St. MARY'S UNINESITY SCHOOL OF GRADUATE STUDIES



THE EFFECT OF SERVICE QUALITY ON CUSTOMER SATISFACTION: IN CASE OF ETHIOTELECOM CALL CENTER

BY

MERON GEBRU

A THESIS

SUBMITTED TO ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE
STUDIES IN PARTIAL FULFILLMENT OF THE REQIREMENT FOR THE
DEGREE OF MASTERS OF BUSINESS ADMINISTRATION

July, 2020

ADDIS ABABA, ETHIOPIA

ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

FACULTY OF BUSINESS

The effect of Service Quality on Customer Satisfaction: in case of Ethio-Telecom Call Center

 \mathbf{BY}

MERON GEBRU

APPROVED BY BOARD OF EXAMINERS	
Dean, Graduate Studies	Signature
Advisor	Signature
_YirgalmeTadle(PhD)	
External Examiner	Signature
	121
_Temesgen Belayneh (PhD)	
Internal Examiner	Signature
BushaTemesgen(BhD)	

Declaration

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of YirgalmeTadle (PHD). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

MeronGebru

Signature

St. Mary's University, Addis Ababa

July, 2020

Endorsement

s University, School of Graduate Studies for
y advisor.
Signature
Signature
St. Mary's University, Addis Ababa,
St. Mary's University, Audis Ababa,
July, 2020

ACKNOWLEDGMENT

My deepest appreciation and thanks goes to my advisor YirgalmeTadle (PHD), without his guidance and intellectual assistance this study paper would not have been materialized in its present context and form.

I convey my thanks to my all family and TBJT for their stanch supports and encouragements during the period of my study.

Finally, I would like to express my sincere appreciation and gratitude to all of my teachers who thought me at this MBA level.

ABSTRACT

This study is about the effect of service quality on customer satisfaction at Ethio-Telecom's Call Center. For the analysis services quality are proxy with five variables; tangibility, reliability, responsiveness, empathy and assurance. Both descriptive and explanatory research design and primary and secondary data are used hence the research is mainly quantitative in nature. Primary data is collated by distributed among 384 customers of Ethio-Telecom Call Center Services using outbound call. The descriptive analysis shows that majority of the respondent's answers yes to customer satisfaction, tangibility, reliability, responsiveness, empathy and assurance. 304 out of 384 customers of Ethio-Telecom Call Center Services are satisfied by the service. To the proxy of service quality customers of Ethio-Telecom Call Center Services; 297 tangible, 260 reliable, 280 responsive, 287 empathy and 278 assurances are answers yes. The correlation results shows that customer satisfaction have positive and higher correlation with all service quality proxy (tangibility, reliability, responsiveness, empathy and assurance). Also, the correlation analysis shows that service quality proxy (tangibility, reliability, responsiveness, empathy and assurance) have positive and high correlation with each other. For the regression analysis probit model are employed. The probit result shows other than tangibility, others proxy of service quality are found to have statistically significant positive effect on customer satisfaction of Ethio-Telecom Call Center service. Even though it is not statistical significant tangibility have also positive effect on customer satisfaction of Ethio-Telecom Call Center service. Therefore, management at Ethio-Telecom Call Center should focus on improvement in service quality.

Key words: customer satisfaction, service quality

Acronyms and Abbreviations

ETEthio Telecom
ETCEthiopian Telecommunication Corporation
IVRInteractive voice recorder
SERVPERF Service Performance Scale/Model
SERVQUAL Service Quality Scale/Model
CRM Customer Relation Management

Table of Contents

CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the study	1
1.2 Statement of the problem	4
1.2.1 Research Question	7
1.3 Objectives of the Study	7
1.3. 1 General Objective of the Study	7
1.3.2 Specific Objectives of the Study	7
1.4 Significance of the Study	8
1.5 Scope of the Study	8
1.6 Limitation of the study	9
1.7 Definition of Terms	10
1.7.1 Conceptual Definition of Terms	10
1.7.2 Operational Definition of Terms	11
1.8 Organization of the Study	12
CHAPTER TWO	13
REVIEW OF RELATED LITERATRURE	13
2.1 Theoretical Related Literature Review	13
2.1.1 Who are customers?	13
2.1.2 What is Service?	13
2.1.3 Customer Service	16
2.1.4 Service quality	16
2.1.5 Service Quality Dimensions	18
2.1.6 Customer Satisfaction	20
2.1.7 Customer Expectations and Perception	22
2.1.8 Service Quality and Customer Satisfaction	25
2.1.9 Factors Affecting Service Quality and Customer Satisfaction	28
2.1.10 Measuring Service Quality	29
2.2 Empirical Review	39
2.2.1 The Relationship between Service Quality and Customer Satisfaction	39
2.2.2 Tangibility and Customer Satisfaction	40
2.2.3 Reliability and Customer Satisfaction	42
2.2.4 Responsiveness and Customer Satisfaction	
2.2.5 Empathy and Customer Satisfaction	45
2.2.6 Assurance and Customer Satisfaction	46
2.3 Conceptual Framework	47
2.3.1 Customer Satisfaction	47
2.3.2 Tangibles	49
2.3.3 Reliability	49

2.3.4 Responsiveness	49
2.3.5 Empathy	50
2.3.6 Assurance	50
CHAPTER THREE	51
Methodology of the study	51
3.1 Research Approach	51
CHAPTER FOUR	59
DATA PERSENATION, ANALYSIS AND DISCUSSION	59
4.1 Descriptive Analysis	59
4.1.1 Tangibles	60
4.1.2 Reliability	62
4.1.3 Responsiveness	64
4.1. 4 Empathy	66
4.1.5 Assurance	67
4.2 Correlation of Variables	69
4.3 Regression Result	69
CHAPTER FIVE	74
CONCLUSION AND RECOMMENDATION	74
5.1 Conclusion	74
5.2 Recommendation	77
REFERENCE	79
APPENDEX	83
Appendix 1: Questionnaire (Amharic Version)	83
Appendix 2: Questionnaire (English Version)	88

List of Tables

Table 4.1: Tangibility of Ethio-Telecom Call Center service42
Table 4.2: Reliability of Ethio-Telecom Call Center service43
Table 4.3: Responsiveness of Ethio-Telecom Call Center service44
Table 4.4: Empathy of Ethio-Telecom Call Center service45
Table 4.5: Assurance of Ethio-Telecom Call Center service46
Table 4.6: Correlation of Dependant and Independent variables47
Table 4.7: Probit Regression Result

List of Figure

Figure 1: Conceptual Framework of the Effect of Service Quality on Customer Satisfaction Error! Book	mark not defin
Figure 2: Customer Satisfaction of Ethio-Telecom Call Center Service	60
Figure 3: Tangibility of Ethio-Telecom Call Center Service	60
Figure 4: Reliability of Ethio-Telecom Call Center Service	62
Figure 5: Responsiveness of Ethio-Telecom Call Center service	64
Figure 6: Empathy of Ethio-Telecom Call Center service	66
Figure 7: Assurance of Ethio-Telecom Call Center service	67

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

In service industry, the concept of quality holds the main position. The relationship with the customer is based on the promise that customer satisfaction is achieved through providing standard quality of service. The high quality demands on customers end is becoming prominent due to the growing fact that high level of service quality leads to sustainable competitive advantage in the competitive business environment (Sureshchandar, 2002). It is not surprising to know that quality level of services is the leading phenomena to plan strategies in the services firms (Khamalah and Lingaraj, 2007).

Service has been defined in many ways by various scholars through time. Still there is no universal definition of service. For instance Kotler and Keller (2012) define service as any act or performance that one party can offer to another that is essentially intangible and does not result in ownership of anything. Its production may or may not be tied to a physical product. Another definition is by Gronroos (2001), defined service as an activity or series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between the customer and service employee and/or systems of the service provider, which are provided as solutions to customer problems.

Since customer satisfaction has been considered to be based on the customer's experience on a particular service encounter (Cronin & Taylor, 1992). It is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from service providers in organizations. Another author define customer satisfaction s "definitions of consumer satisfaction relate to a specific transaction (the difference between predicted service and perceived service) in contrast with "attitudes", which are more enduring and less situational-oriented," (Lewis, 1993).

Regarding the relationship between customer satisfaction and service quality, Oliver (1993) first suggested that service quality would be antecedent to customer satisfaction regardless of whether these constructs were cumulative or transaction-specific.

Quality is generally regarded as being a key factor in the creation of worth and in influencing customer satisfaction. Hence, the telecommunication industry has to be strategically positioned to provide quality service to satisfy customer. To provide improved quality service, telecommunication companies need to investigate degree of customers" sensitivity and expectation towards service quality. Armed with such information, telecommunication outfits are then able to strategically focus service quality objectives and procedures to fit the market.

The formerly known "Ethiopian Telecommunications Corporation (ETC) "" is introduced in 1894, seventeen years after the invention of telephone technology in the world. ETC is state owned sole telecommunication service provider in Ethiopia. The Ethiopian government has decided to transform the telecommunication infrastructure and services to world class standard, considering them as a key lever to the development of Ethiopia.

Thus, Ethio Telecom (ET) is born out of ETC on December 2, 2011, in order to bring about a paradigm shift in the development of the telecom sector to support the steady growth of our country.

Currently, Ethio Telecom provide telecom service in the entire country on voice, internet, data, channels and value added services (VAS) with comprehensive plans in place to meet the requirements set out by the Ministry of Communications & Information Technology (MCIT) and peoples of Ethiopia.

One of the most basic types of customer service is call center. A large business will often devote an entire department to taking calls free of charge from customers who have needs or concerns about the business' service or product. The representatives who work at the call center will usually be the first people to hear about the customers' concerns and will either resolve the problem or contact the people who can. Company call centers are the

link between customers and the company, and how they handle customer concerns reflects on the company in a very important way.

Now a day's Call centers are the major channels of communication with the customers. Today's, call center industry is one of the most rapidly growing industries in the world. Call centers are providing a mix of services like customer support, technical support, sales and telemarketing, administrative support, customer relationship management, financial services, human resource management. In Ethiopia, call center industry is in infant stage relative to other countries who have call center services for example, in India call center Industry is a huge industry employing more than 330,000 people and is worth about £3.2 billion a year and growing at a very fast rate of around 25% per annum. Today, more than 500 companies of UK, USA and other developed countries are outsourcing their call center activities to India.

The formerly known Ethiopian Telecommunication Corporation started operator based call center service namely 997 and 998 through manually operated system serving by operators. The 997 call center service was open for all types of customer for any enquiry but mainly customer were calling for directory and bill information on other hand 998 call center deployed for helping customer to assist for communicating international call servicing as an exchange site. When the old ETC is transformed to ET in 2011 the call center service also changed its name to 994 and nature of service, system and work flow also changed.

Currently Ethio Telecom provide two types of call center services namely 994 and 980 in four different places by employing nearly 2315 staffs, both services are provided through online telephone supporting by IVR (interactive voice response). 994 call center is accessible to all service users of Ethio Telecom around the country and it's serving customer in five different languages specifically English, Amharic, Oromiffa, Tigrigna and Somali, whereas 980 call center is dedicated only for selected enterprise, VIP and Key account customers of the company and the customers are served in English and Amharic languages. 994 call center services work 24/7 to support customer enquiry by

providing full information about ET products and services, subscription requirements, billing and related enquires, activation of value added services, fault registration, status update and follow up but even if the support given by advisors of 980 and 994 are the same the working hour of 980 call center is from Monday to Saturday in office hours.

In Ethio telecom, call centers are trying to satisfying customers by reducing the overall cost of transaction and improving the quality of interaction with customers. But it's becoming difficult for call centers to make a balance between quality and efficiency while trying to achieve companies" objectives.

The major objective of this study, therefore, is to examine the impact of service quality dimensions on customer satisfaction in Ethio telecom call centers and to find out important dimensions of services having greater influence on customer satisfaction.

1.2 Statement of the problem

According to Kotler and Armstrong (2003), satisfying the needs of customers is the major priority to be considered if the company is to survive and prosper. However, many organizations seem to be far from satisfying the needs of their customers and as a result fail to be successful, while some organizations that constantly follow up the needs of their customers are observed to achieve their goals of bringing customer loyalty and boosting their revenue.

Customer satisfaction is a critical issue in the success of any business system. According to Potluri and Magnale (2010) customer satisfaction is the key to survival and the source of competitive advantage for organizations (Anderson, Fornell& Lehmann, 1994). Empirically, researches support the concept that there is a positive relationship between customers" satisfaction and financial performance (Rust &oliver, 1994; Anderson et al, 1994). However, the case in Ethio Telecom is the reverse to what the researchers found. Which means the organization is always profitable and has

excellent financial performance but customers are dissatisfied with most of its services. This is because Ethio Telecom is the sole telecommunication service provider and it has 100% market share with the highly growing telecom service demand in Ethiopia due to that whether the customers are satisfied or not with service quality of the company there is no choice for the customer to switch provider in to one of the competitors except staying unsatisfied.

It has been proven from past researches on service quality and customer satisfaction that customer satisfaction and service quality are related from their definitions to their relationships with other aspects in business. Some authors have agreed to the fact that service quality determines customer satisfaction. Parasuraman, A., Zeithaml, V. A. and Berry, L.L., (1985) in their study, proposed that when perceived service quality is high, then it will lead to increase in customer satisfaction.

Customer satisfaction is influenced by various factors. According to Andaleeb and Conway (2006) service quality is the main driving factor for satisfaction of customer in service sectors. Therefore a firm should concentrate on the improvement of service quality and charge appropriate fair price in order to satisfy its customers who would ultimately help the firm to retain its customers (Gusfafsson, 2005). Telecom sector like other sectors is not exception to the rule. Zeithaml, and Bittner (2006) found satisfied customers of telecom sector have high extent of usage and intentions to repurchase in future like in the other sector. Besides, Kim (2004) found that call quality, value added services and customer support play a significant role in building customer satisfaction for telecom service subscribers and they tend to keep using current service as the level of the customer satisfaction is high that leads to customer loyalty.

Call center service is one way of online customer support free of charge which is provided by Ethio Telecom for its service users throughout the country. Since call center is serving as a bridge between the company and its customers the service given by the call center have to maintain the service quality expected by the customer in order to get customer satisfaction.

A central challenge in designing and managing a service operation in general, and telephone-based services in particular, is to achieve a desired balance between operational efficiency and service quality to provide a desired customer satisfaction.

There are a number of complaints on the service delivery system of Ethio Telecom call center service. A Number of reasons are behind these customer discontents. Whatever the reasons may be, once the customer is dissatisfied, it would be very difficult to gain their trust. In this regard, a research should be carried out to urge a major reform, to assesses the root causes of the problem and get the problem rectified.

According to customer satisfaction survey on call center service made by Ethio telecom customer service department which is taken for two month of duration from November 1, 2019 to December 31, 2019 by participating 1.4 million customers 434,232 manual rating which is filled by customers without contacting advisors immediately after the survey and 777,049 automatic rating which is filled by customers after contacting advisors before the survey on two parameters satisfaction and willingness to help for manual survey and three parameters for satisfaction, willingness to help and accessibility for automatic survey the finding for satisfaction on the call center services is 60.83% from automatic survey and 69.62% for manual survey. From the finding it be can see the huge gap which is 30.38% of customers of the call center are dissatisfied with the service quality of the center. This shows the satisfaction level of customers on call center services are far from the target which is 100%, expected by customers and the companies too.

Even if the survey give us some clue on the overall level of customer satisfaction on the call center it didn't incorporate service quality dimensions or use other models in order to see the effect of service quality on customer satisfaction and which quality parameter have major influence. But, only show us general comment of customers towards the

service. The study attempted to look in to the overall service quality of call center services and customer satisfaction level in Ethio telecom call center by using service quality dimensions which has not been done by the company or other researchers as well in this specific area. Therefore, the main interest of this study was to measure the perception of customers concerning a service provided by call center and find out whether Ethio Telecom has met the perception of its customers under all the dimensions of service quality.

1.2.1 Research Question

The main research question of the study is:

- What is the overall satisfaction of customers with the call center service?
- In which quality dimension is the service quality gap higher in call center services of Ethio telecom provided to customers?
- What is the effect of service quality dimensions on customer satisfaction?
- What is the dominant service quality dimension that has a strong relation with customer satisfaction?

1.3 Objectives of the Study

1.3. 1 General Objective of the Study

General objective of the study is to examine effect of service quality on customer satisfaction in Ethio-Telecom's Call Center.

1.3.2 Specific Objectives of the Study

- To examine the overall satisfaction level of the customer.
- To examine which dimension have the higher quality gap.

- To examine the relationship between service quality dimensions and customer satisfaction.
- Identifying the dominant dimension of service quality that drives customers" perceived service quality in call center.

1.4 Significance of the Study

Even if there are few documents about the service quality and customer satisfaction with regard to Ethio Telecom call center service, there are no previous well documented studies on service quality and its subsequent effect on customer satisfaction with regard to the call center service. This research, therefore, plays a role in filling the research gap related to service quality and customer satisfaction using a model that will describe the various factors of service delivery through five dimensions.

This study will serve as an input for researchers and other interested people in related topic and to acquire broader knowledge about the subject matter under the study. As a researcher I am also the beneficiary of this study by getting experience of how to conduct a research and the experience will help me in order to make other researches.

Other government and private service giving organizations who provide call center service of their own can use the study to get practical experience of customer expectation of service quality and their satisfaction level for call center service.

1.5 Scope of the Study

The purpose of this study is limited to measure the service quality and customer satisfaction towards telcom call center service by EthioTelecome.

Ethio Telecom is providing call center service for each and every one of its customer throughout the country. The study on service quality and customer satisfaction of Ethio Telecom call center services will be restricted only on some sample of customers focusing on Amharic language (IVR) users of the call center service.

Sample respondents will be selected randomly from ET"s call center database system on which telephone numbers of those customers who recently called to the center is recorded. Then, the data is going to be collected using the telephone survey method having a questioner which was developed using SERVPERF model.

Because of the broad nature of this area of study, accessing all the literature concerning customer satisfaction and service quality would be very voluminous.

Thus the literature will be limited around the relationship between customer satisfaction and service quality dimensions of the SERVPERF model.

1.6 Limitation of the study

Since Ethio Telecom is the only telecom service provider in the country, the customers are millions in numbers and there are different customer segmentation and the company give two types of call center service namely 994 for residential in five languages which are Amharic, English, Oromiffa, Tigirigna and Somali and 980 for enterprise customers. Because of the difficulty of accessing all service users of the company call center, the present study limited to the exploration and analysis of ET"s call center service customer satisfaction and service quality focusing on only some samples of Amharic IVR users who called during one week. Thus the findings of the study give some picture of the quality of the call center service provided by the company and it can contribute to further study on quality of the call center service and its impact on customer satisfaction.

1.7 Definition of Terms

1.7.1 Conceptual Definition of Terms

- ✓ Service quality: the degree and direction of discrepancy between the consumers" perceptions and expectations, or the extent to which a service meets or exceeds customer expectation.
- ✓ **Service**: service is an act or performance offered by one party to another. Although the process may be tied to a physical product, the performance is essentially intangible and does not normally result in ownership of any of the factors of production (Lovelock and wright, 1999).
- ✓ **Quality:** Some definitions of quality sited on (Mohamed, 2011) are:-Qualities totality of features and characteristics in a product or service that bear upon its ability to satisfy needs (Hardie& Walsh 1994). Quality is the extent to which the customers or users believe the product or service surpasses their needs and expectations (Gitlowetal, 1989).
- ✓ Service quality: is how well a delivered service level matches customer's expectation. (Parasuraman et al. 1988, 1991) as sited on Sang-Lin Han, (Bitneret al 1990) define service quality as "the consumers" overall impression of the relative inferiority/superiority of the organization and its services." As sited on Sang-Lin Han.
- ✓ **Customer perception**: is the actual level of service the customers received. Perceived service quality is a component of customer satisfaction.

- ✓ Customer satisfaction: is a person's feeling of pleasure or disappointment resulting from comparing a product's performance (outcome) in relation to his or her expectation (Kotler& Keller, 2006).
- ✓ **Reliability:** it's the ability to perform the promised service dependably and accurately (Parasuraman et al. 1988, 1991).
- ✓ **Responsiveness:** it's the willingness to help customers and provide prompt service (Parasuraman et al. 1988, 1991).
- ✓ **Assurance:** it's employee's knowledge and courtesy and their ability to inspire trust and confidence (Parasuraman et al. 1988, 1991).
- ✓ **Empathy:** it's being caring, individualized attention given to customers (Parasuraman et al. 1988, 1991).
- ✓ **Tangibility:** Appearance of physical facilities, equipments, personnel and written materials (Parasuraman et al. 1988, 1991).

1.7.2 Operational Definition of Terms

- ✓ **Customer** is the recipient of a services or idea obtained from a seller, vendor, or supplier for a monetary or other valuable consideration
- ✓ Call center- is a physical place where customer and other telephone calls are handled by an organization, usually with some amount of computer automation.

1.8 Organization of the Study

This paper is organized into five chapters. Chapter one is composed of background of the study, statement of the problem, research questions, objectives of the study, significance of the study, and organization of the study. The second chapter presents theoretical backgrounds on service quality and customer satisfaction, different model and frameworks are discussed with their strength and criticism followed by a review of previous studies particularly empirical literatures related to the SERVPERF dimension. Chapter three discuss about research methodologies. Chapter four is about result and discussion of the data and chapter five is conclusion and recommendation.

CHAPTER TWO

REVIEW OF RELATED LITERATRURE

2.1 Theoretical Related Literature Review

In theoretical review part how the concept are defined by different authors and what the relevant variables functions, importance, advantage and limitation related to the variables will be discussed.

2.1.1 Who are customers?

Smith (2003) defined Customer as any individual or group of individuals to whom a company supplies one or more products or services.

Customers could be any of a range of people or organizations; they could be:-

- External customers: individuals, end users or consumers of a product or service, these are outside an organization.
- Internal Customers: individuals, departments or sub groups within an organization.
- Corporate customers: organization, that an organization does business with, such
 as suppliers, distribution companies or transport providers. (These are also
 external customers, as they too are outside the organization) Arden and Edwards
 (2009).

2.1.2 What is Service?

Services are economic activities offered by one party to another. In exchange for money, time, and effort, service customers expect value from access to goods, labor, professional

skills, facilities, networks, and systems; but they do not normally take ownership of the physical elements involved (Lovelock &Wirtz, 2007).

A service occurs when an interaction is established between customers and service providers and/or the physical component of the service and/or the systems through which the service is delivered (Shahin&Janatyan, 2011).

Service is any act or performance that one party can offer to anther that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product (Kotler, 2006).

Service has different characteristics. Mudie&Pirrie (2006) in their book explained that service has four key characteristics. These are intangibility, perishability, variability (or heterogeneity) and inseparability. Arden and Edwards (2009) identified key four distinguishing characteristics of service with their implications.

1. Intangibility

Services cannot be generally be seen, felt, heard or smelled before being bought. The potential customer is unable to perceive the service before (and sometimes during and after) the service delivery.

Implications

Intangibility present problems in those customers may experience difficulty in knowing and understanding what is an offer before, and even after receipt of the service. The challenge for the service provider is to determine the extent of intangibility and the management action required to make the service more tangible example, via brochure to help customers understand the service.

2. Inseparability

Whereas goods are first produced, then stored, finally sold and consumed, services are first sold, then produced and consumed simultaneously. Service inseparability means that services cannot be separated from their providers whether the providers are people or machines.

Implications

The involvement of the customer in the production and delivery of service means that the service provider must exercise care in what is being produced and how it is produced. Proper selection and training customer contact personnel are necessary to ensure the delivery of quality.

3. Variability

An unavoidable consequence of simultaneous production and consumption is variability in performance of a service. The quality of the service may vary depending on who provides it as well as when, where and how it is provided. As such, service quality is difficult to control.

Implications

Reducing variability involves determining the causes, it may be due to unsuitable personality traits in an employee which are difficult to detect at the selection stage and increasing standardization of procedures may be required.

4. Perish ability

Services cannot be stored for later sales or use. If demand far exceeds supply, it cannot be met.

Implications

Fluctuation in demand characterizes service organization and may pose problems where these fluctuations are unpredictable. Strategies need to be developed for producing a better match between supply and demand.

2.1.3 Customer Service

Customer service is defined as an organization's ability to constantly and consistently meet the needs and expectations of its customers. In other words, customer service is meeting the needs and desires of any customer. In the corporate world, the emphasis on customer service has been described as a marketing concept of business management. When an organization has adopted the marketing concept, it "moves" from a product orientation to a customer orientation. The foundation of the marketing concept is a business philosophy that leaves no doubt in the mind of every employee that customer satisfaction is primary importance (Kaliski, 2001).

Zeithaml and Bitner (2003) defined customer service as the service provided in support of a company's core products. Customer service is provided by various types of companies including manufacturing, IT companies and service companies. Customer service provided by companies most often includes answering questions, taking orders, dealing with billing issues, handling complaints, and perhaps scheduling maintenance or repairs. Customer service can occur on site, or it can occur over the phone or via internet. Many companies operate customer service call centers, often staffed around the clock. Quality customer service is essential to build customer relationships.

2.1.4 Service quality

Delivering quality service is considered an essential strategy for success and survival in today's competitive environment (Parasuraman, Zeitham& Berry, 1985).

According to Parasuraman, Zeitham& Berry (1985) Defining service quality is difficult than defining goods quality because of three characteristics of service – intangeblity,heterogenity& inseparability.

First most services are intangible because they are performance rather than objects. Most services cannot be counted, measured, inventoried, tested and verified in advance of sale to assure quality (Parasuraman, Zeitham& Berry, 1985).

Second services, especially those with high labor content, are heterogeneous; there performance often varies from producer to producer from customer to customer and form day to day. Consistency to behavior from service personnel (i.e. uniform quality) is difficult to assure

Because what firms intended to deliver may be entirely different from what the customer received (Boons and Bitner, 1981).

Third production and consumption of many services are inseparable Carmen and langeard as a consequence quality in service is not engineered at manufacturing plant and delivered intact to the customer (Parasuraman, Zeitham& Berry, 1985).

So examination of literature by Gronroos, (1982), and Lehtinen, (1982), and Lewis & Booms, (1983) on service quality suggests three underlining themes.

Service quality is more difficult for consumer to evaluate than good quality

Service quality perceptions result from a comparison of consumer expectations with
actual service performance

Quality evaluations are not made solely on the outcome of service; they also involve evaluations of the process of service delivery

Keeping in mind the previously mentioned case the following are some of the definitions formulated about service quality by different scholars.

Service quality is defined as "the difference between customer expectations and perceptions of service" or "as the customers' satisfaction or dissatisfaction formed by their experience of purchase and use of the service" (Gronroos, 1984 and Parasuraman et al.1988). Oliver (1993) reported that service quality is a casual antecedent of customer satisfaction, due to the fact that service quality is viewed at transactional level and satisfaction is viewed to be an attitude. Zeithaml et al. (1996) reported that the service quality divisions are related to overall service quality and or customer satisfaction. Fornell et al., (1996) expressed that satisfaction is a consequence of service quality. There are various classifications of the components of service quality in marketing science. Gronroos (1984) stated that "in service environments, customer satisfaction will be built on a combination of two kinds of quality aspects; technical and functional". Technical quality or quality of the output corresponds to traditional quality of control in manufacturing. It is a matter of properly producing the core benefit of the service. Functional quality or process quality is the way the service is delivered. Technical quality is related to what customer gets (transaction satisfaction); functional quality is related to how the customer gets the result of the interaction (relationship satisfaction). Lewis (1987) suggested that service quality can be classified as essential and subsidiary. Essential refers to the service offered and subsidiary includes factors such as accessibility, convenience of location, availability, timing and flexibility, as well as interactions with the service provider and other customers.

2.1.5 Service Quality Dimensions

In services marketing literature, service quality has been reported as a second order construct being composed of first order variables (Sachdev and Verma, 2004). Various authors have provided different conceptualizations over time.

The classification can also be the core (contractual) of the service, and the relational (customer- employee relationship) of the service. The core or the outcome quality, which refers to what is delivered and the relational or process quality, which refers to how it is delivered are the basic elements for most services. (Gronroos, 1984, McDougall and Levesque, 2000). McDougall and Levesque (2000) in their direct approach investigation on four service firms (dentist clinic, automobile shop, restaurant, and haircut salon) demonstrated that both core and relational service quality classes have significant impact on customer satisfaction. Parasuraman et al. (1988) identified five dimensions of service quality (SERVQUAL) that must be present in any service delivery. SERVQUAL helps to identify clearly the impact of quality dimensions on the development of customer perceptions and the resulting customer satisfaction. SERVQUAL include:

According to Har (2008), this dimension may differ from one industry to the other. In some it may be very important, in others it may not. Andaleeb and Conway (2006) observed that assurance may not be so important relative to other industries where the risk is higher and the outcome of using the service is uncertain.

They, concluded that in the health sector, for example, assurance is a very much important dimension to clients assessing a hospital or a surgeon for an operation. Empathy, according to Har (2008), is treating the customer as if he is unique and special. It is defined as the caring, individualized attention the firm provides its customers (Zeithaml et al, 2006). Like the other dimensions, the importance of this factor differs from industry to industry.

Empathy has been found to be more suitable and important in enhancing service quality in industries where building relationships with customers and clients ensures the firm's survival as opposed to "transaction marketing" (Andaleeb and Conway, 2006). Thus Har has argued that in quick service restaurant setting, the customer look for quick service and whether the queues at the counters are long and in that context empathy may not be so important. He however indicated that in fine dining restaurant, empathy may be

important to ensure customer loyalty as the server knows how the customer likes his or her food prepared (Har, 2008).

Reliability is about the organization keeping its word. It is defined as "the ability to perform the promised service dependably and accurately" or delivering on its promises" (Zeithaml et al, 2006). Responsiveness is the willingness to help and provide prompt service. This dimension is concerned with dealing with customer's requests, questions and complaints promptly and attentively.

A firm is known to be responsive if it takes time to communicate to its clients how long it would take to get answers or have their problems dealt with (Har, 2008). Tangibles is defined as the physical appearance of facilities, equipment, staff and written materials. Tangibles are used to convey images and to signal quality (Zeithaml et al 2006). Hayes (1997), states that some quality dimensions are generalized across many services, but some will apply only to specific type of services and it is necessary to understand quality dimensions to be able to develop measures to assess them.

2.1.6 Customer Satisfaction

Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under or over-fulfillment (Oliver 2010). Zeithaml and Bitner (2000) defined customer satisfaction as the customers" evaluation of a product or service in terms of whether that product or service has met their needs and expectations.

Customer satisfaction can also be defined as the "customer's response to the evaluation of the perceived discrepancy between prior expectation and the actual performance of the product as perceived after its consumption" (Tse and Wilton, 1998). Jamal and Nazer

(2002) cited argued that customer satisfaction is not only linked with the view of customers but also on their experience with the service delivery process.

Customer satisfaction as an important concept in marketing and has been used as a benchmark to measure the performance of companies (Manhasa and Takumashaba, 2015). Service quality can improve customer satisfaction and later on can encourage customer positive desires. High quality service can drive positive customer desires, and vice versa (Su, 2011). Kotler and Amstrong (2012) stated that customer satisfaction is the level of one's feelings after comparing products performance that gets along with his expectations. Satisfaction or dissatisfaction of consumers is a response to the evaluation of discrepancy or disconfirmation perceived between previous expectations and actual product performance that is felt after use.

Holbrook (1994) suggests that customer satisfaction is one of the goals of marketing acti In accord with Holbrook"s suggestion, Kotler&Amstrong (2003) explain that customer satisfaction is an essential element in marketing, or a fundamental concern.

Holbrook (199) explained that although some studies interpreted service quality perceptions as an outcome of satisfaction, recent studies have characterized service quality as an antecedent of satisfaction. We except the position that customers can evaluate a service (be satisfied or dissatisfied) only after they perceive it. Many authors who studied the relationship between perceived service quality and customer satisfaction have shown that service quality determines customer satisfaction. Anderson et al (1994) believes that the concept of service should be approached from a customer perspective. It is the customer's total perception of the outcome, which is "the service". It forms the perception of quality and determines whether a particular customer is satisfied or not. Customers have different values and different grounds for assessment; they may perceive one and the same service in different ways.

Therefore a company must first find out the level of satisfaction of its current customers to improve its customer satisfaction. One common way of measuring satisfaction is to ask customers first to identify what factors are important in satisfying them and then to

evaluate the performance of a service provider and its competitors on these factors. Many firms use a five point scale to measure customer satisfaction, with the following format; 1= very dissatisfied, 2=somewhat dissatisfied, 3=neutral, 4= somewhat satisfied 5=very satisfied.

The result of the satisfaction surveys can be used to estimate the number of loyal customers a firm has as well as how many are at risk defecting Lovelock and Writz (2004).

2.1.7 Customer Expectations and Perception

Expectations are formed prior to usage of the service and perceptions are the customer's evaluation of the service. After the service has been consumed, customers compare the perceived service with the expected service and if the perceived service meets or exceeds the expected service, the customer is satisfied. Satisfaction = perception - expectations.(Mudie and CTTAM, 1993).

2.1.7.1 Customer Expectation

Service quality is determined by comparing customer's expectation and perception. Before the process of service delivery starts, we should know what customers expect to receive. Expectations are usually formed prior to usage of a service but may also occur where a customer is actively involved in the delivery of a service. They reflect inclinations or beliefs as to what will or should happen (Mudie&Pirrie, 2006). Past literatures define expectations as desires and wants of customers. It refers to what the customers think a company should provide. Customers might expect to be treated in a particular way unconsciously when they are entering into a transaction (Timm, 2001). They have their own set of expectations for different transactions. Specially consultancy service customers clearly define their expectation and select organizations that deliver the expected service.

2.1.7.2 Customer Perceptions

To analyze service quality customer expectation only is not enough. Assessing customer perception is necessary. Most literatures in the past stated that evaluation of service quality should consider both expectation and perception. Customers perceive service quality differently. They have their own standards based on their prior experience.

A specific service that is considered as high quality service by one customer may be perceived as low quality by other. Perceptions can be developed during a service, but invariably materialize after usage (Mudie&Pirrie, 2006). If their expectations are met, service quality will be regarded as satisfactory or good; otherwise, it will be regarded as unsatisfactory, bad, poor or deficient. When customers perception exceeds their expectations, the firm would be commented as excellent and the chance of turning customers into repeat customers would increase (Timm, 2001).

2.1.7.2.1 How Expectations are formed

Customers" expectations about what constitutes good service vary from one business to another. Expectations are also likely to vary in relation to differently positioned service providers in the same industry. People's expectation about services tend to be strongly influenced by their own prior experience as customers with a particular service providers, with competing services in the same industry, or with related services in different industries. If they have no prior experience, customer may base their pre-purchase expectation on word-of—mouth comments, news, and firm's own marketing efforts.

Expectations change over time, influenced by both suppliers controlled factors such as advertising, pricing, new technologies, and service innovation, as well as social trends, advocacy by consumer organizations, and increased access to information through the media and the internet. (Lovelock and Wirtz, 2004)

2.1.7.2.2 The Components of Customer Expectations

According to Lovelock and Wirtz (2004), Customer expectation embrace several elements, including desired service, adequate service, predicted service and a zone of tolerance that falls between the desired and adequate service levels.

- 1. Desired and Adequate service levels: the type of service customers hope to receive is termed as DESIRED SERVICE. It is a ""whished-for"" level; a combination of what customers believe can and should be delivered in the context of the personal needs. However, most customer are realistic and understand that companies can't deliver the desired level of service; hence, they also have a threshold level of expectations termed ADEQUATE SERVICE, which is defined as the minimum level of service customers will accept without being dissatisfied. The levels of both desired and adequate service expectations may reflect explicit and implicit promises by the provider, word of mouth comments, and the customer's past experience, if any, with the organization. Among the factors that set the expectations are situational factors affecting service performance, and the level of service, that might be anticipated from alternative providers?
- 2. Predicted Service Value: the level of service that customer anticipates receiving is known as predicted service, which directly affects how they define "adequate service" on the occasion. If good service is predicted, the adequate level will be higher than if poor service is predicted. Customer prediction of service may be situation specific.
- 3. Zone of tolerance:-the inherent nature of services makes consistent service delivery difficult across employee from one day to another. The extent to which customers are willing to accept this variation is called the zone of tolerance. A performance that falls below the adequate service level will cause frustration and dissatisfaction, whereas, one that exceeds the desired level will both please and surprise customers. Another way of looking the zone of tolerance is to think

of it as a range of service within which customer's don't pay explicit attention to service performance. When service falls outside this range, customer will react either positively or negatively.

2.1.7.2.3 How Confirmation or Disconfirmation of Expectations Relate to Satisfaction

The term quality and satisfaction sometimes used interchangeably, however, some researchers believe that the perceived service quality is one component of customer satisfaction, which also reflect price or quality tradeoffs, as well as personal and situational factors.

Satisfaction can be defined as an attitude like judgment following a purchase act or a series of consumer product interactions. Most of studies are based on the theory that the confirmation or disconfirmation of pre-consumption expectation is the essential determinants of satisfaction. This means that customers have some certain services standard in mind (their expectation) prior to their consumption, observe service performance and compare it to their standards and then form satisfaction judgments based on comparison. The resulting judgment is labeled negative disconfirmation if the service is worse than expected, and some simple confirmation if as expected. When there is substantial positive disconfirmation, along with pleasure and element of surprise, customers are likely to be delighted. (Lovelock and Wirtz 2004)

2.1.8 Service Quality and Customer Satisfaction

During past few decades the interest of academics and researchers has been increased to measure the relationship between service quality and customer satisfaction. Both customer satisfaction and service quality are considered as extensive and vast subjects of research and many studies related to customer satisfaction are conducted in the area of service settings (Cadotte, Woodruff and Jenkins, 1980).

In marketing theory, the consumer satisfaction category has the main position. It is based on the premise that the profit is made through the process of satisfaction of consumers" demands (Dubrovski, 2001). A further debate has considered whether service quality is a cause of customer satisfaction (Cronin and Taylor, 1992), (Parasuraman et al., 1985). It then helps to identify a link between both constructs.

The increased level of customer satisfaction, decreases the chances that customers will be pointing the flaws in the quality (Anderson et al., 1997). In service settings it would offer a better perspective of the relative importance of service quality determinants by developing more comprehensive models of the drivers of customer satisfaction (Anderson et al., 1997). A great similarity between the customer satisfaction and service quality is observed, however researchers are careful to say that these two are different concepts (Spreng and Singh, 1993; Oliva, Oliver, and MacMillan, 1992).

In academics both constructs are recognized as distinct and independent (Oliver, 1980). Whereas a wide literature studies shows that both concepts are distinct conceptually but also are closely related to each other (Parasuraman et al., 1994; Shemwell et al., 1998) and any increase in one (quality) leads to increase in another (satisfaction) (Sureshchandar et al., 2002). However there are number of variations found in literature between service quality and customer satisfaction. Cronin and Taylor, 1994; Boulten and Drew 1991 stated that Satisfaction is customer decision after an experience while quality is not.

According to Cronin and Taylor (1992) it is important to have this distinction between the two concept for managers and academics, as there is a greater need to understand either the firms objective is to perform in a way that satisfies the customers or they should strive to provide maximum level of service quality perceived by its customers.

There are researchers like Hurley and Estelami (1998) who states that service quality and satisfaction are distinct constructs, and there is a causal relationship between the two, and the impression about the quality of service influence emotions related to satisfaction

which, in turn, affect future purchase behavior. Also customer satisfaction is viewed as the overall assessment of the service provider (Anderson et al., 1997).

The literature related to service quality and satisfaction has emphasized that customers compare the performance of product and services on some standards (Spreng&Mackoy, 1996). Also the quality of service as perceived by the customers is considered as an important factor that affects the level of satisfaction.

Due to its relative importance in the service context it became a wide debatable topic and focus of research for academics.

Literature revealed that the difference between perceived service quality and satisfaction is due to the use of different standards of comparison (Zeithaml et al., 1993; Parasuraman et al., 1988). Different authors stated that the standard of comparison to form satisfaction depends on customer feelings regarding what will come out (predictive expectations) where perceived service quality defines what customers believe that a firm should deliver, also it is a result of comparing the performance (Spreng&Mackoy, 1996).

Essentially, customer satisfaction is the sense that customers get when they experience service that fulfills or surpasses their expectation. Primarily in marketing, satisfaction is defined as the global evaluation of relationship fulfillment by a firm (Dwyer and Oh, 1987) or the positively affected state resulting from the assessment of a firm's working relationship (Farrelly and Quester, 2005). Satisfaction is also one of the most important elements to explain any type of relationship among participants (Sanzo et al., 2003) and a consumer's fulfillment response (Oliver, 1997). Generally, customer satisfaction is known as an outcome of service quality, which means that it is related to the quality of the products or services provided to the customer in a positive manner. The level of customer satisfaction is also believed to be enhanced, along with an increased level of perceived quality of the product or service. In particular, customer satisfaction is considered to be an intrinsic variable that explains returning customers and their post-

behaviors of purchasing products and services (Oliver, 1980; Lee, 2000; Szymanski, and Henard, 2001).

Since customer satisfaction has been considered to be based on the customer's experience on a particular service encounter, (Ekinci, 2004) it is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from service providers in organizations. Another author stated in his theory that: "definitions of consumer satisfaction relate to a specific transaction (the difference between predicted service and perceived service) in contrast with attitudes, which are more enduring and less situational-oriented," (Lewis, 2006).

2.1.9 Factors Affecting Service Quality and Customer Satisfaction

For marketers or service providers, achieving customer satisfaction is important because it is supposed to be an important motive of customer loyalty, repeated business (with customer) and positive word of mouth (Bearden and Teel, 1983). However quality is not the only factor that effects the customer satisfaction, there are other factors besides quality like Performance, Expectations, (Mohr, 1982) desires and price factor affect the customer perceptions and the overall satisfaction level. Where quality of service is a descendent of customer satisfaction as described by Cronin and Taylor (1992), Service quality is not the only factor that has direct impact on customer satisfaction.

Identification of other elements beside quality that effects the satisfaction is critical. The other factors as described by Woodruff & Albert (2002) are value, corporate reputation, and image and transaction satisfaction. On other hand factors that affect the service quality other than those of intangible nature like human interaction in service delivery, rest are of tangible nature, design and décor elements, the effect of atmospherics, employee appearance and appearance of equipment etc (Sureshchandar et al., 2002). A clear understanding of all these factors that affect the relationship between service

quality, and customer satisfaction results in overall performance of the firm and can help to ensure better implementation of resource that firm required putting in place.

2.1.10 Measuring Service Quality

Sachdev and Verma (2004), had stated that service quality by its very nature is an elusive, indistinct and abstract concept. Consumers do not easily articulate their requirement and also there are difficulties in delimiting and measuring the concept. As a result only a handful of researchers have operational zed the concept.

In the literature two perspectives of service quality measurement have been identified - internal and external perspectives. The internal perspective is defined as zero defect - doing it right the first time, or conformance to requirements (Garvin, 1988). The external perspective sees service quality in terms of customer perception, customer expectation, customer satisfaction, customer attitude and customer delight (Sachdev and Verma, 2004). The external perspective has become important because of increasing customer awareness, changing consumer tastes and growing consumer expectations (Sachdev and Verma, 2004) and it is the concern of this study.

As Curry and Herbert (1998) put it, quality is generally transparent when it is present, but easily recognized when it is absent. If service quality is to be the cornerstone of any organizations strategy, then there must be a means of measuring it.

Many different methods exist to measure, control and improve quality in various fields. It would be helpful if quality was an easily defined and unambiguous concept. Unfortunately, quality is hard to define and often difficult if not impossible to measure.

Service quality is viewed as a multi-dimensional concept. Consumers assess and evaluate a number of factors or dimensions. The fifth gap, in the Gaps Model of Service Quality gave rise to SERVQUAL, a self-administered questionnaire purported to be a generic measure of service quality (Parasuraman et al., 1988). Many literature and research have

been using this method as standardized instrument in various settings with only minor modification.

2.1.10.1 Soft and Hard Service Quality Measures

According to Christopher H. Lovelock and JochenWirtz (2004) Customer defined standards and measures of service quality can be grouped into two broad categories, **soft** and **hard**. Soft measures are those that cannot easily be observed and must be collected by talking to customers, employees or others. As noted by Zeithaml and Bitner(2003), ,,"Soft standards provide direction, guidance and feedback to employees on ways to achieve customer satisfaction and can be quantified by measuring customer perceptions and beliefs" by contrast, hard standards and measures relate to those characteristics and activities that can be counted, timed, or measured through audits. Such measures may include how many telephone calls were abandoned while the customer was on hold, how many minutes customers had to wait in line at a particular stage in the service delivery, the time required to complete a specific task, how many patients made a complete recovery following a specific type of operation, and how many orders were filled correctly.

Organizations that are known for excellent service make use of both soft and hard measures. These organizations are good at listening to both their customers and their customer contact employees. The larger the organization, the more important it is to create formulated feedback programs using a variety of professionally designed and implemented research procedures.

2.1.10.2 *The Gap Model*

If one accepts the view that quality entails consistently meeting or exceeding customers" expectations, the manager's task is to balance customer expectations and perceptions and to close any gaps between the two. A total of seven types of gaps are identified;

- I. The knowledge gap: is the difference between what service providers believe customers expect and customers" actual needs and expectation.
- II. The standard gap: is the difference between management's perception of customer expectations and the quality standards established for service delivery.
- III. The internal communication gap: is the difference between what the company's advertising and sales personnel think are the product's features, performance and service quality level and what the company actually able to deliver.
- IV. The perception gap: is the difference between what is, in fact, delivered and what customer's perceive they have received
- V. The interpretation gap: is the difference between what a service provider's communication offer to (in advance of service delivery promise and what a customer thinks was promised by these communications.
- VI. The delivery gap: the difference between specific delivery standard and the service provider's actual performance.
- VII. The service gap: the difference between what customers expect to receive and their perception of the service that's delivered.

Gaps at any point in service delivery can damage relationships with customer. The service gap is the most critical; hence, the ultimate goal in improving service quality is to close or narrow this gap as much as possible (Lovelock and Wirtz, 2004).

2.1.10.3 Suggestion for Closing Service Gaps

As Christopher H. Lovelock and JochenWirtz (2004) referred from (Zeithams et al, 1990) and summarized the following prescription for closing service gaps.

Gap 1 (knowledge gap) - Learn what customers expect

- Understand customer expectation through research, complaint analysis, customer panels.
- Increase direct interactions between managers and customers to improve understanding.
- Improve upward communication from contact personnel to management.
- Turn information and insights into action.

Gap 2 (the standard Gap).- establish the right service quality standards

- Ensure that top management displays ongoing commitment to quality as defined by customers.
- Set, communicate and reinforce customer oriented service quality standards for all work units.
- Train managers in the skills needed to lead employees to deliver quality service.
- Become receptive to new ways of doing business that overcomes barriers to delivering quality service.
- Standardize repetitive work tasks to ensure consistency and reliability.
- Establish clear service quality goals that are challenging, realistic and explicitly designed to meet customer expectation.
- Ensure that employees understand and accept goals and priorities.

- Measure performance and provide regular feedback.
- Reward managers and employees for attaining quality goals.

Gap 3 (the delivery gap) - ensure the service performance meets standards

- Clarify employee roles.
- Ensure that all employees understand how their jobs contribute to customer satisfaction.
- Provide employees the technical training needed to perform their assigned tasks.
- Develop innovative recruitments and retention methods to attract the best people and build loyalty.
- Enhance performance by selecting the most appropriate and reliable technology and equipment.
- Teach employees about customers" expectations, perceptions and problems.
- Ensure that employees working at internal support jobs provide good service to customer contact personnel.

Gap 4 (The internal communication gap) - ensure that communication promises are realistic

- Seek inputs from operations personnel when new advertising programs are being created.
- Allow service providers to preview adverts before customers are exposed to them.
- Ensure that consistent standards of service are delivered across multiple locations.
- Manage customers" expectations by letting them know what is and are not possible and the reasons why?

2.1.10.4 SERVPERF

The SERVPERF model was carved out of SERVQUAL by Cronin and Taylor in 1992. SERVPERF directly measures the customer's perception of service performance and assumes that respondents automatically compare their perceptions of the service quality levels with their expectations of those services. Cronin and Taylor argued that only perception was sufficient for measuring service quality and therefore expectations should not be included as suggested by SERVQUAL (Baumann et al, 2007). Instead of measuring the quality of service via the difference between the perception and expectation of customers as in SERVQUAL, SERVPERF operationalizes on the perceived performance and did not assess the gap scores as expectation does not exist in the model. Thus, it is performance-only measure of service quality.

The model adopts the five dimensions of SERVQUAL and the 22 item scale is used in measuring service quality. In the SERVPERF model, the results demonstrated that it had more predictive power on the overall service quality judgment than SERVQUAL (Cronin and Taylor 1994). "The SERVPERF scale is found to be superior not only as the efficient scale but also more efficient in reducing the number of items to be measured by 50% (Hartline and Ferrell, 1996; Babakus and Boller, 1992; Bolton and Drew, 1991) "...". Many studies have been conducted by adopting the SERVPERF model.

Also, Wall and Payne(1973) note that when people are asked to indicate the "desired level" (expectations) of a service and the "existing level" (perceptions) of the service, there is a psychological constraint that people always tend to rate the former higher than the latter (E>P).

Babakus and Boller1992 have found that service quality, as measured in the SERVQUAL scale, relies more significantly on the perception score than on the expectation score. (Cited on H.VasanthaKumari) Due to the above mentioned facts the researcher also preferred to use SERVPERV model to undertake the study.

2.1.10.5 SERVQUAL

SERVQUAL was created to measure service quality and is based on the view that the customer's assessment of service quality is paramount. It is operationalized in terms of the relationship between expectations and outcomes (Gilmore, 2003, pp40)

It is widely accepted that customers compare the service they expect with perceptions of the service they receive in evaluating service quality (Grönroos, 1982); (Parasuraman*et al.*, 1985) as cited on (Gilmore and Carson, 1996)

SERVQUAL is a concise multiple item scale with good reliability and validity that retailers can use to better understand the service expectations and perception of consumer and, as a result, improve service. The instrument has been designed to be applicable across a broad spectrum of services. As such, it provides skeleton through its expectation/perceptions format encompassing statements for each of the five service quality dimensions(Parasuraman,Zeithaml and Berry, 1988)

The exploratory research conducted by (Parasuraman, Zeithaml and Berry, 1985) reviled that the criteria used by consumers in assessing service quality fit 10 potentially overlapping dimensions. These dimensions where, tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/knowing customers and access (Parasuraman, Zeithamland Berry,1988)as cited on(Philip and Hazlett,1996)

The original construct was found to be overly complex, subjective and statistically unreliable, and as a result it was simplified and modified to the five dimensional model which is measured on five (5) aspects, namely - reliability, assurance, tangibility, empathy and responsiveness (RATER). (McCabe et al, 2007). Service quality is therefore a function of pre -purchase customers" expectations perceived process quality and perceived output quality (McCabe et al, 2007). Parasuraman et al (1985), conceptualized

service quality as the gap between customers" expectation and their perception of the service experience. Based on their conceptualization of service quality, the original instrument was made up of 22-items. The data on these items were grouped under the five dimensions of RATER (Nyeck et al, 2002).

2.1.10.6 Criticism of the Model

The service quality gaps models can be criticized on both methodological and conceptual grounds (Carman, 1990; Cronin and Taylor, 1992; Tse, 1993; Brown et al., 1993). Cronin and Taylor (1992) proposed that there is a lack of evidence supporting the expectation-performance gap as a predictive measure of service quality. They believe that assessing customer perception is enough for evaluating service quality and it is unnecessary to measure customer expectations in service quality research. They oppose evaluating service quality by calculating the difference between customer perceptions and customer expectations (P-E). Indeed, they define Service Quality as a customer Perception (of Performance only) without expectations. They proposed that the performance based measurement approach (SERVPERF) is more in conformance with the existing attitude and customer satisfaction literature and is superior to the perception-expectation gap approach.

Tse (1993) questioned the validity of perception-expectation gap with conceptual and operational problem in the definition of the expectation. While perception (P) is definable and measurable in a straightforward manner as the customer belief about service is experienced, expectation (E) is subject to multiple interpretation by different authors/researchers (e.g. Babakus and Inhofe, 1991; Dabholkar et al., 2000; Gronroose, 1990; Teas, 1993, 1994). They believe that expectation concept is doubtful and conceptualized owing to there are plenty definition for the term expectation in service quality literature where it is defined as "normative expectation" with concern to organization constraints such as human resource or facilities and equipment limitation or "ideal expectation" without any concern to limitation and constraint, it means what the customer would

expect from excellent service. Initially, Parasuramanet al (1985, 1988) defined expectation as "desire or wants of customer"; what they feel a service provider should offer rather than would offer (Jain and Gupta, 2004). The other criticizer claims that SERVQUAL is not applicable to a wide variety of service contexts as the common tool for evaluating service quality (Carman, 1990). The above explanation provides a critical discussion of the traditional models, but it is not convincing and it seems that this model still needs to be further developed. In the following, other shortcomings in gaps models are addressed and a model is developed based on the discussion.

Considering the critical discussion, more gaps are added to the previous models. The new components which are proposed to be fitted in to the model include:-

- Ideal service standards;
- Service quality strategy and policy;
- Translation of service quality strategy and policy into service quality specifications and service design;
- Management perceptions of customer perception; and
- Employee perceptions of customer perception.

Although the elements listed in SERVQUAL model have been proven to be the main method for evaluating service quality from the consumer's perspective (Brown et al., 1993), drawbacks in using SERVQUAL in measuring service quality has been the reason that the SERVPERF scale was proposed by Cronin & Taylor (1992, cited in Jain et al. (2004, p. 25-37) after they called into question the conceptual basis of the SERVQUAL, having found it, led to confusion with service satisfaction (Jain et al., 2004, p. 25-37). These researchers discarded the 'E' for 'expectation' claiming instead that 'P' for 'performance' alone should be used. They meant that higher perceived performance entails higher quality service. Unfortunately, during this past century, customers have changed their behaviors in ways that do not suit organizational behavior.

The SERVQUAL has come under some criticisms. Francis Buttle (1996) has criticized the SERVQUAL on a number of theoretical and operational bases. He noted that the five dimensions of RATER are not universals and that the model fails to draw on established economic, statistical and psychological theory (Buttle, 1996). Luis Lages and Joana Fernandes (2005), in their critique of the SERVQUAL, suggest that consumer's final decisions are taken at a higher level of abstraction. Consequently, they proposed the Service Personal Values (SERPVAL) model. Similar to the SERVQUAL, the SERPVAL is also a multidimensional construct. It presents three dimensions of service value to peaceful life, social recognition and social integration. All three SERPVAL dimensions are associated with customer or client satisfaction. While service value to social integration is related only with loyalty, service value to peaceful life is associated with both loyalty and patronage intents (Lages and Fernandes, 2005). Some research studies do not support the five-factor structure of SERVQUAL put forward by Parasuraman et al (1988), and administering expectation items is also considered unnecessary (Carman, 1990; Babakus and Boller, 1992). In addition, Cronin and Taylor (1992) have developed their own performance-based measure, the SERVPERF. In fact, the SERVPERF scale is the un weighted perceptions components of SERVQUAL, which consists of 22 perception items thus excluding any consideration of expectations. In their empirical work in four industries, Cronin and Taylor (1992) found that un weighted SERVPERF measure (performance-only) performs better than any other measure of service quality, and that it has the ability to provide more accurate service quality score than SERVQUAL. They argue that current performance best reflects a customer's perception of service quality, and that expectations are not part of this concept. Despite the criticisms, SERVQUAL has been used to measure service quality in a variety of contexts, including hospitals (Bakar et al., 2008), universities (Galloway, 1998), police services (Donnely et al., 2006), banks (Kangis and Passa, 1997), travel agencies (Luk, 1997) and public utilities (Babakus and Boller, 1992). The wide array of application of such an instrument as SERVQUAL spells confidence in its utilization as a technique for measuring service quality in various business sectors and service industries. Although

some studies did fail to support its structure, Parasuraman et al (1993) defended the use of the different dimensions, based on conceptual and practical grounds. Parasuraman et al. (1988) noted that even if it may be necessary to reword or modify some of the items, yet the SERVQUAL scale is applicable in a wide range of business services. However, Parasuraman et al. (1991) cautioned that the addition/deletion of items and/or dimensions may result in the loss of the scale's integrity.

In their arguments in support of the SERVQUAL, Nyeck et al (2002), suggest that SERVQUAL remains the most complete attempt to conceptualize and measure service quality. They contend that its main benefit is the ability of researchers to examine numerous service industries such as healthcare, banking, financial services and education. The fact that SERVQUAL has critics does not render it moot. Rather the criticisms may well have to do with how researchers use the tool.

2.2 Empirical Review

Generally the context in which the presented findings of the studies that have been conducted by these researchers differ from that of Ethiopia where technology is limited, awareness and knowledge seems to be low compared to developed world in which most studies have been conducted. Such important aspect, necessitate for investigating on the relationship exists between customer satisfaction and service quality provided by Ethio telecom call center service.

2.2.1 The Relationship between Service Quality and Customer Satisfaction

The relationship between customer satisfaction and service quality has received a good deal of attention in the literature Bolton and Drew; (1994). Defined service quality and customer satisfaction as "service quality is a global judgment, or attitude, relating to the superiority of the service, whereas satisfaction is related to a specific transaction"

Satisfaction is a "post consumption experience which compares perceived quality with expected quality, whereas service quality refers to a global evaluation of a firm's service delivery system" (Parasuraman et al, 1988).

The key difference between service quality and customer satisfaction is that quality relates to managerial delivery of the service while satisfaction reflects customers' experiences with that service. They argue that quality improvements that are not based on customer needs will not lead to improved customer satisfaction (Iacobucci et al, 1995).

Bolton and Drew (1994) pointed out "customer satisfaction depends on pre-existing or contemporaneous attitudes about service quality".

There is also a lot of argument regarding whether customer satisfaction is the antecedent of service quality or the outcome of service quality. "Initially scholars take the position that satisfaction is an antecedent of service quality since to reach an overall attitude (service quality) implies an accumulation of satisfactory encounters" (Bolton & Drew, 1991). However, other scholars take the opposite view that service quality is the antecedent of customer satisfaction (Cronin & Taylor, 1992); (Ekinci, 2004); (Rust & Oliver, 1994); as cited on (Harr, 2008).

Empirical research by Cronin & Taylor, (1992) "showed that service quality has a significant effect on customer satisfaction." Similarly, recent studies by González & Brea, (2005); &Ekinci(2004) as cited on (Harr, 2008) using recursive structural models provided empirical support that service quality results in customer satisfaction. Customer satisfaction "is a broader concept than service quality which focuses specifically on dimensions of service (Zeithamlet al.2006).

2.2.2 Tangibility and Customer Satisfaction

Sumit A., Dr. Deepack S. Prof. K.S (2013) in their studies of impact of service quality dimensions towards customer satisfaction in Indian call centers, found that tangibility have least impact on customer satisfaction in case of Indian call centers as there is very less visual involved in call center services. In contrast from the study by Francis K. (2011) title, assessment and analysis of customer satisfaction with service delivery of MTN, Tangibility was found to be the best dimension. The tangibility dimension of MTN deal with the physical nature of MTN both the infrastructure and the appearance of the employees of the company, in this study, state of art equipment, professionalism and appearance of employees, visually appealing of physical facilities and modernization of equipment for service delivery were considered. All the items used for the discussion of the tangibility for MTN have a mean above 4.0. This shows that, in terms of tangible assets of the company, MTN is doing better of its service quality delivery. Averagely, the tangibility dimension had an average of 4.20, representing 84 percent. A mean of 4.20 indicate that, customers agreed to the assertion that, the service quality delivery of MTN is satisfy which results in a quality delivery of an appreciable 84 percent.

Anantha R. A and Dr. Abdul G. A (2013) in their study of service quality and customer satisfaction in the cellular telecommunication service provider in Malaysia found that by using pearson correlation the weakest correlation was found to be between empathy and customer satisfaction. Other study by Thien P. N. (2014) in his thesis of Measuring Customer Satisfaction on Perceived Service Quality of Mobile Telecommunications Service when the evaluation is made in importance level of each dimension on the scale from least important to most important found that least important factor is tangibles which indicates for the appearance of Bouygues's representative stores and their infrastructures. This result might derive from the fact that customers only come to the representative stores when they take SIM cards and sign the contracts with the operator in the beginning. However, during the utilization of mobile phone services, customers do not frequently come to the stores, even the malfunctions happen with their network, they tend to call for the service operator rather than coming to the stores. The respondents were also asked to rate their expectation and their perception of the service quality of Bouygues Telecom on the scale from 1 (totally disagree) to 5 (totally agree) to show level

of customer satisfaction on each dimensions. In this case, tangibles are the appearance of Bouygues Telecom's representative stores, its infrastructure, as well as the appearance of its employees. Based on the result, of 5 dimensions, tangibles gain the least average expectation score but it has the second highest perception score which indicates that Bouygues Telecom is doing a great job in maintaining its physical appearances.

H1: There is a significant relationship between tangibility and customer satisfaction.

2.2.3 Reliability and Customer Satisfaction

Sumit A., Dr. Deepack S. Prof. K.S (2013) in their studies of impact of service quality dimensions towards customer satisfaction in Indian call centers, found that reliability is the most important dimensions of service quality which have the greater impact on customer satisfaction

In contrast with the above finding, the study by Francis K. (2011) title, assessment and analysis of customer satisfaction with service delivery of MTN, reliability were found not to be of its best dimensions. Reliability deals with the ability of the company to provide services as schedule time, keeping of accurate records of customers, sincere interest in solving problems of customers and the customer's satisfaction with the quality of service provided. On the reliability dimension, most of the items were not agreed upon by the customers of MTN. Clearly it indicates that, MTN is not doing enough to increase its reliability of service provision to its customers. On the item "MTN employees keep accurate records of customers" was found to be consistently disagreed among the customers. This might be attributing to the fact that, as a telecommunication company keeping records of customers to large extent becomes sometimes costly since such information will not be useful in the day to day operation of the company. The items "MTN provides services at scheduled times as promised", "When you have a problem MTN shows a sincere interest in solving it" and "Customers are satisfied with the quality of service provided by MTN" were all mainly record to have dominated by uncertain by the respondents. Perhaps this might also be attributing to the fact that, customer might not be able to measure these items with a comparison to other service providers.

It was found that, customers agreed on insist on error-free records and the performing of the services right the first time. All these record a mean of more than 4.0 and show a consistency of a general agreement among respondents. In all customer measure for the reliability shows that, MTN provide a service quality level of 3.68 representing 73.6%

Anantha R. A and Dr. Abdul G. A (2013) in their study of service quality and customer satisfaction in the cellular telecommunication service provider in Malaysia found that by using Pearson correlation reliability and customer satisfaction have positive moderate correlation. In addition Thien P. N. (2014) in his thesis of Measuring Customer Satisfaction on Perceived Service Quality of Mobile Telecommunications Service found that, when the evaluation is made in importance level of each dimension on the scale from least important to most important reliability is the most important dimensions from all. With related to customer perception and expectation which represents the capacity of a company can provide the services as it promised. It means the company can provide the products which correspond to its advertising; its delivery service arrives punctually and so on for instance, the overall customers" perception regarding reliability is undersatisfied.

H2: There is a significant relationship between reliability and customer satisfaction.

2.2.4 Responsiveness and Customer Satisfaction

Sumit A., Dr. Deepack S. Prof. K.S (2013) in their studies of impact of service quality dimensions towards customer satisfaction in Indian call centers, found that responsiveness is the most important dimensions of service quality which have the stronger impact on customer satisfaction Missana E.G (2015) in his dissertation on customer satisfaction in service quality of TENESCO emergency call center determines that there was no multi-collinear relationship between customer satisfaction and responsiveness. Likewise, the study found that from the collected questionnaires filled by

70 customers, there is an absolute strong positive relation between satisfaction and responsiveness, which reveals that the very crucial service quality variable which marks the image of TANESCO to majority of esteemed customers is responsiveness.

The study by Francis K. (2011) title, assessment and analysis of customer satisfaction with service delivery of MTN, found that the ability of the company to deal with complaints of clients, promptness of services, willingness to offer help to clients and made known when and where exactly services will be executed formed the responsiveness dimensions of a company. As clearly shown in the finding, customers were not receiving services as thought to be, out of all the service items provided, with the exception of "Employees of MTN gives you prompt services" all the remaining items were scored below 4.0 indicating inconsistency in the extent of service provision from MTN. Customers indicate that, the services they have received from their service provider has an overall average for the responsiveness dimension to be 3.63, which constitute a service provision of 72.60 percent.

Anantha R. A and Dr. Abdul G. A (2013) in their study of service quality and customer satisfaction in the cellular telecommunication service provider in Malaysia found that by using Pearson correlation the same as reliability, responsiveness and customer satisfaction also have positive moderate correlation. Another study by Thien P. N. (2014) in his thesis of Measuring Customer Satisfaction on Perceived Service Quality of Mobile Telecommunications Service when the evaluation is made in importance level of each dimension on the scale from least important to most important found that responsiveness is the second most important dimensions from all. With related to customer perception and expectation the overall customers" perception regarding responsiveness is considered as the second importance by the most of respondents, it has the highest average expectation score among six dimensions.

H3: There is a significant relationship between responsiveness and customer satisfaction.

2.2.5 Empathy and Customer Satisfaction

Sumit A., Dr. Deepack S. Prof. K.S (2013) in their studies of impact of service quality dimensions towards customer satisfaction in Indian call centers, found that empathy is not the most important dimensions of service quality which has no much impact on customer satisfaction. Another study by Anantha R.A and Dr. Abdul G. A (2013) in their study of service quality and customer satisfaction in the cellular telecommunication service provider in Malaysia found that by using Pearson correlation the strongest correlation was between empathy and customer satisfaction.

Missana E.G (2015) in his study found that there were no multi-collinear relationship between customer satisfaction and variables empathy. Rather there was linear regression between customer satisfaction and services" empathy which showed the very strong positive (R=0.966) between what were predicted customer satisfactions and to what exactly is the confidence of customers on empathy from TANESCO. Therefore TANESCO should focus on training its employees on how to respond and serve customers that is customer care as the results revealed that as empathy increases the customer satisfaction increases and the vice versa is also true to customer satisfaction. This concludes that efforts made on improvement of empathy and responsiveness produced the desired results in winning the customers preferences and perceptions toward the TANESCO emergency call center services.

The study by Francis K. (2011) title, assessment and analysis of customer satisfaction with service delivery of MTN, Empathy is the ability to share another's feelings as one's own i.e. to be in the shoes of another", understanding the customers" needs as well as giving individual attention to customers. With regards to empathy, the finding depicts that customers of MTN hold the view that MTN actually has about 3.94 level of quality. This may be attributed to the MTN staff have the interest of their customers at heart by giving them individual attention, understanding the specific needs of customers and operating hours convenient to customers to satisfy them. Again as the competition within

the industry becomes very keen a lost customer means lost revenue and for that are more conscious of customers" needs.

H4: There is a significant relationship between empathy and customer satisfaction.

2.2.6 Assurance and Customer Satisfaction

Sumit A., Dr. Deepack S. Prof. K.S (2013) in their studies of impact of service quality dimensions towards customer satisfaction in Indian call centers, found that assurance is the most important dimensions of service quality which have the stronger impact on customer satisfaction

The study by Francis K. (2011) title, assessment and analysis of customer satisfaction with service delivery of MTN, This study assurance of service deal with the confidence instill in customers by employees of MTN, safeness of transaction, consistency of courteousness of staff and knowledgeable of staff to answer customers queries. The result indicates that, assurance dimension has a general agreement among the customers of the company. This reveals a better service delivery on this dimension to customers of MTN. It is found that, almost all the items received a consistent agreement of mean more than 4.0, resulting in an overall service provision of 4.15, constituting 83.00 percent of service delivery of MTN. followed by tangibility assurance is the second important service quality dimension according to the finding.

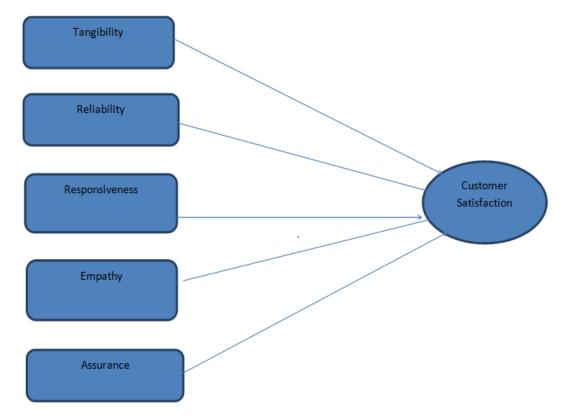
Anantha R. A and Dr. Abdul G. A (2013) in their study of service quality and customer satisfaction in the cellular telecommunication service provider in Malaysia found that by using Pearson correlation there was a significant positive relationship between assurance and customer satisfaction. Another study by Thien P. N. (2014) in his thesis of Measuring Customer Satisfaction on Perceived Service Quality of Mobile Telecommunications Service when the evaluation is made with related to customer perception and expectation customers are pretty satisfied with the overall assurance aspect of the company. It is

demonstrated by professional manner of sellers which is capable of creating beliefs, trust and confidence for customers.

2.3 Conceptual Framework

The general idea from the past literature is that there is a relationship between customer satisfaction and service quality; also that service quality could be evaluated with the use of five service quality dimensions and the most useable is the SERVPERF scale. Based on the literature presented above, the following conceptual framework of the study has been developed

Figure 2.1 conceptual formwork of the study



Source: Adapted from SERVPERF model

2.3.1 Customer Satisfaction

The scholarly and applied literature on service management refers to several concepts related to customers' reactions to a product or service. These are primarily 'customer satisfaction' and 'perceived service quality', but increasingly also 'customer experience' and 'customer engagement'.

At the most general level, perceived service quality and customer satisfaction are evaluation or appraisal variables that relate to customers' judgment about a product or service. Although research suggests that both customer satisfaction and perceived service quality are distinct constructs (Oliver, 1997; Taylor and Baker, 1994), and that there is a causal relationship between the two (Cronin and Taylor, 1992; Gotlieb et al., 1994; Spreng and Mackoy, 1996; Salini and Kenett, 2009), they have in some cases been used interchangeably (Iacobuci et al., 1994; Mittal et al., 1998; Oliver, 1997; Parasuraman et al., 1994; Taylor and Baker, 1994). However, some differences between the two concepts are acknowledged. Oliver (1997) argues as follows:

- Perceived service quality judgments are evaluations of specific cues or attributes, whereas satisfaction judgments are more global.
- Expectations of perceived service quality are based on perceptions of 'excellence', whereas satisfaction judgments include referents such as need and equity or fairness.
- Perceived service quality judgments are more cognitive, whereas satisfaction judgments are more affective and emotional reactions.

An additional aspect of conceptualizing customers' reactions to service is the time dimension. Lovelock and Wright (1999) define perceived service quality as 'customer's long-term, cognitive evaluations of a company's service delivery', and customer satisfaction as a 'short-term emotional reaction to a specific service performance'. They argue that satisfaction is by default experience-dependent, since customers evaluate their levels of satisfaction or dissatisfaction after each service encounter. In turn, this information is used to update customer perceptions on service quality. However, attitudes about service quality are not necessarily experience-dependent. They can also be based

on the word of mouth or advertising. Thus, it may seem that satisfaction determines quality, and not vice versa. Oliver's (1997) research on the direction of the causal relationship between perceived service quality and customer satisfaction adds a further layer of complexity by suggesting that the direction of influence of one variable over another depends on the level at which measurement is conducted. Oliver (1997) argues that at the single-transaction level there is a strong quality-affects-satisfaction relationship, while at the multiple-transaction level there is a strong satisfaction-affects-quality relationship, because overall satisfaction judgments influence customers' attitudes about perceived service quality

2.3.2 Tangibles

This dimension is defined as the physical appearance of facilities, equipment, staff, and written materials. It translates to the restaurant's interiors, the appearance and condition of the cutlery, tableware, and uniform of the staff, the appearance and design of the menu, restaurant signage and advertisements (Zeithamal et al., 2006). Tangibles are used by firms to convey image and signal quality (Zeithaml et al., 2006).

2.3.3 Reliability

Reliability is defined as "the ability to perform the promised service dependably and accurately" or "delivering on its promises" (Zeithaml et al., 2006, p. 117). This dimension is critical as all customers want to deal with firms that keep their promises and this is generally implicitly communicated to the firm's customers. Some companies such as FedEx may make it an explicit service positioning.

2.3.4 Responsiveness

Responsiveness "is the willingness to help customers and provide prompt service" (Zeithaml et al., 2006, p. 117). This dimension is concerned with dealing with the customer's requests, questions and complaints promptly and attentively. A firm is known to be responsive when it communicates to its customers how long it would take to get answers or have their problems dealt with. To be successful, companies need to look at responsiveness from the view point of the customer rather than the company's perspective (Zeithaml et al., 2006).

2.3.5 Empathy

Empathy is defined as the "caring, individualized attention the firm provides its customer (Zeithaml et al., 2006, p. 120). The customer is treated as if he is unique and special. There are several ways that empathy can be provided: knowing the customer's name, his preferences and his needs. Many small companies use this ability to provide customized services as a competitive advantage over the larger firms (Zeithaml et al., 2006). This dimension is also more suitable in industries where building relationships with customers ensures the firm's survival as opposed to "transaction marketing" (Andaleeb& Conway, 2006).

2.3.6 Assurance

Assurance is defined as "the employees' knowledge and courtesy and the service provider's ability to inspire trust and confidence" (Zeithaml et al., 2006, p. 119). According to Andaleeb and Conway (2006), assurance may not be so important relative to other industries where the risk is higher and the outcome of using the service is uncertain. Thus, for the medical and healthcare industry, assurance is an important dimension that customers look at in assessing a hospital or a surgeon for an operation. The trust and confidence may be represented in the personnel who link the customer to the organization (Zeithaml et al., 2006).

CHAPTER THREE

Methodology of the study

This chapter tries to cover the research design and methodology part of the study. The research type, the approach used the source of data and its method of collection, the sample design and other topic which has to be included in the methodology part are discussed here.

3.1 Research Approach

According to John, (2014) Research approaches are plans and procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation. The selection of a research approach is also based on the nature of the research problem or issue being addressed, the researchers' personal experiences, and the audiences for the study. There are three basic approaches to research; (a) qualitative (b) quantitative (c) mixed methods. According to Christensen, (1985) noted that quantitative survey is the most appropriate one to use if the purpose of an investigation is to describe the degree of relationship which exists between the variables.

The main aim of this study is to assess service quality and depict customer satisfaction among call center customers and to explore the relationship between customer satisfaction and service quality dimensions. Deductive approach will be applied to develop hypothesis based on what is theoretically known about the research concepts.

Accordingly this research will be conducted by using quantitative research approach hence, it will examine and measured the relationship between service quality and customer satisfaction in relation to Ethio telecoms call center service. Therefore; the quantitative method will be used by considering sample customers of the organization and questionnaires will be distribute.

3.2 Research Design

According to Singh, (2006), research design is essentially a statement of the object of the inquiry and the strategies for collecting the evidence, analyzing the evidences and reporting the findings.

There are different types of scientific research. Namely exploratory research, Descriptive research and Explanatory research (Bhattacherjee, 2012). Accordingly, this research will be conducted by using both descriptive and explanatory research and also different inferential statistics tools will be use to understand the relationship between the five dimensions of SERVQUAL and customer satisfaction and the impact this SERVQUAL dimensions have on customer satisfaction in Ethio telecoms call center section and the research will be involving the administration of a set of structured questions with predetermined response options to a large number of respondents.

To examine the relationship between customer satisfaction and service quality with the five dimensions SERVPERF model is going to be used.

3.3 Source of Data

There are two kinds of sources for data collection and these are primary and secondary sources of data. In this study both Primary and a secondary source is going to be used in soliciting information for the study. Primary data will be collected via communicating the study population through major tools i.e. questionnaire. and Secondary information will be collected from the Ethio telecom call center service manuals, previous studies, journals and articles conducted on customer satisfaction and other related titles, and unpublished materials of Ethio telecom call center service and web addresses and /or internet reports generated. And the customers' judgments will be used as the source of data for analysis. The data is going to be collected in the form of questioners. These

questioners will be analyzed and conclusions will drawn from the analysis about the level of service quality provided by the call center 994 call center Amharic IVR users and its customer satisfaction.

3.4 Sampling Design, Population and Sampling Technique

3.4.1 Sampling Design

There are two basic sampling techniques which are probability and non-probability sampling. This research will be conducted by using probability sampling which is proportional stratified sampling technique. The population of the study will be the customers among call center service Customers. The study also conducted purposive sampling technique to identify in which category that the customers are.

Deductive approach will be applied to develop hypothesis based on what is theoretically known about the research concepts. Both descriptive and explanatory research design is going to be used because descriptive research involves describing a problem, context or a situation of research variables and explanatory design enables to explain the relationship between service quality dimensions and customer satisfaction.

3.4.2 Target Population of the study

The target of this study will be on Ethio Telecom's 994 call center Amharic IVR users. On average there are around 1,713,351 customers who accessed the call center per week they will be divided in five languages by the system according to the user language preference. Out of the total number of calls made to call center; 1,119,291 calls handled by Amharic, 30,547 call handled by English, 436,368 calls handled by oromiffa, 72838 calls by somaligna and the rest 53052 by Tigrigna. The call center service is the type of service which is accessible 24/7 to the customers through online telephone, the above mentioned service user can call to the call center any time to get support or information regarding the service given by the company. This study targeted 1,119,291 customers of

Amharic center IVR users. Since the center users take the lion share which increases the representativeness of the sample.

3.4.3 Sample size determination

Considering the size, as well as the time, it will be hard to collect data on the whole population. Thus, to avert such constraint the researcher forced to draw sample from the whole population. The ever increasing need for a representative statistical sample in empirical research has created the demand for an effective method of determining sample. To address the existing gap, Krejcie and Morgan (1970) came up with table for determining Sample size for a given population for easy reference. Thus, the formula used to calculate the sample size is

$$n=x^2NP (1-P)/e^2 (N-1) + x^2p (1-P)$$

Where:

X²=Chi-Square table value that depends on a degree of freedom at a given confidence level

e= Margin of error

p=Population proportion

N=population size

To calculate Sample size for 1,119,291 Population size (N)

At 95% confidence level with degree of freedom 1 the Chi square value is $(x^2) = 3.841$

At 95% confidence level the margin of error (e) is 0.05

Population Proportion (P) =0.5

n=sample size) =3.841

N=total population that is 1,119,291

e= is the error term, which is 5% (i.e. at 95% confidence interval)

Using the above formula the simple size of the study is determined as

$$n=x^2NP (1-P)/e^2 (N-1) + x^2p (1-P)$$

N= 1,119,291

 $X^2 = 3.841$

P=0.5

E=0.05

 $n = 3.841*1,\ 119291*0.5*0.5/\left((0.05)^2*(1,119,291\text{-}1)\right) + (3.841*0.5*0.5)$

n=1,074,799.2/2799.1

n=383.9

At given condition the sample size is approximately 384

Therefore the sample size is 384 Customers.

3.4.4 Sampling Techniques

Using structural equation modeling amounts to defining a structure where the overall satisfaction is seen as a function of the satisfaction with different components that are considered to be relevant for explaining the overall satisfaction. To fix the ideas consider the case where the customers overall satisfaction with the output from the analysis depends on how the customer perceive the quality of different aspects like for example timeliness, competence of the staff, costs, service mindedness of the staff, quality of results, accessibility of data and so on. What components should be relevant for explaining the overall satisfaction are typically determined in interacting customers through design questionnaire. The components are then further divided into a number of areas each of which representing an aspect of the component. The aspects should be easy to recognize in reality. It should also be easy for the customer to give a rating of the perceived quality for that aspect. A probability sample of customers is requested to respond to a questionnaire. The questions relate to the aspects of the components the respondent is supposed to enter their rating of the satisfaction with the aspect under study. Typically a five point scale is used. The rating ten denotes that the customer is completely satisfied and the rating one means that the customer is not at all satisfied. The responses are analyzed using structural equation modeling with latent variables where the latent are the components. From the analysis the components that have the largest impacts on the overall satisfaction can be found. Thus it is possible to find what components should have first priority for improvement. The analysis provides an efficient method for improvement of the customer satisfaction.

3.5 Data collection Instrument

The research will be involving the administration of a set of structured questionnaire with predetermined response options to a large number of respondents. The questionnaire is going to be designed in five likert scale measurement with five response categories (strongly agree, agree, neutral, disagree and strongly disagree). A 26 item measure will be used to indicate the customer degree of agreement for the 26 performance statements, based on their assessments of the service provided by the call center adopted from

SERVPERF. Customer satisfaction will be measured with one scale adopted from Lovelock and Wright (1999) with response ranging from "very satisfied" to "very dissatisfied".

Thus, the respondents will be request to select their own choice of the five point Likert scale alternatives in order to specify their level of agreement or disagreement on each statement.

3.6 Data collection procedure

The researcher will distribute the questionnaire to each sample customers by outbound call and after the questioners are retuned back, the researcher will sees what is properly filled and then entered the data into a computer for electronic processing using the Stata.

3.7 Data analysis Techniques

The data analysis will include: descriptive statistics to count the frequency of response, correlation analysis-to assess the relationship between variables of the study and Econometrics analysis to see significance of variables of interest. After the required data collected the researcher will code it and enter data into a computer for electronic processing using the Stata.

3.8 Ethical Considerations

Ethics are the moral distinction between right and wrong, and what is unethical may not necessarily be illegal (Bhattacherjee (2012). In order to be ethical a researcher will consider voluntary participation and harmlessness. Subjects in a research project must be aware that their participation in the study is voluntary, that they have the freedom to withdraw from the study at any time without any unfavorable consequences, and they are not harmed as a result of their participation or non-participation in the project. Name of the respondents and companies name are not asked to write in order to increase the confidentiality of the information they give. And also the questionnaire explains that the

purpose of research will be for academic purpose and finally the respondents is going to be included based on their willingness. Furthermore, the researcher tried to avoid misleading or deceptive statements in the questionnaire. Lastly, the questionnaires will distribute only to voluntary participants.

CHAPTER FOUR

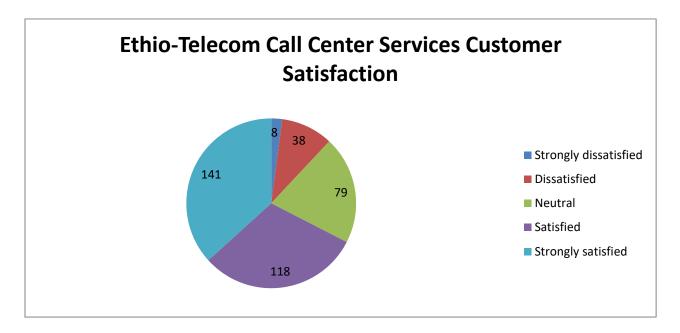
DATA PERSENATION, ANALYSIS AND DISCUSSION

This part of the study try to show result of the data collected using tables and graphs. Two types of question are asked to customers of Ethio-Telecom Call Center Services. The first is general question on the level of satisfaction, tangibility, reliability, responsiveness, empathy and assurance which be answered by yes or no. The second type of question isLikert scale question on tangibles, reliability, responsiveness, empathy, assurance and total level of satisfaction of Ethio-Telecom Call Center Services. The questionnaires are distributed among 384 customers of Ethio-Telecom Call Center Services using outbound call. After the questionnaires are retuned back, the data are assessed whether they are properly filled or not, the assessment show the data are properly filled. The general question code as 1 yes and 0 no; and the Likert scale are codeas 1 strongly disagree, 2 disagree, 3neutral, 4 agree and 5 strongly agreeto simplify the analysis.

4.1 Descriptive Analysis

In order to know, the overall feeling (level of satisfaction) of customers of Ethio-Telecom Call Center Services a general question about their satisfaction were asked. They were asked two questions. The first question is "All in all I am satisfied with Ethio Telecom Call Center Services"; 304 of 384 respondent answer yes to the question, that is 304 of the respondent are satisfied with the service of Ethio Telecom Call Center Service. The second question are to rateEthio Telecom Call Center Services level of satisfaction as highly dissatisfied, dissatisfied, neutral, satisfied and strongly satisfied. For the Likertquestion customers of Ethio-Telecom Call Center Services answer as 8 strongly dissatisfied, 38 dissatisfied, 79 Neutral, 118 satisfied and 141 strongly satisfied.

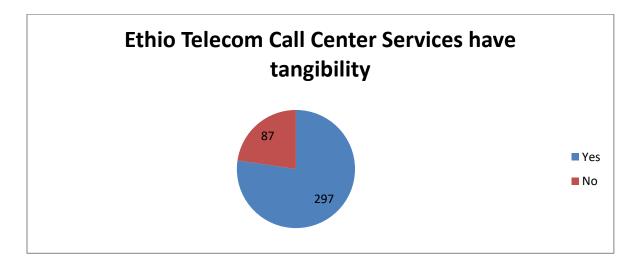
Figure1: Customer Satisfaction of Ethio-Telecom Call Center Service



Source: Survey data 20

4.1.1 Tangibles

Figure 2:Tangibility of Ethio-Telecom Call Center Service



Source: Survey data 20

Looking at the data more or less customers agree with tangibility of Ethio-Telecom Call Center Services. As it can be seen in Figure 4.1, 297 of respondent answer yes to the question Ethio-Telecom Call Center Services have tangibility. But 87 respondents answer no to the question Ethio-Telecom Call Center Services are tangible.

In the likert scale questions also more than 260 respondent answer either agree or strongly agree to the list of tangibility questions. For the detail answers of likert scale answer about tangibility see table 4.1.

Table 4.1: Tangibility of Ethio-Telecom Call Center service

	Strongly				Strongly		Standard
Variable	disagree	disagree	neutral	Agree	agree	Mean	deviation
Did the advisor welcome/greet							
you properly? Considering if							
the advisors: Introducing the							
company name, Introducing							
himself/herself, Asking how							
he/she could help you	11	28	68	143	134	3.94010	1.036693
Call center advisors have							
welcoming tone of voice	16	28	80	137	123	3.84114	1.083113
The interactive voice recorder							
facilities and technology call							
center are using goes with the							
type of service provided	11	33	78	135	127	3.86979	1.058954
Call center has up-to-date							
equipment and technology	12	25	75	160	112	3.87239	1.007475
Did the advisor ends the							
conversation properly;							
Considering if: The advisor							
thanking you for calling, The							
advisor saying goodbye, Let							
you hang up first.	9	23	76	146	130	3.95052	0.99353

Source: Survey data 20

4.1.2 Reliability

To the question of reliability, 260 respondents answers they are reliable on the service of Ethio-Telecom Call Center Service. But 124 of the respondents have no reliability on the service of Ethio-Telecom Call Center service.

Figure3: Reliability of Ethio-Telecom Call Center Service

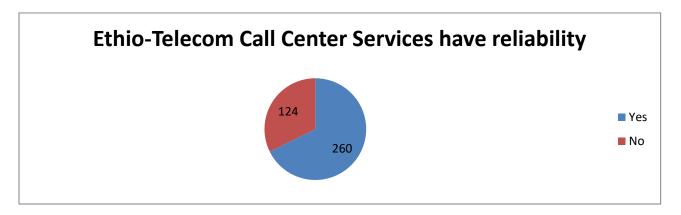


Table 4.2: Reliability of Ethio-Telecom Call Center service

	Strongly				Strongly		Standard
Variable	disagree	disagree	neutral	agree	agree	Mean	deviation
Call center advisors							
promised to do							
something by a certain							
time they provide the							
service at the time they							
promise to do so	13	37	97	122	115	3.75260	1.088148
Call center advisors							
show sincere interest on							
solving customer's							
problems	14	32	89	137	112	3.78385	1.068246
Call center advisors							
perform service right							
the first time (error free							
service)	12	26	97	151	98	3.77343	1.005584
Call center advisors							
provide correct							
/accurate information to							
you	12	19	101	146	106	3.82031	0.994241
Call center advisors							
briefly present the							
various offers and							
services (short message							
service, voicemail,							
coloring ring back tone,							
Internet on mobile)	13	37	89	124	121	3.78906	1.093434

As it can be seen in the table for the likert scale questions more than 250 respondents says either agree or strongly agree to the list of reliability questions. Therefore, we can say customers of Ethio-Telecom Call Center Services are reliable with the services.

4.1.3 Responsiveness

To the questions of responsiveness 280 respondent, answers yes, that is 280 respondents believe that Ethio-Telecom call Center Services are responsive. But 204 respondents answer Ethio-Telecom Call Center Services are not responsive.

Figure 4: Responsiveness of Ethio-Telecom Call Center service

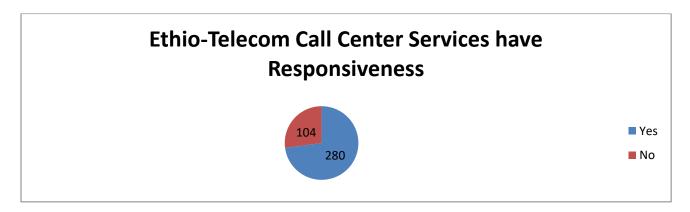


Table 4.3: Responsiveness of Ethio-Telecom Call Center service

	Strongly				Strongly		Standard
Variable	disagree	disagree	neutral	agree	agree	Mean	deviation
There are always adequate							
number of employees to							
respond to your needs at the							
time you make a call to the							
call center	17	42	87	127	111	3.71093	1.127527
The length of time you had to							
wait before you could speak							
to an advisor is reasonable	10	23	96	160	95	3.79947	0.966218
The speed with which your							
request was processed are fast	13	25	75	160	111	3.86197	1.016425
Call center advisors are							
always happy and willing to							
serve customer	10	25	77	126	146	3.97135	1.03803
Call center management are							
accessible, listen to and							
provide prompt and honest							
responses to customers							
inquiries	14	37	80	140	113	3.78385	1.082811

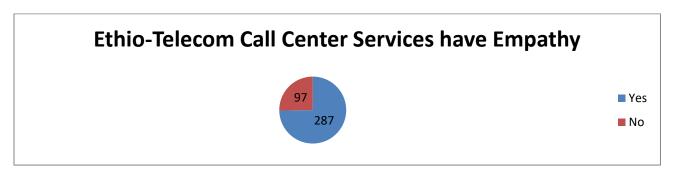
Source: Survey data 20

Compared to other list of factors on customer satisfaction the low numbers of respondents who answer agree and strongly agree are on responsiveness of the service. As it can see in table 4.3 it is about more than 230 respondents are says agree or strongly agree to the list of responsiveness question Ethio-Telecom Call Center Service.

4.1.4 Empathy

287 respondents have feel empathy on Ethio-telecom call Center service but 97 are not

Figure 5: Empathy of Ethio-Telecom Call Center service



Source: Survey data 20

Table 4.4: Empathy of Ethio-Telecom Call Center service

	Strongly				Strongly		StandardD
Variable	disagree	disagree	Neutral	agree	agree	Mean	eviation
Call center advisors have							
customers best interests at							
heart	10	19	71	138	146	4.01822	0.999833
Call center advisors give							
individual attention to							
customer's	15	46	85	131	107	3.70052	1.115474
Call center service hours							
are convenient to you	12	21	85	161	105	3.84895	0.987176
Call center interactive voice							
record service is easily							
accessible	12	22	78	145	127	3.91927	1.020031
Call center interactive voice							
record is user friendly and							
easily understandable (the							
instruction, language)	13	30	87	133	121	3.83072	1.064496
Call center advisors							
understand your specific							
needs	13	39	76	144	112	3.78906	1.076589
Call center employees							
demonstrate integrity and							
trustworthiness in dealing							
with customers	11	21	76	171	105	3.88020	0.967473

As it can be seen in table 4.4 more than 255 customers answer to the list of empathy questions. Therefore, we can say majority of Ethio-Telecom Call Center service customers are feel empathy on the services.

4.1.5 Assurance

To the questions of assurance 278 respondent, answers yes, that is 278 respondents believe that Ethio-Telecom call Center Services have assurance. But 206 respondents answer Ethio-Telecom Call Center Services no assurance.

Figure 6: Assurance of Ethio-Telecom Call Center service

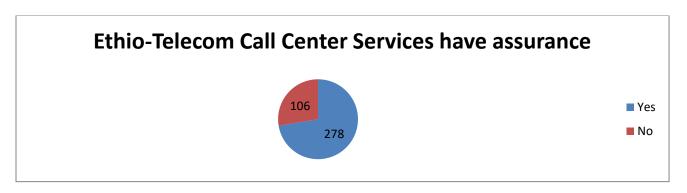


Table 4.5: Assurance of Ethio-Telecom Call Center service

Variable	Strongly disagree	disagree	neutral	agree	Strongly agree	Mean	Standard deviation
The behavior of call center advisor instills confidence in you	8	29	81	111	155	3.97916	1.051957
you feel safe in making conversation with call center							
advisors	21	43	79	104	137	3.76302	1.204251
Call center advisors provide you the adequate information on the service you							
requested.	20	45	95	127	97	3.61458	1.136802
Advisors have sufficient knowledge and required skills to answer customer							
question	17	40	89	121	117	3.73107	1.134075

Source: Survey data 20

As it can be seen in table 4.5 more than 250 customers answer to the list of assurance questions. Therefore, we can say majority of Ethio-Telecom Call Center service customers are feel assurance on the services.

4.2 Correlation of Variables

Before regression, it can be useful to investigate pair-wise correlation of the dependant variables and key repressors variables by using correlate.

Table 4.6: Correlation of Dependant and Independent variables

	Customer					
	Satisfaction	Tangibility	Reliability	Responsiveness	Empathy	Assurance
Customer						
Satisfaction	1					
Tangibility	0.4421	1				
Reliability	0.4763	0.356	1			
Responsiveness	0.4666	0.4146	0.4778	1		
Empathy	0.5725	0.4173	0.4143	0.4144	1	
Assurance	0.4964	0.3877	0.3743	0.3924	0.3338	1

Source: Survey data 20

As it can be seen in table 4.6 customer satisfaction have positive and higher correlation with all independent variables. Also, independent variables have positive and high correlation with each other.

4.3 Regression Result

The question asked to customers of Ethio-Telecom Call Center service are of two types. The first one is a Likert scale questions and the next one is dichotomous question which should be answered as yes or no. To the regression analysis dichotomous questions are used. Regression analysis of qualitative binary or dichotomous variables are common in many Econometrics problems (Verbeek, 2004).

A binary variable takes on only two values, zero and one (Wooldridge, 2016). The binary outcome models focus on the determinants of the probability 'P' of the occurrence of one outcome rather than an alternative outcome that occurs with the probability '1-P'. However, estimation of this types of model by linear probability model has certain drawbacks, for instance it may lead to negative predictions (Wooldridge, 2016). Verbeek (2004) list the two most important disadvantages of linear probability model as the fitted probabilities can be less than zero or greater than one and the partial effect of any explanatory variable (appearing in level form) are constant.

logit and probit models, overcome the shortcomings of linear probability model (Wooldridge, 2016). Also Verbeek (2004), note that the standard binary model are logit and probit model.

The binary model can be modeled as $y_i = \beta_0 + \beta_i X_i + \varepsilon_i$

Where: $y_i=1$, if the event occur and $y_i=0$, if the event did not occur.

 X_i is independent variables

 β_0 is constant and β_i is parameter to be estimated

 ε_i is error disturbance term

'i', 1, 2,3.....

This model can be estimated by logit and probit model. The result of probit and logit model are the same (Verbeek,2004; Wooldridge, 2016). It can be estimated by using maximum likelihood estimation.

As the two model estimation are the same, for the regression analysis of customers satisfaction of Ethio-Telecom Call Center service the probit model are used. The estimated model are:

$$CS_i = \beta_0 + \beta_1 T_i + \beta_2 RL_i + \beta_3 RS_i + \beta_4 E_i + \beta_5 A_i + \varepsilon_i$$

Where: CS_i =1 if customer are satisfied and CS_i = if the customer are not satisfied T_i =1 if customer feel tangible and T_i =0 if customer feel no tangible RL_i =1 if customer feel reliable and RL_i =0 if customer feel no reliable RS_i =1 if customer feel responsible and RS_i =0 if customer feel no responsible E_i =1 if customer feel empathy and E_i =0 if customer feel no empathy A=1 if customer feel assurance and A_i =0 if customer feel no assurance

Verbeek (2004) and Wooldridge (2016) the probit model can be estimated by using maximum likelihood estimation.

Table 4.7: Probit Regression Result

Probit regression	Number of obs	=	384
	LR chi2(5)	=	175.50
	Prob > chi2	=	0.0000
Log likelihood = -108.75744	Pseudo R2	=	0.4466

customersatisfaction	Coef.	Std. Err.	Z	P> z	[95% Conf.	Interval]
empathy assurance	1.16461	.2124397	5.48 4.33	0.000	.7482353	1.580984
tangability	.2654133	.2432187	1.09	0.275	2112867	.7421132
reliabiliy responsiveness	.5270292 .371144	.2214336	2.38 1.59	0.017	.0930273 0855572	.9610311 .8278452
_cons	-1.231163	.2045159	-6.02	0.000	-1.632007	8303195

For the probit model to know whether the model is correctly specified or not the test used is Wald and Likelihood ratio. The regression result have higher Likelihood ratio hence the model is highly express the effect of independent variable on dependant variable (see Verbeek (2004) and Wooldridge (2016)). Also the iteration are very low, which show the absences of multicollinarity among independent variables. All the other aspect of the model shows very good result.

As it can be seen from table 4.8other than tangibility others are found to have statistically significant positive effect on customer satisfaction of Ethio-Telecom Call Center service. Even though it is not statistical significant tangibility have also positive effect on customer satisfaction of Ethio-Telecom Call Center service.

Tangibility found to have positive impact on customer satisfaction of Ethio-Telecom Call Center Services but the relationships are not statistically significant. Which is supported in the literature, for instance Francis (2011) and Sumit and Deepack (2013) found that even though tangibility have positive impact on customers satisfaction it is not that much significant compared to other factors.

Reliability found to have positive and significant impact on customer satisfaction of customers of Ethio-Telecom Call Center Services. The result is supported in the literature see for instance; Francis (2011), Sumit and Deepack (2013) and Anantha and Abdul (2013). Sumit and Deepack (2013) in Indian Call Centers and Anantha and Abdul (2013) in Malaysia found that reliability is the most important factor to customer satisfaction. In other country case study by Francis (2011) also found that reliability positively affect customer satisfaction.

Thien (2014) found that responsiveness is the second most factors in customer satisfaction of Call Centers. In this study also responsiveness found to have positive impact on customer satisfaction of Ethio-Telecom Call Center Services; but it is significant at 10% level of significance.

Empathy found to have positive and significant impact on customer satisfaction of customers of Ethio-Telecom Call Center Services. The result is supported in literature see Francis (2011), Sumit and Deepack (2013), Anantha and Abdul (2013) and Missana

(2015). For instance Missana (2015) found that the linear regression between customer satisfaction and empathy showed very strong positive relationship.

Assurance found to have positive and significant impact on customer satisfaction of customers of Ethio-Telecom Call Center Services. The result is supported in literature see Francis (2011), Sumit and Deepack (2013), Anantha and Abdul (2013) and Thien (2014). For instance, Thien (2014) found that the very first and important factor to customer satisfaction of customers of Call Centers is assurance of the services.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

This study is about the effect of service quality on customer satisfaction: a case Ethio-Telecom's Call Center. In the service providers institution service quality hold the main position (Kotler and Armstrong, 2003). Service quality is the main factor to customer satisfaction (Potluri and Magnale, 2010). Currently Ethio-Telecom is the sole provider of Telecom service in Ethiopia. Call centers are the major channels of communication Ethio-Telecom with its customers.

Currently Ethio Telecom provide two types of call center services namely 994 and 980 in four different places by employing nearly 2315 staffs, both services are provided through online telephone supporting by IVR (interactive voice response). 994 call center is accessible to all service users of Ethio Telecom around the country and it's serving customer in five different languages specifically English, Amharic, Oromiffa, Tigrigna and Somali, whereas 980 call center is dedicated only for selected enterprise, VIP and Key account customers of the company and the customers are served in English and Amharic languages. 994 call center services work 24/7 to support customer enquiry by providing full information about ET products and services, subscription requirements, billing and related enquires, activation of value added services, fault registration, status update and follow up but even if the support given by advisors of 980 and 994 are the same the working hour of 980 call center is from Monday to Saturday in office hours.

Customer satisfaction is influenced by various factors. According to Andaleeb and Conway (2006) service quality is the main driving factor for satisfaction of customer in service sectors. Ethio-telecom tries to improve service quality through this Call centers and hence improve customer satisfaction. Therefore, this study tried to assess the impact

of service quality on customer satisfaction on the customers of Ethio-Telecom Call Center Services.

To do so service quality are proxy with five variables; tangibility, reliability, responsiveness, empathy and assurance. To study the relationships of the five variables and customer satisfaction in Ethio-Telecom Call Center Services both descriptive and explanatory research design are employed. The research is mainly quantitative in nature. Both primary and secondary data are used in the process of the research. Secondary information was collected from the Ethio-Telecom Call Center Service manuals, previous studies, journals and articles conducted on customer satisfaction of Call Center Services.

The primary data is collated by distributed among 384 customers of Ethio-Telecom Call Center Services using outbound call. After the questionnaires are retuned back, the data are assessed whether they are properly filled or not, the assessment show the data are properly filled. Two types of question are asked to customers of Ethio-Telecom Call Center Services. The first is general question on the level of satisfaction, tangibility, reliability, responsiveness, empathy and assurance which be answered by yes or no. The second type of question is Likert scale question on tangibles, reliability, responsiveness, empathy, assurance and total level of satisfaction of Ethio-Telecom Call Center Services. The general question code as 1 yes and 0 no; and the Likert scale are code as 1 strongly disagree, 2 disagree, 3 neutral, 4 agree and 5 strongly agree to simplify the analysis.

The collected data analyzed through descriptive statistics to count the frequency of response, correlation analysis-to assess the relationship between variables of the study and Econometrics analysis to see significance of variables of interest.

The descriptive analysis shows that majority of the respondent's answers yes to customer satisfaction, tangibility, reliability, responsiveness, empathy and assurance. 304 out of 384 customers of Ethio-Telecom Call Center Services are satisfied by the service. The Likert scale levels of satisfaction of Ethio-Telecom Call Center Services are 8 strongly dissatisfied, 38 dissatisfied, 79 Neutral, 118 satisfied and 141 strongly satisfied.

The proxy of service quality customers of Ethio-Telecom Call Center Services; 297 tangible, 260 reliable, 280 responsive, 287 empathy and 278 assurances are answers yes.

In the likert scale questions more than 260 respondent either agree or strongly agree to the list of tangibility questions. More than 250 respondents either agree or strongly agree to the list of reliability questions. More than 230 respondents either agree or strongly agree to the list of responsiveness question. More than 255 customers either agree or strongly agree to the list of empathy questions. More than 250 customers either agree or strongly agree to the list of assurance questions. Therefore, we can say customers of Ethio-Telecom Call Center Services feel tangible, reliable, responsive, empathy and assurance with the services.

The correlation results shows that customer satisfaction have positive and higher correlation with all service quality proxy (tangibility, reliability, responsiveness, empathy and assurance). Also, the correlation analysis shows that service quality proxy (tangibility, reliability, responsiveness, empathy and assurance) have positive and high correlation with each other.

For the regression analysis probit model are employed. The regression result have higher Likelihood ratio hence the model is highly express the effect of independent variable on dependant variable (see Verbeek (2004) and Wooldridge (2016)). Also the iteration is very low, which show the absences of multicollinarity among independent variables. All the other aspect of the model shows very good result.

Other than tangibility, others proxy of service quality are found to have statistically significant positive effect on customer satisfaction of Ethio-Telecom Call Center service. Even though it is not statistical significant tangibility have also positive effect on customer satisfaction of Ethio-Telecom Call Center service.

Tangibility found to have positive impact on customer satisfaction of Ethio-Telecom Call Center Services but the relationships are not statistically significant. Which is supported in the literature, for instance Francis (2011) and Sumit and Deepack (2013) found that even though tangibility have positive impact on customers satisfaction it is not that much significant compared to other factors.

Reliability found to have positive and significant impact on customer satisfaction of customers of Ethio-Telecom Call Center Services. The result is supported in the literature

see for instance; Francis (2011), Sumit and Deepack (2013) and Anantha and Abdul (2013). Sumit and Deepack (2013) in Indian Call Centers and Anantha and Abdul (2013) in Malaysia found that reliability is the most important factor to customer satisfaction. In other country case study by Francis (2011) also found that reliability positively affect customer satisfaction.

Thien (2014) found that responsiveness is the second most factors in customer satisfaction of Call Centers. In this study also responsiveness found to have positive impact on customer satisfaction of Ethio-Telecom Call Center Services; but it is significant at 10% level of significance.

Empathy found to have positive and significant impact on customer satisfaction of customers of Ethio-Telecom Call Center Services. The result is supported in literature see Francis (2011), Sumit and Deepack (2013), Anantha and Abdul (2013) and Missana (2015). For instance Missana (2015) found that the linear regression between customer satisfaction and empathy showed very strong positive relationship.

Assurance found to have positive and significant impact on customer satisfaction of customers of Ethio-Telecom Call Center Services. The result is supported in literature see Francis (2011), Sumit and Deepack (2013), Anantha and Abdul (2013) and Thien (2014). For instance, Thien (2014) found that the very first and important factor to customer satisfaction of customers of Call Centers is assurance of the services.

5.2 Recommendation

The recommendation of the study should be written based on the find and conclusion of the study. As it can be noted in the find and conclusion of the study service quality indicators such as tangibility, reliability, responsiveness, empathy and assurance found to have positive impact on customers satisfaction. Therefore, management at Ethio-Telecom Call Center should focus on improvement in service quality. Specifically, the management should focus on:

- **1. Tangibility:** Improve the physical nature Ethio-Telecom Call Center both the infrastructure and the appearance of employees.
- **2. Reliability:** Improve the schedule time of provision of service, keeping of accurate records of customers and accurately solve customer's problems.
- **3. Responsiveness:** Improve ability of dealing with complaints of clients, promptness of services, willingness to offer help to clients and made known when and where exactly services will be executed formed the responsiveness dimensions of a company.
- **4. Empathy:** Empathy is the ability to share another's feelings as own, understands the customer's needs as well as giving individual attention to customers. Hence, Ethio-Telecom Call Center should provide training to employees on how to respond and serve customers in the way empathy requires.
- **5. Assurance**: Ethio-Telecom Call Center should give training to employee to instill confidence to customers, safeness of transaction, and consistency of courteousness of staff and knowledgeable of staff to answer customer's queries.

REFERENCE

Andaleeb and Conway, (2006). Service Quality And Customer Satisfaction In Public Sector Organizations: A Case Study Of The Commission On Human Rights And Administrative Justice," Amanfi Jnr, Benjamin.

Anderson, E., Fornell, C. and Lehman, D. (1994). Customer Satisfaction, Market Share, and Profitability: Findings from Sweden. Journal of Marketing, 58 (July), 53-66.

Anderson, S.W., Baggett, L.S. and Widneneer, S.K. (2009), "The impact of service operations failure and customer satisfaction: Evidence on how failures and their source affect what matters to customers," Manufacturing & Service Operations Management, Vol.11, No. 1, pp. 52-69.

Cadotte, E.R., Woodruff, R.B and Jenkins, R.C. (1980), Expectations and Norms of consumer satisfaction, Journal of Marketing Research, 24(3) 305-314.

Christopher H. Lovelock and Jochen wirtz, (2004). Services marketing: people, technology, strategy, 5th Ed, Hamilton Printing Co. USA, pp 413-414.

Cronin, J. J. and Taylor, S. A. (1992). Measuring service quality: a re-examination and extension. Journal of Marketing, Vol. 56, pp. 55-68.

Cronin, J.J. and Taylor, S.A. (1994), "SERVPERF versus SERVQUAL: Reconciling performance-based and perception-minus expectations measurement of service quality," Journal of Marketing, Vol. 58, No. 1, pp. 125-131.

Dwyer, F.R. and OH, S. (1987), "Output sector munificence effects on the internal political economy of marketing channels," Journal of Marketing Research, Vol. 24, pp. 347-358.

Farrely, F.J. and Quester, P.G. (2005), "Examining important relationship quality constructs of the focal sponsorship exchange," Industrial Marketing Management, Vol. 34, pp. 211-219.

Garvin, D.A. (1988), Managing Quality: The Strategic and Competitive Edge, in Dale H. Besterfield, Carol Besterfield- Michna, Glen H. Besterfield, Mary Besterfield – Scave (eds), Total Quality Management, New York, Free Press, Prentice-Hall.

Gronroos, C. (1984). A service quality model and its marketing implications. European Journal of Marketing, 18, 36-44.

Gronroos, C. (2001), "The perceived service quality concept – Managing Service Quality, Vol. 11 No. 3,

Kaliski, B. (2001). Social Responsibility and Organizational Ethics. Encyclopedia of Business and Finance (2nd ed., Vol. 1). New York: Macmillan.

Khamalah, J.N. and Lingaraj, B.P. (2007) TQM in the service sector: a survey of small businesses, Total Quality Management & Business Excellence, 18 (9), p. 973-982.

Kotler P. and Armstrong A., (2006). Principles of marketing, Prentice Hall, New Jersey.

Kotler, P., & Keller, K. L. (2012). Marketing Management (14th ed.). Upper Saddle River, N.J. Pearson/Prentice Hall.

Kotler, Philip., and Amstrong, Gary. (2012). Principel of marketing. 15 th edition. Global edition, Person.

Lewis, B. R. (1993). "Service quality: recent developments in financial services". International Journal of Bank Marketing, 2 (6), 19-26.

Manhasa, Parikshat Singh., and Tukamushaba, Eddy Kurobuza. (2015). Understanding service experience and its impact on brand image inhospitality sector. International Journal of Hospitality Management, 45, 77–87

Mudie & Pirrie, (2006). An Assessment of Service Delivery Quality in Relation to Customer Satisfaction in Industrial Projects Service.

Oliver, R. (1997), Satisfaction: A Behavioral Perspective on the Customer, Boston: McGraw-Hill.

Oliver, R.L. (1993), "A conceptual model of service quality and service satisfaction: compatible goals, different concepts", in Swartz, T.A., Bowen, D.E. and Brown, S.W. (Eds), Advances in Services Marketing and Management, Vol. 2, JAI Press, Greenwich, CT, pp. 65-85.

Oliver. R. (1980), "A cognitive model of the antecedents and consequences of satisfaction decisions", Journal of Marketing Research, Vol.17, pp. 460-469.

Parasuraman, A, Zeithaml, V A and Berry, L L (1985). "A conceptual model of service quality and its implication for future research", Journal of marketing, 49, 41-50

Rust, R.T. and Oliver, R.L. (1994), "Service Quality: insights and managerial implications from the frontier." Sage Publications, London, pp. 1-20.

Sachdev, S.B. and Verma, H.V. (2004), "Relating Importance of Service Quality Dimensions: A multi sectorial study, Journal of Services Research, Vol.4, No.1 (April – Sept. 2004).

Spreng, R. A., Mackey, R. D. (1996), "An Empirical Examination of a Model of Perceived Service Quality and Satisfaction", Journal of Retailing, 72 (2), Summer, 201-204.

Sureshchandar, G.S., Chandrasekharan, R. and Anantharaman, R.N. (2002) The relationship between service quality and customer satisfaction – a factor specific approach, Journal of Services Marketing, 16(4), p. 363-379.

Tse, D.K. and Wilton, P.C. (1998), "Models of consumer satisfaction formation: an e Verbeek.M, (2004). A Guide to modern Econometrics, 2nd edition

Wooldridge.J (2016). Introductory Econometrics: A Modern Approach, 6th edition,

xtension", Journal of Marketing Research, Vol. 25, May, pp. 204-13.

Zeithaml V.A., & Bitner M. J. (2000). Services Marketing (2nd ed.). New York: McGrawHill. Inc.

Zeithaml, V. A. and Bitner, M. J. (2003). Services Marketing: Integrating Customer Focus across the Firm, 3rd Ed, McGraw–Hill, New York.

www.ethiotelecom.et).

APPENDEX

Appendix 1: Questionnaire (Amharic Version)

ቅድስተ ማርያም ዩኒቨርስቲ ትምህርት ቤት

ንግድ አስተዳደር ኘሮግራም ክፍል

በኢትዩ ቴሌኮም የጥሪ ማእከል አንልግሎት የደንበኞች የሚሞላ ሞጠይቅ

እባክዎ ጥቂት ጊዜ ሰጥተው የሚከተለትን ጥያቄዎች በመመለሰ ይተባበሩን፡፡ የሚሰጡት መልስ የሚውለው ለዚሁ ጥናት አላማ ብቻ ነው እናም የሚሰጡት ማንኛውም አይነት ምላሽ ሚስጥሩ የተጠበቀ ይሆናል፡፡ ስለሆነም ከዚህ በታች ለቀረቡት ጥያቄዎች ትክክል ነው የሚለትን መልስ ይሰጡ ዘንድ በትህትና እጠይቃለሁ ምክንያቱም የእርስዎ ምላሽ ጥናቱ ለሚያስንኘው ውጤት ከፍተኛ አስተዋጽኦ አለው፡፡

አጠቃላይ መመሪያ

- ትክክል ነው የሚለትን መልስ በተዘጋጀው ሳጥን ውስጥ (√) ምልክት ያስቀምጡ

ምጠይቂን በ<mark>ም</mark>ሙላት የሚያደርንት ትብብር በቅድሚያ አምሰማናለሁ!!

1 = በጭራሽ አልስጣጣም 2 = አልስጣጣም 3= ሀሳብ የለኝም

 $4 = \lambda$ ስማማለሁ 5 = 0 ስማማለሁ

ተ.ቁ	የአንልማሎት ጥራት ጥያቄ	በጭራሽ አልስጣ ማም	አልስጣ ማም	ሀሳብ የለኝም	እስማ ማለሁ	በጣም እስማማ ለሁ
		1	2	3	4	5
1	የጥሪ ማእከል ለሰራተኞች የመൗቢያ ሰላምታ ባማባቡያቀርባለ? የሚቀጥለትን ከማምት ውስጥ ያስንቡ: (የድርጅ ስም ማስተዋወቅ፣ ምንልርዲዎ ብለው መጠየቅ)					
2	የጥሪ ማዕከለ ሰራተኞች ደንበኛን ለጦርዲታ የሚ <i>ጋ</i> ብዝ ድምጽ አላቸው?					
3	የጥሪ ማዕከለ የሚጠቀመው የኮምፒውተር መቅረጸ ድምጽ የጥሪ ማዕከለ ከሚሰጠው አ <i>ገልግሎት ጋ</i> ር አብሮ ይሄዲል					
4	የጥሪ ማዕከለ ወቅቱን የጠበቀ ዘመናዊ የመንልንያ መሳሪያ እና አዲዱስ ቴክኖሎጂ ይጠቀማል?					
5	የጥሪ ማዕከለ ሰራተኞች በአግባቡ የመዝጊያ ሰላምታ ይሰጣለ? የሚቀጥለትን ከግምት ውስጥ ያስንቡ: (ስሰደወሉ እናመሰግናለን፣ መልካም ጊዜ ይሁንልዎ፣ ስልኩን ይዝን እባክዎ)					

		1	1 1	1
6	የጥሪ ማዕከለ ሰራተኞች አንድ ነገር በተወሰነ ጊዜ ውስጥ ለማድረግ ቃል ከንቡ የንቡትን ቃል ይፈጽማለ?			
	1 10 - 10 11 11 16 17 17 1 1 1 1 1 1 1 1 1 1 1 1			
7	 የጥሪ ማዕከለ ሰራተኞች የደንበኞችን ችግር ለመፍ <i>ታ</i> ት ያላቸውን ፍላљት በቅንነት ያሳያለ?			
	የጥሪ ማመሰለ በራጥኖጥ የደ ነበኖጥ ነ ጥግር ለማፋውጥ ያላጥሙ ነ ፍላሎጥ በቀ ነነጥ ያጣያለ?			
8				
٥	በምጀመሪያ ጥሪ			
9	0~ / m+b / b / l ZZ 7 b b / ZC ~ / l 2 0~ 0+ m / Z 0 b ~ m l 2			
J	የጥሪ ማዕከለ ሰራተኞች ትክክለኛና ጥራቱን የጠበቀ ሞረጃ ይሰጥዎታል?			
10	የጥሪ ማዕከለ ሰራተኞች ስለድርጅቱ አንልግሎትና ምርት በግልጽ ያስረዳሉ ምሳሌ አጭር የጽሁፍ ლልዕክት፣			
	የድምጽ ሳጥን አጠቃቀም፣ የድምጽ ማሳሞሪያ፣ ኢንተርኔት አንልግሎት			
11	ወደ ጥሪ ማዕከለ በደወሉ ጊዜ የርስዎን ጥያቄ ለመመለስ የተዘ <i>ጋ</i> ጁ በቂ ሰራተኞች አለ?			
12	የጥሪ ማዕከለን ሰራተኛ ለማግኘት መስመር ላይ የሚጠብቁት ጊዜ ምክንያታዊ ነው?			
13	በጥሪ ማዕከለ በፍጥነት እና በቅልጥፍና ይስተናንዲለ?			
14	የጥሪ ማዕከለ ሰራተኞች ደንበኞችን ለማንልንል ሁሌም ደስተኛ, ትሁት እና ፈቃደኞች ናቸው?			
15				
	የጥሪ ማዕከለ የስራ ኃላፊዎች የደንበኛን ጥያቄ ለማዳመጥና አስፈላጊውን መፍትሄ ለመስጠት ተደራሽ			
	ናቸው?			
16				
	የጥሪ ማዕከለ ሰራተኞች ሲያስተናግዱ የደንበኞችን ፍላኈት ከልባቸው አኑረው ነው?			
17				
	የጥሪ ማዕከለ ሰራተኞች ለያንዳንዱ ደንበኛ ልዩ ትኩረት ይሰጣለ?			
18	የጥሪ ማዕከለ የስራ ሰአት ለእርስዎ አሞቺ ነው?			
19	የጥሪ ማዕከለ የድምጵ ሳጥን አንልግሎት ለማግኘት አያስቸግርም ወይም በቀላለ ይንኛል?			

20	የጥሪ ማዕከለ የድምጽ ሳጥን አንልግሎት ለአጠቃቀም ምቹና በቀላ ለመረዳት የሚችሱት ነው? (ቋንቋው,መመሪያው)			
21	የጥሪ ማዕከለ ሰራተኞች የደንበኞችን ትክክለኛ ፍላኈት ይረዲለ?			
22	የጥሪ ማዕከለ ሰራተኞች ደንበኞቻቸውን በታማኝነት እና በቅንነት ያንለማላሉ?			
23	የጥሪ ማዕከለ ሰራተኞች የሚሰጥዎት አንልግሎት ላይ የመተማመን ስሜት እንዱኖርዎት ያደርጋለ?			
24				
24	ከጥሪ ማዕከለ ሰራተኞች <i>ጋ</i> ር ሲነ <i>ጋገ</i> ሩ የመመቸት ስሜት ሰማዎታል?			
25	የጥሪ ማዕከለ ሰራተኞችለሚጠይቁት አ7ልግሎት በቂ ሙረጃ ይሰጥዎታል?			
26	የጥሪ ማዕከለ ሰራተኞች የደንበኞችን ጥያቄ ለመመለስ የሚያስችል በቂ እውቀት እና ክህሎት አላቸው?			

ከዚህ በታች ያለው አረፍተ ነ <i>ገ</i> ር አጠቃላይ ስለኢትዮ ቴሌኮም የጥሪ ማዕከል የደንበኞች
<i>አገልግ</i> ሎትያልዎትን የእርካታ
በትክክል ይ7ልጻል ብለው ያሞኑበትን በተዘ2ጀው ሳጥን ውስጥ (√) ምልክት በማድረግ ይግለጽ።

አጠቃላይ ስለጥሪ ማዕከለ አ7ልግሎት አሰጣጥ የእርካታ	
በጣምዝ ቅተኛ	
ዝቅተኛ	
ሃሳብ የለኝም	
ከፍተኛ	
በጣም ከፍተኛ	

Appendix 2: Questionnaire (English Version)

St. Mary's University

School of Graduate Studies

(General MBA)

A questionnaire to be filled by customers of EthioElecom Call Center Service

Dear Respondents,

I am MeronGebru, a graduate student of St. Mary's University. I am conducting a research on the effect Of Service Quality on Customer Satisfaction of Ethio Telecom's Call Center" in partial fulfillment of General MBA. The main objective of this study is to examine the quality of service provided by Ethio Telecom calls center and its impact on customer satisfaction.

I kindly request you to spend some minutes of your time in answering the questionnaire. Your responses will be used only for academic research and any information which you provide will be kept confidential. Your genuine response will have significant effect on the result of the study.

General Instruction:-

There is no need of writing your name

In all cases where answer options are available please tick ($\sqrt{}$)

Thank You, for your kind cooperation in answering the questionnaire.

88

Part I: Survey on Service Quality Items

Direction: This part of the questionnaire intends to find your perception towards the service quality of ethio telecom call center services. Please put a check mark ($\sqrt{}$) on the number which reflects your perception.

1= strongly disagree, 2=Disagree, 3= Neutral, 4= Agree 5= strongly Agree

Tangibles

	Statement of	Strongly	Disagree	Neutral	Agree	Strongly
S/N	Service Quality	Disagree				Agree
	Did the advisor					
1	welcome/greet you					
	properly?					
	Considering if the					
	advisors:					
	Introducing the					
	company name,					
	Introducing					
	himself/herself,					
	Asking how he/she					
	could help you					
	Call center advisors					
2	have welcoming					
	tone of voice					
	The interactive					
3	voice recorder					
	facilities and					
	technology call					

	center are using			
	goes with the type			
	of service provided			
	Call center has up-			
4	to-date			
	equipment and			
	technology			
	Did the advisor			
5	ends the			
	conversation			
	properly;			
	Considering if: The			
	advisor thanking			
	you for calling, The			
	advisor saying			
	goodbye, Let you			
	hang up first			

Reliability

	Statement of	Strongly	Disagree	Neutral	Agree	Strongly
S/N	Service Quality	Disagree				Agree
	Call center					
6	advisors promised					
	to do something					
	by a certain time					
	they provide the					
	service at the time					
	they promise to do					
	so					

	Call center			
7	advisors show			
	sincere interest on			
	solving customer's			
	problems			
	Call center			
8	advisors perform			
	service right the			
	first time (error			
	free service)			
	Call center			
9	advisors provide			
	correct /accurate			
	information to you			
	Call center			
10	advisors briefly			
	present the various			
	offers and services			
	(short message			
	service, voicemail,			
	coloring ring back			
	tone, Internet on			
	mobile)			

Responsiveness

	Statement of	Strongly	Disagree	Neutral	Agree	Strongly
S/N	Service Quality	Disagree				Agree
	There are always					
11	adequate number					
	of employees to					
	respond to your					
	needs at the time					
	you make a call to					
	the call center					

	The length of time			
12	you had to wait			
	before you could			
	speak to an advisor			
	is reasonable			
	The speed with			
13	which your request			
	was processed are			
	fast			
	Call center advisors			
14	are always happy			
	and willing to serve			
	customer			

	Call center			
15	management are			
	accessible, listen to			
	and provide prompt			
	and honest			
	responses to			
	customers inquiries			

Empathy

	Statement of	Strongly	Disagree	Neutral	Agree	Strongly
S/N	Service Quality	Disagree				Agree
	Call center					
16	advisors have					
	customers best					
	interests at heart					
	Call center					
17	advisors give					
	individual attention					
	to customer's					
	Call center service					
18	hours are					
	convenient to you					
	Call center					
19	interactive voice					
	record service is					
	easily accessible					

	Call center			
20	interactive voice			
	record is user			
	friendly and easily			
	understandable (the			
	instruction,			
	language)			
	Call center			
21	advisors			
	understand your			
	specific needs			
	Call center			
22	employees			
	demonstrate			
	integrity and			
	trustworthiness in			
	dealing with			
	customers			

Assurance

	Statement of	Strongly	Disagree	Neutral	Agree	Strongly
S/N	Service Quality	Disagree				Agree
	The behavior of call					
23	center advisor					
	instills confidence in					
	you					
	you feel safe in					
24	making conversation					
	with call center					
	advisors					
	Call center advisors					
25	provide you the					
	adequate					
	information on the					
	service you					
	requested.					
	Advisors have					
26	sufficient knowledge					
	and required skills to					
	answer customer					
	question					

Part II: Level of Customer Satisfaction

Direction: the following statement describes the overall feeling you have about Ethio Telecom Call Center Services; please respond by choosing the number which best reflects your own perception.

27. My feeling about call center service delivery can be best described as;
1. Highly dissatisfied
2. Dissatisfied
3. Neutral
4. Satisfied
5. Highly satisfied
20. All in all I am actiofied with Ethia Talagam Call Cantag Samiaga Vas. No.
28. All in all I am satisfied with Ethio Telecom Call Center Services Yes No
29. Ethio Telecom Call Center Services have tangibility Yes No
30. Ethio Telecom Call Center Services have reliability Yes No
31. Ethio Telecom Call Center Services have responsiveness Yes No
32. Ethio Telecom Call Center Services have empathy Yes No

Thank you for taking your time to answer this questionnaire!!!

33. Ethio Telecom Call Center Services have assurance Yes No