

ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE



Department of Marketing Management

The effect of call center customer service on customer satisfaction: The case of commercial bank of Ethiopia.

**By
Elias Eshetu**

ADVISOR: MULUGETA G/MEDHIN. (PhD)

**June, 2020
ADDIS ABABA, ETHIOPIA**

**ADDIS ABABA UNIVERSITY
SCHOOL OF COMMERCE**

MARKETING MANAGEMENT POSTGRADUATE PROGRAM

**THE EFFECT OF CALL CENTER CUSTOMER SERVICE ON CUSTOMER
SATISFACTION: THE CASE OF COMMERCIAL BANK OF ETHIOPIA**

**BY
ELIAS ESHETU**

Approved by Board of Examiners



Advisor

X

Mesfin Workineh (PHD)
Internal Examiner

M

X

Lakew Alemu (PHD)
External Examiner

L

DECLARATION

I, Elias Eshetu Demissie declare that the thesis entitled “The effect of call center customer satisfaction on customer satisfaction; the case of Commercial Bank of Ethiopia” is my original work. Moreover, this study has not been presented for any other program or university and that all sources of material used have been acknowledged accordingly.

X

Elias Eshetu
Researcher

CERTIFICATION

This is to certify that Elias Eshetu has carried out his research work on “The effect of call center customer service on customer satisfaction: the case of Commercial Bank of Ethiopia” for Partial Fulfillment of the Requirements for the Degree of Masters of Arts in Marketing Management at Addis Ababa University School of Commerce. This work is original and it is suitable for submission of Masters of Arts in Marketing Management.

X

Mulugeta G/Medhin (PHD)
Advisor

ACKNOWLEDGEMENT

I would like to express my gratitude to my advisor Dr. Mulugeta G/Medhin for his guidance, continual advice and critical review of the thesis.

And I thank Mrs. Kumneger Yismashoa, Ato. Sewagegnehu Dagne, Ato. Dawit Arega, Miss. Melat Alemayehu, Ato. Surafel Jenberu, Ato. Mehatemesillasie Bacha, Ato. Wesenyeleh Tedla Ato. Dawit Eshetu, Mrs. Firaol Tolosa and Mrs. Hawani Eshetu for Everything you've done for me.

And my special gratitude goes to Customers of CBE who filled my questioner and returned, although they don't have to regarding the situation and fear of Covid-19 pandemic.

Acronyms

- CBE Commercial Bank of Ethiopia
- CSA Customer Service advisors
- ANOVA Analysis of variance
- SPSS Statistical Package for the Social Sciences
- VIF Variance Inflation Factor
- CSA Customer Service advisors

List of tables

Table 3.1 Reliability test result for the questionnaire.....	40
Table 3.2 Overall Reliability Statistics.....	40
Table4.1 Gender of respondents.....	41
Table 4.2Ages of respondents.....	41
Table 4.3 Educational background of respondents.....	42
Table 4.4 Descriptive statistics inline normality test.....	42
Table 4.5 Descriptive statistics.....	44
Table 4.6 Correlations.....	46
Table 4.7 Multi-collinearitytestcoefficients ^a	47
Table 4.8 Tolerance and VIF result coefficients ^a	48
Table 4.9 Collinearitydiagnostics ^a	48
Table 4.10 Model summary of regression analysis.....	50
Table 4.11 anova ^a	51
Table 4.12 Summary of hypothesis testing variable.....	52

Abstract

Marketing is all about customers and bank is customer dependent industry. This study was aimed to examine the effect of call center customer service on customer satisfaction by adopting Anton's "three service dimension model" (accessibility of the call center, customer interaction with agents and completeness and accuracy of answers provided by Agents) and adding call center technology as the fourth independent variable. Two type of survey was conducted to collect data the first part is data through a questionnaire containing 16 items from sample of 384 conveniently selected bank customers. Whereas the second part of survey is an interview with Director of CBE call center regarding the fourth non independent variable (call center technologies). The statistical result revealed that both "three service dimension model" and call center technologies have positive and significant effect on customer satisfaction. CBE should focus on elements of "three service dimension model" and call center technology so that it keeps satisfying its customers and build lasting relationship, as it's found on this study that they have positive and significant effect its customer satisfaction.

Key words: Three service dimension Model, accessibility of the call center, customer interaction with agents, completeness and accuracy of answers provided by agents and call center technologies.

Contents

CHAPTER ONE	11
1. INTRODUCTION	11
1.1 Background of the Study	11
1.2 Statement of the Problem.....	15
1.3 Research Questions	17
1.4. Research Objectives.....	18
1.5 Research Hypothesis.....	18
1.6 Significance of the Study	18
1.7 Scope/ Delimitation of the Study	19
1.8. Limitation of the study.....	20
1.9. Definition of Terms.....	20
1.10. Organization of the Study	21
CHAPTER TWO	22
Review of Related Literatures.....	22
2. Theoretical Review	22
2.1 Call center	22
2.2. Call center employees 'behavior.....	23
2.3 Call center technology and service delivery	25
2.4 Customer satisfaction.....	26
2.5 Theories of Customer satisfaction.....	27
2.6. Empirical review	29
2.7 Conceptual Frame Work of the Study.....	33
CHAPTER THREE	34
3. Methodology	34
3.1 Introduction.....	34
3.2 Procedures of Data Collection	34
3.3 Research Design.....	35
3.4. Population, Sampling Frame and Sampling Technique.....	36
3.5. Data Types, Sources and Methods of Data Collection	40
3.6. Methods of Data Analysis.....	42
3.7 Reliability and Validity.....	42
3.8. Ethical Consideration.....	44

CHAPTER FOUR	45
4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION.....	45
4.1 Introduction.....	45
4.2 Demographic Background of Respondents.....	45
4.3 Normality Test	46
4.4 Descriptive Statistics for the three non-independent variables.....	47
4.5 Correlation Analysis	49
4.5.1 Multi-collinearity test.....	51
4.5.2Checking for linearity	53
4.6 Regression Analysis.....	54
Part Two; Interview analysis	57
4.7 Results Discussion	60
CHAPTER FIVE	63
SUMMARY, CONCLUSION AND RECOMMENDATIONS	63
5.1 Summary of Findings.....	63
5.2 Conclusion	64
5.3 Recommendation	65
REFERENCES.....	67
APPENDIX.....	74
Appendix 2.....	77

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

Marketing is about customers. Customers are an essential component of a marketing system (Kotler et al, 2005). In this constantly changing world and today's competitive more companies are seeking ways for increase their competitive advantage, one way is to move towards improvement in-service delivery to customers. Thus, companies usually trying to put more facilities for customers and satisfies their needs and wants quickly.

The only value companies will ever create is the value that comes from having customers, the ones you have now and the ones you will have in the future. Businesses succeed by getting, keeping, and growing customers. Customers are the reasons that companies build factories, hire employees, schedule meeting, lay fiber optic lines, or engage in any business activities and without customers, one cannot have a business left to run (Kotler and Keller, 2013). This tells us the survival of organizations depends on its customers. Customers are the source of profits to be earned by a profit-making organization and the primary reason for being in the operation for not for-profit organizations. Thus, customers are the backbone and lifeline of organizations. Often it is said that "without customers there is no business".

In the present age, changes happen quickly in the service sector. In this challenging environment, among organizations and companies accelerating change is being forced to communicate with customers and make them loyal to their priority. Organizations have been forced to change their response to the market. They have focused more on customers and less on products. They have to have a long-term view of conducting business rather than short-term view. It is because of this that organizations have turned to new strategies for relationship marketing (Taleghaniand Tabatabaei, 2014).

These new strategies are different for different sectors. In the service sector especially in those sensitive service sectors like the financial institutions need higher level of customer service tools. With the fast change of technology using information technology tools like call center are becoming common.

1.1.1 The Call Center Work

“A call center can be defined as a work environment in which operators have to interact with customers by phone or other computer-based technologies. Call centers, nowadays used by several companies, appeared in the early 1990s and served for organizations to reduce the costs of some services by improving customer facilities, and extending expectations of high service quality. The types of call center activities can be identified in inbound and outbound: the first, are suggested to have a passive role, since the activity is generally focused on receive calls from customers who contact the call center to complain and face with problems, whereas the second, is considered to be more active, since the operator is mostly engaged in selling and telemarketing.”Margherit Zito, Federica Emanuel, Monica Molino, Claudio Giovanni Cortese, Chiara Ghislieri, Lara Colombo (2018).(<https://doi.org/10.1371/journal.pone.0192126> accessed on October 21, 2019).

The call center industry is one of the most rapidly growing in the developed and developing world today (Harvey, Cohendet, Simon & Borzillo, 2015). Call centers are employed in diverse industries, including financial services, insurance, retail, information technology, and telecommunications at large scale and it is growing rapidly. The rapid growth of these call centers, both locally and in the regional stage can be attributed to the liberalization of the industries, increased call center outsourcing or off shoring opportunities coming from different countries. As call center become abundantly important for customer-company relationship management, call center agents also become increasingly critical, as they serve as the link between companies and customers.

Call centers that execute customer care by phone, represent a new form of work organization, which often is designed “from scratch”. This might offer a unique opportunity to design jobs according to established principles of job design, creating work that is motivating, and enhances productivity for organization at large (Caillier, 2013). Typically, however, when new jobs are designed, such principles tend not to play a major role and unfavorable working conditions are resulted from work which is designed around technical solutions or existing organizational principles (Gardner, 2012).

In Ethiopia many financial institutions including Commercial bank of Ethiopia Launched Call center to manage their customer relationship. These call centers help banks to handle grievance of customers, to transfer and teach the services and products of banks, and transfer information’s

to the customers. With low level of banking penetration and banking literacy the success of the call centers is limited. CBE as the biggest financial institution in Ethiopia introduced call center in September 15, 2015 G.C and it is trying to address customers through it. (<http://cbe.portal/Library.aspx> accessed October 31, 2019)

1.1.2 Commercial Bank of Ethiopia

In any country, banking sector plays a vital role for overall development of primary (agriculture, service) and industrial sectors. The employees in banking company take painful effort to deliver the multiple needs of its customers. Banking industry is still emerging industry in Ethiopia; the entry of private banks laid foundation stone and passed a mile journey from its start.

Commercial Bank of Ethiopia is the leading bank in Ethiopia, established in 1942 and Pioneer to introduce modern banking to the country. It has 1546 branches stretched across the country as of October 31, 2019. Beside it has opened two branches in South Sudan and has been in the business since June 2009 and one of leading bank in Africa with total assets of 711.96 billion Birr as of June 30, 2019. It plays a catalytic role in the economic progress & development of the country. Moreover, the first bank in Ethiopia to introduce ATM service for local users and Pioneer to introduce Western Union Money Transfer Services in Ethiopia early 1990s and currently working with other 20 money transfer agents.

Furthermore, it has strong correspondent relationship with more than 50 renowned foreign banks and a SWIFT bilateral arrangement with more than 700 others banks across the world. It also has a total of 37,894 employees and currently it has more than 22 million account holders. Its vision is to become a world-class commercial bank by the year 2025 and its mission is committed to best realize stakeholders' needs through enhanced financial intermediation globally and supporting national development priorities, by deploying highly motivated, skilled and disciplined employees as well as state-of the-art technology. (<http://www.combanketh.et/> accessed on October, 2019)

Having more than 22 million account holders in its portfolios CBE branches and service centers are always full of customers. Long queues in branch offices are a common practice in CBE and sometimes it creates frustration in customers. Taking this to account to improve customer service and better company-customer relationship CBE introduced Call center.

CBE call center is established on September 15, 2015 G.C for both external customers and internal staff members who needed help. It's established in intension of serving as a feedback

collection tool and communicating with customer from wherever they are for free, without any charge, 24 hours of the day and 7 days of the week without interruption. And for this to work the call center employees are divided into three teams, which work in three shifts, and two categories, which are external customer service advisors (951) and internal contact center (8879). CBE call center are the most frequently contacted by receiving 3,045,396 calls between September 17, 2015 G.C to February 28, 2018 G.C for external customers and 131,781 calls for internal users. CBE call center has one director for both external and internal contact center and two managers for each, under manager of external customer service advisors there are three team leaders which lead three shifts and six senior advisors, two for each shift, which replied to an answered questions and difficulties that surpass customer service advisors. And under each senior customer service advisors there are 22 customer service advisors which makes 44 CSA in one shift, this makes up 134 Customer service advisors for External Customers. (<http://cbe.portal/Library.aspx> accessed on October 31, 2019).

According to Oliver (1980) and Huffman & Bateson, (2001) Customer satisfaction is a result of feeling pleasure or disappointment based on the service he or she get from service encounter against expectation before he or she have before service rendered to him or her.

The ultimate goal of the organizations effort is customer satisfaction and customer satisfaction only. Customer interests are expected to be put first in all situations regardless, even (in some views, especially) where these appear to conflict with other business opportunities by the roles played in the service encounter and by service personnel and consumers contribute to their own satisfaction. In the same way that totally satisfied customers are hard to find, the totally dissatisfied customer is also an elusive one. While one should understand the extent of customer satisfaction (i.e. how much customers are satisfied), it is perhaps more important and must to understand the underlying cause of the satisfaction/dissatisfaction. In general, the response to a satisfactory experience will contain both emotional and behavioral elements. So, customer satisfaction will result in positive emotional states which, in turn, mediate the response between customer satisfaction and behavioral responses resulted in positive word of mouth, no complaint behavior and repeat purchase (Mudie and Pirrie, 2006).

According to Trevor Arden and Stephanie Edwards (2009), customer service is a sum total of what an organization does to meet customer expectations and produce customer's satisfaction. In order to meet expectations of customers, organizations must study their own service delivery

characteristics. Service delivery characteristics are the individual elements that make up the service provided to customers. According to Zeithaml and Bitner (2003), one path to achieving customer's satisfaction is through effective customer service. Customer service is the stipulation of service to customers, before, during and after a purchase. Creating satisfied customers include prompt and successful response and solutions to their need and complains.

One of the most fundamental types of customer service is call center. A large business, the like of CBE, 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 are 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 vital way. Although there are debates among them, most of the authors explained that quality is major factor in satisfying customer. Service quality has therefore been taken as distinct to an overall judgment similar to attitudes towards the service and generally accepted as an antecedent of overall customer satisfaction (Zeithaml and Bitner, 1996).

1.2 Statement of the Problem

Bank is a customer leaning services industry. A bank depends upon the customers for their survival in the market. The customer is the focus and customer service is the differentiating point (Guo et al., 2008). Customer satisfaction has been very much considered and used in marketing texts and activities during previous decades. Customer satisfaction has been a subject of great concern in any organizations and institutions. The main and principal objective of organizations is to maximize profits and minimize cost. Profit maximization can be achieved through increasingly maximizing customer satisfaction (Wilson et al., 2008). Empirically, researches support the concept that there is a positive and direct relationship between customer's satisfaction and financial performance (Rust & Oliver, 1994; Anderson et al, 1994). 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 foundation of competitive advantage for organizations (Anderson, Fornell& Lehmann, 1994). Adrienne (2008) states that the use of technology in call centers is meant to lead to many advantages like cost savings,

scalability benefits, offering solutions to service problems, simplified processes which are common across the call center industry.

The increasing demand for customer-services in a highly aggressive business environment has resulted in the increase of call centers globally (Knight, 2012). Call centers are an essential part of most industries today. They play an essential role in today's business world and are often the most important source of contact for customers (Jagasia, Baul & Mallik, 2015).

In different organizations especially in Commercial Bank of Ethiopia; the way customers are served is traditional. The waiting time of customers is more bulky, which enhance the plan of time management is failed. According to Habte, Bacha, Redd (2015) CBE has problem of availability of connection service, attractiveness of bank facility, number of front desk (channels), managing waiting line, speed of service, waiting time, customers caring manner, giving improved and consistent service for their customers complain handling process, employees handling customers with best interest and at heart, employees give promoting service for their customers, employees inspire confidence and trust, availability of modern equipment, engagement in occupation and distance, which are significantly associated with customers satisfaction (Habte, Bacha, Reddy, 2015).

With the fast change of the mode of service delivery in the financial sector the importance of call center is growing. Basing on the above reasons for CBE too the importance of call center is very high. With effective call center CBE can improve the service delivery which later brings customer satisfaction.

In view of the importance of the subject, much attention is given and various studies have been conducted by different researchers in our country to show the many benefits of attaining customer satisfaction in CBE as a general and from different angle, from those studies Fetene Fikre (2017) emphasized on The Impact of Service Quality on The Satisfaction of Foreign Customers using SERVQUAL dimension and in his findings stated that "foreign customers are satisfied with responsiveness and assurance followed by empathy." And in another study conducted by Fikirte Mersha (2016) which is titled "Factors Affecting Customer Satisfaction: The case of Commercial Bank of Ethiopia Customers In Addis Ababa, Ethiopia", testing the SERVQUAL dimension she said that "the majority of the customers are satisfied with the services of commercial bank of Ethiopia and The study identified corporate image and price hold significant influence on customer's satisfaction."

Although the above studies focus on customer satisfaction of CBE in different sections they did not consider CBE call center work in general and did not mention it at all.

There are also different researches done on call centers works of different industries other than banking sector, from those, a thesis titled “The Impact of Service Quality on Customer Satisfaction: The Case of Ethio-Telecom” by Lidya Seyoum is one and in her findings Lydia stated that “service quality of Ethio-telecom call center is below average and customers are not satisfied with the service.” In another study done on Ethiopian Electric Utility Call Center by Muez Yihdego (2018) titled “Assessment of Factors Affecting Incoming Calls at Ethiopian Electric Utility Call Center” The result of his study showed that “the highest two reasons for call to the call center are power interruption and fallen electricity pole”.

Literature reviewed suggests that there is no empirical research that has been conducted on the effect of call center customer service on customer satisfaction in the case of the Ethiopian banking sector, and in addition, the effective call center is different from organization to organization, So this study which takes CBE as a center of this research is very important and timely. Other than that almost all of these studies conducted are in use of SERVQUAL dimensions (Reliability, Tangibility, Responsiveness, Assurance, Empathy) as a solely influencers of customer satisfaction, but I am interested to study the effect of call center customer service on customer satisfaction by finding responses to the following research questions which are adopted from Anton (1997) “three service dimensions model” (Accessibility of the call center, customers interaction with agent and completeness and accuracy of answers) and in addition to Anton’s model I keen to study the effect of call center technology on CBE customer satisfaction aiming to bridge the existing knowledge gaps.

1.3 Research Questions

1.3.1 Main Question

What is the effect of call center customer service advisors on customer satisfaction?

1.3.2 Sub Questions

1. To what extent does Accessibility of the call center affect customer satisfaction?
2. How customer’s interaction with customer service advisors of CBE affects their satisfaction?

3. How completeness and accuracy of answers provided by CSA affect customer satisfaction?
4. What are the effects of call center technology on customer satisfaction?

1.4. Research Objectives

1.4.1 General Objective

The Study Aims at Making Meaningful inquiry and investigation into the effect of call center customer service on customer satisfaction, the case of Commercial bank of Ethiopia.

1.4.2 Specific Objectives

1. To determine the extent to which Accessibility of the call center affect customer satisfaction.
2. To evaluate the extent to which customer's interaction with customer service advisors of CBE affects their satisfaction.
3. To analyze the extent to which completeness and accuracy of answers provided by CSA affect customer satisfaction.
4. To analyze on how call center technology affects customer satisfaction.

1.5 Research Hypothesis

In line with the above objectives the following four hypotheses are formulated.

H1; Accessibility of the call center has direct and positive effect on customer satisfaction of CBE

H2; customer interaction with customer service advisors of CBE call center has positive and direct effect on customers satisfaction.

H3; completeness and accuracy of answers provided by CSA of CBE have direct and positive effect on customer satisfaction.

H4; call center technology have direct effect on customer satisfaction.

1.6 Significance of the Study

Although we can find prior researches done on and about the service quality and customer satisfaction with regard to call center service in different industries, there are no previous well

documented studies on effects of call center customer service, on customer satisfaction in banking industries. This research, therefore, will play a role in filling the research gap related to the above stated scenario and tried to put a well-documented handy material on the effects of call center employee's on customer satisfaction in banking industry, referring to commercial bank of Ethiopia.

Further 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. And In conducting this study I think I was a beneficiary by getting experience of how to conduct research and this experience will help me in order to make other researches in the future.

Other government and private service giving organizations, especially those in banking industries, who provide call center service of their own will use this study to get practical experience.

1.7 Scope/ Delimitation of the Study

Although there are many variables that affects customer satisfaction of CBE as a general and call center in particular this study focused on Anton (1997) three service dimensions model (Accessibility of the call center, customers interaction with agents and completeness and accuracy of answers provided by agents) and adding to the Anton model it included call center technology as the fourth variable which is believed to affect customer satisfaction. The sampling technique used for this study was non-probability sampling technique with convenience sampling. Point out that the obvious limitation of convenience sampling is that it is likely to be biased Mackey, A. &Gass, S. (2005). Still, there is another problem of great concern related to convenience sampling, i.e. the problem of outliers. Because of the high self-selection possibility in non-probability sampling, the effect of outliers can be more devastating in this kind of subject selection. Outliers are cases whom consider as not belonging to the data. In a convenience sample, on the contrary, neither biases nor their probabilities are quantified Hatch, E. & Lazaraton, A. (1991). In fact, the researcher does not know how well a convenience sample will represent the population regarding the traits or mechanism under research. What makes convenience samples so unpredictable is their vulnerability to severe hidden biases. Leiner, D. J. (2014).

The study also delimited itself to customers of Commercial Bank of Ethiopia who lives in Addis Ababa area. However, the recommendation will be helpful for the organization under study, CBE, taking account that the sample will represent the population.

1.8. Limitation of the study

CBE have a very large customer base, which is more than 22 million, and with different kinds of account holders. This large base using different product and service of CBE makes difficult to target specific part of the segment for this study and this research lacks targeting a specific target group. The researcher instead used the generalized term of “customers of CBE” in setting target population for data collection. Although there are different segments of account holders, the researcher tried to minimize the gap by setting inclusive and generalized questions about the call center in the questioner.

The study had limitations because it only covered Addis Ababa area in terms of geographical region and was conducted between the months of October 2020 to June 2020. The questioners were distributed on March 2020, on which first COVID 19 (corona virus) case was recorded in Ethiopia and because of this contagious virus from the sample size taken 384 only 270 (70%) were returned and was valid to use for further analysis. And this may have significant effect on sample being representation of total population of CBE, which is more than 22 million.

1.9. Definition of Terms

- Effect – a change that results when something is done or happens
- Call center- is a physical place where customer and other telephone calls are handled by an organization, usually with some amount of computer automation. Customer–someone who buys goods or services from business
- Service – useful labor that does not produce a tangible commodity
- Advisor- to recommend or suggest
- Satisfaction- a happy or pleased feeling
- Customer's Satisfaction: the client's perception of the performance of the service in relation to his or her expectations.

1.10. Organization of the Study

The research is organized into five chapters. The first chapter is an introduction which includes background of the study, back ground of the organization, problem statement, objective of the study, research questions, and hypothesis of the study, significance of the study and scope /delimitation of the study, definition of terms and organization of the subject to be studied.

The second chapter is review of related literatures which consists theoretical and empirical background and important findings from different literatures.

The third chapter is methodology; this chapter includes research approach, research design, population and sample data, source, type data collection method and ethical consideration. The fourth chapter includes the research present the primary and secondary data and the detailed data analysis. The last chapter concludes the research and recommendations of the study.

CHAPTER TWO

Review of Related Literatures

2. Theoretical Review

2.1 Call center

Call center are defined as “a place where calls are placed, in high volume for the purpose of sales, marketing, customer service, telemarketing, technical support or other specialized business activity” (Bodin and Dawson, 1999). Almost all call centers are available 24 hours a day, 7 days a week and 365 days per year. Apart from this operational definition, Mitchell (1998) considered call center to be one of the strategies for conducting customer relationship management, meaning that when companies believe that the relationship with customer should not end at sales and customer access after the sales adds value to the transaction.

In call center, the act of solving problems and resolving complaints, giving information, answering questions and receiving feedbacks are dedicated to human agents and/or automatic voice response machines that handle telephonic communication with customers (Moon et al., 2004). Call center is a best means of providing and controlling customer satisfaction (Anton, 1997) over the phone and other communication medias out there in providing products and services by meeting customers' needs in an efficient, convenient and friendly way. On the other hand, it helps satisfaction recovery when a customer has a problem, complain or even just for feedback. The primary objective of call center operation is customer attention and achievement of high level of customer satisfaction. In today's competitive market, customer service call centers have moved from back to the front office as customer satisfaction and retention strategy (Anton, 1997). The importance of call center is principal in banking industry that all players have call centers as a proactive way to differentiate their services. They use call centers to build, maintain, and manage customer relationships by creating direct communication with their customers that help the business do more with customer and attract new customers.

However in reality call centers are unsuccessful to realize their potential in helping organization achieve the goal of providing high level of customer satisfaction. According to (Bennington et al., 2000) Customers are unsatisfied with call center services compared with office based in person

services so how to deliver superior service to customers through call center is extremely important for organizations from the long-term objective of customer retention.

It is significant for us to recognize why customers use call center service. Seeing from customer's perspective, the foremost call center benefits for customers are convenience, flexibility and customization (Bennington et al., 2000). It is customers who at last consume the services offered by call centers, hence their perceptions count most. Nowadays in the banking industries using call centers to reach customers are trending and calling call centers (contact centers) by customers is also growing at large.

2.2. Call center employees 'behavior

As employees play an important role in attaining customer satisfaction, the essential point would be to identify the factors and outcomes of employee behavior. In this logic, there are three questions needs to be talked or addressed: what does employee feel in contradiction of their company? How can call center managers guarantee the service provided by their employees? And how can employee behavior and attitude has an effect on customer satisfaction?

Call centers are hybrid organizations between the core activity and the hygiene/administrative activities, which frequently adopt a low-cost managerial approach (Piercy and Rich, 2009a) and at the same time make available a hybrid service between staff competence, technology usage, reliability and price (Ganguli and Sanjit, 2010).

In this context, employees are the core bridge that links the organization and the customer. This comprises many different requirements at the same time (Jasmand et al., 2012). On the one hand, in order to satisfy customers, employees are expected to offer service quality (De Ruyter and Wetzels, 2000; Upal and Dhaka, 2008). On the other hand, employees must correctly use the technology and accomplish managerial requirements in terms of number of calls answered and other performance indicators (Cheong et al., 2008; Feinberg et al., 2000). This extremely demanding environment causes stress among employees. When employees control their tasks, the stress can be positive and we can say that we speak about motivation. In contrast, the loss of control over task activity origins negative stress or emotional exhaustion, which afterward leads to employee's turnover or absenteeism (Poddar and Madupalli, 2012).

So, call center's employees must be able to satisfy customers (Sergeant and Frenkel, 2000), to unravel problems (Bharadwaj and Roggeveen, 2008), to bring quality service (de Ruyter and

Wetzels, 2000; Upal and Dhaka, 2008), to harvest performance (Cheong et al., 2008; Feinberg et al., 2000; Piercy and Rich, 2009a, 2009b) and to involve in several activities at the same time, such as adaptive selling (Evanschitzky et al., 2012; Jasmand et al., 2012). All of the above-mentioned tasks must take place in a stressful environment, dealing with problematic customers (Poddar and Madupalli, 2012; Wegge, 2006) under managerial burdens that adopt a production line approach (Gilmore, 2001) and a low-cost approach to HR practices (Wallace et al., 2000). In addition, there is some supporting indication that call center employees also experience work-family conflict due mainly to emotional dissonance, workload and uneasiness to deal with customer displeasure (Choi, 2012). Maybe this is the reason why the call center literature does not adequately address the employee satisfaction paradigm. Indeed, research focuses mostly on the opposite, that is, employee unhappiness measured in terms of employee burnout, turnover and absenteeism. As some authors suggest, it seems that employee turnover and absenteeism are the main internal problems in call centers (Piercy and Rich, 2009a) and could be solved through a diverse approach to HR practices.

In terms of managerial approach, the literature proposes that it also plays an important role in call center operation. We can categorize two main managerial approaches: the production-line approach, which focuses on quantitative performance; and customer orientation approach, which focuses on qualitative performance (Gilmore, 2001). In other words, call centers that implement the production-line approach essentially emphasize handling a large number of calls or focus on sales volume, and usually do not take into account the quality of the service rendered or the satisfaction of customers. In this sense, in order to attain their goals, these types of organizations try to standardize their operations by constantly pressing and controlling their staff. On the contrary, call centers which implement a customer-orientation approach are categorized by focusing on service quality and concern about customer satisfaction. In this sense, these types of organizations try to oblige and motivate their employees by empowering and giving company support so that staff is able to deliver service quality.

Although some authors report the use of both quantitative as well as qualitative metrics in order to measure call center performance (Bain et al., 2002), there is also signal that call center managers still focus mostly on quantitative metrics (Gilmore, 2001), which affect negatively employees ability to bring service quality (Dean and Rainnie, 2009). So, as we cited before, employees are the essential part of call center activity, as they deal with customers face to face

and at the same time use all the tools provided by the company. Thus, in order to attain results, managers must design suitable HR practices and leverage technology efficiently (Eric et al., 2006).

Therefore, the customer orientation approach is still believed to be the most appropriate managerial approach if the call center's aim is to bring service quality and achieve customer satisfaction (Curry and Lyon, 2008; Gilmore, 2001).

According to the findings of Dorina Chicu, Gerard Ryan and Mireia Valverde-Aparicio published in May 2016, that titled "determinants of customer satisfaction In call center", only a few researchers address the direct link between employee satisfaction and customer satisfaction, referring (Evanschitzky et al., 2012; Upal and Dhaka, 2008) And further illuminating the work of Upal & Dhaka, (2008) as a suggestion of a reciprocal correlation between employee satisfaction and customer satisfaction. It means that not only employee satisfaction and behavior can lead to customer satisfaction, but also that customer feedback, in terms of recognition or abuse, can produce satisfaction, dissatisfaction, or emotional conflict among employees (Litte and Dean, 2006; Poddar and Madupalli, 2012; Wegge et al., 2007). So, the relationship between customer and employee is bi-directional by nature, and depending on the interaction and communication satisfaction can be achieved by both parts and neither of them. This mutual relationship between employee and customer could be influenced by different peripheral factors, such us customer attitude toward the company or customer ethnocentrism on one hand (Sharma, 2012; Sharma et al., 2009), and employee obligation to the organization on the other hand (Sergeant and Frenkel, 2000). As a result, the negative predisposition from one participant of the service encounter is disposed to create a negative interaction between both parts. Accordingly, not only customers will feel dissatisfied with employee service (Helms and Mayo, 2008). Employees, when facing with problematic customers, will experience an emotional dissonance that leads to lower job performance (Wegge, 2006) or to turnover (Poddar and Madupalli, 2012).

2.3 Call center technology and service delivery

Technology in call center becomes the new frontier for delivering effective customers service and produce customer satisfaction. To ensure high level of customer satisfaction, companies must offer stellar customer service anytime, anywhere and through any touch point, recognizing

that continuously adding quality Customer service advisors simply does not add up financially. More and more companies are turning to technology in order to weigh in quality support.

A lot of changes to the call center and customer experience landscape in the 21st century are becoming a trend. Cloud communications and virtual agents are on the forefront of everyone's minds, and social-media is more important than ever. Technology trends that are helping companies attain this kind of customer experience comprises artificial intelligence integrated with customers experience, advanced technologies that have completely rationalized the modern business environment like digital transformation, analytical programs with kind of statistical dashboards on user interface, implementation of cloud based communication system self-service websites and two way social media conversation are making call centers more sophisticated and much important for customer satisfaction.

The breakdown of the brick and mortar banking system also decrease the regularity of customers coming to bank branches. The young generation is more attracted to the online payment systems than the traditional branch-oriented banking. Online banking system comes with a need for online management of customers' queries and questions. So, call center is becoming much more than phone communication with customers. Actually, phone or line communication is becoming the outdated version of call center. Emerging technologies empowered banks to use online two-way communication to effectively deliver customer service. (Johnatan Gutumberge, 2015)

2.4 Customer satisfaction

Customer satisfaction is an abstract concept. Cronin & Taylor (1992) describe it as the link between quality and post-purchase assessments. Firms often use customer satisfaction as a measure of product or service performance on the market (Anderson & Sullivan, 1993).

As customer satisfaction is related to the perception and expectation of the customer, level of satisfaction increases when the quality of service exceeds needs and expectations of the customer.

The actual demonstration of the state of satisfaction differs from person to person and service/product to service/product. The state of satisfaction or dissatisfaction depends on a number of psychological and physical variables which correlate with satisfaction or dissatisfaction behaviors. Satisfaction behaviors include positive word of mouth and repurchase intentions. In

banking industry, satisfaction behaviors are willingness to recommend and continuity of using the service.

As stated in preceding section, call centers are an essential weapon for customer relationships management and customer retention in the banking industry. All players have call centers served as a cornerstone of service strategy. How to achieve customer satisfaction through the service of call center is important for all players in the industry.

It is central to note that customer loyalty is affected by customer satisfaction (Heskett, 1997). A loyal customer will hold on using the service and there is empirical support for positive association between customer satisfaction and intentions to spread word-of-mouth (Dabholkar and Thorpe, 1994; Richins, 1983)

According to Anton (1997), perception of service performance can be categorized into three zones – rejection, acceptance and preference, by the customer satisfaction index (CSI), which the desired level of score is 85 - the preference zone. As Reichfeld (1993) stated, it is interesting to note that a very satisfied customer – customer in preference zone (customer satisfaction index $CSI \geq 85$), is six times more likely to be loyal, to repurchase and to endorse the product than a customer who is just satisfied –customer in acceptance zone. Vavra (2002) further mentioned that if customer satisfaction is attained, company will advance customer loyalty, and thus improve profitability, market share, and can advantage the company in the longer term.

2.5 Theories of Customer satisfaction

1) Expectancy – Disconfirmation Theory

Oliver (1980) elaborated that consumer expectations are the foundation of post-purchase evaluations such as disconfirmation and satisfaction. Satisfaction is formed on the basis of consumer's pre-purchase expectations about the performance of a product/service and their decisions about the actual product/service performance. If the actual performance associate to the expectation is identical, it is labeled as “confirmation”. It is categorized as positive disconfirmation if performance is better than expectation; while as negative disconfirmation if it is worse than what is expected before. This theory assumes that customers are skilled to form or articulate their expectations. Chan W. S (2011). Customers have expectation on the service quality provided by the call centers of banking industries before they call for the services, they

required to get from the call center. If the service quality provided by the call center does not meet the expectation of customer, the customer will be unsatisfied and eventually will not call for additional service of the bank. Conversely, if the call center service quality meets the expectation of customer, the customer will be satisfied and continuous to use the service rendered. This theory enlightens the ultimate aim of providing higher service quality in call center is to satisfy customer's expectation. Chan W.S (2011) The set back of this theory is that it assumes all people can form or articulate the pre-purchase expectation, but in fact some people have very limited expectations or molded expectations prior to purchases (Halstead et al., 2007).

2) Equity Theory

Huppertz et al. (1978) applied equity theory to buyer-seller condition. The study advocates that consumers can cause inputs and outcomes for themselves and merchants, rate input /outcome on fairness, and then express their satisfaction /dissatisfaction.

Consumers will feel equitably treated and thus satisfied if they distinguish their outcome-to input ratio is proportionate to that of the seller. On the other hand, consumers will feel unfair when they perceive their outcome-to-input ratio is disproportionately higher, and thus dissatisfaction will be formed. Customer satisfaction in this theory is journey on justice. Chan W.S (2011).

In equity theory, customer satisfaction is based on justice, which insists on saying, their judgment on outcome-to-input ratio by relating it to that of the seller/company. In banking industry, customer satisfaction can be based on use of the service uninterruptedly for every problem they face or for every endorsement and remarks they want to present. These customers' satisfactions will be grounded on loyalty justices. Different customers will have different evaluation on their input; uncalled-for to say, their expected outcomes can be varied, too. Chan W.S (2011)

3) Customer Expectation Theory

The SERVQUAL model (Parasuramen, Zeithaml & Berry, 1988) is the most common approach for determining customer satisfaction on service quality by relating customers' expectations earlier to service encounter and their perceptions of the actual service delivered. They define and refine that the expectation of customer is hinged on three factors including positive word of mouth, personal needs and past experience. After all, the measurement of customer satisfaction is based on the gap between expected service and perceived service by using the five dimensions.

In the “Customer Expectation Theory”, customer expectation rest on three factors – word of mouth, personal needs and past experience Chan W.S (2011).

Same as Expectancy-Disconfirmation theory, the limitation of Customer Expectation theory is that it assumes all people can articulate the pre-purchase expectation, but in fact some people have very limited expectations prior to purchases (Halstead et al., 2007).

To conclude, all three theories can be used to explain and elaborate the formation of customer satisfaction in call center, and all of them illustrate the same facts that: Customer satisfaction is a result of comparison between expectation and perceived quality.

Customer expectation varies person to person because of different personal needs, word-of-mouth, past experience, monetary justice or loyalty justice, etc. Perceived quality differs person to person, too, due to divergent expectations Chan W.S (2011).

2.6. Empirical review

2.6.1 The link between service quality and customer satisfaction

Parasuramen, Zeithaml & Berry (1985, 1988) points out that the notion of service quality and customer satisfaction are closely inter-related and are not implicitly differentiated from each other. Other researchers also share the same view that customer satisfaction and service quality are two different but highly correlated constructs (Bansal and Taylor, 1997; Dabholkar et al., 2000).

Cronin and Taylor (1992) locates that service quality is a predecessor of satisfaction in their structural analysis for the causal relationship among customer satisfaction, service quality and purchase intension. Spreng and Mackoy (1996) also support this finding and indicate that service quality influences satisfaction.

The SERVQUAL model (Parasuramen, Zeithaml & Berry, 1988) is the most common approach which proposes measurements not only on customer perception on service quality but also on organization side. On customer side of the model, there is one gap known as the service quality gap, while on the organization side of the model, there are four gaps that will affect the perceived service quality.

Gap 1 Understanding Gap / Market Information Gap. According to Zeithaml et al. (1990) gap 1 happens when managers do not know or understand their customers ‘needs. This gap occurs

when there is a variance between what consumers expect from a provider and what management of the company perceives the consumers to expect. Therefore, managers cannot design or specify the service to meet their customer's requirements, which will create gap 2, the design gap.

Gap 2 Design Gap / Service Standards Gap: This gap occurs when there is a difference between management's perception of consumer expectations and actual service quality description. Zeithaml et al. (1990) further explained that if the service specification is incorrect, the operational staff would carry an inappropriate service generate gap 3 known as the delivery gap.

Gap 3 Delivery Gap/Service Performance Gap: This gap takes place when there is a difference between service quality specifications and the service actually delivered to the customer.

Gap 4 – Market Communication Gap / Internal Communication Gap: This gap is the difference between what is brought to and what is communicated to customers as being delivered. When the service provider makes promises about its service through its communication tools, it raises the consumers' expectations thus creating gap 4 known as the market communication gap.

Gap 5 – Service Quality Gap: the fifth gap focuses on customer side and it's the gap that is between consumers' expectations and their perceptions of service quality.

The basis of this model is the set of gaps discussed above. Customer perceived service quality not only hinged on customer expectation but also the gaps associated with management understanding of customer, service standard, marketing and delivery of services.

2.6.2 Service quality in call centers

Since measuring the level of service quality is the first step to progress the service quality it is vital to have the effective measures. In call center there are numerous measurements of service quality. The following are the common measurements based on Anton and Feinberg.

1) Operational Measures

In the call center industry, service quality performance assessment is done on the basis of several operational measures. There are 15 frequently used operational measures (Anton, 1997; Feinberg et al., 2000).

- Average speed of answer (ASA) – the total queue time divided by the total number of calls being answered by call center agents.
- Abandonment rate – the ratio of number of calls abandoned by the customer prior to answer to number of calls made to the call center provider.

- Total calls – the total number of calls made to the call center
- Longest delay – the longest time taken either before answering a customer call or call abandoned by a customer.
- Average talk time – the total time the customer was connected to a call center agent of Call Center Company.
- Average work time after-call – the average time asked to finish the work added to be done instantly after an inbound call. This includes keying-in data, filling out forms. During this period, the agent is inaccessible to take another inbound call.
- Average handle time – the average time taken to handle per customer per agent; that is, the summation of average talk time and average work time after-call.
- Service level – the ratio of number of calls answered within the settled upon time interval and total calls received.
- Queue time – the number of seconds the callers spends waiting for a call center agent to answer the phone after being positioned in the queue by the ACD (Automatic Call Director)
- First-call resolution – the percentage of customers who have satisfactory problem resolution on the first call, i.e. no need of calling again.
- Percentage of calls blocked – the percentage of customers who receive “number is busy” message and could not even enter in the call queue to attain the call center service.
- Calls per agent – the total number of calls handled per agent in a shift (usually of eight hours)
- Adherence – the percentage of call center agents who are on their seats as programmed.
- Agent turnover – the percentage of agents who resign in a specified period of time
- Average hold time – the average number of seconds or minutes that an agent places customer on hold(Anton, 1997; Feinberg et al., 2000)

Feinberg et al. (2000) has founded that, out of fifteen operational variables, only first-call resolution and abandonment rate have a substantial effect on caller satisfaction but the relationship is still weak. Their study shows operational variables mainly used by call centers had low-predictive validity in assessing customer satisfaction with call centers. The measures only indicate the efficiency level in call centers (Marr and Parry, 2004). The over-dependence on

operational measures results in focusing on calls rather than call outcomes as experienced by customers (Robinson and Morley, 2006).

2) Call Center Representative Behavior

Burgers et al. (2000) launches 4 dimensions to measure customers' expectations with regard to call center representative behavior:

- **Adaptiveness** – listen to customers, understand problems and offer solid answers by assessing customers' constitutions (mood, social behavior, relationship with the firm) and altering behavior consequently.
- **Assurance** – reducing customer hesitation by providing clear explanations to customers, like steps in the problem solving and the purposes
- **Empathy** – empathizing with customer circumstances, giving customers the feeling that their problems are important to the firm
- **Authority** – representatives are empowered and authorized to perform tasks required for unraveling problems

The expectation dimensions above are emphasis on quality part but cover a narrow aspect of telephone interaction.

3) Service Quality Dimensions

In Parasuraman et al. (1985, 1988) service quality gap model, five dimensions and 22 service attributes are identified. These dimensions are:

- **Reliability** – capacity to deliver the promised service
- **Responsiveness** – willingness to provide speedy service
- **Assurance** – ability to encourage trust and confidence
- **Empathy** – individualized thoughtfulness to customers, caring about the customers individually.
- **Tangibles** – form of physical facilities, personnel and materials

However, Rust et al. (1994) state that “SERVQUAL is intended to describe the dimensions of quality common to all services, and is therefore unlikely to encompass the special properties of any particular service.” In call centers, unlike face-to-face service encounters occurring in other service organizations such as restaurants, banks and hospital, service encounters are phone encounters that happen every time a customer intermingles with a company through call centers

over telephone. In telephonic service encounters, tangible influences such as attire of employees, physical evidence (e.g. air conditioning, ambience) do not contribute to service quality perceptions of customers. Keiningham et al. (2006) has shown that call center satisfaction has all the dimensions as found in SERVQUAL – reliability, responsiveness, assurance and empathy, except tangibility. Also, in a study conducted by Dean (2004) in Australian call centers has found other measured attributes for service quality, such as Adaptiveness, assurance, authority given to agents to solve customers’ problems, lack of queues, empathy, and friendly manner of agents, have consistently high ratings. So, the service quality five dimensions are not good fit to the call center attributes.

The model Anton (1997) provides a more well-adjusted view of evaluation on call center’s service quality. It is inclusive that it covers both operational and behavioral measures. On the other hand, the attributes in Anton’s model are the reflection of service quality dimensions in SERVQUAL – reliability, responsiveness, assurance and empathy. In this study, I will use Anton’s call center service quality attributes to measure customer’s perception of performance, adding technological effectiveness of CBE for call center service.

2.7 Conceptual Frame Work of the Study

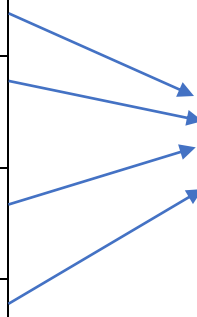
Based on the overall review of related literatures and the theoretical framework, the following conceptual model is developed in which this specific study is governed. The model that is used in this study offered a unique result of the effect of call center customer service on customer satisfaction. This model was tested in Commercial Bank of Ethiopian.

Independent variables

Accessibility of the call center
customer interaction with customer service advisors
completeness and accuracy of answers provided by CSA
Call center technology

Dependent variable

Customer satisfaction



Source: (Anton, 1997 and Myself)

CHAPTER THREE

3. Methodology

3.1 Introduction

In this chapter the practical method used in order to answer the research questions and fulfill the purpose of the research are presented. Also, it provides an overview of research approach, research design, population, sampling frame and sampling technique, data source and data types, sources and methods of data collection, ethical consideration, and methods of data analysis.

3.2 Procedures of Data Collection

The research is conducted on semi structured interviews with respondents on a one-on-one basis for testing of the relevance of items in the questionnaire. Furthermore the questionnaires were distributed to customers based on Anton (1997) model with slight modification on some statements and an interview was conducted with call center managers of CBE to explore the effect of current technologies CBE is using on customer satisfaction.

There are two methods that present in the research method such as quantitative and qualitative, where one of them is not better than the others, all of this depends on how the researcher want to do a research of study (Ghauri and Kjell, 2005). To achieve the aforementioned objectives, the study adopted a quantitative research approach; where it used a questionnaire to provide predominantly descriptive and qualified data.

A quantitative research enables the researcher to collect objective and numerical data to apply statistical tools and will use to establish relationships of the variables used in this study.

A quantitative approach is one in which the investigator primarily uses postpositive claims for developing knowledge, i.e., cause and effect relationship between known variables of interest or it employs strategies of inquiry such as experiments and surveys, and collect data on predetermined instruments that yield statistics data (Creswell, 2003).

3.3 Research Design

Saunders et al. (2007), defines research design as the general plan of how the research questions would be answered. The research design for this study is the Cross-sectional field survey method because data is collected at one point of time to assess the relationship between Independent variables and dependent variable. In cross-sectional field surveys, independent and dependent variables are measured at the same point in time using a single questionnaire (Anol, 2012). In addition, this research applied both descriptive and explanatory research design. Descriptive research is research which describes exist phenomena. It is used to identify and obtain information on the characteristics of a particular problem or issue. The data collected is often quantitative and statistical techniques are usually used to summarize the information.

Explanatory research is a continuation of descriptive research. It aims to understand phenomena by discovering and measuring causal relations among them. An important element of explanatory research is identifying and, possibly, controlling the variables in the research activities, since this permits the critical variables or the causal links between the characteristics to be better explained. Jill and Roger (2003), based on this, this research describes the general information of the respondents (customers) and aimed to explain and identify the causal relationship between independent variables and customer satisfaction which enabled us to understand the depth of effect that independent variables have on customer satisfaction.

To analyze the effect of different variables on customer satisfaction different scholars used different models. SERVQUAL and SERVPERF being the favorable of all for service quality, Rust et al. (1994) state that “SERVQUAL is intended to describe the dimensions of quality common to all services, and is therefore unlikely to encompass the special properties of any particular service.” In call centers, unlike face-to-face service encounters occurring in other service organizations such as restaurants, banks and hospital, service encounters are phone encounters that happen every time a customer intermingles with a company through call centers over telephone. In telephonic service encounters, tangible influences such as attire of employees, physical evidence (e.g. air conditioning, ambience) do not contribute to service quality perceptions of customers. in another hand Keiningham et al. (2006) has shown that call center satisfaction has all the dimensions as found in SERVQUAL – reliability, responsiveness, assurance and empathy, except tangibility. Also, in a study conducted by Dean (2004) in

Australian call centers has found other measured attributes for service quality, such as Adaptiveness, assurance, authority given to agents to solve customers' problems, lack of queues, empathy, and friendly manner of agents, have consistently high ratings. So, the service quality five dimensions are not good fit to the call center attributes.

Anton (1997) "three service dimension model" (accessibility of the call center, customer interaction with customer service agents (CSA) and completeness and accuracy of answers provided by CSA) area well-adjusted view of evaluation on call center's service quality. It is inclusive that it covers both operational and behavioral measures. On the other hand, the attributes in Anton's model are the reflection of service quality dimensions in SERVQUAL – reliability, responsiveness, assurance and empathy. In this study, the researcher used Anton's call center service quality attributes to measure customer's perception of performance, adding technological effectiveness of CBE for call center service.

3.4. Population, Sampling Frame and Sampling Technique

3.4.1 Target Population

The target population of the study is customer of CBE in Addis Ababa. Even though CBE had more than 22 million customers, the study focuses on Addis Ababa due to its convenient and inexpensive to the researcher.

3.4.2 Sampling Technique

Sampling techniques can be divided into two major categories: probability sampling and non-probability sampling (Parasuraman et al., 2007) Moreover, a researcher conducting a sampling study has a variety of probability and non-probability sampling methods to choose from. Each one of these methods is discussed below.

➤ Probability sampling

Probability sampling is an objective procedure in which the probability of selection of each population element is known (Parasuraman et al., 2007). However, Aaker et al. (2007) highlight that in most probability sampling methods, a sampling frame is required and information on the sampling units is necessary before starting the sampling process. Probability sampling methods include simple random sampling, systematic sampling, stratified sampling and cluster sampling.

i. Simple random sampling

Simple random sampling is the most basic type of probability sampling (Parasuraman et al., 2007). Malhotra and Peterson (2006), in simple random sampling each element of the population have a known and equal probability of being selected for the sample. Simple random sampling commences by assigning each element of the sampling frame a number, and then a series of random numbers is generated – the sample becomes the elements whose numbers appear on the list.

ii. Systematic sampling

Systematic random sampling is similar to simple random sampling, but requires that the target population must be ordered in some way. In systematic sampling, a starting point is selected at random and then elements of the sampling frame are taken at equal predetermined intervals (Bradley, 2007). The sampling interval, i , is determined by dividing the population size N by the sample size n and rounding to the nearest integer (Malhotra, 2010).

iii. Stratified sampling

Stratified sampling first requires dividing the heterogeneous population into homogeneous strata that are mutually exclusive and comprehensive, and thereafter a sample of elements is drawn independently from each stratum. Malhotra, 2010 cautions that the elements within a stratum should be as homogeneous as possible with the elements of each stratum as heterogeneous as possible. This author adds that the stratification variables should be closely related to the characteristic of interest. Parasuraman et al. (2007), note that this sampling technique compels the sample to contain elements of each of the strata of the population.

iv. Cluster sampling

In cluster sampling, a two-step probability technique is used: the target population is first divided into mutually exclusive and collectively exhaustive subpopulations or „clusters”, after which a random sample of clusters is, selected (Bradley, 2007). Each cluster is assumed to be representative of the heterogeneity of the target population. Once the cluster has been identified, the prospective sampling units are drawn into the sample – either by using a simple random sampling method, or by investigating all the elements in the identified cluster (Hair et al., 2000).

➤ Non-probability sampling

In non-probability sampling, the probability of selection of each sampling element is not known; accordingly, the selection of sampling elements is based on some type of intuitive judgment or knowledge (Hair et al., 2000). Non-probability sampling consequently relies to a large degree on

the discretion of the researcher. Non-probability sampling methods eliminate the cost and trouble of developing a sampling frame and this ensures operational ease. Many authors postulate that a non-probability sampling method, even though it is biased and lacks the precise estimates of sampling variation, can be appropriate when used in the correct context. Non-probability sampling methods which are available to researchers include judgmental sampling, quota sampling, snowball sampling and convenience sampling.

i. Judgmental sampling

Hair et al. (2000) explain that in judgmental sampling, respondents are selected according to an experienced individual's belief that they will meet the requirements of the research study. As a result, the researcher believes that the sample selected is representative of the target population or has the greatest knowledge and experience of the research subject. According to Proctor (2005), judgmental sampling is more frequently used in industrial market research than in consumer research.

ii. Snowball sampling

Snowball sampling is a sampling method in which a set of respondents is chosen, who in turn helps the researcher identify additional people to be included in the study. This process is continued, resulting in a snowball effect as one referral is obtained from another (Malhotra & Peterson, 2006). According to Malhotra (2010), the snowball sampling method is generally used when studying characteristics that are relatively rare or when it is difficult to identify the population.

iii. Quota sampling

The quota sampling method entails the selection of prospective respondent's according to prior specified quotas regarding demographic characteristics, specific attitudes or specific behaviors (Hair et al., 2000). According to Parasuraman et al., (2007), quota sampling requires the following: dividing the population into segments based on control characteristics, determining the quota of units for each population cell, and instructing the interviewers to fill the quotas assigned to cells.

iv. Convenience sampling

In convenience sampling, the sample is drawn from a section of the population that is readily accessible or available to the researcher (Wiid & Diggins, 2009). The sample is accordingly drawn at the convenience of the researcher, often as the study is conducted. According to

Malhotra (2007), this method allows for obtaining a sample in a quick and inexpensive manner. Many author further states that with convenience sampling, the sampling elements are easy to measure and are also cooperative.

And based on the above definitions made by different literatures the sampling technique used for this study is non-probability sampling technique. Not all members of the population will have a chance of participating in the study. This is contrary to probability sampling, where each member of the population has a known, non-zero chance of being selected to participate in the study. And it is also Cost and time effectiveness compared to probability sampling. It involves selecting conveniently those cases that are easiest to obtain for the sample. Convenience sampling (also known as Haphazard Sampling or Accidental Sampling) is a type of non-probability or non-random sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate are included for the purpose of the study. Dörnyei, Z. (2007). According to Saunders, Lewis and Thornhill, (2009) the sample selection process is continued until the required sample size has been reached.

3.4.3 Sample size

Even though CBE have more than 22 million customers it is difficult to know the exact number of customers. This is because of daily increase of the number of customers and did not consider all customers who use service of CBE like local money transfer customers, foreign money transfer customers, foreign currency exchange customers, exchange of birr notes customers. The sample size for this study is 384 determined using unknown population formula of sample size determination.

$$n = \frac{z^2 \cdot p \cdot q}{e^2}$$

Where

n = the sample size

Z = standard error associated with the chosen level of confidence (For 95% confidence = 1.96)

e= acceptable sample error (0.05)

p = probability of success (assume it is 0.5)

q= 1-p

$$n = \frac{(1.96)^2 * (0.5 * 0.5)}{(0.05)^2}$$

$$n = 0.9604 / 0.0025$$

$$n = 384$$

3.5. Data Types, Sources and Methods of Data Collection

3.5.1. Types and Sources of Data

According to Catherine (2007), data may be collected as either primary or secondary. The main source of this study was primary data source collected from customers of commercial banks of Ethiopia, and an interview with Managers of Call center as the research is intended to assess the effect of call center customer service on customer satisfaction; Primary data was collected based on structured questionnaires and interview. Those data which were collected through questionnaire describes numerical figures is the quantitative data types that is used in this study, and secondary data that is relevant to the study was collected from the bank written document, and internet access etc.

3.5.2. Methods of Data Collection

Quantitative method of data collection was used in order to gather primary data and for that fixed response questionnaire and interview was conducted by focusing on the research objective, as the aim of this study is not only to collect the perceptions of customers but also those of call center managers regarding technologies that CBE call center is currently using and whether it have effect on customer satisfaction. Thus the first set of questioner which are adopted from Anton (1997) “three service dimensions model” have five parts were distributed for respondents using non probability/convenience technique for respondents to fill and reply, the first part of the questionnaire focuses on the service dimension – accessibility of call center, which is the independent variable of this research. The second part focuses on service dimensions related call center agents and the third part asks about interaction and answer/solution given, which are also the independent variables of this research. The fourth part of the questionnaire focuses on overall customer satisfaction, which is the dependent variable of this research. The fifth part of the questionnaire collects demographic data, such as gender, age, education, of the customers. The second set of questioner is a structured interview questions to be answered by manager or

director of CBE call center based on the fourth non-independent variable of the study which is the effects of call center technology on customer satisfaction.

Details of the questionnaire are illustrated as follows:

Part 1 – Accessibility

This part is to find out the respondent's perception of service quality of CBE call center in the dimension of accessibility. Based on Anton's model, there are four service attributes in this dimension: (1) number of rings, (2) queue time, (3) hold time, (4) number of transfers. As such, we develop four questions in Part 1 of the questionnaire.

Part 2 Interaction with Call Center Agents, which are called call center service advisors in CBE, and

Part 3 the Answer/Solution provided- this part is to find out the respondent's perception of service quality of CBE call center in the dimensions answer/solution provided.

The researcher developed total of eight questions in Part 2 and part 3 of the questionnaire because there are four attributes in each dimension in Anton's model. Which is part 2, Interaction with call center agents: (1) handled the call quickly, (2) showed concern for caller's situation, (3) understood caller's questions, (4) spoke clearly and in part 3 Answer/solution provided: (1) completeness of the answer, (2) confidence in solution, (3) completeness of options, (4), sufficient knowledge about products/services.

Part 4 – Overall Satisfaction

This part was to find out the respondent's customer satisfaction. Based on the literature review in Chapter 2, customer satisfaction and customer loyalty are closely related and loyal customers are believed to be satisfied from the customer behavioral perspectives of re-purchase and recommendation to others. As such, the researcher developed 4 questions concerning satisfaction, willingness to continue using the service, recommend it to others, whether it's enough and satisfactory in calling only ones with overall satisfaction of the service.

Part 5 – Demographic Data

This part was for finding out the respondent's personal background in order to analyze the respondent's background relating to the research result. Customers: gender, age, education and sex.

For the fixed response questionnaire explained above five-point Likert-scale ranging from Strongly Disagree (1) to Strongly Agree (5) will be used. A five-point Likert type scale ranging

from 1 (one being strongly disagree) to 5 (five being strongly agree) is a widely used rating scale which requires the respondents to indicate a degree of agreement or disagreement with each of a series of statements or questions(Albaum, 1997)

3.6. Methods of Data Analysis

The first part of data gathered through questioner from customers of CBE, which are adopted from Anton (1997) three service dimension model is analyzed using Descriptive statistics and inferential statistical analyses techniques, frequency distribution, mean score ranking order, correlation test, multi-co linearity test, regression analysis to answer the research questions posed in the first chapter of the research. The relationship between the dependent variable, customer satisfaction, and the three independent variables was expressed as a linear combination of the independent variables plus an error term. The multiple linear regression models are specified as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where Y= Customer satisfaction

X1= Accessibility X3= Answer/solution provided

X2= Interaction with Call Center Advisors

Where the β s are coefficients of independent variables, Xs are column vectors for the independent variables in this case; accessibility of the call center, customer interaction with CSA's and completeness and accuracy of answers/solutions provided by CSA's. The results are presented by using tables to bring easy and clear understanding on the findings.

Data analysis was made by categorizing data in to meaningful groups and interpreting specific occurrences. Data collected from secondary sources was analyzed by using qualitative data analysis techniques by creating detailed relationship with the main idea under study.

3.7 Reliability and Validity

The precision with which things are measured in a study is expressed in terms of validity and reliability (Hopkins, 2001). Validity is concerned with whether the findings are really about what they appear to be about, Likewise reliability refers to the extent to which the data collection techniques or analysis procedure will yield consistent findings (Saunders et al., 2009, p. 157,

Bryman& Bell 2003, p. 33). Reliability is an essential pre-condition for validity and can be estimated in one of four ways: Internal consistency (typically Cronbach's alpha), split-half reliability (the Spearman- Brown coefficient), test-retest reliability and inter-rater reliability. This study applied Cronbach's alpha value as a tool for reliability examination. The higher the Cronbach's alpha value, the higher the internal consistency (Hair, Anderson, Tatham, & Black, 1998). According to Sekaran(1996) and Melewar and Saunders(1999), reliability figures less than 0.60 are generally considered to be poor, those in the range of 0.70 to be acceptable, while those above 0.80 to be good. Based on the result depicted in Table 3.1, the value of the Cronbach's alpha for each in dependent variables is 0.746 for accessibility of call center , 0.754 for customer interaction with CSA and 0.719 for completeness and accuracy of answer provided by CSA and for dependent variable, which is customer satisfaction cronbach's alpha of 0.819 is recorded and all variable together shows a value of 0.887 Alpha coefficient, which implied that the scales used in the questionnaire is satisfactorily measured the constructs and suggested good internal consistency of the items.

Table 3.1: Reliability test result for the questionnaire

Item	Number of Item	Cronbach's Alpha	Result
Accessibility of call center	4	0.746	accepted
Customer interaction with CSA	4	0.754	Accepted
Completeness and accuracy of answer/solution	4	0.719	Accepted
Customer satisfaction	4	0.819	Good
Overall reliability	16	0.887	Excellent

Table 3.2 Overall Reliability Statistics

Cronbach's Alpha	N of Items
.887	16

Source: own survey, 2020.

3.8. Ethical Consideration

Information provided by the respondents were confidential because respondents are informed before completing the questionnaire that the information they provided would be used for academic purposes only and that their participation was voluntary; thus, no information provided by respondents could pose any harm to their work or their home. Anonymity was ensured in that the questionnaires filled by respondents doesn't linked to respondents, as respondents were required to submit filled questionnaires with no names.

CHAPTER FOUR

4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This study attempted to examine the effect of Customer service on call center customer satisfaction in CBE using Anthon, 1997 model. A total of 384 questionnaires were distributed to customer of CBE and 270 (70.3%) usable questionnaires were found to be valid and were used for further analysis. A statistical analysis was conducted by using IBM SPSS Version 20.

4.2 Demographic Background of Respondents

Descriptive statistics using frequencies is used to analyze the demographic characteristics of the respondents and the result of the analysis is described in detail here under.

Table 4.1: Gender of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
MALE	163	60.4	60.4	60.4
Valid FEMALE	107	39.6	39.6	100.0
Total	270	100.0	100.0	

Source: own survey, 2020

As it can be seen from the above table, Male respondents took the biggest share of the sample population considered under the study (n=270), which is 60.4% of the sample.

Table 4.2 Age of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
26-35	51	18.9	18.9	18.9
36-45	192	71.1	71.1	90.0
Valid 46-55	21	7.8	7.8	97.8
56-65	6	2.2	2.2	100.0
Total	270	100.0	100.0	

Source: Source: own survey, 2020

From the above table, majority of the respondents was found to be between age 36-45 taking 71.1% followed by 26-35 which holds 18.9% and next to that is age 46-55 with 7.8% and finally age 56-65 holds 2.2%.

Table 4.3 Educational background of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid SECONDARY SCHOOL	9	3.3	3.3	3.3
COLLEGE/UNIVERSITY	261	96.7	96.7	100.0
Total	270	100.0	100.0	

Source: own survey, 2020

This indicate that majority of the respondents are first degree holders (96.7%) followed by (3.3%) which are in secondary school.

4.3 Normality Test

Normality of data distribution is an assumption of several inferential statistics. Since most common inferential statistics or test assumes that the dependent variable is normally distributed, knowing if our variables are highly skewed or not is very important. In general, if skewness is more than +1.0 or less than - 1.0, the distribution is markedly skewed and it would be prudent to use a nonparametric (ordinal type) statistic Karen and George (2005).

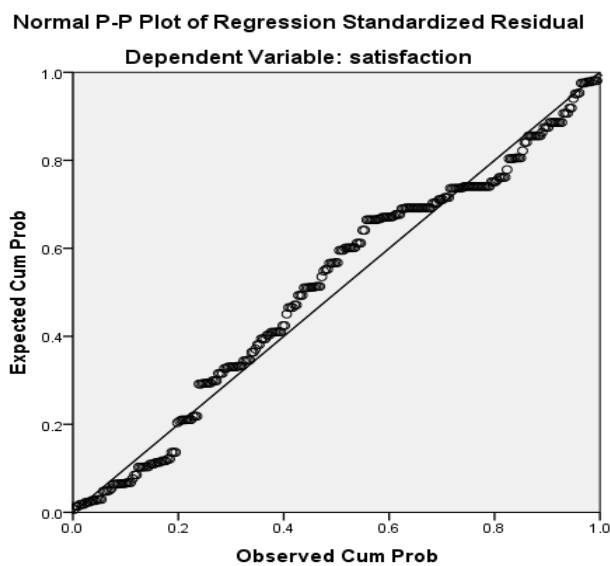
Table 4.4 Descriptive Statistics inline normality test

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Accessibility	270	3.4324	.70005	-.533	.148	.284	.295
interaction with customer service advisors (CSA)	270	3.5194	.61149	-.445	.148	-.062	.295
completeness and accuracy of answer/solution provided by CSA	270	3.7250	.73360	-1.027	.148	.937	.295
Satisfaction	270	3.7250	.82484	-.591	.148	-.131	.295
Valid N (listwise)	270						

Source: own survey 2020

According to above table (table 4.5) the distribution is markedly skewed with results of -0.533 for accessibility, -0.445 for interaction with the CSA, -1.027 for completeness and accuracy of answers provided by CSA and finally for dependent variable, customer satisfaction, -0.591. Having all negative skewness implies that the tail of the left side of the distribution is longer or fatter than the tail of the right side distribution, which indicates that the mean and median will be less than the mode. The dependent variable, customer satisfaction, is normally distributed. Also in Table 4.5, that skewness of all variables is in the acceptable range indicating normal distribution.

To test the assumption of normality, a Normal P-Plot of Regression Standardized Residuals was conducted for each of the six variables. For all three, Normal P-Plots of Regression Standardized Residuals were examined (see chart on next page). The points lie in reasonably straight lines, therefore, the assumption of normality was found tenable.



4.4 Descriptive Statistics for the three non-independent variables.

Descriptive analysis using mean and standard deviation is conducted on the three non-independent variables stated by Anton (1997) three service dimension model, (accessibility of the call center, customer interaction with agents, (in our case customer service advisors (CSA) and completeness and accuracy of answer/solution provided by CSA), to identify which non-independent variable is more dominant in customer satisfaction. Respondents were asked to indicate their level of agreement with the questions relating to the Anton (1997) three service

dimension model using Likert scale which ranged from strongly disagree to strongly agree. The interpretation was made based on the following measurement scale intervals or range.

Mean scores 4.51-5.00 excellent or very good, 3.51-4.50 good, 2.51-3.50 average or moderate, 1.51-2.50 fair and 1.00-1.50 is poor (Poonlar Btawee:1987) See table 4.4 below:-

Table 4.5 Descriptive Statistics

	N	Mean	Std. Deviation
Accessibility	270	3.4324	.70005
interaction with customer service advisors (CSA)	270	3.5194	.61149
completeness and accuracy of answer/solution provided by CSA	270	3.7250	.73360
Satisfaction	270	3.7250	.82484
Valid N (listwise)	270		

Source: own survey 2020

From the above table, the dominant non-independent variable resulted testing Anton (1997)three service dimension model is completeness and accuracy of answers provided by CSA with the mean score of 3.7250 (standard deviation 0.73360). This indicates that most of the customers strongly admitted that CBE call center is doing great in completeness of answers provided by customer service advisors (CSA), which are completeness of the answer provided to them, confidence in solution that the CSA are showing, completeness of options provided to them by CSA and CSA is sufficient knowledge about the products/services the bank renders. It also indicates that completeness of answers provided by customer service advisors (CSA) of CBE on customer satisfaction is good according to (Poonlar Btawee: 1987) if the mean score lies of 3.51-4.50.The second dominant non-independent variable with the mean score of 3.5194(standard deviation of 0.61149)is interactions with customer service advisors (CSA). This implies customers are second most agreed that CBE call center is doing well on how quick calls are handled, the concern shown to them by CSA, how concerned CSAs are for their situation and how CSA understood their question and speaks clearly while in conversation. Interactions with

customer service advisors (CSA) on customer satisfaction is moderate according to (Poonlar Btawee: 1987) with the mean score lying 2.51-3.50.

Accessibility exhibit the list score in relation to other variables with mean value 3.4324(standard deviation of 0.70005) implying that the average respondents agreed on that CBE call center accessibility is good in on the no rings they heard, the length of time they stay on hold and queued to get to CSA's and the number of transfers by CSA to their supervisors. Accessibility on customer satisfaction is moderate according to (Poonlar Btawee: 1987) with the mean score lying 2.51-3.50

4.5 Correlation Analysis

The correlation between dependent and independent variables along with the causal effect was analyzed using Statistical Package for Social Science (SPSS) version 20. The below correlation matrix shows correlation between variables in the questionnaire with a Pearson Correlation coefficient to show the strength of relationship among the variables considered in the questionnaire.

Table 4.6 Correlations

		accessibility	interaction with customer service advisors (CSA)	completeness and accuracy of answer/solution provided by CSA	Satisfaction
Accessibility	Pearson Correlation	1	.557**	.618**	.667**
	Sig. (2-tailed)		.000	.000	.000
	N	270	270	270	270
interaction with customer service advisors (CSA)	Pearson Correlation	.557**	1	.713**	.722**
	Sig. (2-tailed)	.000		.000	.000
	N	270	270	270	270
completeness and accuracy of answer/solution provided by CSA	Pearson Correlation	.618**	.713**	1	.877**
	Sig. (2-tailed)	.000	.000		.000
	N	270	270	270	270
Satisfaction	Pearson Correlation	.667**	.722**	.877**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	270	270	270	270

Source: own survey, 2020.

As can be observed from the above table (table 4.6) Pearson correlation result indicates that the correlations between the dependent and independent variables were statistically significant. In addition, the statistical evidence depicted that the three independent variables that are derived from Anton (1997) three service dimension model have positive correlation with customer satisfaction with Pearson correlation coefficient of 0.677, 0.722, 0.882 of Accessibility, Interaction with CSA, and Completeness and accuracy of answers/solution provided respectively. This indicates that the three variables indicated by Anton (1997) having positive result in Customer satisfaction of call center to be true and variables under this study have also proven to have positive association with customer satisfaction in Commercial Bank of Ethiopia(CBE). A positive improvement with regard to Accessibility of the call center, customer

Interaction with CSA, and Completeness and accuracy of answers/solution by the bank also increase customer's satisfaction.

4.5.1 Multi-collinearity test.

Table 4.7: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	-.477	.139		-3.437	.001	-.750	-.204
1 Accessibility interaction with customer service advisors (CSA)	.205	.041	.174	4.944	.000	.123	.286
1 completeness and accuracy of answer/solution provided by CSA	.212	.053	.157	3.984	.000	.107	.316
	.739	.047	.657	15.790	.000	.647	.831

a. Dependent Variable: satisfaction

The above coefficient table shows the constant, beta value and p-value of the variables to examine the significance of set hypothesis. The significance level of each variable is P-value

0.001, 0.000, 0.000, and their standardized coefficients are 0.174, 0.157, & 0.657. The p-value of the three independent variables under the study implies that significant relationship with dependent variable i.e. customer satisfaction.

Table 4.8: Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	Accessibility	.591	1.693
	interaction with customer service advisors (CSA)	.470	2.127
	completeness and accuracy of answer/solution provided by CSA	.421	2.374

a. Dependent Variable: satisfaction

Source: own survey, 2020

Table 4.9: Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	accessibility	interaction with customer service advisors (CSA)	completeness and accuracy of answer/solution provided by CSA
1	1	3.953	1.000	.00	.00	.00	.00
	2	.021	13.688	.80	.27	.00	.08
	3	.017	15.431	.09	.71	.16	.23
	4	.009	20.874	.11	.02	.84	.69

a. Dependent Variable: satisfaction

Source: own survey, 2020

Preliminary analyses were conducted to indicate if there were any violations of the assumptions of multi-collinearity was conducted. To indicate if multi-collinearity was violated, the tolerance, VIF and condition indexes were evaluated. From a Collinearity Diagnostics table in SPSS, The

tolerance values for each of the variables scales ranged from 0.421 to 0.591 which are not less than 0.20; thus, further verifying that the assumption is not violated. According to Tabachnick&Fidell, (2007) multi-collinearity is tenable if VIF value is under 10 this was verified by the VIF values in this study, which ranged from 1.693 to 2.374. The condition index indicated values ranging from 1.000 to 20.874 which show all variables values are below 30, so none of which suggest serious multi-collinearity problems. Based on the results of the tests above mentioned the assumption of no multi-collinearity is tenable.

The first hypothesis developed states; there is a direct and positive relationship between accessibility of the call center and customer satisfaction. The hypothesis has been accepted as its p- value is 0.000, which is $P \leq 0.05$. Henceforth, we conclude that accessibility of the call center has significant relation with customer satisfaction. Accordingly, the second hypothesis which states there is a positive and direct relationship between customer interaction and customer satisfaction, this hypothesis is also proven to be accepted as p-value is yet to be 0.000. The third hypothesis is also supported by this investigation. Completeness and accuracy of answers provided by CSA have direct and positive relationship with customer satisfaction has been tested and supported with having p-value of 0. The regression equation developed is

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

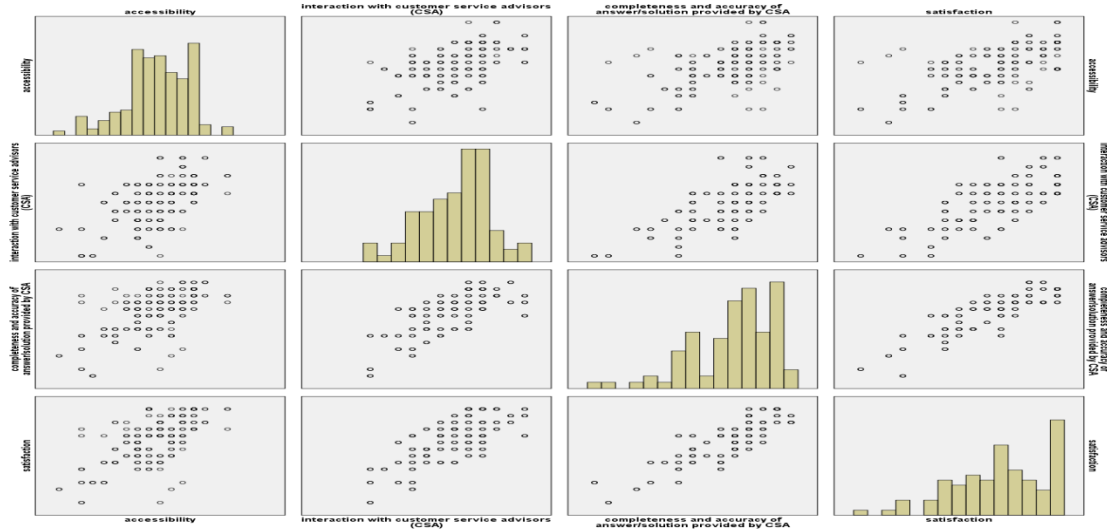
$$\text{Customer satisfaction} = -0.477 + 0.205 \text{acc}^* + 0.212 \text{int}^{**} + 0.739 \text{ans}^{***} + 0.05$$

Whereas Acc^* =accessibility of the call center. int^{**} =customer interaction with CSA and

ans^{***} =completeness and accuracy of answer by CSA

4.5.2 Checking for linearity

Linearity is the assumption that two variables are related in a linear fashion. The assumption can be tested using the scatter plot of the dependent and independent variables. The next graph shows the scattered plots of which indicates that there is a linear relationship between three independent variables derived from Anton (1997) three dimension model and the dependent variable, which is Customer satisfaction.



4.6 Regression Analysis

Multiple regression analysis was conducted to examine effect of CBE is call center customer service on customer satisfaction. In this survey, three hypotheses were adopted from Anton(1997)three service dimension model to study the direct or indirect impact of Call center Customer service on Customer satisfaction through call center accessibility, customerInteraction with customer service advisors (CSA) and completeness and accuracy of answers provided by CSA of CBE.

Different scholars have stated various variables as dimension of achieving call center customer service, among those variables, for the purpose of this study; only three of Anton (1997)three service dimension model were selected as independent variables of call center customer service, The impact of these three independent variables; accessibility of call center, customer Interaction with customer service advisors and completeness and accuracy of answers provided by CSA on dependent variable i.e. customer satisfaction, using multiple regression.

Table 4.10 Model Summary

Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.898a	.806	.804	.36555

a. Predictors: (Constant), completeness and accuracy of answer/solution provided by CSA, accessibility, interaction with customer service advisors (CSA)

The above regression model presents how much of the variance in the measure of customer satisfaction is explained by the underlying call center customer service elements by Anton (1997) three service dimension model. The predictor variables i.e. completeness and accuracy of answer/solution provided by CSA, accessibility, interaction with customer service advisors (CSA) have accounted 80.4% of adjusted R square which indicates that 80% of the variance is explained by the predictors whereas the remaining 19.6% are other variables that not included under this model estimation.

Table 4.11: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	147.474	3	49.158	367.871	.000 ^b
	Residual	35.545	266	.134		
	Total	183.019	269			

a. Dependent Variable: satisfaction

b. Predictors: (Constant), completeness and accuracy of answer/solution provided by CSA, accessibility, interaction with customer service advisors (CSA)

The above ANOVA table shows the acceptability of the model. The p-value is less < 0.05 i.e. 0.000 which indicates the variation is explained by the model is not due to chance.

Table 4.12: Summary of hypothesis testing variable

Hypothesis	Description	Sig 2-tailed	Test
1	There is a significant association between accessibility of call center and customer satisfaction	0.000	confirmed H1
2	There is significant relation between customer interaction with CSA and customer satisfaction	0.000	confirmed H2
3	There is a significant association between completeness and accuracy of answer provided by CSA and customer satisfaction	0.000	confirmed H3

Source: own survey, 2020

In overall, from the findings of this study, it is found that the entire Anton (1997) three dimension model (accessibility of the call center, customer interaction with agents, (in our case customer service advisors (CSA)) and completeness and accuracy of answer/solution provided by CSA) had direct and positive effect on customer satisfaction. The findings of this study also indicated that completeness and accuracy of answer/solution provided by CSA was the most important factor to have positive and significant effect on customer satisfaction, followed by customer interaction with CSA and accessibility of call center.

Part Two; Interview analysis

The target of the interview was director of CBE call center service and I managed to sit with her to ask about the call center technology practices and how it might have effect on customer satisfaction. Basing on the response for my questions under mentioned, CBE call center possesses one of the latest technologies in the world but stuck on the traditional practice of Call center service, which is customer-agent inbound call. CBE is Lack of continuous update and adopting with the changing trends in this very fast and continuously changing technology era is observed on this interview. In Closing the director recommended that CBE must understand the trend, update its technology and utilize emerging technologies and the social media to effectively address its customers.

The under listed five structured interview questions and answers are the detailed part of the interview and summarized in accordance with the research objectives.

Q.1 what call center technology CBE is currently using?

CBE is currently using a technology developed by the Huawei technologies co. ltd. called IP contact center (IPCC); this is one of the latest technologies in world which has a lot of features compatible to the present technological evolution. This technology in general have the following feature;

1. CTI – Computer Telephony Integration

CTI is a type of technology that enables computer and telephone systems to interact together and enables to control and track the calls and distribute to different stations.

2. ACD – Automatic Call Distributor ACD

ACD is a telephony system that recognizes, answers, and routes incoming calls to the terminal or agent that is best suited to handle the caller's needs.

3. IVR – Interactive Voice Response

IVR is an automated phone system that allows incoming callers to access the information they need without having to talk to a person.

4. IV – Interactive Video

Businesses can use IV technology to play videos for advertisements, promotions or entertainment while callers are waiting on hold.

5. Call Recording Systems

Call centers can use recording systems to capture all customer interactions. This is helpful should an agent or manager need to review what happened on a call.

6. Voice Biometrics

Voice has become a reliable way to authenticate a person's identity, because it is unique to each individual.

7. Voice Biometrics

Voice has become a reliable way to authenticate a person's identity, because it is unique to each individual.

8. CMS – Campaign Management System

A CMS is most helpful for outbound call centers. The software provides the agent with a contact list, or other info needed to make calls to the right people.

9. Administration Console

An administration console is a web application that makes it easy for a contact center staff member to manage a server.

Q.2 how latest is these technologies compared with the available technologies?

IPCC is one of the latest technologies in the call center technology with all features of customer service, however this technology changes very often and they introduce different additional features in a short time gap. To say CBE is using the latest technologies it needs to update its call

center platform whenever new feature introduced. But CBE is stuck on the old feature, which is customer-agent voice interaction feature of the technology that has been using since the beginning in 2015 G.C. The technology have transformed in the last five years by entertaining artificial intelligence, online self-service platform, online chatting and social media integration, which CBE has the access and technological ability by owning IPCC but not utilizing it yet.

Q.3 what is the level of employee awareness about the technology CBE is currently using?

Almost all CBE call center employee have awareness about the basic IPCC technology because starting from the beginning CBE call center is using IPCC system to support its customer and the service package is not very complicated. The employees mainly serve customers by answering inbound call just like their phone and text service. In addition, it is been five years since CBE call center officially start to support customer through call center this also helps them to master the service.

But the awareness about changing technologies is very low. This is the result of continuous update on the technology and lack of training by the bank. Employees only get induction training in the beginning of their job tenure. But after that the training is only about the bank's products and service.

The main challenge affecting the awareness of employees about the technology is the higher turnover in the department. Different from other departments the call center department has the highest rate of turnover. This results continuous staffing and the need to higher cost of training.

Q.4 what is the customer's reaction and satisfaction about the current call center service, if there is a mechanism to measure customer's satisfaction?

Unfortunately, there is no such way to measure customer satisfaction. But the amount of call is increasing overtime. This is on one hand related with the fast increase in the number of customers and a need to access the service from phone. With time the cue to get service at CBE is increasing over time. This creates a frustration on the customers. In addition, the technology and access to phone is increasing over time.

In addition to increase in callers the issues they raise is also expanding. Customers ask different questions about the products and services about the bank and the employees are also becoming

more flexible over time. In general, we can say that most of the customers of CBE are satisfied from the service of the call center even if the service is limited to few issues.

Q.5 as you know there are a lot of latest technologies in call center, i.e. direct chat, online chat service, social media communication and the like, so is CBE using these Technologies currently? And if not is there any strategic plan that CBE will you use these technologies in the near future?

Currently CBE call center uses direct phone call support and accordingly the employees support their customers through email and SMS. This are one of the old call center features introduced in 1960s. The call center technology is transformed over time by leveraging the technology revolution. However, CBE is only using few of the features; this is the effect of small level of internet penetration in the country and lack of technology awareness in the society.

By nature, money is a sensitive issue. People are very weary of banking technologies and they afraid to make transaction over the internet. In addition, the banking industry is not investing in the awareness creation of in the society.

In the future CBE has a plan to make call center use current and latest technologies like online chat and other technologies. But still there are issues on the society which needs an awareness creation about the importance of online technologies.

4.7 Results Discussion

In overall findings of this study, it is found that all of the Anton (1997) “three service dimensions model” (Accessibility of the call center, customers interaction with agent and completeness and accuracy of answers) had positive effect and significant effect on Customer satisfaction and the fourth non independent variable (Call center technology) had also positive relationship with Customer satisfaction. The finding shows that “three service dimension model” can explain 80.4% of customer satisfaction of call center. The findings of this study also indicated that completeness and accuracy of answers provided by agents (CSA) was the most important factor to have positive and significant effect on customer satisfaction, followed by customers’ interaction with agent, and Accessibility of the call center. these findings goes with the findings

of Mitchell (1998) which considered call center to be one of the strategies for conducting customer relationship management.

The other finding proved in this study is Anton (1997) study conclusion that “call center is a best means of providing and controlling customer satisfaction and on the other hand, it helps satisfaction recovery when a customer has a problem, complain or even just for feedback as the primary objective of call center operation is customer attention and achievement of high level of customer satisfaction.”

According to (Bennington et al., 2000) Customers are unsatisfied with call center services compared with office based in person services, but through this study and its finding the researcher can say that Customer are satisfied with CBE call center and reading on the work of Reddy, Habte and Bacha’s 2015 study which in their conclusion stated that there was lack of attractiveness in bank facility, there is long waiting time for customers to get service and there is week managing waiting in line in CBE which lead to customer dissatisfaction, thus this study of mine can be put in contrary to Bennington et al statement “service in office is preferable over by customer than service through call center”.

According to Jasmand et al., employees are the core bridge that links the organization and the customer; this is confirmed by this study as there is positive relationship found between customer satisfaction and customer interaction with customer service agents (advisors). So, the relationship between customer and employee is bi-directional by nature, and depending on the interaction and communication satisfaction can be achieved by both parts and neither of them.

On other study conducted by Dean (2004) in Australian call centers, there is found that other measured attributes for service quality, such as Adaptiveness, assurance, authority given to agents to solve customers’ problems, lack of queues, empathy, and friendly manner of agents, have consistently high ratings in attaining customer satisfaction. This study is confirmed to be true by this study as there is significant and positive relationship is found between the Completeness and accuracy of answer provided by call center agents (CSA) and customer satisfaction and Accessibility of call center has also positive effect on customer satisfaction.

On this study Accessibility of call center has significant and positive effect on customer satisfaction, although it’s the least one from independent variables. And the study of Feinberg et al. (2000) has founded that, first-call resolution and abandonment rate have a substantial effect on caller satisfaction but the relationship weak. Their study shows operational variables mainly

used by call centers had low-predictive validity in assessing customer satisfaction with call centers.

The study showed that the call center staffs have sufficient knowledge to handle all questions raised by clients. These results are in agreement with the competitive advantage theory supported by Warf and Stutz (2009) who witnessed that, organizations gain competitive advantage by attaining the best technology, having comparatively lower prices, product differentiation and by hiring highly competent and qualified personnel. These results are similar to Michel *et al.* (2013) who state that, successful call centers need to continually reengage and reevaluate to determine how customer centric their processes are, and he further notes that, call center attributes include access to highly trained and skilled personnel human resources.

On the other hand, the study of Cheong *et al.*, 2008 suggests that employees must correctly use the technology and accomplish managerial requirements in terms of number of calls answered and other performance indicators must be taken to achieve customer satisfaction which contradicted by scholars like Aliyu *et al.* (2011) and Teirlinck and Spithoven, (2013) who pointed out that technology increasingly turns the call center agents into machines and leads to frustrated customers..

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

The main purpose of the study was to know the effect of call center customer service on customer satisfaction of commercial bank of Ethiopia. The major goal of Call center is to be there for customer whenever they need it, free of charge and to give answer to any questions, complains they may have and to create lasting relationship with customers. Lasting relationship with customers is the first requirement to survive in this competitive environment and to generate profit from it.

The customer service dimensions that were included in this research are adopted from Anton (1997) “three service dimensions model” which are Accessibility of the call center, customers interaction with agent and completeness and accuracy of answers by agents. In addition this study added one additional variable which is call center technologies and its effect on customer satisfaction.

Descriptive result of customer service elements above mentioned and customer satisfaction:

Accessibility of call center dimensions has scored 3.43 grand mean, with standard deviation of 0.70. The overall mean shows perception of customers about Accessibility of call center is good.

All items of customers’ interaction with agent scores grand mean of 3.52 and standard deviation of 0.61. The overall mean shows perception of customers about customer’s interaction with agent is good.

Completeness and accuracy of answers provided by CSA has scored 3.72 grand mean and 0.73 of standard deviation. The overall mean shows perception of customers about completeness and accuracy of answers provided by CSA is good.

Customer satisfaction has scored of 3.72 grand mean and 0.82 of standard deviation. The overall mean shows perception of customers about customer satisfaction is good.

With regard to the Pearson correlation analysis, it can be clearly seen that the three service dimensions model namely Accessibility of the call center, customers’ interaction with agent and completeness and accuracy of answers provided by CSA are positively related to customer satisfaction.

- Accessibility of the call center and customer satisfaction have positive relationship, $r=0.667$
- Customers' interaction with agent and customer satisfaction have positive relationship, $r=0.722$
- Completeness and accuracy of answer provided by CSA and customer satisfaction have positive relationship, $r=0.877$

Regression analysis result of the study shows that “three service dimension” model explains customer satisfaction. The regression analysis indicated that 80.4% customer satisfaction is explained by “three service dimension” model.

The regression analysis result looks like the following.

- 20.5 % of customer satisfaction is significantly explained by accessibility of call center.
- 21.2 % of customer satisfaction is significantly explained by customer interaction with agents (CSA).
- 73.9 % of customer satisfaction is significantly explained by Completeness and accuracy of answers provided by CSA.

5.2 Conclusion

Based on previous theories and researches conducted in the areas of call center customer service and its outcomes, this study could show clear links between call center customer service and customer satisfaction, which helps to deeply understand the relationship and interaction between them. The findings fully support the assumption that three service dimension model of Anton can enhance the customer satisfaction of CBE.

In this study, the effect of four variables (Accessibility of the call center, customers interaction with agent and completeness and accuracy of answers provided by CSA and call center technology on customer satisfaction was investigated. According to the results of this study, all of the elements have significant and positive effect on customer satisfaction.

According to the results obtained from the research, completeness and accuracy of answers by CSA is the most important element of three service dimension model that CBE should focus on. Accessibility of the call center, customers' interaction with agent and call center technologies are also variables which has effect on customer satisfaction.

5.3 Recommendation

This research has shown that Anton (1997) “three service dimension model” and call center technologies have impact on customer satisfaction in CBE call center service. The results obtained confirm that all of the variables have a positive impact on customer satisfaction. Based on the findings of this study, the following recommendations are proposed to help improve service of CBE call center service.

In this 21st century service provision is transforming from face to face interaction to an online one. This is being seen in the financial sector where it is possible to provide almost all services by using technology. And the sector is thriving in transforming its self to online based service delivery every day; which is currently seen as the main parameter for customer satisfaction, differentiation, and competitiveness.

Call center has many roles in facilitating effective service provision and its one of the technologies in banking industry which one can attain customer satisfaction and they are integrated with other technologies in the financial sector like online banking. In addition other variables of customer satisfaction mentioned in this study (accessibility of the call center, customer interaction with CSA and completeness and accuracy of answer provided by CSA) are dependent on the level of technology development and integration of call center with online service provision. Thus:-

1. CBE should upgrade its call center technology and integrate it with online chat, social media interaction, and online banking services. This will expand the services availability and increase the accessibility of the call center and help to address large customer base.
2. Call center automation is a vital step for greater employee efficiency, optimal customer satisfaction, and enhanced operational profitability. The technology is intended to improve the working environment for call center agents who need to navigate through multiple systems while handling client queries.
3. CBE is call center should have a mechanism that helps in indicating the satisfaction level of customers. This can be done by introducing rating or scaling mechanism at the end of the call.

4. Based on the number of customers CBE has i.e. 22 million plus account holders as of October 2019, call center customer service advisors are very few. So to increase the accessibility, which is rated last in this study, the bank should expand the number of employees which are currently not more than 134.
5. The bank should promote the call center and its services to its customers, as there is huge number of people encountered during this study in which does not have any clue about the CBE call center and its services.

REFERENCES

Kotler, P., Wong, V., Saunders, J. and Armstrong, G. (2005) *Principles of Marketing* 4th edn. Pearson Education Limited.

Kotler, P. and Keller, P. (2013) *Marketing Management*. 14th edn. Pearson Education, Inc.

Margherita Zito, Federica Emanuel, Monica Molino, Claudio Giovanni Cortese, Chiaraghislieri, Lara Colombo February, 2018

Harvey, J., Cohendet, P., Simon, L., & Borzillo, S. (2015). Knowing communities. Lessons from a large Malaysian Islamic institution. *Asia Pacific Business Review*, 7(1), 171-198.

Caillier, J. G. (2013). Does teleworking affect managing for results and constructive feedback? A research note. *Canadian Pacific Administration*, 56, 638-654.

Gardner, H. K. (2012). Performance pressure as a double-edged sword: Enhancing team. front end of innovation. *Research Technology Management*, 58, 46-54

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

[Http://Cbe.Portal/Library.aspx](http://Cbe.Portal/Library.aspx)

[Http://Www.Combanketh.Et/](http://Www.Combanketh.Et/)

Zeithaml V. A., & Bitner M. J. (2000). *Services Marketing* (2nd ed.). New York : McGraw Hill. Inc. Knight, 2012

Jagasia, J., Baul, U., & Mallik, D. (2015). A framework for communities of practice. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 41, 220-

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

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

Ghauri, P., and Kjell, G. (2005). *Research Method in Business Studies*. Harlow: Pearson Education Limited.

Taleghani, M. and Tabatabaei, S.M (2014) "The Effects of Relationship Marketing

on the Increase Customers' Loyalty (Case Study: Melli Bank in Rasht)”. *International Journal of Management sciences and Education* ISSN: 2345-6396 Vol.1 (1), 63-68.

Creswell, J.W. 2003. *Research Design. Qualitative, Quantitative, and Mixed Methods Approaches*. Saunders, M., Lewis, P. and Thornhill, A. (2007). *Research methods for business students. 4th ed.* London: Prentice Hall.

Anol, Bhattacharjee. (2012). *Social Science Research: Principles, Methods, and Practices*. USA: University of South Florida.

Reid, S. (1987). *working with Statistics: an introduction to quantitative method for social scientist*. London: Polity.

Saunders, M., Lewis, P. and Thornhill, A., (2009). *Research Methods for Business Students* (5th ed.). Edinburgh Gate: Pearson Education Limited

Catherine D. (2007). *A practical guide to research methods*. 2nd ed. United Kingdom: How to Content.

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

Huffman & Bateson, (2001). *An Assessment of Service Delivery Quality in Relation to Customer Satisfaction in Industrial Projects Service*,” iii Ian Smith, (2003). *Meeting customer needs*, 3rd Ed, Elsevier science ltd., UK, Oxford, page 6.

Trevor Arden and Stephonie Edwards, (2009). *Best Practice guide for customer service managers*, customer 1st International Ltd, UK, p.5.

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

Anderson, E.W. & Sullivan, M.W. (1993), “The Antecedents And Consequences Of Customer Satisfaction For Firms”, *Marketing Science*, 12, Spring, 25-43

Bodin and Dawson K. (1999), *The Call Center Dictionary*, Telecom Books, New York

Mitchell, P.J. (1998), “Aligning Customer Call Centers For 2001”, *Telemarketing And Call Center Solutions*, Vol. 16, No.10, Pp.64-69.

Bennington, L., Cummane, J. And Conn, P. (2000), “Customer Satisfaction And Call Centers: An Australian Study”, *International Journal Of Service Industry Management*, Vol. 11 No. 2, Pp. 162–173.

Piercy, N. And Rich, N. (2009a), “Lean Transformation In The Pure Service Environment: The Case Of The Call Service Centre”, *International Journal Of Operations & Production Management*, Vol. 29 No. 1, Pp. 54–76

Ganguli, S. And Sanjit, K.R. (2010), “Service Quality Dimensions Of Hybrid Services”, *Managing Service Quality*, Vol. 20 No. 5, Pp. 404–424.

Jasmand, C., Blazevic, V. And De Ruyter, K. (2012), “Generating Sales While Providing Service: A Study Of Customer Service Representatives’ Ambidextrous Behavior”, *Journal Of Marketing*, Vol. 76 No. 1, Pp. 20–37.

De Ruyter, K. And Wetzels, M.G.M. (2000), “The Impact Of Perceived Listening Behavior In Voice-To-Voice Service Encounters”, *Journal Of Service Research*, Vol. 2 No. 3, Pp. 276–284.

Upal, M. And Dhaka, B. (2008), “Telecommunication Service Gap: Call Center Service Quality Perception And Satisfaction”, *Journal Of Communications Of The Ibima*, Vol. 3, Pp. 18–27.

Cheong, K.J., Kim, J.J. And So, S.H. (2008), “A Study Of Strategic Call Center Management: Relationship Between Key Performance Indicators And Customer Satisfaction”, *European Journal Of Social Sciences*, Vol. 6 No. 2, Pp. 268–276.

Poddar, A. And Madupalli, R. (2012), “Problematic Customers And Turnover Intentions Of Customer Service Employees”, *Journal Of Services Marketing*, Vol. 26 No. 7, Pp. 551–559.

Sergeant, A. And Frenkel, S. (2000), “When Do Customer Contact Employees Satisfy Customers?”, *Journal Of Service Research*, Vol. 3 No. 1, Pp. 18–34.

Bharadwaj, N. And Roggeveen, A. (2008), “The Impact Of Offshored And Outsourced Call Service Centers On Customer Appraisals”, *Marketing Letters*, Vol. 19 No. 1, Pp. 13–23.

Evanschitzky, H., Sharma, A. And Prykop, C. (2012), “The Role Of The Sales Employee In Securing Customer Satisfaction”, *European Journal Of Marketing*, Vol. 46 No. 3, Pp. 489–508.

Wegge, J. (2006), “Work Motivation, Organizational Identification, And Well-Being In Call Centre Work”, *Work And Stress*, Vol. 20 No. 1, Pp. 60–83.

Thompson, P. And Wallace, T. (1996), “Redesigning Production Through Teamworking: Case Studies From The Volvo Truck Corporation”, *International Journal Of Operations & Production Management*, Vol. 16 No. 2, Pp. 103–118.

Choi, S. (2012), “Moderating Effects Of Supervisor Support, Monetary Rewards, And Career Paths On The Relationship Between Job Burnout And Turnover Intentions In The Context Of Call Centre”, *Managing Service Quality*, Vol. 22 No. 5, Pp. 492–516.

Gilmore, A. (2001), “Call Centre Management: Is Service Quality A Priority?”, *Managing Service Quality*, Vol. 11 No. 3, Pp. 153–159. Bain Et Al., 2002

Dean, A. And Rainnie, A. (2009), “Frontline Employees’ Views On Organizational Factors That Affect The Delivery Of Service Quality In Call Centers”, *Journal Of Services Marketing*, Vol. 23 No. 5, Pp. 326–337.

Eric, P.J., Tom, A.B. And Charles, E.M. (2006), “Operational Challenges In The Call Center Industry: A Case Study And Resource-Based Framework”, *Managing Service Quality*, Vol. 16 No. 5, Pp. 477–500.

Curry, A. And Lyon, W. (2008), “Call Centre Service Quality For The Public: A Scottish Framework For The Future”, *Managing Service Quality*, Vol. 18 No. 2, Pp. 194–208.

Dorinachicu, Gerard Ryan And Mireia Valverde-Aparicio “Determinants Of Customer Satisfaction In Call Center”, Published in may 2016

Litte, M.M. And Dean, A.M. (2006), “Links Between Service Climate, Employee Commitment And Employees’ Service Quality Capability”, *Managing Service Quality*, Vol. 16 No. 5, Pp. 460–476. Wegge et Al., 2007

Sharma, P. (2012), “Offshore Outsourcing Of Customer Services - Boon Or Bane?”, *Journal Of Services Marketing*, Vol. 26 No. 5, Pp. 352–364.

Sharma, P., Mathur, R. And Dhawan, A. (2009), “Exploring Customer Reactions To Offshore Call Centers: Toward A Comprehensive Conceptual Framework”, *Journal Of Services Marketing*, Vol. 23 No. 5, Pp. 289–300.

Helms, M.M. and Mayo, D.T. (2008), “Assessing Poor Quality Service: Perceptions Of Customer Service Representatives”, *Managing Service Quality*, Vol. 18 No. 6, Pp. 610–622.

Poddar, A. And Madupalli, R. (2012), “Problematic Customers And Turnover Intentions Of Customer Service Employees”, *Journal Of Services Marketing*, Vol. 26 No. 7, Pp. 551–559.

Parasuraman A., Zeithaml, V.A and Berry, L.L. (1985), “A Conceptual Model Of Service Quality And Its Implications For Future Research, Vol. 17, Pp.460-469.

Cronin,J.J .&Taylor ,S.A (1992) “Measuring Service Quality : A Reexamination And Extention”,*Journal Of Marketing*, Vol.56, Pp.55-68.

Anderson,E.W.&Sullivan M.W, (1993), “The Antecedents And Consequences Of Customer Satisfaction For Firms” *Marketing Science*, 12, Spring, 25-43

Heskett,J.L., Sasser, W.E And Schlesinger, L.A. 91997), *The Service Profit Chain ;How Leading Companies Link Profit And Growth To Loyalty, Satisfaction, And Vale*, New York; Free Press

Dabholkar, P.AAndthorpe, (1994), “Does Customer Satisfaction Predict Shopper Intention?” *Journal Of Customer Satisfaction, Dissatisfaction And Complaining Behavior*, Vol 7,Pp.161-71

Richins,M.L(1983),” Negative Word Of Mouth By Dissatisfied Consumers; A Pilot Study “, *Journal Of Marketing*, Vol 47,Pp 68-78

Reichfeldf.F (1993), “Loyalty-Based Management”, *The Harvard Business Review*,Vol.71 Issue 2, Pp.64-73.

Vavra,T.G. (2002), *Customer Satisfaction Measurement Simplified; A Step By Step Guide For Iso 9001;2000 Certification*, Milwaukee, Wi; Asq Quality Press.

Chan W.S (2011). *Hong Kong Broad Band Network Limited, Outstanding Academic Papers By Students, On “An Examination Of Call Center Service Quality And Customer Satisfaction”*

Huppertzj.W., Sidney J.A And Richard H.E (1978), “An Application Of Equity Theory To Buyer –Seller Exchange Situation”, *Journal Of Marketing Research*, Vol.15 (May), Pp.250-260.

Parasuramen, Zeithaml&Berry (1988), *SERVQUAL: A Multiple-Item Scale For Measuring Consumer Perception Of Service Quality*”, *Journal Of Retailing*, Vol.64, Pp.12-40.

Halstead, D.,Jones M., &Cox, A.(2007), “Satisfaction Theory And The Disadvantaged Consumer”, *Journal Of Consumer Satisfaction, Dissatisfaction And Complaining Behavior*, Vol.20, Pp.15-35.

Bansal H. Sand Taylor, S. (1997), "Investigating The Relationship Between Service Quality, Satisfaction And Switching Intention", In Elizabeth, J.W And Joseph, C.H (Eds), *Development In Marketing Science*, Academy Of Marketing Science, Colar Gables, Fl, Pp, Pp.304-13

Spreng and Robert D.M. (1996), "An Empirical Examination Of A Model Of Perceived Service Quality And Satisfaction," *Journal Of Retaining*, Vol.72(2) Pp.201-204

Anton, J. (1997), *Call Center Management By The Numbers*, Purdue University Press/Call Center Press, Annapolis, Md.

Feinberg, R.A., Kim, I.-S., Hokama, L., De Ruyter, K. and Keen, C. (2000), "Operational determinants of caller satisfaction in the call center", *International Journal of Service Industry Management*, Vol. 11 No. 2, pp. 131–141.

Marr B. And Parry, S. (2004), "Performance Management In Call Centers: Lessons, Pitfalls And Achievements In Fujitsu Services", *Measuring Business Excellence*, Vol. 8 No. 4, Pp.55-62.

Robinson G. And Morley, C. (2006), "Call Center Management: Responsibilities And Performance" *International Journal Of Service Industry Management*, Vol.17 No. 3, Pp.284-300.

Burgers, A, De Ruyter, K., Keen, C And Streukens, S. (2000), "Customer Expectation Dimensions Of Voice-To-Voice Service Encounters: A Scale Development Study", *International Journal Of Service Industry Management*, Vol.11 No.2, Pp.142-161.

Keiningham, T.L., Aksoy, L., Andreassen, T.W., Coil, B. And Wahren, B.J. (2006), "Call Center Satisfaction and Customer Retention In A Co-Branded Service Context", *Managing Service Quality*, Vol.16 No.3, Pp. 269-89.

Dean, A.M (2002), "Service Quality in Call Vendors: Implications For Customer Loyalty", *Managing Service Quality*, Vol.2 no.6, pp. 414-23.

Johnatan Gutumberge ; *Call centres: High on technology ; European Journal of Work and Organizational Psychology*, 2015

Dörnyei, Z. (2007). *Research methods in applied linguistics*. New York: Oxford University Press.

Mackey, A. & Gass, S. (2005). *Second language research: Methodology and design*. New Jersey: Lawrence Erlbaum Associates, Inc.

- Leiner, D. J. (2014). Convenience Samples and Respondent Pools. 1-36.
- Hatch, E. & Lazaraton, A. (1991). The research manual: Design and statistics for applied linguistics. New York: Newbury House Publishers.
- Wilson A, Zeithaml V, Bitner M, Gremler D (2008). Services marketing: integrating customer focus across the firm. First European Edition. McGraw Hill, UK.
- Zeithaml V.A., & Bitner M. J. (2000). Services Marketing (2nd ed.). New York :McGrawHill. Inc.
- HabteTadesseLikasa ,BachaEdosaAmeya, DR.O.ChandraSekhara Reddy, assessing and identifying factors affecting customers satisfaction of commercial bank of Ethiopia ;the case of west shewa zone (Bako, Gedo,,Ambo, Ghinchi, and Holeta) ,international journal of latest research in science and technology, volume 4, issue 1: page no 96-101 , January February 2015
- Guo, X., Duff, A. and Hair, M. (2008) Service quality measurement in the Chinese corporate banking market, International Journal of Bank Marketing, 26 (5), 305-27.
- Hatch, E. & Lazaraton, A. (1991). The research manual: Design and statistics for applied linguistics. New York: Newbury House Publishers.
- Mackey, A. & Gass, S. (2005). Second language research: Methodology and design. New Jersey: Lawrence Erlbaum Associates, Inc.
- Leiner, D. J. (2014). Convenience Samples and Respondent Pools. 1-36.
- Malhotra, N. (2010) *Marketing Research*, 6th ed., Pearson Education, USA
- Malhotra, S., & Peterson, M. (2006). *Basic Marketing Research A Decision-Making Approach (2nd Ed.)*. New Jersey: Pearson Education, Inc.

APPENDIX

Appendix 1: Research Questionnaire

My name is Elias Eshetu; I am a student of Master program in Marketing Management at Addis Ababa University, School of Commerce. I am conducting research for my Master degree thesis on the topic “**The effect of call center customer service on Customer Satisfaction: the case of commercial bank of Ethiopia.**” The main purpose of this research is to study the effect of call center customer service on customer satisfaction. The risk of being participating in this study is zero, and only taking few minutes from your time. Other than this the questionnaire will not cause any harm on you and the community and as a benefit the findings from this research may reveal important information for the bank and its customers too.

I will be very grateful if you could answer the questions mentioned below so I can accomplish the research objective.

Thank you for the cooperation.

Target Interviewee: Callers to CBE’s call center (CBE’s customers)

For the following questions, please CIRCLE your opinion for each item below on a 1 to 5 scale with 5 being strongly agree, 4 agree, 3 neutral, 2 disagree and 1 strongly disagree.

Part 1 Accessibility

1.1 The number of rings you heard or the length of time you waited before the menu choices were presented are too long.					
1	2	3	4	5	
1.2 The length of time you spent on hold waiting for the first customer service advisors to answer is too long.					
1	2	3	4	5	
1.3 During the call, the length of time placed on hold by the customer service advisors is short.					
1	2	3	4	5	
1.4 The need for one customer service advisors to transfer you to a different advisors or supervisors to complete your call is quite often.					
1	2	3	4	5	

Part 2 Service Quality – Interaction with the CSA and the answer/solution provided

2.1 customer service advisors of CBE call center complete your call as quickly as possible.					
1	2	3	4	5	
2.2 customer service advisors of CBE call center are reluctant and doesn't show any shows concern when answering your question.					
1	2	3	4	5	
2.3 customer service advisors of CBE call center quickly understand your request.					
1	2	3	4	5	
2.4 customer service advisors of CBE call center speak clearly.					
1	2	3	4	5	

Part 3 Service Quality- answer/solution provided by CSA

3.1 customer service advisors of CBE call center give a complete answer.					
1	2	3	4	5	
3.2 customer service advisors of CBE call center gives you confidence in the solution or answer.					
1	2	3	4	5	
3.3 customer service advisors of CBE call center clearly presented different options of solutions to you.					
1	2	3	4	5	
3.4 customer service advisors of CBE call center have sufficient knowledge about the products / services of CBE.					
1	2	3	4	5	

Part 4 Overall Satisfactions

4.1 I am satisfied with the overall service that I received from CBE call center?					
1	2	3	4	5	
4.2 As a result of the call center service, it's likely that I continue using the service?					
1	2	3	4	5	
4.3 In the future, it's likely that I recommend CBE call center to a friend?					

1	2	3	4	5
---	---	---	---	---

4.4 My questions/problems were resolved in one time, as a result of my call last time without the need of calling in again?

1	2	3	4	5
---	---	---	---	---

Part 5 Demographics

1. Gender					
Male			Female		
2. Age					
18-25	26-35	36-45	46-55	56-65	Above 65
3. Education					
Primary School		Secondary School		College/University	

Appendix 2

Interview Questions

My name is Elias Eshetu; I am a student of Master program in Marketing Management at Addis Ababa University, School of Commerce. I am conducting research for my Master degree thesis on the topic “**The effect of call center customer service on Customer Satisfaction: the case of commercial bank of Ethiopia.**” The main purpose of this research is to study the effect of call center customer service on customer satisfaction. The risk of being participating in this study is zero, and only taking few minutes from your time. Other than this the next questions I will ask you will not cause any harm on you and the community and as a benefit the findings from this research may reveal important information for the bank and its customers too.

I will be very grateful if you could answer the questions mentioned below so I can accomplish the research objective.

Thank you for the cooperation.

Target Interviewee: Manager/Director of CBE’s call center

Structured interview questions to be answered by manager or director of CBE call center on the fourth non independent variable of the study which is the effects of call center technology on customer satisfaction.

Q.1 what are call center technologies CBE is currently using?

Q.2 how latest is these technologies compared with the available technologies?

Q.3 what is the level of employee awareness about the technology CBE is currently using?

Q.4 what is the customer’s reaction and satisfaction about the current call center service, if there is a mechanism to measure customer’s satisfaction?

Q.5 as you know there are a lot of latest technologies in call center, i.e. direct chat, online chat service, social media communication and the like, so is CBE using these Technologies currently? And if not is there any strategic plan that CBE will you use these technologies in the near future?