suppliers. So, customers estimate which products or service offer will meet their needs thus enhancing repurchase probability. Thus customer satisfaction or dissatisfaction is subjective and dependent on perceived performance and expectations.

Customer satisfaction is related to customer expectations. Three outcomes can be anticipated, if the product or service meets customers’ expectation, then customer satisfaction exists. If it exceeds customer expectation, then there is customer delight. If the product or service goes beyond customer delight, then the customer is surprised (Roberto *et al.,* 2016). The higher the level of fulfillment, the higher the satisfaction. Since marketing focuses on the needs and wants of the customers, one of the prime marketing objectives should be to maximize customer’s satisfaction (Zeithaml and Bitner 2003).

# 2.4.1 Quality of Services

It is important to study service quality as it impacts organizational profits because it is directly related to customers satisfaction, customer retention, and hence customer loyalty ( Mohsin, 2015). Quality of service is what people want to have whenever they encounter a service providing institution. Smith (2010) viewed service quality in two ways. The first is the level of quality by which the regular service is delivered, for example, the bank teller’s handling of a transaction. The second is the level of quality by which “exceptions” or “problems” are handled. However, maintaining quality is important for good customer relations regardless of the type of service. At the time of service delivery, customers interact closely with the service providers and get an inside knowledge of the service organization. This kind of knowledge gives them an opportunity to critically assess the service provided and the service provider. From the literature stated above, service quality plays an important role in adding value to the overall service experience. That means that, the best quality is that which adequately meet the needs of customers.

Attraction of new customers through positive word of mouth recommendation. Employee morale can improve due to reduced customer complaints. Quality can only be determined on the basis of reliability- the ability to deliver the promised services in a dependable and accurate manner; responsiveness- the willingness to help customers and provide a prompt service, for example, by avoid ing keeping customers waiting for no apparent reason; assurance- the ability to inspire trust, and confidence such as being polite and showing respect to customers; empathy or caring- the attitude of being approachable or the degree to which customers are treated as individuals, for example, being a good listener; and tangibles- physical facilities, equipment, personnel and service-facilitating materials such as communication and cleanliness. Service quality is commonly noted as a critical prerequisite and determinant of competitiveness for establishing and sustaining satisfying relationships with customers. No business organization can survive without building its customer satisfaction and brand loyalty. Likewise no organization can make a healthy living without meeting the needs of its customers. That is what organisations do: they serve people’s needs. Service quality helps in cementing the relationship between customers and the organization and it is a two-way flow of value. This means that customer derives real value from the relationship which translates into value for the organization in the form of enhanced profitability and sustainability over a long period of time.

# 2.5 Empirical Review

# 2.5.1 The Tangibility of Services and Customer Satisfaction

Ali and Raza (2021) measured the relationship between service quality and customer satisfaction among the customers in Pakistan Islamic Bank services. A cross sectional research study was adopted involving 300 customers. Data were gathered from customers using questionnaire and data was analyzed through descriptive statistics. The findings showed significant positive relationship between tangibility of delivered services and customer satisfaction. The study recommended that bank managers must think of modifying the services as per needs and demands of customer.

A study conducted by Owino (2018) to identify the nature and significance relationship between service quality and customer satisfaction of hospitality industry in Kenya. A descriptive research design was employed using 100 respondents who were randomly selected. Data collection was done by using questionnaire. Multiple regression analyses were used to analyze data. Results showed that tangibility of delivered services has a significant impact on customer satisfaction. The study recommended that hotel managers should always consider the fact that a good customer service can cover the flaws or loop holes of overall service system.

*H1: Tangibility has no significant impact on customer satisfaction*

# 2.5.2 The Reliability of Services and Customers Satisfaction

The study conducted by Kamau and Stanley (2019) explored the impact of service qualityon customer satisfaction for passengers at KenyaAirways. The study used a descriptive survey design to obtain information on key determinants of customer satisfaction for passengers at Kenya Airways. The study mainly adopted a case study approach and the respondents constituted Passengers who had used Kenya airways for a period of six months between Jan-June 2012. The sample of this study consisted of one hundred (100) passengers. Both primary and secondary data sources were used to answer the research questions. The data collected was analyzed by use of the means, frequency, percentage and Factor Analysis. The study findings indicate that reliability of delivered services such as safety, proper communication with customers to update them on status of their flights, provision of food variety and ability of the airline to communicate to passengers about the weather on arrival destinations were particularly noted to increase significantly the level of customer satisfaction. The study recommended that in order to remain competitive the airline need to focus on its operational strategies so as to reduce cost but at the same time increase service quality.

A study conducted by Hossain (2022) aimed at assessing the impact of perceived service quality on satisfaction of tourists visiting Cox’s Bazar in Bangladesh. A descriptive research design was employed with a sample size of 385 tourists. Data collection was through questionnaire. The study finding indicated that reliability of delivered services has a significant influence on customer satisfaction. The recommendation was that managers should come up with strategies geared towards improving the quality of service and this should be based on the passengers ’profile, for example age, occupation, gender and education level.

*H2: Reliability has no significant impact on customer satisfaction*

# 2.4.3 The Responsiveness of Service Providers and Customers Satisfaction

Shanka (2018) studied the relationship between service quality and customer satisfaction in water services in Ethiopia. A total sample of 280 respondents was involved in the study. Data collected through questionnaire and correlation and multiple regressions were used to analyze data. The study found that responsiveness of service providers is positively correlated with customer satisfaction indicating quality water service as a prerequisite for establishing and having satisfied customers. The study recommended the water supply authority to improve the quality of its service in order to increase the level of customer satisfaction by increasing employees’ ability to handle customers’ complaint and customers’ problems in consistency manner.

*H3: Responsiveness has no significant impact on customer satisfaction*

# 2.4.4 The Assurance of Services and Customers Satisfaction

Munyao (2019) studied effects of service quality on customer satisfaction in Mobile Telecommunication sector in Kenya. The data used for this study were obtained using a structured survey questionnaire. The questions were close ended and used a 5-point Likert-scale. The sample consists of 532 mobile subscribers, using a simple random sampling technique. The data obtained from the survey were analyzed using the Statistical Package for Social Sciences (SPSS), Version 21. The survey was restricted to subscribers using the four major GSM mobile phone operators. The results have indicated that there is a relationship exists between service quality/delivery and customer satisfaction. It is therefore recommended that mobile telecommunication network providers should ensure always availability of desired services for the consumption of their customers.

Adeniyi (2021) investigated the impact of service quality on customer satisfaction in communication industry in Nigeria. The survey research design method was used in this study which involves using questionnaire in collecting data from 103 customers. The instrument used in this study is a close ended questionnaire that was designed by the researchers. Correlation coefficient and multiple regression analysis were used to analyze the data with the aid of statistical package for social sciences (SPSS) version 21. Multiple regression analysis showed that R2 = 0.563 which indicated that assurance accounted for 56% variability in the customer satisfaction in communication industry. The study concluded thatgovernment should provide and manage basic, social and economic infrastructures such as transportation network and electric power supply among others, in other to provide a favorable environment for the telecommunication companies

 *H4: Assurance has no significant impact on customer satisfaction*

# 2.4.5 The Empathy and Customers Satisfaction

Ojo (2020) investigated the relationship between service quality and customer satisfaction in the telecommunication industry with a focus on Mobile Telecommunication Network (MTN) in Nigeria. A total sample of 230 respondents participated in the study. Data collected through questionnairewhile regression analysis and Pearson correlation coefficient were employed in analyzing the data. The study revealed a positive relationship between service quality and customer satisfaction. The researcher recommended that organizations should focus more attention on service quality, because of its effects on customer satisfaction.

Mtwe (2019) assess the patients’ level of satisfaction under NHIF and factors influencing their satisfaction. The study employed a cross sectional study design involving 82 NHIF outpatients. The data collection methods used includes questionnaire administration, focus group discussions and documentary review. Results show that it emerged from the study that, insured patients had good expectation towards health services as well as good attitude with health service. The study recommends action to be taken by NHIF scheme together with the hospital administration on addressing patients’ concerns for the purpose of improving the provision of health services.

*H5: Empathy has no significant impact on customer satisfaction*

# 2.5 Research Gap

Empirical studies indicate that majority of the studies assessed the relationship between service quality and customer satisfaction on health services for example Akhade *et al.*(2019), Allahham (2018), Zaimet *al.* (2010), Amole *et al.* (2019), their study however, failed to shed light on aspects of quality satisfaction relationship in water sector. Therefore, none of the above reviewed studies analyzed the effect of service quality practices on satisfaction of telecommunication service users.

# 2.6 Conceptual Framework

Researcher aims adopting a modified conceptual framework that is the SERVQUAL model with five dimensions consisting: Tangibility, Reliability, Responsiveness, Assurance, and Empathy to be *independent variables* and customer satisfaction as *dependent variable*. SERVQUAL Model is a suitable for measuring service quality and customer satisfaction in banking industry.

The researcher used the same dimensions to measure both service quality and customer satisfaction because both are related (Parasuraman, 1988). The SERVQUAL approach integrates the two constructs and suggests that perceived service quality leads to customer satisfaction. The model is to find out the overall services quality perceived by customer if it meets the customer needs and satisfies.

The conceptual framework shows independent variables which upon fulfillment enhances the level of satisfaction (dependent variable).

# Independent variables Dependent variable



Figure 2.1: Conceptual Framework

**Source:** Researcher (2024).

# CHAPTER THREE

# RESEARCH METHODOLOGY

# 3.1 Overview

This chapter discusses the research design, study area, target population, sample and sampling techniques, source of data, data collection tools and technique, validity and reliability of research tools, data analysis and ethical issues.

# 3.2 Research Philosophy

Research philosophy is a set of common beliefs and agreements shared between scholars about how problems should be understood and addressed clearly to build in depth understanding (Patel, 2015). Research philosophy is categorized into three categories which include positivist, pragmatism and phenomenology approach (Patel, 2015). This study adopted a positivist research philosophy, because Positivists argue that reality is stable and could be observed and described from an objective viewpoint rather than subjective or one’s perception.

# 3.3 Research Design

Kombo & Tromp (2009) define research design as the glue that holds all the elements in the research project together. It holds all the elements in the research project. It is the structure of research. Research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with the economy in producer (Kothari, 2006).

This study used a descriptive research design. This is because descriptive studies are concerned with specific predictions, narrations of facts and characteristics concerning individuals, groups or situations. Therefore, this study adhered to the descriptive research design. The aim of the study was to investigate and get an insight to an unknown phenomenon

# 3.4 Study Area

This study was conducted at TTCL in Dar es Salaam region. TTCL is responsible for developing operating and maintaining all telecommunication and internet services and in Dar es Salaam. The researcher has chosen this area of the study because it was convenient to obtain reliable information from customers regarding service quality.

# 3.5 Study Population

According to Creswell (2012) study population refers to the total of items about which information is desired. The study population included 156 customers who use TTCL services.

# 3.6 Sampling Techniques

# 3*.6*.1 Sample Size

According to Saunders, Lewis and Thornhill (2007) the sample size is part of a population that we examine to gather information. Specifically in this study, the sample size was calculated by using Yamane’s formula which is mostly used to calculate sample size from a defined population (Yamane (1967). The calculations of the sample by using Yamane’s formula included;

n = $\frac{N}{1+Ne^{2}}$

Where: n = Sample size

N = Population size of precision

Assuming =10% level of precision, the calculation for the required sample size will be as follows;

e =10% or 0.1, Then

n =$\frac{156}{1+156(0.1)^{2}}$= 90

Therefore, a total sample size of 90 respondents was used.

# 3.6.2 Sampling Procedures

Sampling procedures provide a range of methods that enable one to reduce the amount of data needed for a study by considering only data from a sub-group rather than all possible elements (Creswell, 2012). A simple random sampling technique was employed to select customers who attend at TTCL to seek communicatiion services.

# 3.7 Data Collection Tools

According to Creswell (2012) research tools refer to the technique or method used in data collection. Saunders, Lewis and Thornhill (2012) defined questionnaire as an instrument that consists of questions printed in a definite or a form or set of form. In this study structured questionnaire were employed because they are simple to administer and relatively cheaper to analyze.In this study, questionnaires was used to elicit required information from the respondents. Hence questionnaire was administered to customers of TTCL.

#

# 3.8 Data Analysis

Data analysis is the process of gathering, sorting, organizing, and structuring data. The process involves the ordering and structuring of data to produce knowledge (Saunders, Lewis and Thornhill, 2012). The processing of data was aided by the use of SPSS (Statistical Package for Social Sciences), this software is preferred because of its consistency in providing compatibility mode in problems analysis. Data was analyzed using both descriptive and inferential statistics. Linear regression and correlation were done to ascertain the existence of relationship between the variables. The research model was estimated is;

 Y = β0+ β1X1+ β2X2+ β3X3 + β2X4+ β3X5+ ε

 Whereby;

 Y= customer satisfaction

 β0= constant

ε = error term;

β= regression coefficients

X1= Tangibility of delivered services

 X2= Reliability of delivered services

X3= Responsiveness of service providers

X4= Assurance of the delivered services

X5= Empathy of service providers

# 3.9 Validity and reliability of Data

# 3.9.1 Validity of Data

Validity can be defined as a degree to which testimony and theory preserve the appreciation of test scores involved in a study (Zikmund *et al,* 2010). Instruments were used through processing data into manageable proportions through editing, coding, and tabulation methods.

# 3.9.2 Reliability of Data

Reliability is the capability of a research instrument to regularly measure qualities of activity over time (Creswell, 2012). The reliability was tested through test-retest techniques by the use of Cronbach Alpha-Coefficient (α) which is the very common method of testing reliability (Creswell, 2012). The researcher accepted Cronbach’s α result above 0.7.

# 3.10 Research Ethics

For ethical requirements in the conduct of the study respondents were duly informed of the fact that the study was for academic purpose and that they were under no compulsion to respond to the questionnaire. The respondents were asked to participate voluntarily whilst assuring them of anonymity and confidentiality on the information given. In order to avoid plagiarism, all sources of information were duly acknowledged.

# CHAPTER FOUR

# FINDINGS AND DISCUSSION

# 4.1 Overview

This chapter presented and discussed results with regard to study objectives. It covers results and descriptions of the demographic characteristics of the respondents, reliability analysis and justification, the effects of reliability, the effects of tangibility, the effects of assurance, the effects of empathy, the effects of responsiveness and the level of customer satisfaction, as well as results and descriptions of effects of service quality variables on customer satisfaction. It is in this chapter where the hypotheses have been tested so as to confirm or reject the statements.

# 4.2 Demographic Characteristics of Respondents

The demographic characteristics of the respondents assessed by the study include age, sex, marital status, education and job experience. The descriptions of respondents’ demographic characteristics appear in the following sections 4.2.1, 4.2.2, 4.2.3 and 4.2.4.

# 4.2.1 Gender of Respondents

Table 4.1 below shows the sex of the respondents who were involved in this study. The result showed that 34 (38%) of all respondents were males while 56 (62%) of all respondents were females.

Table 4.1:Distribution of Respondents according to Demographic Characteristics

|  |  |  |
| --- | --- | --- |
| **Variable** | **Frequency** | **Percent** |
| **Sex** |   |   |
| Male | 34 | 38 |
| Female | 56 | 62 |
| **Marital status** |  |  |
| Single | 25 | 28 |
| Married | 55 | 61 |
| Other | 10 | 11 |
| **Age** |  |  |
| 31-40 | 60 | 67  |
| 41-5051-60 | 255 | 28 15 |
| **Educational Level** |  |  |
| secondary education | 0 |  0 |
| Certificate | 5 | 6 |
| Diploma | 10 | 11 |
| Bachelor degree holders | 45 | 50 |
| Master degree holders | 30 | 33 |
| **Service user experience** |   |   |
| less than 5 years | 13 | 14 |
| 5-10 years | 45 | 50 |
| 10-15 years | 32 | 36 |

|  |
| --- |
|  |

**Source:** Field Data (2024)

# 4.2.2 Education Level of Respondents

Table 4.1 presents the highest education level of the surveyed respondents. Education level had been considered by the researcher as it determines understanding of issues in hand.The results indicated that (50%) of all surveyed respondents of the study were bachelor degree holders followed by 30 (33%) of all surveyed respondents had master degree holders, 10 (11%) of all surveyed respondents attained diploma education and 5 (6%) of all surveyed respondents attained certificate education. This implies that majority of the surveyed respondents customers of TTCL had enough education level to answer the questionnaires.

#

# **4.1.3**  **Age**

The study found that most (60%) of the respondents were belonging in the age group of 31-40 years, followed by those (28%) who are in the age group of 41-50 years (Table 4.1). A few of the respondents (15%) belongs to the age group of 51-60 years.

#

# **4.2.2 Sex and Marital Status**

The distribution of respondents based on sex show that majority of the respondents were females (62%). Only 38% of the respondents were males. On the other hand, married respondents constituted the majority (61%) of survey participants, followed by respondents who are still single by the means that they had not yet married (28%) as shown in Table 4.1. Other marital statuses composing widows and divorce constituted only 11.0% of the survey participants.

### **4.2.3**  Customer Duration at TTCL

Table 4.1 presents duration for which surveyed customers have been at TTCL.

The results indicated that 45(50%) of all surveyed customers have been using TTCL services for 5-10 years followed by 32(36%) of all surveyed customers who have been using TTCL services for 10-15 years while 13(14%) of all surveyed customers have been using TTCL services for less than 5 years. This implies that majority of the surveyed customers have been customers using TTCL services for relatively longer period.

# 4.3 Descriptive Statistics

Table 4.2 indicates the descriptive statistics for the influence of tangible of delivered services in satisfaction to customers

## Table 4.2: Influence of Tangibles on Customer satisfaction

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **N** | **Mean** | **Std. Dev** |
| TTCL has a modern equipment/vehicle | 90 | 3.4232 | 0.48426 |
| TTCL has a visually appealing facility | 90 | 3.3458 | 0.35210 |
| TTCL’s employees have a neat, professional appearance | 90 | 3.5042 | 0.38454 |
| TTCL has a visually appealing materials associated with the service | 90 | 3.4203 | 0.32111 |
| **Average** | **3.4233** | **0.156201** |

**Source:**Survey data (2024).

The mean average value for the influence of tangible of delivered services in satisfaction to customers obtained was 3.4233 with a standard deviation average of 0.156201. This means that most of the surveyed customers agreed that TTCL has a modern equipment/vehicle, has a visually appealing facilities, TTCL’s employee have a neat, professional appearance and has a visually appealing materials associated with the service.

Table 4.3 indicates the descriptive statistics for the influence of reliability of delivered services in satisfaction to customers.

## Table 4.3: Influence of Reliability on Customer Satisfaction

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **N** | **Mean** | **Std. Dev** |
| TTCL providing services as promised | 90 | 3.1028 | 0.18250 |
| TTCL has a soundness in handling customers’ service problems | 90 | 3.3172 | 0.24352 |
| TTCL has a capability of performing services right the first time | 90 | 3.8104 | 0.32861 |
| TTCL provide services at the promised time | 90 | 3.1508 | 0.25166 |
| **Average**  | **2.67424** | **0.13308** |

**Source:S**urvey data (2024).

The mean average value for the influence of reliability of delivered services in satisfaction to customers obtained was 2.67424 with a standard deviation average of 0.13308. This means that most of the surveyed customers agreed that TTCL providing services as promised, has a soundness in handling customers’ service problems, has a capability of performing services right the first time and providing services at the promised time. Table 4.4 indicates the descriptive statistics for the influence of responsiveness of service providers in satisfaction to customers

**Table 4.4: Influence of Responsiveness on Customer satisfaction**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **N** | **Mean** | **Std. Dev** |
| TTCL is keeping customers informed about when services will be performed | 90 | 4.0363 | 0.38015 |
| TTCL offers prompt service to customers | 90 | 4.2014 | 0.35221 |
| TTCL has a high willingness to help customers | 90 | 3.3054 | 0.36842 |
| TTCL has a readiness to respond to customers’ requests | 90 | 3.4203 | 0.33015 |
| Average | **3.7485** | **0.3773** |

**Source:S**urvey data (2024).

The mean average value for the influence of responsiveness of service providers in satisfaction to customers obtained was 3.7485 with a standard deviation average of 0.3773. This means that most of the surveyed customers agreed that TTCL is keeping customers informed about when services will be performed, offers prompt service to customers, has a high willingness to help customers and also has a readiness to respond to customers’ requests.

Table 4.5 indicates the descriptive statistics for the influence of assurance of the delivered services in satisfaction to customers

## Table 4.5: Influence of Assurance on Customer satisfaction

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **N** | **Mean** | **Std. Dev** |
| TTCL has employee who instill confidence in customers | 90 | 2.104 | 0.2401 |
| TTCL has employee who are consistently considerate | 90 | 2.7302 | 0.1422 |
| TTCL has employee who have the knowledge to answer customer questions | 90 | 2.3014 | 0.2572 |
| TTCL has employee who making customers feel safe in their transactions | 90 | 2.2014 | 0.6524 |
| Average  | **2.7485** | **0.3773** |

**Source**:Survey data (2024)

The mean average value for the influence of assurance of the delivered services in satisfaction to customers obtained was 3.7485 with a standard deviation average of 0.3773. This means that most of the surveyed customers agreed that TTCL has employee who instill confidence in customers, has employee who are consistently considerate, has employee who have the knowledge to answer customer questions and has employee who making customers feel safe in their transactions

Table 4.6 indicates the descriptive statistics for the influence of empathy of service providers in satisfaction to customers

## Table 4.6: Influence of Empathy on Customer Satisfaction

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **N** | **Mean** | **Std. Dev** |
| TTCL has employee who giving customers individual attention | 90 | 3.514 | 0.1546 |
| TTCL has employee who deal with customers in a caring fashion | 90 | 3.6132 | 0.2481 |
| TTCL has employee who having the customers’ best interests at heart | 90 | 3.5023 | 0.2572 |
| TTCL has employee who understand the needs of their customers | 90 | 3.4073 | 0.6524 |
| Average  | **3.2452** | **0.2423** |

**Source:** Field data (2024)

The mean average value for the influence of empathy of service providers in satisfaction to customers obtained was 3.2452 with a standard deviation average of 0.2423. This means that most of the surveyed customers agreed that TTCL has employee who giving customers individual attention, has employee who deal with customers in a caring fashion, has employee who having the customers’ best interests at heart and has employee who understand the needs of their customers

## Correlation Analysis

Table 4.7 presents a summary of the correlation matrix. It shows the degree of their association between independent variables and the dependent variable.

## Table 4.7: Pearson’s Correlations Matrix

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables**  |  | 1 | 2 | 3 | 4 | 5 | 6 |
| Customer satisfaction | Pearson Correlation  | **1.00** |  |  |  |  |  |
| Tangibility | Pearson Correlation Sig. (2-tailed)  | .775\*\*.000 | **1.00** |  |  |  |  |
| Reliability | Pearson Correlation Sig. (2-tailed)  | 684\*\*.001 | .542\*\*.010 | **1.00** |  |  |  |
| Responsiveness | Pearson Correlation Sig. (2-tailed)  | .626\*\*.010 | .531\*\*.001 | .556\*\*.000 | **1.00** |  |  |
| Assurance | Pearson Correlation Sig. (2-tailed)  | .556.010 | .501.001 | .506\*\*.000 | .508\*\*.010 | **1.00** |  |
| Empathy | Pearson Correlation Sig. (2-tailed)  | .566.010 | .531.001 | .546.000 | .527.010 | .501.001 | **1.00** |

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

**Source:**Survey data (2024)

The results in Table 4.7 show that the level of correlation between the independent and dependent variable was higher. A correlation analysis result showed that there is a significant relationship between tangibility and Customer satisfaction (r=0.775, p=.000). The strong relationship evidenced by this finding suggests that tangible of delivered services could lead to Customer satisfaction.

The correlation analysis showed a significant relationship existed between the reliability of delivered services and Customer satisfaction (r=0.542, p= 0.010).The correlation analysis showed also that there is a significant relationship between responsiveness and Customer satisfaction (r=0.556, p= 0.000). Consequently, correlation analysis showed that there is a significant relationship between assurance and Customer satisfaction (r=0.508, p= 0.010). Lastly, the correlation analysis showed that there is a significant relationship exists between empathy and Customer satisfaction (r=0.501, p=.001).

# 4.3 Hypothesis-Test

# 4.3.1 The Influence of Tangibility of Delivered Services on Customers Satisfaction

The first objective of the study was about to assess the influence of tangibility of delivered services on customers satisfaction

The hypothesis had been stated as; tangibility of delivered services has no significant influence in satisfaction to customers at TTCL.

## Table 4.8: Model Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **R** | **R****Square** | **Adjusted****R** | **Std. Error****Estimate** |
| **1** | .815(a)  | .743  | .705 | .2508 |

 a. Predictor: (Constant); Tangibility of delivered services

 b. Dependent Variable: Customer satisfaction

**Source:** Survey data (2024).

The results in Table 4.8 show that the value obtained for R, which is the model correlation coefficient was r = (0.815). The r square (r = 0.743), also indicates that tangibility of delivered services could explain approximately 74.3 % of the variations in Customer satisfaction

**Analysis of Variance (ANOVA)**

ANOVA results in table 4.9, indicated that F calculated is greater than the F critical (6.345>2.50), this shows that the overall model was significant. The significance value is less than 0.05, thus indicating that the predictor variables, (Modern equipment/vehicles, visually appealing facilities, neat professional appearance and visually appealing materials) explain the close relationship in the dependent variable which is customer satisfaction.

## Table 4.9: Analysis of Variance (ANOVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Sum of****Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| **Regression**  |  31 | 3 | .243 | 6.345 | .000b |
| **Residual** | 20.33 | 120 | .171 |  |  |
| Total  | 20.64 | 123 |  |  |  |

b.Dependent Variable: Customer satisfaction

a.Predictors: (Constant); Modern equipment/vehicles, visually appealing facilities,

neat professional appearance and visually appealing materials.

**Source:**Survey data (2024).

**Regression Coefficients**

The finding in Table 4.10, the multiple linear regression models indicate that all the independent variables have positive coefficients (0.065), (0.016), (0.039) and (0.018) respectively and p value <0.005 implying that there is a positive relationship between tangibility of delivered services and Customer satisfaction.

Since the p<.005, then we reject null hypothesis and accept the alternative hypothesis that tangibility of delivered services has a significant influence on Customer satisfaction. This finding is consistent with the study of Owino (2013) found that tangibility of delivered services has a significant impact on customer satisfaction.

## Table 4.10: Regression Coefficients

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model**  | **Unstandardized Coefficients** | **Standardized Coefficients** |   |   |
|   |   |
|   |   |
|  |  | **B** | **Std.** | **Beta** | t | Sig. |
|  | **Error** |   |   |
| **1** | **Constant** | 0.023 | 0.107 |  | 1.14 | 0.025 |
|   | Modern equipment/vehicles | 0.065 | 0.024 | 0.018 | 1.021 | 0.01 |
|   | Visually appealing facilities | 0.016 | 0.054 | 0.013 | 1.253 | 0 |
|   |  Neat professional appearance | 0.039 | 0.03 | 0.105 | 1.301 | 0.012 |
|   | Visually appealing materia | 0.018 | 0.12 | 0.416 | 1.762 | 0.005 |

**Source:**Survey data (2024)

# 4.3.2 The Influence of Reliability of Delivered Services on Customers Satisfaction

The second objective of the study was about to assess the influence of reliability of delivered services on customers satisfaction. The hypothesis had been stated as; reliability of delivered services of the delivered services has no significant influence in satisfaction to customers at TTCL

## Table 4.11: Model Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **R** | **R****Square** | **Adjusted****R** | **Std. Error****Estimate** |
| **2** | 0. 622 | 0. 543 | 0. 504 | .238 |

 a. Predictor: (Constant); reliability of delivered services

 b. Dependent Variable: Customer satisfaction

The results in Table 4.11 show that the value obtained for R, which is the model correlation coefficient was r = 0.622. The r square value of r = 0.543, also indicates that reliability of delivered services could explain approximately 54.3 % of the variations in Customer satisfaction.

**Analysis of Variance (ANOVA)**

ANOVA results in table 4.12, indicated that F calculated is greater than the F critical (14.56 >2.50), this shows that the overall model was significant. The significance value is less than 0.05, thus indicating that the predictor variables, (providing services as promised, soundness in handling customers’ service problems, capability of performing services right the first time and providing services at the promised time) explain the close relationship in the dependent variable which is customer satisfaction

## Table 4.12: Analysis of Variance (ANOVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Sum of****Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| **Regression**  |  88.564 |  4 | 13.81  | 14.56  | .000b |
| **Residual** | 112.503 | 60 |  1.45 |  |  |
| Total  | 201.067 | 64 |  |  |  |

b. Dependent Variable: Customer satisfaction

a. Predictors:(Constant); providing services as promised, soundness in handling customers’ service problems, capability of performing services right the first time and providing services at the promised time

**Regressions Coefficients**

The finding in Table 4.13, the multiple linear regression models indicate that all the independent variables have positive coefficients (0.325), (0.102), (0.125) and (0.301) respectively and p value <0.005 implying that there is a positive relationship between reliability of delivered services and Customer satisfaction. Since the p<.005, then we reject null hypothesis and accept the alternative hypothesis that reliability of delivered services has a significant influence on Customer satisfaction. This finding agrees with Kamau and Stanley (2015) who argues that reliability of delivered services increase significantly the level of customer satisfaction.

## Table 4.13: Regressions Coefficients

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model**  | **Unstandardized Coefficients**  | **Standardized Coefficients** |  |  |
|  |  |
|  |  |
|  |  | **B** | **Std.** | **Beta** | **t** | **Sig.** |
|  | **Error** |   |   |
| **2** | Constant | 0.102 | 0.025 |  | 2.167 | 0.001 |
|   | TTCL providing services as promised | 0.325 | 0.105 | 0.182 | 0.524 | 0.02 |
|   | TTCL has soundness in handling customers’ service problems | 0.102 | 0.165 | 0.052 | 3.574 | 0.015 |
|   | TTCL has capability of performing services right the first time | 0.125 | 0.342 | 0.018 | 3.201 | 0.001 |
|   | TTCL providing services at the promised time | 0.301 | 0.48 | 0.024 | 3.455 | 0 |

**Source:** Survey data (2024)

# 4.3.3 The Influence of Responsiveness on Customers Satisfaction

The third objective of the study was about to assess the influence of responsiveness of service providers on customers satisfaction

The hypothesis had been stated as; responsiveness of service providers has no significant influence in satisfaction to customers at TTCL

**Model Summary**

The results in Table 4.14 show that the value obtained for R, which is the model correlation coefficient was r = 0.755. The r square value of r = 0.653, also indicates that responsiveness of service providers could explain approximately 65.3% of the variations in Customer satisfaction.

#

## Table 4.14: Model Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model**  | **R** | **R****Square** | **Adjusted****R** | **Std. Error****Estimate** |
| **3** | .755a | .653 | .442 | .2014 |

1. Predictor: (Constant);

b. Dependent Variable: Customer satisfaction

**Source:**Survey data (2024)

**Analysis of Variance (ANOVA)**

The study established that the (F 74.481; p=.000b) was statistically significant at p<.05 level of significance. This showed that the predictor variables (keeping customers informed about when services to be done, offers prompt service to customers, willingness to help customers and readiness to respond to customers’ requests) explain the close relationship with customer satisfaction. Since the p<.05, then we reject null hypothesis and accept the alternative hypothesis that responsiveness of service providers has a significant influence on Customer satisfaction.

## Table 4.15: ANOVA

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Model** |  | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| **3** | Regression | 24.703 | 4 | 8.475 | 74.481 | .000b |
| Residual | 20.521 | 153 | .126 |  |  |
| Total | 45.224 | 157 |  |  |  |

b. Dependent Variable: Customer satisfaction

a. Predictors: (Constant);keeping customers informed about when services to be done, offers prompt service to customers, willingness to help customers and readiness to respond to customers’ requests

**Regression Coefficients**

Table 4.16 indicated that responsiveness of service providers have a significant influence on Customer satisfaction. This is verified by the coefficient value of (0.351),(0.320),(0.540) and (0.380) respectively with p<.05, implying that there is a positive relationship between responsiveness of service providers and Customer satisfaction. As long as p<.05, then we reject null hypothesis and accept the alternative hypothesis that responsiveness of service providershas a significant influence on Customer satisfaction. This finding aligns with the study of Shanka (2012) who found that responsiveness of service providers is positively correlated with customer satisfaction

##

## Table 4.16: Regression Coefficients

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model**  | **Unstandardized Coefficients** | **Standardized Coefficients**  |  |  |
|  |  |
|  |  | **B** | **Std.** | **Beta** | **t** | **Sig.** |
|  | **Error** |   |   |
| **3** | Constant | 0.124 | 0.312 |  | 3.145 | 0.002 |
|   | TTCL keeping customers informed about when services will be performed | 0.351 | 0.045 | 0.624 | 3.504 | 0 |
|   | TTCL offers prompt service to customers | 0.32 | 0.13 | 0.103 | 3.201 | 0.003 |
|   | TTCL has a high willingness to help customers | 0.54 | 0.03 | 0.404 | 3.62 | 0.01 |
|   | TTCL has readiness to respond to customers’ requests | 0.38 | 0.071 | 0.662 | 3.12 | 0.001 |

**Source:** Survey data (2024)

### 4.3.4 The Influence of Assurance of Services on Customers Satisfaction

The fourth objective of the study was about to assess the influence of assurance of the delivered services on customers satisfaction.The hypothesis had been stated as; assurance of the delivered services has no significant influence in satisfaction to customers at TTCL

#

## Table 4.17: Model Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model**  | **R** | **R****Square** | **Adjusted****R** | **Std. Error****Estimate** |
| **4** | .834a | .725 | 0.356 | 4.216 |

a. Predictor: (Constant); assurance of the delivered services

b. Dependent Variable: Customer satisfaction

The results in Table 4.17 show that the value obtained for R, which is the model correlation coefficient was r = 0.834. The r square value of r = 0.725, also indicates that assurance of the delivered services could explain approximately 72.5 % of the variations on Customer satisfaction

**Analysis of Variance (ANOVA)**

The study established that the (F 16.40; p=.000b) was statistically significant at p<.05 level of significance. This showed that the predictor variables (Employee at TTCL instill confidence in customers, are consistently considerate, have the knowledge to answer customer questions, make customers feel safe in their transactions) explain the close relationship between assurance of the delivered services with customer satisfaction. Since the p<.05, then we reject null hypothesis and accept the alternative hypothesis that assurance of the delivered services has a significant influence on Customer satisfaction

## Table 4.18: ANOVA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model**  | **Sum of Squares**  | **df** | **Mean Square** | **F** | **Sig.** |
| 4 | Regression  |  7.84 | 04 | 8.485 |  16.40 |  .000b |
|  Residual  |  2.30 | 08 | 0.230 |  |  |
| Total  |  10.14 | 12 |  |  |  |

b. Dependent variable; Customer satisfaction

a. Predictor: Employee at TTCL instills confidence in customers, are consistently considerate, have the knowledge to answer customer questions, make customers feel safe in their transactions

**Regression Coefficients**

Table 4.19 indicated that assurance of the delivered services have a significant influence on Customer satisfaction. This is verified by the coefficient value of (0.382),( 0.402),( 0.320) and (0.270) respectively with p<.05, implying that there is a positive relationship between assurance of the delivered services and Customer satisfaction. As long as p<.05, then we reject null hypothesis and accept the alternative hypothesis that assurance of the delivered services has a significant influence on Customer satisfaction. This finding is consistent with the finding of Munyao (2014) who found that there is a relationship exists between assurance of the delivered services and customer satisfaction.

## Table 4.19: Regression Coefficients

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model**  | **Unstandardized Coefficients** | **Standardized Coefficients** |  |  |
|  |  |
|  |  |
| **4** |  | **B** | **Std.** | **Beta** | **t** | **Sig.** |
|  | **Error** |   |   |
|   | Constant | 0.22 | 0.145 |  | 2.509 | 0.001 |
|   | Employee at TTCL instill confidence in customers | 0.382 | 0.062 | 0.02 | 2.204 | 0.01 |
|   | Employee at TTCL is consistently considerate | 0.402 | 0.054 | 0.117 | 2.061 | 0.003 |
|   | Employee at TTCL have the knowledge to answer customer questions | 0.32 | 0.024 | 0.268 | 2.443 | 0.001 |
|   | Employee at TTCL make customers feel safe in their transactions | 0.27 | 0.112 | 0.106 | 2.102 | 0 |

**Source:** Survey data (2024)

### 4.3.5 The Influence of Empathy of Service Providers on Customers Satisfaction

The fifth objective of the study was about to assess the influence of empathy of service providers on customers satisfaction. The hypothesis had been stated as; empathy of service providers has no significant influence in satisfaction to customers at TTCL

## Table 4.20: Model Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model**  | **R** | **R****Square** | **Adjusted****R** | **Std. Error****Estimate** |
| **5** | .875a | .765 | .753 | .4156 |

a. Predictor: (Constant); empathy of service providers

 b. Dependent Variable: customer satisfaction

The outcomes in Table 4.20 exhibit that the value acquired for R, which is the model correlation coefficient was once r = 0.875. The r square value of r = 0.765, additionally indicates that empathy of service providers provides an explanation for approximately 76.5% of the variations in customer satisfaction

**Analysis of Variance (ANOVA)**

The study established that the (F 61.043; p=.000b) was statistically significant at p<.05 level of significance. This showed that the predictor variables (Employee at TTCL give customers individual attention, deal with customers in a caring fashion, having the customers’ best interests at heart and understand the needs of their customers) explain the close relationship between assurance of the delivered services with customer satisfaction. Since the p<.05, then we reject null hypothesis and accept the alternative hypothesis that empathy of service providers has a significant influence on Customer satisfaction

## Table 4.21: ANOVA

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model**  | **Sum of Squares** | **df** | **Mean Square** | F | **Sig.** |
| 5 | Regression  | 42.245 | 4 | 10.561 | 61.043 | .000b |
| Residual  | 12.955 | 75 | .173 |  |  |
| Total  | 55.200 | 79 |  |  |  |

1. Dependent variable; customer satisfaction
2. Predictor: Employee at TTCL give customers individual attention, deal with customers in a caring fashion,having the customers’ best interests at heart and understand the needs of their customers

**Regression Coefficients**

Table 4.22 indicated that assurance of the delivered services has a significant influence on Customer satisfaction. This is verified by the coefficient value of (0.326), (0.045), (0.382) and (0.242) respectively with p<.05, implying that there is a positive relationship between empathy of service providers and Customer satisfaction.

As long as p<.05, then we reject null hypothesis and accept the alternative hypothesis that empathy of service providers has a significant influence on Customer satisfaction. This finding agrees with Shanka (2012) who found that empathy of service providers is positively correlated with customer satisfaction

## Table 4.22: Regressions Coefficients

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model**  | **Unstandardized Coefficients** |   | **Standardized Coefficients** | **t** | **Sig.** |
|  |
|  |  | **B** | **Std.** | **Beta** |
|  | **Error** |
| **5** | Constant | 0.664 | 0.446 |  | 1.335 | 0.102 |
|   | TTCL has employee who giving customers individual attention | 0.326 | 0.087 | 0.56 | 2.294 | 0 |
|   | TTCL has employee who deal with customers in a caring fashion | 0.045 | 0.134 | 0.167 | 0.524 | 0.031 |
|   | TTCL has employee who having the customers’ best interests at heart | 0.382 | 0.062 | 1.02 | 2.204 | 0.01 |
|   | TTCL has employee who understand the needs of their customers | 0.242 | 0.062 | 3.02 | 6.204 | 0 |

**Source:** Survey data (2024)

# CHAPTER FIVE

# SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

# 5.1 Overview

This chapter presents summary of findings, conclusion and recommendations. It recommends areas for further study.

# 5.2 Summary of the Key Findings

The study sought to assess the impact of service quality on customer satisfaction in communication sector provision services. Specific objectives are; to assess the influence of tangible of delivered services in satisfaction to customers, to assess the influence of reliability of delivered services in satisfaction to customers, to assess the effect of responsiveness of service providers in satisfaction to customers, to assess the influence of assurance of the delivered services in satisfaction to customers and to assess the influence of empathy of service providers in satisfaction to customers at TTCL

The first objective of the study was about to assess the influence of tangible of delivered services in satisfaction to customers. The study revealed that there is a significant relationship between tangibility of delivered services and Customer satisfaction.The second objective of the study was about to assess the influence of reliability of delivered services in satisfaction to customers. The study revealed that there is a significant relationship between reliability of delivered services and Customer satisfaction.

The third objective of the study was about to assess the effect of responsiveness of service providers in satisfaction to customers. The study revealed that there is a significant relationship between responsiveness of service providers and Customer satisfaction.The fourth objective of the study was about to assess the effect of assurance of the delivered services in satisfaction to customers. The study revealed that there is a significant relationship between assurance of the delivered services and Customer satisfaction.The fifth objective of the study was about to assess the effect of empathy of service providers in satisfaction to customers. The study revealed that there is a significant relationship between empathy of service providers and Customer satisfaction.

# 5.3 Conclusions

Service quality plays a crucial role on customer satisfaction as there is a significant relationship between tangibility of delivered services and customer satisfaction.**,** there is a significant relationship between reliability of delivered services and customer satisfaction.**,** there is a significant relationship between responsiveness of service providers and customer satisfaction, there is a significant relationship between assurance of the delivered services and customer satisfaction.**,** that there is a significant relationship between empathy of service providers and customer satisfaction.

# 5.4 Recommendations

Based on the findings the following recommendations have been made;

The study showed that there is a significant relationship between tangibility of delivered services and Customer satisfaction. It is recommended therefore that TTCL management to timely provide prompt services to their customers, willingness to help customers and readiness to respond to customers’ requests.There is a need for Managers to set operating hours convenient to all the customers and having employees who give customer services with respect to tangibles, reliability, responsiveness, assurance and empathy. Managers should ensure that they perform the services that they promise dependably and accurately and be willing to help customers and provide them with prompt services. Employee at TTCL should provide more caring individualized attention to their customers,ensuring that they offer a wide variety of services.To be successful, TTCL management need to give the impression of being at responsiveness from the view point of the customer.

# 5.5 Areas for Future Research

This study assessed the impact of service quality on customer satisfaction in telecommunication provision services at TTCL.Other studies can do the same but a case of other organizations like TIGO, VODACOM and Airtel.Other authors can conduct the same studies in different sectors like DAWASA, TANESCO etc.Other studies can do the same but at different area rather than Dar es salaam.

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# APPENDIX I

**Questionnaire to Customers**

**Dear Respondents,**

My name is Mboka Kategela, I am currently pursuing a Masters of Business Administration (MBA) at the Open University of Tanzania (OUT). As part of my academic requirements, I am conducting a research study on assessment of the impact of service quality on customer satisfaction in telecommunication services at TTCL.

Your participation in this study by providing valuable insights through this questionnaire is greatly appreciated. Your responses will contribute to the advancement of knowledge in this field and may help inform future strategies in the financial industry. Any information you provide will be kept strictly confidential. This survey is completely voluntary. Your full participation would greatly help the cause of the study.

Thank you for your time and cooperation.

Sincerely, Mboka Kategela

**Instruction:** Please indicate by either filling in the blanks or put a tick (√) in each statement the extent to which the services provided by TTCL.

**PART I: Demographic characteristics of respondents.**

**a) Sex:**

Male ( )

Female ( )

**b) Education level:**

Primary education ( )

Secondary education ( )

Diploma ( )

 Bachelor Degree ( )

Master’s Degree ( )

**c) Customer duration in TTCL**

Less than 5 years ( )

5 -10 years ( )

10 years and above ( )

**PART II: STUDY QUESTIONS;**

Please show the extent to which **TTCL** makes you get satisfied with its delivered services.

Scale attitude statements of a 5-point Likert scale ranging from 1-strongly disagree to 5 strongly agree to a given statement.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Scale** | 1 | 2 | 3 | 4 | 5 |
|  | Strongly Disagree | Disagree | Not sure | Agree | Strongly agree |
| **Dimensions**  | **Statement** | 1 | 2 | 3 | 4 | 5 |
| **Reliability** | 1. TTCL providing services as promised |  |  |  |  |  |
|  | 2. TTCL has a soundness in handling customers’ service problems |  |  |  |  |  |
|  | 3. TTCL has a capability of performing services right the first time |  |  |  |  |  |
|  | 4. TTCL providing services at the promised time.  |  |  |  |  |  |
| **Responsiveness** | 1. TTCL is keeping customers informed about when services will be performed  |  |  |  |  |  |
|  | 2. TTCL offers prompt service to customers  |  |  |  |  |  |
|  | 3. TTCL has a high willingness to help customers |  |  |  |  |  |
|  | 4. TTCL has a readiness to respond to customers’ requests |  |  |  |  |  |
| **Assurance** | 1. TTCL has employee who instill confidence in customers |  |  |  |  |  |
|  | 2. TTCL has employee who making customers feel safe in their transactions |  |  |  |  |  |
|  | 3. TTCL has employee who are consistently considerate  |  |  |  |  |  |
|  | 4. TTCL has employee who have the knowledge to answer customer questions |  |  |  |  |  |
| **Empathy** | 1. TTCL has employee who giving customers individual attention |  |  |  |  |  |
|  | 2. TTCL has employee who deal with customers in a caring fashion |  |  |  |  |  |
|  | 3. TTCL has employee who having the customers’ best interests at heart  |  |  |  |  |  |
|  | 4. TTCL has employee who understand the needs of their customers |  |  |  |  |  |
|  | 5. TTCL has employee with convenient business hours |  |  |  |  |  |
| **Tangibles** | 1. TTCL has a modern equipment/vehicles  |  |  |  |  |  |
|  | 2. TTCL has a visually appealing facilities |  |  |  |  |  |
|  | 3. TTCL’s employee have a neat, professional appearance |  |  |  |  |  |
|  | 4. TTCL has a visually appealing materials associated with the service |  |  |  |  |  |

**THANK YOU FOR YOUR GOOD COOPERATION**



**MANUSCRIPT**

**Assessment of the Impact of Service Quality on Customer Satisfaction in Telecommunication Industry: A Case of Tanzania Telecommunication Corporation Limited**

Mboka Kategela, Michael Mwacha (PhD) and Asha Katamba (PhD)

**ABSTRACT**

The study sought to assess the impact of service quality on customer satisfaction in telecommunication sector provision services. Specific objectives were: to assess the influence of tangibility of delivered services in satisfaction to customers, to assess the influence of reliability of delivered services in satisfaction to customers, to assess the effect of responsiveness of service providers in satisfaction to customers, to assess the influence of assurance of the delivered services in satisfaction to customers and to assess the influence of empathy of service providers in satisfaction to customers of TTCL.The study used a descriptive research design. The study used a questionnaire to collect data and 90 respondents from the best users of TTCL services were targeted. The study found that there is a significant positive relationship between reliability of delivered services and tangibility of service providers. The study recommended that TTCL management need to timely provide prompt services to their customers, willingness to help customers and readiness to respond to customers’ requests, set operating hours convenient to all the customers and having employees who give customer services with respect to tangibles, reliability. Managers should ensure that they perform the services that they promise dependably and accurately and be willing to help customers and provide them with prompt services and TTCL Employee should provide more caring individualized attention to their customers along with ensure that they offer a wide variety of services.

**Keywords:**Service quality,customer satisfaction,tangibles,Empathy

# 1. INTRODUCTION

# The growth in a service sector has been observed across the globe (Adhikari & Das, 2016). This exponential growth in the service sectors has made it difficult for firms to consistently create, share, and sustain memorable customer service experiences (Oakton, 2021). Customers are becoming knowledgeable and selective in terms of buying and consuming services (Juan, *et al.,* 2022). Today the service-oriented products are acknowledged as experiences where everyone in a service system has to create and share value for the customers (Vargo & Lusch, 2014). This view recognizes the significant role of customer feedback in order to improve the quality of services offered. The service providers must have a clear understanding of perceived as well as expected quality of service offered so to create and deliver value for the customers (Nazim *et al.,* 2021).

The customer satisfaction in service products is usually derived from a combination of technical quality as well as functional quality. However, functional quality is considered important as most customers do not have expertise to evaluate the technical quality (Nandan & Geetika, 2020). When customers are satisfied with the service quality, they tend to be loyal with the service organization (Siddiqi, 2021). Loyal customers become the referents in order to attract more customers (Mersha, *et al*, 2022). Hence, achievement of service quality is regarded as a critical success factor for service organizations.

Enhancing customer satisfaction is critical because it is a key to business success of any Water utility. In the competitive economy, customer’s satisfaction has come under limelight due to stiff competition where organizations are trying to take competitive advantage through the human factor and customers (Kamlani, 2019). Customer satisfaction is one of the most significant factors that can aid organizations to increase profits, customer satisfaction leads to customer loyalty which in turn leads to repeat purchases and referrals (Appiah, 2019).

The service quality provided is an important factor of general customer satisfaction, which in chance resulting to customer retention and loyalty. Also, Service quality is regarded as one of the greatest important antecedent of customer loyalty in service businesses (Appiah, 2019). Customer satisfaction is influenced by various service quality drivers which include tangibility, reliability, responsiveness, assurance, empathy, price and location (Appiah, 2019).

In the contemporary business environment keeping customers satisfied saves money as well as increasing profits for organizations as the process of satisfying and retaining current customers is far less expensive than constantly replacing customers (Appiah, 2019). Thus, understanding customers’ satisfaction in utility sector is important not only from economic perspective but also from creation of good image of organization. Understanding the impact of service quality dimensions on customer satisfaction is essential because customer satisfaction is an important factor for sustained business success (Ali & Raza, 2017).

## Statement of the Problem

Provision of communication services is a vital service that provides a basic good which is essential to development and individual growth (Ali & Raza, 2017). Lack of communication has a great impact on well-being as well as huge financial cost and loss of economic activity (Ali and Raza, 2017). Access to internet for productive purposes such as family and corporate businesses is essential as it helps in generation of income that helps to improve livelihoods and promote economic growth (Ali and Raza, 2017). However, optimizing on the level of service quality ensures a high level of customer satisfaction which translates to increased sales and profits (Adhikari, and Das, 2019). In Tanzania TTCL is facing a great challenge to satisfy the growing demands for communication due to several reasons such as poor budgetary allocations by the respective governments, ageing pipes, unstable power supply, poor revenue collection, urbanization and corruption (Gowela *et al.,* 2017).

Some of these studies (Agnihotri *et al.,* 2019) focused on access to improve sources of communication, cost of internet bundles and quality and quantity issues. According to researcher’s knowledge, little is known in Tanzanian context about the impact of service quality on customer satisfaction of the respective public communication providers. This study therefore assesses the impact of service quality on customer satisfaction in telecommunication provision services.

The objective of this study is to examine the impact of service quality on customer satisfaction in telecommunication sector provision services.Specifically the study examined the influence of tangibility of delivered services in satisfaction to customers at TTCL and the influence of reliability of delivered services in satisfaction to customers at TTCL

**2. LITERARURE REVIEW**

 **Service Quality**

Selvakumar (2015) defined services quality as a function of the differences between expectation performance along the quality as a function of the differences between expectation and performance along the quality dimensions.Baghla and Garai (2016) suggest that service quality is the extent to which the customer’s perceptions of service either meet or exceed their expectations. In light of this suggestion service quality can therefore be perceived as how good or how bad customers are served by a service provider. Furthermore, service quality is accepted as one of the elements of customer satisfaction (Selvakumar, 2015).

**Customer Satisfaction**

Kamlani (2016) defines customer satisfaction as the minimum acceptable levels of service that provide customer satisfaction in the key areas that are critical and where service quality thresholds need to be set. To fall below the minimum threshold in any key area puts one into the danger zone and one’s customer will not be satisfied. In this study, customer satisfaction will be defined as the minimum requirement to meet customer service needs.

##

## Theoretical Framework

This study is based on a SERVQUAL model. This model was developed in the mid-1980s by Berry and his colleagues Parasuraman and Seithaml, they began to study service quality determinants and how customer evaluates the quality of services based on the Perceived Service Quality concept. The Five (5) determinants were found to characterize customers’ perception of the service. Now, the five variables that made up what the authors called SERVQUAL were the following five dimensions of service quality: tangibility, reliability, responsiveness, assurance, and empathy:

Reliability is defined as capacity to execute the guaranteed benefit reliably and precisely (Armstrong, 2012). If a company is providing a good service, a company and its staff should be ready to respond to consumer’s queries about products and services offered (Ojo, 2010). According to Toosi and Kohonali (2011), timely responses to requests, is one of the important customer’s expectation. Therefore, this should not be delayed or ignored simply because these are fundamental issues. Online support is offer by some companies that provides customers with instant resolution to their queries.

Tangibility can be illustrated as the appearance of physical offices, equipment, work force, and correspondence materials. Parasuraman et al. (1985), tangibility can be characterized as the presence of physical offices, staff, and equipment and composed materials. If employees’ neglect or mistreat customers, the customer do not complain every time about their experience as impersonal service. Rather, customer will never return and undoubtedly no organization wants this to happen. (Klemz & Boshoff, 2011).

## Empirical Review

### The Tangibility of Services and Customer Satisfaction

Ali and Raza (2021) measured the relationship between service quality and customer satisfaction among the customers in Pakistan Islamic Bank services. A cross sectional research study was adopted involving 300 customers. Data were gathered from customers using questionnaire and data was analyzed through descriptive statistics. The findings showed significant positive relationship between tangibility of delivered services and customer satisfaction. The study recommended that bank managers must think of modifying the services as per needs and demands of customer.

A study conducted by Owino (2018) to identify the nature and significance relationship between service quality and customer satisfaction of hospitality industry in Kenya. A descriptive research design was employed using 100 respondents who were randomly selected. Data collection was done by using questionnaire. Multiple regression analyses were used to analyze data. Results showed that tangibility of delivered services has a significant impact on customer satisfaction. The study recommended that hotel managers should always consider the fact that a good customer service can cover the flaws or loop holes of overall service system.

*H1: Tangibility has no significant impact on customer satisfaction*

### The Reliability of Services and Customers Satisfaction

The study conducted by Kamau and Stanley (2019) explored the impact of service qualityon customer satisfaction for passengers at KenyaAirways. The study used a descriptive survey design to obtain information on key determinants of customer satisfaction for passengers at Kenya Airways. The study mainly adopted a case study approach and the respondents constituted Passengers who had used Kenya airways for a period of six months between Jan-June 2012. The sample of this study consisted of one hundred (100) passengers. Both primary and secondary data sources were used to answer the research questions. The data collected was analyzed by use of the means, frequency, percentage and Factor Analysis. The study findings indicate that reliability of delivered services such as safety, proper communication with customers to update them on status of their flights, provision of food variety and ability of the airline to communicate to passengers about the weather on arrival destinations were particularly noted to increase significantly the level of customer satisfaction. The study recommended that in order to remain competitive the airline need to focus on its operational strategies so as to reduce cost but at the same time increase service quality.

A study conducted by Hossain (2022) aimed at assessing the impact of perceived service quality on satisfaction of tourists visiting Cox’s Bazar in Bangladesh. A descriptive research design was employed with a sample size of 385 tourists. Data collection was through questionnaire. The study finding indicated that reliability of delivered services has a significant influence on customer satisfaction. The recommendation was that managers should come up with strategies geared towards improving the quality of service and this should be based on the passengers ’profile, for example age, occupation, gender and education level.

*H2: Reliability has no significant impact on customer satisfaction*

##  Research Gap

Empirical studies indicate that majority of the studies assessed the relationship between service quality and customer satisfaction on health services for example Akhade *et al.*(2019), Allahham (2018), Zaimet *al.* (2010), Amole *et al.* (2019), their study however, failed to shed light on aspects of quality satisfaction relationship in water sector. Therefore, none of the above reviewed studies analyzed the effect of service quality practices on satisfaction of telecommunication service users.

##  Conceptual Framework

Researcher aims adopting a modified conceptual framework that is the SERVQUAL model with five dimensions consisting: Tangibility, Reliability, Responsiveness, Assurance, and Empathy to be *independent variables* and customer satisfaction as *dependent variable*. SERVQUAL Model is a suitable for measuring service quality and customer satisfaction in banking industry. The researcher used two dimensions to measure the effects of service quality oncustomer satisfaction because both are related (Parasuraman, 1988). The SERVQUAL approach integrates the two constructs and suggests that perceived service quality leads to customer satisfaction. The model is to find out the overall services quality perceived by customer if it meets the customer needs and satisfies.The conceptual framework shows independent variables which upon fulfillment enhances the level of satisfaction (dependent variable).

#

# Figure 1: Conceptual Framework

**Source:** Researcher (2024).

1. **METHODOLOGY**

 This study adopted a positivist research philosophy, because Positivists argue that reality is stable and could be observed and described from an objective viewpoint rather than subjective or one’s perception.This study used a descriptive research design. This is because descriptive studies are concerned with specific predictions, narrations of facts and characteristics concerning individuals, groups or situations. This study was conducted at TTCL in Dar es Salaam region. TTCL is responsible for developing operating and maintaining all telecommunication and internet services and in Dar es Salaam. The researcher has chosen this area of the study because it was convenient to obtain reliable information from customers regarding service quality.According to Creswell (2012) study population refers to the total of items about which information is desired. The study population included 156 customers who use TTCL services.

## According to Saunders, Lewis and Thornhill (2007) the sample size is part of a population that we examine to gather information. Specifically in this study, the sample size was calculated by using Yamane’s formula which is mostly used to calculate sample size from a defined population (Yamane (1967). The calculations of the sample by using Yamane’s formula included;

n = $\frac{N}{1+Ne^{2}}$

Where: n = Sample size

N = Population size of precision

Assuming =10% level of precision, the calculation for the required sample size will be as follows;

e =10% or 0.1, Then

n =$\frac{156}{1+156(0.1)^{2}}$= 90

Therefore, a total sample size of 90 respondents was used.

 **Sampling Procedures**

Sampling procedures provide a range of methods that enable one to reduce the amount of data needed for a study by considering only data from a sub-group rather than all possible elements (Creswell, 2012). A simple random sampling technique was employed to select customers who attend at TTCL to seek communicatiion services. This study structured questionnaire were employed because they are simple to administer and relatively cheaper to analyze.In this study, questionnaires was used to elicit required information from the respondents. Hence questionnaire was administered to customers of TTCL.

## Data Analysis

Data analysis is the process of gathering, sorting, organizing, and structuring data. The process involves the ordering and structuring of data to produce knowledge (Saunders, Lewis and Thornhill, 2012). The processing of data was aided by the use of SPSS (Statistical Package for Social Sciences), this software is preferred because of its consistency in providing compatibility mode in problems analysis. Data was analyzed using both descriptive and inferential statistics. Linear regression and correlation were done to ascertain the existence of relationship between the variables. The research model was estimated is;

 Y = β0+ β1X1+ β2X2+ β3X3 + β2X4+ β3X5+ ε

 Whereby;

 Y= customer satisfaction

 β0= constant

ε = error term;

β= regression coefficients

X1= Tangibility of delivered services

 X2= Reliability of delivered services

X3= Responsiveness of service providers

X4= Assurance of the delivered services

X5= Empathy of service providers

## Validity and reliability of Data

Validity can be defined as a degree to which testimony and theory preserve the appreciation of test scores involved in a study (Zikmund *et al,* 2010). Instruments were used through processing data into manageable proportions through editing, coding, and tabulation methods.Reliability is the capability of a research instrument to regularly measure qualities of activity over time (Creswell, 2012). The reliability was tested through test-retest techniques by the use of Cronbach Alpha-Coefficient (α) which is the very common method of testing reliability (Creswell, 2012). The researcher accepted Cronbach’s α result above 0.7.

# 4. FINDINGS

# Demographic Characteristics of Respondents

 **Gender of Respondents**

Table 1 below shows the sex of the respondents who were involved in this study. The result showed that 34 (38%) of all respondents were males while 56 (62%) of all respondents were females.

Table 1:Distribution of Respondents according to Demographic Characteristics

|  |  |  |
| --- | --- | --- |
| **Variable** | **Frequency** | **Percent** |
| **Sex** |   |   |
| Male | 34 | 38 |
| Female | 56 | 62 |
| **Marital status** |  |  |
| Single | 25 | 28 |
| Married | 55 | 61 |
| Other | 10 | 11 |
| **Age** |  |  |
| 31-40 | 60 | 67  |
| 41-5051-60 | 255 | 28 15 |
| **Educational Level** |  |  |
| secondary education | 0 |  0 |
| Certificate | 5 | 6 |
| Diploma | 10 | 11 |
| Bachelor degree holders | 45 | 50 |
| Master degree holders | 30 | 33 |
| **Service user experience** |   |   |
| less than 5 years | 13 | 14 |
| 5-10 years | 45 | 50 |
| 10-15 years | 32 | 36 |

|  |
| --- |
|  |

**Source:** Field Data (2024)

 **Education Level of Respondents**

Table 1 presents the highest education level of the surveyed respondents. Education level had been considered by the researcher as it determines understanding of issues in hand.The results indicated that (50%) of all surveyed respondents of the study were bachelor degree holders followed by 30 (33%) of all surveyed respondents had master degree holders, 10 (11%) of all surveyed respondents attained diploma education and 5 (6%) of all surveyed respondents attained certificate education. This implies that majority of the surveyed respondents customers of TTCL had enough education level to answer the questionnaires.

Age

The study found that most (60%) of the respondents were belonging in the age group of 31-40 years, followed by those (28%) who are in the age group of 41-50 years (Table 1).A few of the respondents (15%) belongs to the age group of 51-60 years.

### **Sex and Marital Status**

The distribution of respondents based on sex show that majority of the respondents were females (62%). Only 38% of the respondents were males. On the other hand, married respondents constituted the majority (61%) of survey participants, followed by respondents who are still single by the means that they had not yet married (28%) as shown in Table 1. Other marital statuses composing widows and divorce constituted only 11.0% of the survey participants.

###  Customer Duration at TTCL

Table 1 presents duration for which surveyed customers have been at TTCL.

The results indicated that 45(50%) of all surveyed customers have been using TTCL services for 5-10 years followed by 32(36%) of all surveyed customers who have been using TTCL services for 10-15 years while 13(14%) of all surveyed customers have been using TTCL services for less than 5 years. This implies that majority of the surveyed customers have been customers using TTCL services for relatively longer period.

##  Descriptive Statistics

Table 2 indicates the descriptive statistics for the influence of tangible of delivered services in satisfaction to customers

**Table 2: Influence of Tangibles on Customer satisfaction**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **N** | **Mean** | **Std. Dev** |
| TTCL has a modern equipment/vehicle | 90 | 3.4232 | 0.48426 |
| TTCL has a visually appealing facility | 90 | 3.3458 | 0.35210 |
| TTCL’s employees have a neat, professional appearance | 90 | 3.5042 | 0.38454 |
| TTCL has a visually appealing materials associated with the service | 90 | 3.4203 | 0.32111 |
| **Average** | **3.4233** | **0.156201** |

**Source:**Survey data (2024).

The mean average value for the influence of tangible of delivered services in satisfaction to customers obtained was 3.4233 with a standard deviation average of 0.156201. This means that most of the surveyed customers agreed that TTCL has a modern equipment/vehicle, has a visually appealing facilities, TTCL’s employee have a neat, professional appearance and has a visually appealing materials associated with the service.

Table 3 indicates the descriptive statistics for the influence of reliability of delivered services in satisfaction to customers.

**Table 3: Influence of Reliability on Customer Satisfaction**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **N** | **Mean** | **Std. Dev** |
| TTCL providing services as promised | 90 | 3.1028 | 0.18250 |
| TTCL has a soundness in handling customers’ service problems | 90 | 3.3172 | 0.24352 |
| TTCL has a capability of performing services right the first time | 90 | 3.8104 | 0.32861 |
| TTCL provide services at the promised time | 90 | 3.1508 | 0.25166 |
| **Average**  | **2.67424** | **0.13308** |

**Source:S**urvey data (2024).

The mean average value for the influence of reliability of delivered services in satisfaction to customers obtained was 2.67424 with a standard deviation average of 0.13308. This means that most of the surveyed customers agreed that TTCL providing services as promised, has a soundness in handling customers’ service problems, has a capability of performing services right the first time and providing services at the promised time. Table 3 indicates the descriptive statistics for the influence of responsiveness of service providers in satisfaction to customers

## Correlation Analysis

Table 4 presents a summary of the correlation matrix. It shows the degree of their association between independent variables and the dependent variable.

**Table 4 : Pearson’s Correlations Matrix**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables**  |  | 1 | 2 | 3 | 4 | 5 | 6 |
| Customer satisfaction | Pearson Correlation  | **1.00** |  |  |  |  |  |
| Tangibility | Pearson Correlation Sig. (2-tailed)  | .775\*\*.000 | **1.00** |  |  |  |  |
| Reliability | Pearson Correlation Sig. (2-tailed)  | 684\*\*.001 | .542\*\*.010 | **1.00** |  |  |  |

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

**Source:**Survey data (2024)

The results in Table 4 show that the level of correlation between the independent and dependent variable was higher. A correlation analysis result showed that there is a significant relationship between tangibility and Customer satisfaction (r=0.775, p=.000). The strong relationship evidenced by this finding suggests that tangible of delivered services could lead to Customer satisfaction.The correlation analysis showed a significant relationship existed between the reliability of delivered services and Customer satisfaction (r=0.542, p= 0.010).The correlation analysis showed also that there is a significant relationship between responsiveness and Customer satisfaction (r=0.556, p= 0.000). Consequently, correlation analysis showed that there is a significant relationship between assurance and Customer satisfaction (r=0.508, p= 0.010). Lastly, the correlation analysis showed that there is a significant relationship exists between empathy and Customer satisfaction (r=0.501, p=.001).

##  Hypothesis-Test

## The Influence of Tangibility of Delivered Services on Customers Satisfaction

The first objective of the study was about to assess the influence of tangibility of delivered services on customers satisfaction

The hypothesis had been stated as; tangibility of delivered services has no significant influence in satisfaction to customers at TTCL.

**Table 5: Model Summary**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **R** | **R****Square** | **Adjusted****R** | **Std. Error****Estimate** |
| **1** | .815(a)  | .743  | .705 | .2508 |

 a. Predictor: (Constant); Tangibility of delivered services

 b. Dependent Variable: Customer satisfaction

**Source:**Survey data (2024).

The results in Table 5 show that the value obtained for R, which is the model correlation coefficient was r = (0.815). The r square (r = 0.743), also indicates that tangibility of delivered services could explain approximately 74.3 % of the variations in Customer satisfaction

**Analysis of Variance (ANOVA)**

ANOVA results in table 6, indicated that F calculated is greater than the F critical (6.345>2.50), this shows that the overall model was significant. The significance value is less than 0.05, thus indicating that the predictor variables, (Modern equipment/vehicles, visually appealing facilities, neat professional appearance and visually appealing materials) explain the close relationship in the dependent variable which is customer satisfaction.

**Table 6: Analysis of Variance (ANOVA)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Sum of****Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| **Regression**  |  31 | 3 | .243 | 6.345 | .000b |
| **Residual** | 20.33 | 120 | .171 |  |  |
| Total  | 20.64 | 123 |  |  |  |

b.Dependent Variable: Customer satisfaction

a.Predictors: (Constant); Modern equipment/vehicles, visually appealing facilities,

neat professional appearance and visually appealing materials.

**Source:**Survey data (2024).

**Regression Coefficients**

The finding in Table 7, the multiple linear regression models indicate that all the independent variables have positive coefficients (0.065), (0.016), (0.039) and (0.018) respectively and p value <0.005 implying that there is a positive relationship between tangibility of delivered services and Customer satisfaction.

Since the p<.005, then we reject null hypothesis and accept the alternative hypothesis that tangibility of delivered services has a significant influence on Customer satisfaction. This finding is consistent with the study of Owino (2013) found that tangibility of delivered services has a significant impact on customer satisfaction.

**Table 7: Regression Coefficients**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model**  | **Unstandardized Coefficients** | **Standardized Coefficients** |   |   |
|   |   |
|   |   |
|  |  | **B** | **Std.** | **Beta** | t | Sig. |
|  | **Error** |   |   |
| **1** | **Constant** | 0.023 | 0.107 |  | 1.14 | 0.025 |
|   | Modern equipment/vehicles | 0.065 | 0.024 | 0.018 | 1.021 | 0.01 |
|   | Visually appealing facilities | 0.016 | 0.054 | 0.013 | 1.253 | 0 |
|   |  Neat professional appearance | 0.039 | 0.03 | 0.105 | 1.301 | 0.012 |
|   | Visually appealing materia | 0.018 | 0.12 | 0.416 | 1.762 | 0.005 |

**Source:**Survey data (2024)

### The Influence of Reliability of Delivered Services on Customers Satisfaction

The second objective of the study was about to assess the influence of reliability of delivered services on customers satisfaction. The hypothesis had been stated as; reliability of delivered services of the delivered services has no significant influence in satisfaction to customers at TTCL

# Table 8: Model Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model** | **R** | **R****Square** | **Adjusted****R** | **Std. Error****Estimate** |
| **2** | 0. 622 | 0. 543 | 0. 504 | .238 |

 a. Predictor: (Constant); reliability of delivered services

 b. Dependent Variable: Customer satisfaction

The results in Table 8 show that the value obtained for R, which is the model correlation coefficient was r = 0.622. The r square value of r = 0.543, also indicates that reliability of delivered services could explain approximately 54.3 % of the variations in Customer satisfaction.

**Analysis of Variance (ANOVA)**

ANOVA results in table 9, indicated that F calculated is greater than the F critical (14.56 >2.50), this shows that the overall model was significant. The significance value is less than 0.05, thus indicating that the predictor variables, (providing services as promised, soundness in handling customers’ service problems, capability of performing services right the first time and providing services at the promised time) explain the close relationship in the dependent variable which is customer satisfaction

**Table 9: Analysis of Variance (ANOVA)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Sum of****Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| **Regression**  |  88.564 |  4 | 13.81  | 14.56  | .000b |
| **Residual** | 112.503 | 60 |  1.45 |  |  |
| Total  | 201.067 | 64 |  |  |  |

b. Dependent Variable: Customer satisfaction

a. Predictors:(Constant); providing services as promised, soundness in handling customers’ service problems, capability of performing services right the first time and providing services at the promised time

**Regressions Coefficients**

The finding in Table 10, the multiple linear regression models indicate that all the independent variables have positive coefficients (0.325), (0.102), (0.125) and (0.301) respectively and p value <0.005 implying that there is a positive relationship between reliability of delivered services and Customer satisfaction. Since the p<.005, then we reject null hypothesis and accept the alternative hypothesis that reliability of delivered services has a significant influence on Customer satisfaction. This finding agrees with Kamau and Stanley (2015) who argues that reliability of delivered services increase significantly the level of customer satisfaction.

**Table 10: Regressions Coefficients**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model**  | **Unstandardized Coefficients**  | **Standardized Coefficients** |  |  |
|  |  |
|  |  |
|  |  | **B** | **Std.** | **Beta** | **t** | **Sig.** |
|  | **Error** |   |   |
| **2** | Constant | 0.102 | 0.025 |  | 2.167 | 0.001 |
|   | TTCL providing services as promised | 0.325 | 0.105 | 0.182 | 0.524 | 0.02 |
|   | TTCL has soundness in handling customers’ service problems | 0.102 | 0.165 | 0.052 | 3.574 | 0.015 |
|   | TTCL has capability of performing services right the first time | 0.125 | 0.342 | 0.018 | 3.201 | 0.001 |
|   | TTCL providing services at the promised time | 0.301 | 0.48 | 0.024 | 3.455 | 0 |

**Source:** Survey data (2024)

# Summary of Findings

The study sought to assess the impact of service quality on customer satisfaction in communication sector provision services. Specific objectives are; to assess the influence of tangible of delivered services in satisfaction to customers, to assess the influence of reliability of delivered services in satisfaction to customers, to assess the effect of responsiveness of service providers in satisfaction to customers, to assess the influence of assurance of the delivered services in satisfaction to customers and to assess the influence of empathy of service providers in satisfaction to customers at TTCL

The first objective of the study was about to assess the influence of tangible of delivered services in satisfaction to customers. The study revealed that there is a significant relationship between tangibility of delivered services and Customer satisfaction.The second objective of the study was about to assess the influence of reliability of delivered services in satisfaction to customers. The study revealed that there is a significant relationship between reliability of delivered services and Customer satisfaction.

## Conclusions

Service quality plays a crucial role on customer satisfaction as there is a significant relationship between tangibility of delivered services and customer satisfaction.**,** there is a significant relationship between reliability of delivered services and customer satisfaction.

**Recommendations**

Based on the findings the following recommendations have been made;

The study showed that there is a significant relationship between tangibility of delivered services and Customer satisfaction. It is recommended therefore that TTCL management to timely provide prompt services to their customers, willingness to help customers and readiness to respond to customers’ requests.There is a need for Managers to set operating hours convenient to all the customers and having employees who give customer services with respect to tangibles and reliability,. Managers should ensure that they perform the services that they promise dependably and accurately and be willing to help customers and provide them with prompt services. Employee at TTCL should provide more caring individualized attention to their customers,ensuring that they offer a wide variety of services.To be successful, TTCL management need to give the impression of being at responsiveness from the view point of the customer.

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