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ASSESSEMENT OF CUSTOMER CONTACT CENTER PERFORMANCE IN THE COMMERCIAL BANK OF ETHIOPIA

A Research Project Submitted to the School of Graduate Studies in Partial Fulfillment of the Requirements for the Master's Degree
in
Executive Master of Business Administration
(EMBA)
by

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Customer Contact Center Performance in Commercial Bank of Ethiopia

By: Fekadu Kidanemariam Berhanu

Approved By Board of Examiners

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Examiner	Signature	Date
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Examiner	Signature	Date

Statement of Declaration

I, Fekadu Kidanemariam Berhanu, declare that the study entitled "Assessment of Customer Contact Center Performance in the Commercial Bank of Ethiopia'' is the result of my own effort in research project undertaking. All sources of information in this document has been obtained and presented in accordance with the academic rules and ethical conduct and all materials used for the project have been duly acknowledged. The study has not been submitted any other college, institution, or university other than Addis Ababa University for academic credit.

Fekadu Kidanemariam Berhanu

June 2019

Statement of Certification

This is to certify that Fekadu Kidanemariam Berhanu has carried out his research work on the topic entitled "Assessment of Customer Contact Center Performance in the Commercial Bank of Ethiopia" under my supervision. This work is original in nature and it is sufficient for submission for the partial fulfillment for the award of Executive Masters of Business Administration.

Advisor: Dr. Tilahun Teklu

Signature_____

Date _____

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Fekadu K/Mariam Berhanu

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Abbreviation and Acronyms

ACD - Automatic Call Distributor

ATM – Automatic Teller Machine

CBE - Commercial Bank of Ethiopia

CCC- Customer Contact Center

CPM- Customer Performance Measurement

CRM – Customer Relationship Management

DMAIC – Define, Measure, Analyze, Implement and Control

HR – Human Resource

IFC – International Finance Corporation

IPCC – Internet Protocol Contact Center (Call Center)

IT – Information Technology

IVR – Interactive Voice Response

LC – Letter of Credit

NBE - National Bank of Ethiopia

PIN – Personal Identification Number

POS – Point of Sale

QCM – Quality Call Monitoring

QAU – Quality Assurance Unit

SPSS - Statistical Package for the social sciences

VP – Vice President

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Abstract

The insight of this study is customer contact center performance in the Commercial Bank of Ethiopia. CCC is a place of physical location where a high volume of customers and other telephone calls are handled by an organization, usually with some amount of computer automation. The purpose of this study is to investigate the customer contact center performance in the Commercial Bank of Ethiopia. *There is no evidence of a study conducted to investigate the assessment of customer contact center performance in the Commercial Bank of Ethiopia.* The methodology for the study used descriptive design. The findings of the research project showed that the customer contact center advisors felt that the job performance was fairly evaluated. The research also revealed that the CCC staffs were satisfied with the working conditions in the bank, and the advisors were satisfied the overall jobs security. However, the study also showed CCC advisors did not satisfy with their recognition they received for their job accomplished. The study also revealed the advisors payment did not match with their responsibilities. The study showed that the customer contact center was easily accessible through direct phones, and emails. The CCC staffs had sufficient cognizance to handle all queries raised by customers. The customer contact center team answered on timely to the dubitation raised by clients. The CCC staffs adequately addressed to any queries. The Advisors in CCC responded professionally to calls, and emails by system queries. Overall CCC advisors were very important to the bank. Technology improved CCC performances & processes. CCC technology helped the advisors to have a faster turnaround time when responding to customer query. CCC technology gave conclusive reports that could be used in decision making; CCC technology had led to improve productivity in CCC which in turn had improved the banks bottom line. The customer contact center has made a return on investment on the technology procured. The study concludes that CCC had a positive impact on the service delivery in the bank. CCC had played a key role in customer retention. It had made considerable impact on the business growth of the bank. Generally, customers appreciated the service offered by the CCC. The advisors felt confident that the CCC could efficiently manage clients' queries; CCC team was able to follow up on issues conclusively.

CHAPTER ONE

1. INTRODUCATION

The first chapter discusses the introduction of the research which includes background of the study, background of the organization, definition of term and concept,statement of the problem, the purpose of the study, research question, objective of the study, significance of the study, scope of the study, limitations of the study and on how the paper organized.

1.1Background of the study

Customer contact center is a physical location where a high volume of customers and other telephone calls are handled by an organization, usually with some amount of computer automation. Customer contact center is centralized place where messages in a variety of electronic media are sent and received. A customer contact center would typically be provided with special software that would allow contact information to be routed to appropriate people, contacts to be tracked, and data to be gathered.

Customer contact center have become the main contact channel between companies and customers. Customer contact center is the central element in company's operations, as it is the main place of communication between the companies and their customers.

According to Bellman (2007) customer contact center is also known as call center can be defined as a group of people whose main function is talking to existing and potential customers through various communication channels. Effective and efficient customer contact centers should be equipped with skilled staff, current information technology systems and processes that enable delivery of fast, effective and measurable results (Cleveland, 2007).

Customer contact centers increase the bank's ability to reach many new and existing customers beyond its geographical location without physical contact. This is facilitated by banks by creating various channels through which customers can reach them.

1.2 Background of the Organization

The Commercial Bank of Ethiopia is publicly owned financial service provider headquarter in Addis Ababa. The bank was founded in 1942 named "State Bank of Ethiopia''. It introduced saving and new currency, and opened 21 branches, including branches in Khartoum and Djibouti.

In 1963, the bank assumed the current name Commercial Bank of Ethiopia (CBE). Moreover, it abandoned the role of a central bank and maintained commercial bank functions. CBE has been a prominent financial service provider in the country and played a significant role in financing the development endeavors of the nation.

Data compiled by the National Bank of Ethiopia (NBE) as June 30, 2016 showed that CBE commanded 66.1% of the total deposit mobilized by the banking sector, 52.6% loans and advances disbursed by the banking industry, and 36.3% share of branches network in the country. It is the first bank in Ethiopia to open overseas branches.

Currently, CBE covers almost all parts of the country through its more than 1,400 branches. With its more than 33,000 staffs, the bank provides quality service for its customers. The branches execute their functions under the supervision of 15 district offices and supported by E-banking services with it's more than 5.2 million cards distributed to customers, more than 1.5 million active mobile banking users, more than 30,000 internet banking users, more than 2,524 ATM machines and more than 12,057 POS terminals.

The strategic mission of CBE is committed for best realizing stake holders' values 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, strongly believe that winning public confidence is the best of the success.

Commercial bank of Ethiopia initiated for operational excellence for satisfying customers by introducing customer contact center. The Customer Contact centre of Commercial Bank of Ethiopia is one of the operational organs which are responsible for managing inbound and outbound calls of internal and external customers of the bank. Inbound and outbound calls are

performed using internet protocol contact center (IPCC). Inbound calls are calls that the contact center is receiving through 951, and 8879 telephone lines from customers of commercial bank of Ethiopia, employees, and the society at large. Toll-free numbers 951 and 8879 have been used for external & internal customers for providing information on the products the CBE offering, their account status, on their letter of credit (LC), loan status, card status, ATM machines & POS terminals status, and receiving complaints & suggestions. Outbound calls are initiated from the contact center to external or internal customers that have a business relationship with the bank through various electronic media (via telephone, e-mails, SMS).

The customer contact center of CBE started at project level in 2014. The project implemented as operational head office organs with collaborated with Ethio telecom premises in December 2014. The completed CCC operational services started in 2016 and its full structural alignment under the vice president (VP) of banking operation with its parent CBE at its building in October 2017. The Customer contact center (CCC) is very new and still developing in the commercial bank of Ethiopia and the banking industry in Ethiopia. Currently, this Contact Centre mainly is providing first line support through phone besides its advisory services with the help of its major unites namely: Internal Help Desk, External Customer advisory, and Quality assurance units.

Internal help desk *receives calls of incident at the customer contact center from internal* customers from 15 districts of 1,400 branches, or head office organs on line 8879 for technical help and business application for providing all application support needs. The technical team assists one or more of the following tasks will be performed.

- Remote test at the time of connection failure
- Solving internal incidents remotely
- Supporting district system administrators & users
- Escalation of Ethio telecom cases
- Logging incidents to incident management system
- Following the incidents on the system until solved
- Updating of changes on the system and re-escalation of unsolved incidents.

And the business application support team of internal help desk of CCC in CBE supports ATM

with dispenser problem, ATM with card reader problem, ATM with out of service problem, POS is not working, the POS problem is hardware problem, card jam, card holder account is locked, T24 credit support, creation of new arrangements, registering collateral property document information on the system.

External Customer advisory *receives calls of incidents at the customer contact center* from the internal or external customers on line 951 managing various supports such as balance inquires, ATM card black list services, reset or unlock of personal identification number (PIN) of the CBE Birr, Et-switch for other bank ATM service incidence, ATM machines & POS terminals status, mobile and internet banking information, and receiving complaints & suggestions. This is performed using the technological systems of T24, B24, ACI Issuer, CBE Birr Interface, CRM systems and APTRA Vision respectively. And receiving complaints and suggestions for resolving by its advisory service and escalated for further investigating by senior and executive managements as feedback for operational excellence of the bank.

Quality assurance units *regularly reviews all the activities and work performance processes* of the customer contact center on sample basis to ensure efficiency and service qualities as the base of international measuring CCC performance from global best practices using four key metrics. As according to International Finance Corporation (IFC) these are telephone bench marks, efficiency bench marks, human resource bench marks, and service bench marks. By using these key metrics the quality assurance units adapted the quality call monitoring (QCM). The quality call monitoring contains mandatory fields scaling 1 or zero (yes or no). Greetings: introduce company name, introduce advisors first name, asking what the customer wants. Politeness: Polite and respectful words and attitude, bright & positive response, concentration & attention. Addressing Service Request: professionalism, motivational & willingness to serve, ability to lead the call, give the right support. Tone of Voice: volume and speed. Call Categorization: type, area, sub area. Special fields scaling 1 zero, or not available (yes, no, or NA): use apologize words, reformulation, problem solving ability, call holding skills, correct activity. Exceptional fields scaling 1, zero, or not available (yes, no, NA): cross selling & up selling activity, asked customer if the service provided is adequate, asked the customer any additional questions or issues. Quality assurance units (QAU) continuously assess the CCC operational performance,

processes & practices and proposed change & enhancement deemed necessary.

By now, the Centre is running the services with the help of 275 employees that have good communication skills and business related and information technology related graduate professionals that are capable and well trained staffs. They are servicing in shift base to meet the Banks' Customer needs by far.

The management of Commercial Bank of Ethiopia (CBE) assumes that by having a customer contact center with up – to - date technology and seamless process leads to efficiency & optimal result in order to achieve the CBE vision to be the world class bank in 2025.

Financial-services organizations have traditionally viewed customer contact centers as a means to cut costs or improve customer satisfaction. However, this channel has failed to deliver on both of these missions. In an environment of falling revenues and profits, banks are now looking to redefine the mission for customer contact centers. CBE uses customer contact center to improve operational excellence in order to care and satisfy customer interest.

The main purpose of customer contact center operation is customer care and achievement of high levels of customer satisfaction. Customer contact center increasingly play a crucial in customer relationship management to give sustainable competitive advantage (Chanhoo, Sunhee&Euehun, 2012)

The customer contact center of the Commercial Bank of Ethiopia (CBE) is expected to provide, support and information to both internal & external customers. The customer contact center (CCC) is also expected the CBE's service provisioning to the customers without coming to existing and upcoming services such as CBE Birr, ATM, payment card, business operation, IT support, Et-switch card payment of other banks, mobile, POS ,internet banking in addition to advisory services and information provisioning.

1.3 Statement of the problems

The importance of customer contact center in CBE cannot be undervalued. This is because the bank has in-house customer contact center for various purposes and roles. The CBE management

assumes that by having a customer contact center with up – to - date technology and seamless processes leads to efficiency and optimal results hence ultimately customer satisfaction which leads to customer retention hence affecting an organizations bottom line (Aliyu, Abdullateef, Sany&Rushami, 2011).

CBE like other bank depends upon the customers for their survival in the market. The customer is the focus and customer service is the differentiating factors. The CBE can differentiate itself from competitors by providing high quality customer service. Efficacy of customer service is related with progressive operation. In the competitive banking industry, customer satisfaction is considered as the essence of success.

In CBE customer contact center increasingly play a crucial role in customer relationship management to give sustainable competitive advantage (Chanhoo, Sunhee&Euehun, 2012). However, this has been contradicted by Rodney et al. (2009) in his study where he stated that various customer contact centers have failed in achieving this key objective. Customers sometime dread contacting CCC because they feel that their questions will not sufficiently be *addressed. However, none has been conducted to investigate the function that customer contact center plays in customer satisfaction in the Commercial Bank of Ethiopia.*

CCC automation is an essential step for greater employee efficiency, optimal customer satisfaction, and improved operational profitability (Muthoka, 2017). The technology is meant to improve the working environment for customer contact center advisors who need to navigate through multiple systems while *handling client queries* (Laietal, 2012). However, this has been contradicted by various scholars like Aliyu et al. (2011) and Teirlinck and Spithoven,(2013) who pointed out that technology increasingly turns the customer contact center advisors into machines and leads to frustrated customers. These studies did not focus on the banking industry but the customer contact center industry at large. *Therefore, whether technology negatively or positively influence the success of CCC in the CBE.*

According to the National Bank of Ethiopia report (September 2018) the banking industry in

Ethiopia is classified into three levels. These levels are: the first level is the largest bank; the second level is medium bank; and the third level is the small size banks depending upon the bank's assets base and their customer bases. The largest bank is only one that is the Commercial Bank of Ethiopia (CBE). CBE is the largest state bank that has 1,400 branches in all around the countries. In Addis Ababa city CBE has 287 branches. The second level is medium banks include six banks: Awash Bank, Dashen Bank, United Bank, Abyssinia Bank, Nib Bank and Wegagen Bank. The third level is small banks include ten banks: Oromiya International Bank, Oromiya Cooperative Bank, Buna Bank, Enat Bank, Zemen Bank, Abay Bank, Addis International Bank, Berhan International Bank, Debube Global Bank and Lion International Bank.

CBE operates under the same external environment and are affected by the same economic situations. The banks continually reinvent themselves in order to have sustainable competitive advantage. One of the strategies is by introducing customer contact center to serve various purposes. *There is no evidence of a study conducted to investigate the assessment of customer contact center performance in the Commercial Bank of Ethiopia*. Therefore, this study aimed to address that gap in the CCC performance in CBE.

1.4 Purpose of the Study

The purpose of this study is to investigate the customer contact center performance in the Commercial Bank of Ethiopia**.**

1.5 Objective of the Study

This part deals with the general objectives of the study and the specific objectives.

1.5.1 General Objective

The main objective of the study is *to evaluate customer contact center performance* in the Commercial Bank of Ethiopia.

1.5.2 Specific Objectives

This study has the following specific objectives:

- To describe CCC performance in CBE for customer satisfaction

- To identify technology effect on performance of CCC in CBE
- To analyze the influence of CCC in CBE
- To show the significance of CCC for the improvement of CBE performance.

1.6 Research Questions

The customer contact center performance in CBE, in so doing it is plan to give insight in creating awareness on how to implement efficient and effective CCC for the bank to channel the human resources of the organization towards its strategic objective and the link between CCC and performance. Research questions are as follow:

- **To assess what role does CCC plays in customer satisfaction in Commercial Bank of Ethiopia?**
- **How does technology effect on performance of CCC in CBE?**
- **What is the influence of CCC for better performance in CBE?**

1.7 Significance of the Study

This research project is significance for professionals and managers to understand the importance of customer contact center performance and specifically is also important for CBE customer service delivery and operational excellence by increasing employee productivity and the company's profitability.

Customer Contact Centers

This study is investigating the assessment of customer contact center performance in the CBE. Customer contact center may describe the influenc that promote their performance and delivery of service or customer satisfaction or that hinder their success and adapt accordingly.

Banking and Financial Institutions

This research project serves as an eye and an ear opener to the executive and senior managements for operational performance about head office organs of different departments, districts offices and branche level operations by giving them actual feedback gathered from various sources on the effect of having a customer contact center. Some banks may decide to open customer contact centers, equip their CCCs into fully functional departments that have the capability to resolve customer issues on an end to end basis while others may decide to close their CCCs depending on the feedback given.

Banking Industry

This study may be used by the banking industry to understand the significance that hinder or promote customer contact center performance. They may be able to understand if they having a customer contact center influence a customer's choice to bank with them. This may give them a new perspective in improving service delivery in order to attain operational excellence.

1.8 Scope of the Study

This study focused on customer contact center in the Commercial Bank of Ethiopia. The target population was employees and management of CCC in CBE and the sample study consisted of 163 respondents. The study had limitations because it only covered Addis Ababa area in terms of geographical region and only focused on CCC department in CBE.

If the study focuses on all branch offices of the bank it will obtain a lot of information that may be useful for the government and the bank's stakeholders. However, it is unmanageable to include all the bank's branch offices because of resources and time limitations. CBE has 15 district offices and 1,400 branches offices in Ethiopia. From these branch offices 287 branch offices are found in Addis Ababa. This study selects one of the big head office organ centers, the customer contact center, which has frequent contact with customers.

1.9 Definition of Terms

Customer Contact Center

Customer contact center is a physical location where a high volume of customers and other telephone calls are handled by an organization, usually with some amount of computer automation. Customer contact center is centralized place where messages in a variety of electronic media are sent and received.

According to Bellman (2007) customer contact center which is also known as call center can be described as a group of people whose core function is talking to existing and potential customers through various communications of channels. Effective and efficient customer contact center should be equipped with skilled staff, current information technology systems and processes that

enable delivery of fast, effective and measureable results (Cleveland, 2007).

Customer Satisfaction

Customer satisfaction (often abbreviated as CSAT) is a term frequently used in marketing. according to Zhao et al. (2011) defines Customer satisfaction that measures how products or services supplied by a company meet or surpass a customer's expectation. Customer satisfaction is important because it provides marketers and business owners with a metric that they can use to manage and improve their businesses. CSAT is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals."

Automatic Call Distributor (ACD)

Automatic call distributor (ACD) is a Customer Contact Center system that automatically allocates calls to advisors within the customer contact center. It ensures that calls are distributed equally to advisors so that the bulk of work does not fall on one advisor (Conz, 2007). Customer satisfaction is the best indicator of how likely a customer will make a purchase in the future.

In House Customer Contact Centers

These are customer contact centers that are formed within the company to handle to various functions like operations, Information technology support and customer service. The customer contact center is managed by the organization and is integrated into the overall structure of the organization (Benjamin, 2014).

Data Mining

This is a process whereby an organization studies its data to create potential business opportunities. The organization looks at the trends and patterns to create sales opportunities. Different departments mine data for various reasons. The marketing department mines data to create new products and new marketing strategies. The operations department will mine the data to ascertain if the processes are efficient. The sales team will know how to package the products they sell depending on may be the demographics of an area (Chanhoo et al. 2013).

CHAPTER TWO

2 LITERATURE REVIEW

2.1 Introduction

The existent literature has addressed the customer contact centre realities from different perspectives. Some authors study this concept as an emergent phenomenon rather than a theoretical constructs, mostly focusing on customer contact centre classification, business models or managerial control (Russell, 2008). Meanwhile, others address the customer contact centre as an object or analytical unit, using it as a context or unit of observation where to test some theoretical concepts (Piercy & Rich, 2009a, 2009b; Russell, 2008).

This chapter revises research papers done by various scholars to be in contact with different aspects of customer contact centers. Theoretical literature review delves general theories that influence the performance of customer contact center in an organization while empirical literature review looks at studies done relating to the topic of research. Research gaps are established from the literature review.

2.2 The Function of Customer Contact Centers in Customer Satisfaction

The growing interest in customer contact centers among researchers and business professionals is understandable. Since their advent, customer contact centers have become the main contact channel between companies and customers, and at the same time, they have become a massive employment generator (Aksin et al., 2007; Russell, 2008), and industry in themselves.

However, it seems that customer satisfaction is not traditionally associated with customer contact center interactions or, at least, academic attention has not been devoted to this topic. Although customer contact centers have been designed as a customer relationship management tool (CRM) in order to assist and support customers, it seems that the study of customer satisfaction in this context has not received much academic attention. Thus, the aim of this study is to explore

performance in customer contact center industry and its effect. This is an important topic because nowadays, the success of a company may depend on their customer contact center operations, as it is the main communication place with the consumers (Aksin et al., 2007; Anton, 1997; Cheong et al., 2008).

Companies believe that customer access after the sale adds value to the transaction. Customer contact centers have emerged as a leading weapon on this customer satisfaction battle front; CCC enable organizations to build, maintain and manage customer relationships by solving problems and resolving complaints quickly, having information, answering questions and being available usually 24 hours a day, seven days a week, 365 days of the year. Clients now expect and demand telephone free access to line service to the bank. Corporations that include CCC as a focus for their customer satisfaction strategy appear to care more, differentiate themselves from the competition, and thus are in a better competitive position than a business only available at a store between usual operating hours (Harney & Jordan, 2008).

Process optimization can positively influence the bottom line directly; they sometimes have diminutive impact on a client's experience and therefore may not create the desired positive experience that customer service is meant to generate. Therefore, successful customer contact centers need to continually reengage and reevaluate to ascertain how customer centric their processes are (Michel et al., 2013).

2.2.1 Customer Service Theory

Customer service theories and models are all about attracting customers and keeping them with your business. The key thing to aim for in this case is loyalty. Although this is called customer theory, it is more practical than most of the theories you will find, because this theory is practical. Without understanding the principles of customer service in an intimate way, your business will not be able to survive (*LaMarco, 2018).*

The facts that the market place is governed by very competitive dynamics, organizations are forced to treat their customers with respect and meet their ever changing needs. This then leads to repeat business from delighted and satisfied customers hence impacting the organizations

bottom line positively (Antony, 2008).

According to Rodney et al. (2009) recommends some steps that enhance customer experience hence create an excellent customer service experience. The customer should always be greeted with a smile and a friendly but firm handshake. The issues raised should not be generalized but addressed as if they are unique in nature to make the customer appreciated. The service provider should use the customer's name in order to make the customer feel important and that they are not a statistic. When winding up the process, the service provider should ask the customer if all their needs have been met and addressed satisfactorily. This experience will lead to repeat business and eventually customer loyalty**.**

As according to *LaMarco (2018)* customer service is regarded as something of a tree, whose branches represent the more- specific aspects of customer services, whereas the trunk represents the general aspects of customer services.

So, you can see how customer service flows from the most general needs toward the most specific.

Customer issues ensure the whole organization is focused on delivering excellent customer service. Rodney et al. (2009) further stated that about 92% of United States (US) customers form images of the company depending on the interactions with their customer contact center. Organizations focused on efficiency measures which in the long run might be counterproductive to achievement of customer satisfaction. CCC operations and ultimate goals to make profits may create a high level of customer dissatisfaction. The study viewed the service industry as a whole without mentioning the impact of customer contact centers in the banking industry hence some critical areas were not addressed (Aksin 2006, Armony 2006 & Mehrotra, 2006). CCC can influence on offering the best customer service experience since they are the first points of contact. They create lasting impacts which then determines if a potential customer will choose their bank over the competitors or if existing customers will remain with the bank.

2.2.2 Competitive Advantage Theory

Competitive Advantage theory suggests that everyone is better off if decisions are made based on the competitive advantage at all levels – national, corporate, local, and individual. Simply stated, it is nothing more than asking for optimal utilization of resources and the globalization of manufacturing and services across the world as if we lived in a borderless world.

The pursuit of competitive advantage is arguably the central theme of the academic field of strategic management (Furrer 2008; Hoskisson et al. 1999; Porter 1996). Pearce and Robinson (1988, p. 6) define strategic management as, 'the set of decisions and actions resulting in formulation and implementation of strategies designed to achieve the objectives of an organization' Certo and Peter (1990) define strategic management as, 'a continuous, iterative process aimed at keeping an organization as a whole appropriately matched to its environment'. Strategic management is concerned with defining organizational performance, variables of strategic choice and competitive advantage.

There are key features and aspects that give any business organization sustainable competitive advantage over its competitors and there are various macro factors that threaten the success of any business. These aspects are the threat of new entrants, bargaining power of customers, the bargaining power of suppliers, threat of substitute goods and services, and rivalry from competing firms (Porter, 1985). An organization can combine Porters' (1998) attributes to outperform its competition. This theory was further supported by Warf and Stutz (2009) who observed that organizations gain competitive advantage by obtaining the best technology, having comparatively lower prices, product differentiation and by hiring highly competent and qualified personnel. Organizations often use some generic competitive strategies like product and service differentiation, continuous service, product and process innovation strategy and cost leadership strategy which enables an organization to offer the best goods and services at the lowest prices while still earning a profit (Hansen, 2005).

The theory is based on a fundamental assumption that adequate employment opportunities are available to those who are engaging themselves to leverage competitive advantage of others to the degree that they can optimize their own potential – for instance, move up the value chain if they were constrained so far due to capacity instead of capability. Similarly, it assumes that

resources will move to where they find their best employment opportunities irrespective of socio-cultural differences.

One of the factors includes social cultural factors like the social status attributed to the product and reference institutions like family and religion (Warf & Stutz, 2009). The theory of competitive advantage can be applied by financial institutions in their customer contact centers by combining a set of attributes to ensure that they are preferred over their competitors. They can equip their customer contact centers with well trained staff and technology that ensures quick and efficient resolution of clients' issues. The aspect of process re-engineering can be reviewed to ensure total quality management that places customers at the center of any process. By extension the CCC can be perceived as middlemen or agencies that sell all the banks products and services and drive a bank's strategy (Robinson 2009 & Pearce, 2009).

Banks all over the world strive to implement sustainable competitive strategies. Central to these strategies is the implementation of customer contact centers in order to offer excellent customer service alongside other operational processes. The Ethiopian banking industry is not exempt from this trend. Ideally the customer contact centers are structured to serve various needs based on the banks strategic focus, goals and objectives. The banks strive to acquire or develops an attribute or combination of attributes that enable them to outperform its competitors. These attributes include access to highly trained and skilled personnel human resources. New technologies such that enable them to outperform competitors with regard to internet presence (Michel et al., 2013).

2.2.3 Revealed Preference Theory

Revealed preference theory tries to understand the preferences of a consumer among bundles of goods, given their budget constraint. For instance, if the consumer buys bundle of goods *A* over bundle of goods *B*, where both bundles of goods are affordable, it is revealed that he/she directly prefers *A* over *B*. It is assumed that the consumer's preferences are stable over the observed time period, i.e. the consumer will not reverse their relative preferences regarding *A* and *B*. The inability to define or measure preferences independently of 'revealed-preferences' leads some

authors to see the concept as a tautological fallacy. Amartya Sen's critiques in a series of articles: "Behavior and the concept of preference" (Sen 1973), "Rational Fools: A Critique of the Behavioral Foundations of Economic Theory" (Sen 1977), "Internal Consistency of Choice" (Sen 1993), "Maximization and the Act of Choice" (Sen 1997), and his book 'Rationality and Freedom' (Sen 2002).

Based on Wong (1978) consumer preference sometimes can be derived simply by observing consumers in their natural elements when presented with various choices. Consumers will consistently purchase what they like irrespective of the price.This is attributed to various factors like taste and preference which in most cases are consistent and rarely change irrespective of time. The three assumptions that remain constant in consumer preference are that preferences are non-satiable, which means consumers prefer more of a good than less of it, secondly preferences are complete and finally they are transitive (Wright et al., 2007)

Wong (1978) however criticized this theory claiming that it was developed as a substitute to the utility theory. He further argued that if consumers pick a mango over an orange, it can be assumed the preference is for the mango. However, in reality there are some other underlying factors that made the consumer pick the orange over the mango. Therefore, the aspect of ordinal utility was not sufficiently addressed. A customer defines value from the perspective of lean thinking. Rodney et al. (2009) defined lean thinking as a business practice that focuses on offering new methods of thinking around ways of organizing human activities to provide more benefits to society and value to people while removing waste. They further stated understanding customer's contexts and perspectives in respect to the products and services they use offers valuable information that can be harnessed to create satisfaction hence retain existing customers while attracting new ones. This also forms the basis for creating and restoring value hence creating an excellent customer service experience. They also looked at the end to end process from the inception of a call to the final delivery of products or services and how various departments play a critical role in effective delivery.

Based on Anand (2008) though customer contact centers are perceived as central in attracting and retaining customers, studies on the topic indicate that customer loyalty is basically geared

towards a service provider. This essentially means that customer loyalty is towards a specific service provider and not a particular brand. This is an area that has not been explored widely. The fact that the success of any given organization is dependent customer attraction and subsequent loyalty cannot go unmentioned and the unique role of a customer contact center in that entire process must be highlighted. They play a key role in meeting customer needs and obtaining customer feedback that can be channeled to create value for the entire organization (Schneider, 2004). Customers frequently gauge the service climate of an organization and will often make critical decisions based on that perception (Lux, 1996). If the perception is high, then they will join the organization and form a lasting relationship. If the perception is low, then the likelihood of joining the organization and forming a lasting relationship is very low.

2.2.4 Customer Retention

Customer retention is increasingly being seen as an important managerial issue, especially in the context of saturated market or lower growth of the number of new customers. It has also been acknowledged as a key objective of relationship marketing, primarily because of its potential in delivering superior relationship economics, i.e. it costs less to retain than to acquire new customers.

A common paradigm that has emerged from the TQM movement is that the ultimate path to retaining customers is to satisfy their needs. The theory holds that by identifying what customers expect, and then meeting and exceeding these expectations, customers will be far less likely to seek the services of competitors.

One of the important outcomes is that many dissatisfied clients do not air them complains (Aksin et al., 2006). These customers are at a greater risk of looking for alternate service providers. The fact that clients form their opinions about an organization based on interactions with customer contact centers further highlighted the importance of customer contact centers in any organization. This concept was supported by Antom and Gunderson (2004) who stated that customers continually interact with competing organizations hence offering them a wide variety to choose from. The organization that has the biggest positive and pleasant impact on the

customer will ultimately develop a long term relationship with him. This in turn affects the organizations market share due to repeat business and referrals from the happy clients. Businesses have invested in Customer Relationship Management (CRM) systems. According to Sun, Li and Zhou (2006) these expensive systems should assist in managing customer data that can be utilized in the entire organization hence create real value.

Managing a customer contact center environment is particularly challenging because it requires an intricate balance between offering excellent customer service and meeting lean budgetary demand (Frenkel, Korczynski, Shire and Tam, 2009). Customer perspective is rarely addressed in customer contact center research done over time. Other factors like customer contact center operation efficiency, fast resolution of customer queries and staff behavior including employee turnover in customer contact centers take precedence hence renegading the customers' perspectives. This leads to frustrations on customer contact center advisors as they attempt to effectively manage customer queries hence the conclusion that customer orientation, satisfaction and retention are not a key focus for customer contact centers (Gilmore, 2001).

2.2.5 Performance Measurement for Customer Satisfaction

According to International Finance Corporation (IFC): World Bank Group maximization customer satisfaction and to maintain an efficient, high-performance customer contact center should concentrate on four key areas: Telephone benchmarks; Efficiency benchmarks; Human resource benchmarks and Service benchmarks.

Telephone bench marks has three metric areas. The first metric is *service level* this service level is a percentage of calls received by the centre that are answered by a human agent within a certain time frame. The global metric is 80% of calls answered in 20 seconds. This is the most common benchmark to measure the level of service a contact centre provides its customers. The second metric is *average speed to answer* although related to the service level, this benchmark also takes into account all of the calls that are not answered within 20 seconds. This results in an average overall. The global metric is 28 seconds. The third metric is *abandoned rate* is the number of calls that are abandoned while the customer is waiting for a human agent. This value

is expressed as a percentage of all calls received. The global metric is 5% to 8%.

Efficiency benchmarks in which it has about five metric areas. *Call duration* is the amount of time spent speaking to customers on the telephone. Calls may be longer initially as agents are still new to the product and systems. Encourage slightly longer first calls to reach resolution as this is more efficient than repeat calls. The global metric is 4 minutes per call. The *call wrap up time* is the time that an advisor takes after the call has finished to complete the case. This time may include updating the system, completing forms, and any other activities associated with the call. The global metric is 6 minutes. However, this metric is very industry specific. *Accuracy of call forecasting if there are fewer calls than forecast, then advisors will be under-utilized. Call forecasts need to be constantly reassessed and measured. The global metric is a 5% variance.* Adherence to schedule this benchmark measures whether agents are on time for their shifts, whether they go to lunch and take breaks according to the schedule. The global metric is 95%. *Occupancy* measures the average percent of time an individual agent or all agents are actively occupied on a call. This includes talk time and wrap up time. Occupancy does not include ready time. The global metric is between 60-80%.

Human resource benchmarks include absenteeism and attrition. Absenteeism tracks the average number of advisor days lost per year through illness and unauthorized absences as a percentage of contracted days. This is a key indicator of underlying motivation and stress issues, and affects productivity and potential revenue. It is important to measure advisor absenteeism separately from that of the managers and team leaders as there is usually quite a difference. The global metric is 5%. *Attrition* is a measure of staff turnover annually, expressed as a percentage. It is calculated by taking the number of employee that have left the contact center in a given year, for whatever reason, as a percentage of the total number of staff. It is important to use actual head count, rather than full time equivalents as the impact of attrition is the cost of re-recruitment and re-training of replacements, which is a per head basis. The global metric is 15%.

Service benchmarks include customer satisfaction, first call resolution, and quality assurance. *Customer satisfaction* is a critical benchmark. A three pronged approach is recommended that combines quarterly customer surveys conducted by team leaders with independent third party

analysis, and quality assurance measurements. The global metric for customer satisfaction is 90%. *First call resolution rate* measures the percentage of all calls that are resolved on the first attempt, without the advisor needing to refer the customer to a colleague, their manager, or calling the customer back. This measure should improve as advisors become more confident with the product and systems. The global metric is 70-75%. *Quality assurance* measures quality of calls and is based on a set of criteria which the advisor must cover during the call. Including, but not limited to: How the agent answers the call, how they navigate the caller to a resolution, how they end the call.

The challenge of customer service organizations need to clearly identify which actions they can take to maximize the customer experience without breaking their budget or wasting time. As a solution, the *J.D. Power Benchmarking Customer Satisfaction Research Program SM* provides comprehensive measurement of customer satisfaction and operational performance with an organization's phone, interactive voice response (IVR), and Web self-service channels, as applicable.

Based on McAdam, Davies, Keogh and Finnegan (2009) reviewed customer contact center performance measurement from a six sigma perspective. A six sigma is a set of techniques used for improving processes developed by Motorola in 1986. The six sigma concept has a total quality approach which has the customer at the center of the process. It encompasses concept development that is focused on consumer specifications, technological abilities, and economic actualities. Design optimization is also considered which seeks to minimize variation impact hence have a standardized product. This drives organizations towards attaining measurable monetary earnings from any Six Sigma project. This in turn leads to continuous leadership and supports the six sigma hypotheses that customer contact centers are not only service centers but are data centric. This is because they maintain data for a long time. The data can be used for successful business improvement methods that have already been deployed in other business sectors. Six sigma approaches then steers customer contact centers to apply the full range of six sigma concepts and its adaption to addressing strategic and operational issues (Sun et al., 2006).

Customer contact centers by effectively using Six Sigma principles. Instead of focusing on

individual people, take a holistic approach to the entire center. Both Six Sigma and Lean are heavily invested in teamwork, after all, which is essential to maintaining good results for critical-to-customer characteristics. These days, a lot of centers incorporate some aspects of Six Sigma, using quality programs to evaluate their calls per customer calling patterns and align them to customer feedback.

According to Rodney et al. (2009) the application of six sigma concepts guarantees improved operation efficiency by eliminating waste. The concept mainly focuses on how customer contact centers can deliver excellent customer service while reducing operational costs and achieving a holistic improvement. These approaches were based on manufacturing industries; they did not delve into the service industry, specifically the banking industry. This claim was supported further by Antony (2008) who stated that service industries will only fully achieve the benefits of six stigmas' if they apply the key methodology in six stigmas' which is Define, Measure, Analyze, Implement and Control (DMAIC), an aspect that McAdam et al. (2009) did not cover in their research.

Based on Brooks Mitchell (2009) the biggest problem with Six Sigma in a human customer contact center process is that the goal is practically impossible to achieve and nobody really takes it seriously. This leads to customer contact center management mistrust, apathy and even subtle resistance. At best, Six Sigma programs in the customer contact centers are a waste of time and money. And, at worst, Six Sigma will instigate problems and counterproductive results.

A rapid growth in customer contact center industry globally has created a very competitive environment for organizations, some concerns continually emerge (Alison, 2002).The need to closely monitor and control the environment provided a stressful environment for the customer contact center advisors which may be counterproductive in the long run leading to high rates of employee turnover.This means that the staff at customer contact centers cannot be customer focused hence leading to customer dissatisfaction and eventually customers terminate the relationship with the organization.

This research project is turn around on the effect assessment of customer contact center

performance in the CBE occurred by the customer contact center management because of emerging technologies and behavioral responses by both customers and advisors. It did not enter through into the banking industry and the role that customer contact centers play in influencing consumer preference in the banking industries.

2.3 Effects of Technology on Customer Contact Center Performance

In the business environment, like financial institutions and banks, technology has become increasingly more essential. The technological transformation is not in itself important, but it is important to affect the competitive advantage and the industrial structure. Not all technological transformation is strategically beneficial; it may even worsen the competitive position of a company and its attractiveness. High technology does not guarantee profitability. Technology, however, penetrates the network of values of a company and exceeds technologies directly associated with the product (Porter, 1989, P.153).

Especially in the areas of customer contact centers, Mcphail (2002) says the customer contact centers are typically locations of intense use of technology, highly monitored and highly interconnected (networked). Kefi and Kalika (2005) say that technology, beginning in the 1980s, started being considered strategic and an enabler in order to obtain competitive advantages.

Customer contact center technologies include speech recognition software to allow computers to handle first level of customer support, text mining and natural language processing to allow better customer handling, agent training by automatic mining of best practices from past interactions, support automation and many other technologies to improve advisor productivity and customer satisfaction (Wallenburg et al., 2011). This has been supported by Lai et al. (2013) by pointing out that telephone calls are easily monitored and the close monitoring of CCC staff is widespread. However there has been criticism to CCC systems arguing that it leads to lack of personalized services, complaints that departments of companies do not engage in communication with one another and automated queuing systems that delay delivery of services. The various challenges encountered by customer contact operators are discussed by several authors (Wallenburg et al., 2011; Lai et al., 2013; Hofer et al., 2009).

2.3.1 Absence of Individualized Services

According to Adrienne (2008) shows that customer contact centers have evolved over time to emphasize on customer service and cost cutting**.** The use of technological tools used in the management of calls associated with the interactive voice responders (IVR) as a first option to interact with users, certainly represent a reduction in costs for CCCs. Adrienne (2008) further points out that the search for cheap labor in developing countries led to geographical expansion of the CCC industry for numerous big corporations the early 2000. The shift brought about a unique set of challenges like poor services, accents and intonations leading to a decline in this kind of ventures (Taylor, Baldry, Bain & Ellis, 2003). Positive outcome expected on consumers and employees for improved service delivery, customer contact center operations concentrated on front-line staff empowerment.

This view was contradicting mainly because some researches often showed customer contact center advisors as mechanized people who strictly follow routine and are indifferent to customers' needs while other studies show that they are much empowered workers who enjoy their interactions with customers (Curry & Penman, 2004). Application of emotional intelligence is importance for customer contact center employees. This aspect is however affected by the triangle relationship between customers, customer contact center employees and the management of an organization. This means that organizations must understand that the success of their customer contact center is dependent on the support it is given by other departments and functions (Lai et al., 2012).

Commercial Bank of Ethiopia that does not choose to outsource is also affected by this aspect of absence of individualized services. This is mainly because outsourcing firms manage many accounts and any firms' activities at the same time hence will not give the highest concentration to that as bank would primarily give its customers. These two ideas joined with the fact that the customer contact center technologies are presumed to be impersonal creates a unique set of challenge. This worldwide idea is witnessed in the CBE as well as the Ethiopian banking industry as like any other banks found anywhere (Lai *et al*., 2013).

2.3.2 Process Improvement

Complexity in the customer contact center is growing in parallel with customer expectations. As customers feel more entitled, they're also unwilling to tolerate customer service that doesn't deliver a compelling customer experience. Add the economy into the equation and bank CCCs are facing even tougher hurdles to satisfy their customers. When events occur that spike the volume of inbound calls, the ability to effectively respond is reliant on the underlying processes that support customer interactions.

Based on SYKES (July 23, 2014) Financial Industry the growing complexity of the customer contact center is not working in our bank's favor. Recent research by ICMI found that 70% of customer contact centers are experiencing performance issues, including broken processes, lower agent morale, and lower first contact resolution (FCR). For 59% of these CCCs, their focus on fixing these issues is focused on process improvement.

For managing a customer contact center, we probably have to deal with a lot of unhappy customers. Usually, the problems in a customer contact center are process-related, and one-offs are not that common. If we improve our customer contact center, we could significantly improve

customer satisfaction and create loyal customers by strengthening the manner in which our advisors operate and serve customers (Gautam, 2018).

According to Gautam (2018) possibly the best way to start with customer contact center improvement is by knowing our audience, and how our business helps satisfy their most important needs. If we don't know our audience well enough, our advisors won't know the best way to solve our customer's problem.

Initially customer contact centers leaned towards labor-intensive manufacturing processes but that has expanded in the recent past to include knowledge-intensive professional services such as research and development, accounting and legal support (Handley et al., 2012).

Banks and organizations globally have been moving beyond cost motives alone to use customer contact centers as a means of accessing local and skilled labor pools and reduce development

times in knowledge-intensive services (Teirlinck and Spithoven, 2013). The motivations have evolved from a primary focus on cost reduction via lower vendor production costs to an increasing emphasis on performance transformation in areas such as quality, functionality and service. (Malik &Blumenfeld, 2012).

Back offices functions of a bank are cost consuming hence are keen to reduce costs in such areas yet these areas remain key in the smooth functioning of organizations. However there tends to be a lot of process duplication in these areas hence more and more costs (Handley & Benton, 2012). Despite the recent increasing research in customer contact centers little attention has been given to understanding how process improvement techniques impact the business processes in banks and specifically in CBE and the Ethiopian banking industry (Handley et al., 2013). Therefore, this research aims to facilitate the objectives to understand how technology improves processes.

2.3.3 Maximizing on Technological Advances to Improve CCC Performance

Technology offers a powerful means of improving the performance of customer contact centre advisors, with analytics (reports) having the most direct bearing. But the intricacies of analytics necessitate having a trusted advisor on our side, to choose and interpret the right data models and reports.

According to Chris Lukasiak (2018) executives and sales leaders agree that efficient and effective customer contact centers are critical to the acquisition, retention and satisfaction of customers; too few are exploring or implementing the latest technology to improve and optimize customer contact center operations. Recent research from well-known analyst firm Forrester confirmed that voice is still the most widely used customer service channel, with 73% of customers calling into customer contact centers to address concerns, rather than using other communication methods.

Increased competition has led to increased network capacity, improved quality and lower costs for both domestic and international traffic. Technology is cheaper, more reliable and increasingly sophisticated. Customer contact center managers are increasingly expected to deliver both low operating costs and high service quality (Trkman, 2013). To meet these potentially conflicting

objectives, customer contact center managers are challenged with deploying the right number of staff members with the right skills to the right schedules in order to meet an uncertain, time varying demand for service. Traditionally, meeting this challenge has required customer contact center managers to wrestle with classical operations management decisions about forecasting traffic, acquiring capacity, deploying resources, and managing service delivery (Reed &Storrud, 2009).

Market and industry trends tend to create spikes in call volumes or customer complains that customer contact centers must handle (Hsiao, Vorst, Kemp, & Omta, 2010). Many customer contact centers face highly unpredictable demand which is also time varying. The time varying element is relatively easy to handle by adjusting staffing levels. But when call volume is unpredictable, limited flexibility in adjusting staffing levels may lead to situations of over- or under-staffing, at least temporarily (Teirlinck et al., 2013). The Commercial Bank of Ethiopia has customer contact center in house whose efficiency is sometimes dependent on efficient customer contact center systems (Hsiao et al., 2010). However, this does not mean that the presence of an effective technological system will result to efficient delivery of service. The research conducted shed would shed more light on whether maximizing on technological advances improves customer contact center performance.

2.3.4 Applying Technology to Reduce Impact of Staff Turnover

According to Bell (2018) new technologies have emerged to reduce turnover rates by using data analytics to predict if, and when, job candidates will quit. By implementing technology that predicts whether job prospects will leave before the end of year.

Employee turnover is something that every business with workers experiences. Even Commercial Bank of Ethiopia experience employee turnover. Employees come and go. When employees leave, it's costly for our business. It takes time and money to find and train a replacement. That's why it's best for businesses to reduce their turnover as much as possible (Kappel, 2017).

Based on Reed and Storrud (2009) high involvement practices like selective hiring and extensive

training, job designs that include individual discretion and allow for ongoing learning and incentives such as training, security, high pay levels, trust building performance measurement systems, characterize a commitment strategy. These are various alternative production models for customer contact centers, driven by different market segments or internal needs and are enabled by advanced technology (Handley et al., 2013). Employees of a customer contact center feel the tension between control and commitment in part through performance measurement systems. CCCs monitor both quantitative and qualitative aspects of calls answered by an employee (Handley et al., 2013).

Quantitative and qualitative targets may further more be conflicting thus creating additional pressure on employees. This conflict combined with the intensity of monitoring is believed to lie at the root of customer contact center employee burnout leading to negative effects like turnover, absenteeism, and quality problems. Providing efficient systems that lighten employee work load enables them to enhance their skills and service performance hence a positive effect on their wellbeing. Efficient and effective systems lead to other characteristics of commitment strategies which have also been shown to lead to positive performance outcomes. Better systems lead to higher sales and quality and lower quit rates (Alison, 2014). Teams that are able to create a collaborative environment are shown to have better knowledge sharing capabilities thus leading to better service (Alison, 2014).

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1 Research Design

A research design is a framework that has been created to find answers to research questions. It is the set of methods and procedures used in collecting and analyzing measures of the variables specified in the research project problem of research. The design of a study defines the study

type (descriptive, data collection methods and a statistical analysis plan).

According to Cooper and Schindler (2014) research design as the overall plan and investigation structure to acquire answers to research questions and manage variances in the process. This study used descriptive research design. Descriptive design uses statics that measures the cause and effect relationships between variables. This method has an advantage of being cheap and effective where sample sizes are applicable. Mugenda and Mugenda (2003) observed that this survey method is best for collecting original data as it gives a certain degree of accuracy.

3.2 Population and Sample Technique

3.2.1 Population

A population is a whole group of people, things or events, and has similar characteristics that are called parameters Conz (2007). The population of this study was taken from the contact center in the Commercial Bank of Ethiopia. This study focused on customer contact center in The Commercial Bank of Ethiopia whose total population was 275 has taken from CCC in CBE and was distributed as indicated on Table 3.1.

Table 3.1 Population Distribution

Target CBE customer contact center	Number	Percentage
External Customer Advisory	170	100%
Internal Customer Advisory	105	100%
Total	275	100%

Source: Commercial Bank of Ethiopia (2019)

3.2.2 Sampling Design

3.2.2.1 Sampling Frame

A sampling frame is the source material or device from which a sample is drawn. It is a list of all those within a population who can be sampled, and may include individuals, households or institutions. According to Cooper & Schindler (2014) sampling frame is a list of population units

or elements from which to select elements to be sample. A sample can be defined as a smaller group or subgroup obtained from the accessible population (Mugenda&Mugenda, 1999). Sampling is the process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group (Orodho & Kombo, 2002). CBE is the custodian of the employees for the division of customer contact center. The sample frame for the study was a list of management staff, and employees from CCC in the CBE.

3.2.2.2 Sampling Technique

The number of samples was selected by stratified random sampling technique from CCC in the commercial bank of Ethiopia. Sample Size determination in 95% confidence level. Random Sampling technique was used to gain reliability. It provides the simplicity and provides a convenient technique to obtain separate estimates for population parameters (Steven et al, 1993). According to Yamane (2006) the sample size of the probability that the final sample is representative in terms of the target population.

3.2.2.3 Sample Size

The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. In practice, the sample size used in a study is determined based on the expense of data collection. The sample size is a smaller set of the bigger population (Cooper & Schindler, 2014).Mugenda (2003) states that the sample must be representative of the population for objective findings.

$$n = \frac{N}{1+N(e)^2}$$

Yemane's sample size determination formula:

Where; N = the total population of customer contact center

n = the required sample size

e = the precision level which is = (±10%)

With Confidence Level is 95% at P = ± 5 (maximum variability).

N =275, the total population of customer contact center of CBE

$$n = \frac{275}{1+275(0.05)(0.05)} \quad = 163$$

According to Yamane (2006), this step increases the probability that the final sample is representative in terms of the target population.

Table 3.2 Sample Size Distribution

Target CBE customer contact center	Population	Sample	Percentage
External Customer Advisory	170	110	67%
Internal Customer Advisory	105	53	33%
Total	275	163	100%

Source: Commercial Bank of Ethiopia (2019) and Own computational result

3.3 Data Collection Methods

Data collection is a process of collecting information from all the relevant sources to find answers to the research problem, and evaluate the outcomes. Data was collected through primary and secondary sources. A primary source was questionnaires & operator traffic statistics from IPCC, and interviewing by managers of CCC, focused group discussion with the supervisors and officers, while the secondary resources have been utilized in collecting data through literature review and daily, monthly & quarterly CCC reports of 2018/2019. Mugenda and Mugenda (2003) state that data collection is critical to any study as it defines who will be interviewed, when they will be interviewed and how they will be interviewed. Primary data was collected by directly administering questioners to the respondents. The main advantage of primary data is that it is always up to date and reliable. Structured questioners were developed

and administered to selected individuals. Section I of the questionnaire focused on general respondent information, section II focused on the general opinion about CBE, Section III the function of customer contact center on customer satisfaction while section IV focused on the effect of technology on customer contact centers performance in the CBE.

Based on Cooper & Schindler (2014) the main advantages of using questioners are that the questions can be structured in a way to prompt and guide the interviewee; they are cheap to administer and are easy to analyze. The liker scale, which is a psychological measurement device that gauges attitudes, values and opinions, was used extensively in the questionnaire.The questions were structured around the research of the study hence a variation of both open and closed questions.

3.4 Research Procedures

According to Matthew Schieltz (April 24, 2017) a good scientist practices objectivity to avoid errors and personal biases that may lead to falsified research; the entire scientific research process--from defining the research question to drawing conclusions about data--requires the researcher to think critically and approach issues in an organized and systematic way. Scientific research can lead to the confirmation or re-evaluation of existing theories or to the development of entirely new theories. The questionnaires were developed by the researcher based on the research questions of the study. Questionnaires were distributed to at experts highly involved in commercial bank of Ethiopia. Launching of the study survey, a pre-testing on randomly selected 10 employees was carried out the CCC in the CBE. A pilot test involving 10 respondents was carried out to evaluate the completeness, precision, accuracy and clarity of the questionnaires,

3.5 Data Analysis

Statistical Package for the Social Sciences (SPSS) statistics version 25 program was used to, analyze the data and generate statistical measures. There are various methods used to draw conclusions from any data (Cooper &Schindler, 2014). Descriptive and inferential analysis was used to draw out percentage frequencies. Inferential statistics infers from a sample of the population hence predicts the characteristics of a population based on a sample (Mugenda,

2003).

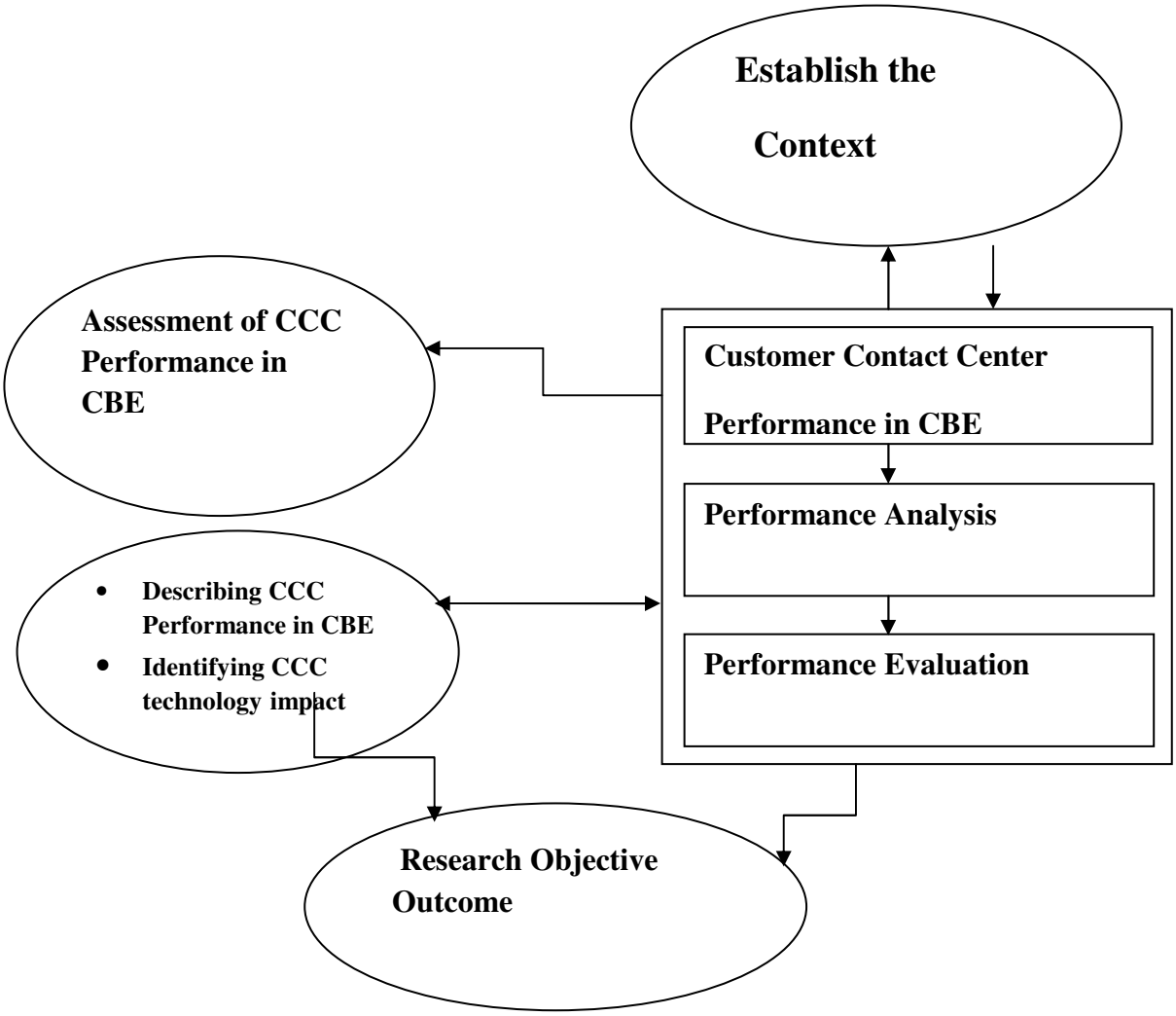

Figure 3.2: Work flow model for the research project

CHAPTER FOUR

4. DATA PRESENTATION & STATISTICAL DATA ANALYSIS

4.1 Introduction

This chapter presents, analyzes and interprets primary & secondary data collected from customer contact center in Commercial Bank of Ethiopia. Structured questionnaires were employed in the study with a mix of close- ended and open ended types of questions. The secondary source of data was used from customer contact center weekly, monthly, and quarterly performance progress reports of 2018-2019.

The bearer of the research project handed out 163 questionnaires to the population and managed to collect all the questionnaires. During data cleaning, only 161 questionnaires were valid and were used for analysis. This gave the study a response rate of 98%. These results were above the required threshold.

4.2 General Information

4.2.1 Gender

The holder of the research project asked the respondents to indicate their gender and Figure 4.2.1 shows that 63.3% were male, and 36.7% were female. These results show that majority of the employees working at customer contact center in CBE were male. This could be explained by the demographic population of the Commercial Bank of Ethiopia that has more male population.

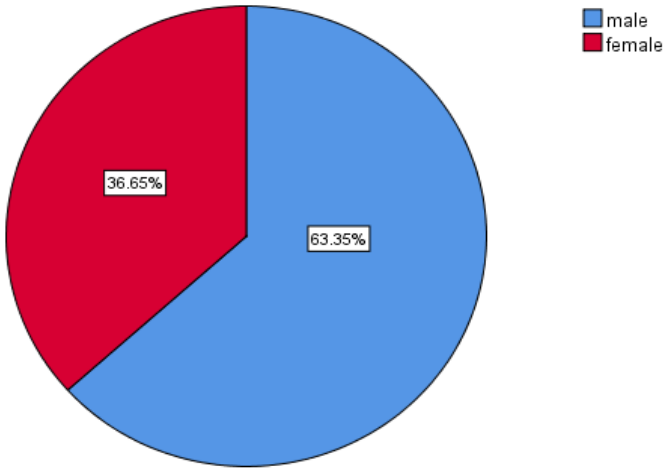

Figure 4.2.1 Gender

4.2.2 Age

The bearer of the research project asked the respondents to indicate their age and Figure 4.2.2 shows that: 62.7% were aged between 25-31 years, 19.9% were aged between 32-38 years, 7.5% were aged between 18-24 years, 6.2% were aged between 39-45 years, and 3.7% were aged 46 years and above. These results show that most of the respondents were young adults which could be described by the demographic distribution of the population in the Commercial Bank of Ethiopia.

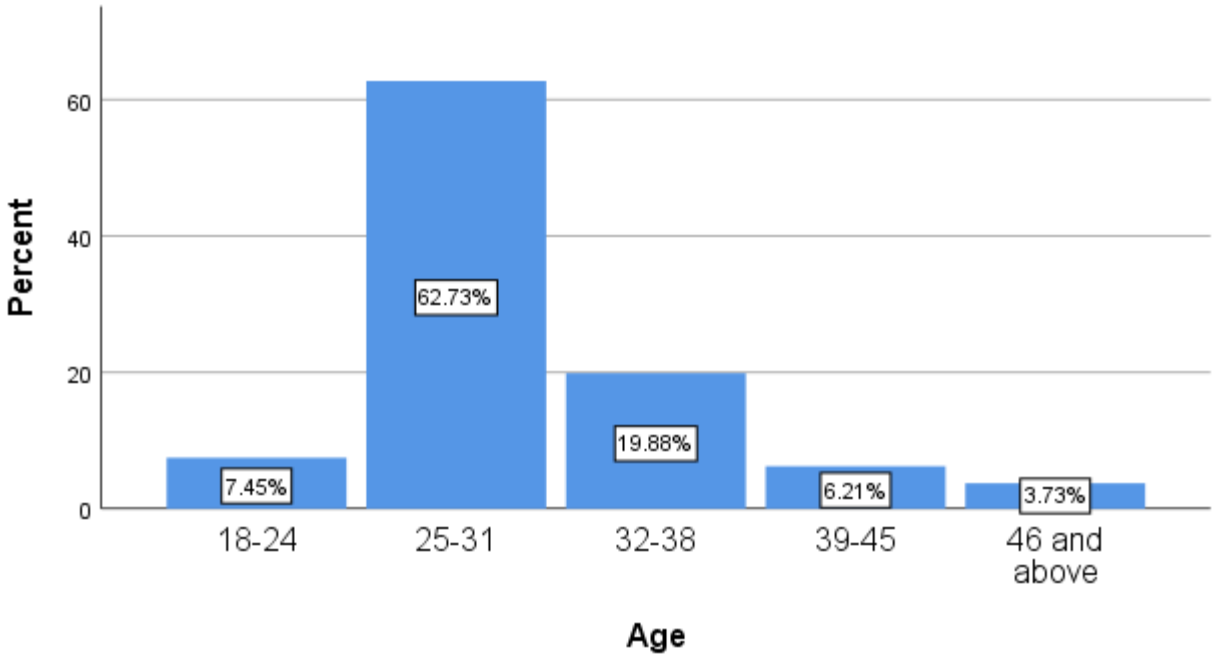

Figure 4.2.2 Age Bracket

4.2.3 Division in CCC

The bearer of the research project asked the respondents to indicate the division in the customer contact center they worked for and Figure 4.2.3 shows that 67.1% worked for external advisory, and 32.9% worked for internal advisory. These results show that the study was inclusive of both external & internal advisory, and they were both represented well in terms of respondent divide.

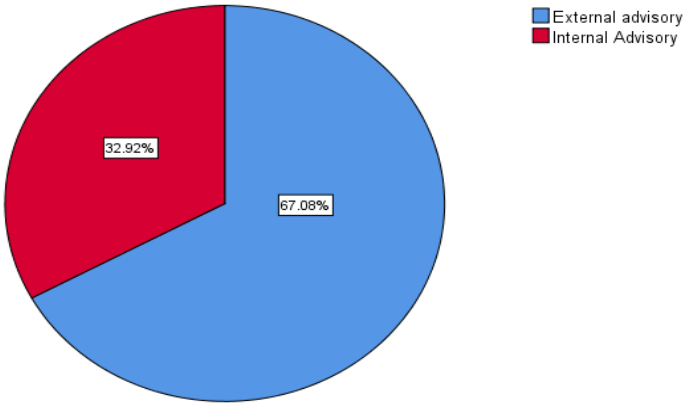

Figure 4.2.3 Division in CCC

4.2.4 Academic Qualification

The holder of the research project asked the respondents to indicate their academic qualification and Figure 4.2.4 shows that 61.5% were 1st degree, and 38.5% were 2nd degree. These results show that majority of the employees working at CCC in CBE were first degree. This could be explained by the demographic population of the CBE that has more first degree population in the CBE.

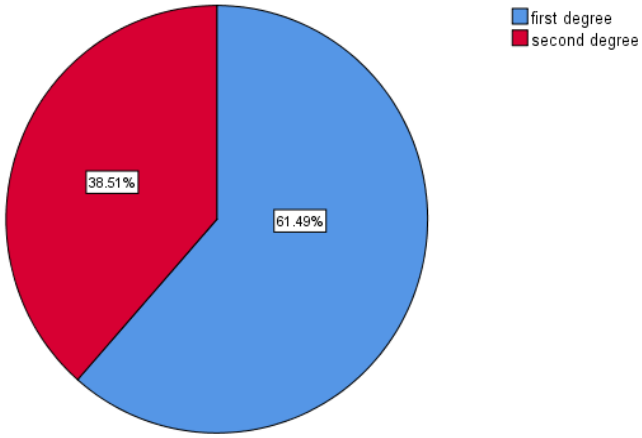

Figure 4.2.4 Academic Qualification

4.2.5 Position at CCC in CBE

The bearer of the research project asked the respondents to indicate their position at CCC in CBE

and Figure 4.2.5 shows that: 67.1% were bank officer, 13.7% were supervisory level, 8.1% were junior officer, 7.4% were middle level management, and 3.7% were senior management. These results show that most of the respondents were bank officers which could be described by the demographic distribution of population in the Commercial Bank of Ethiopia.

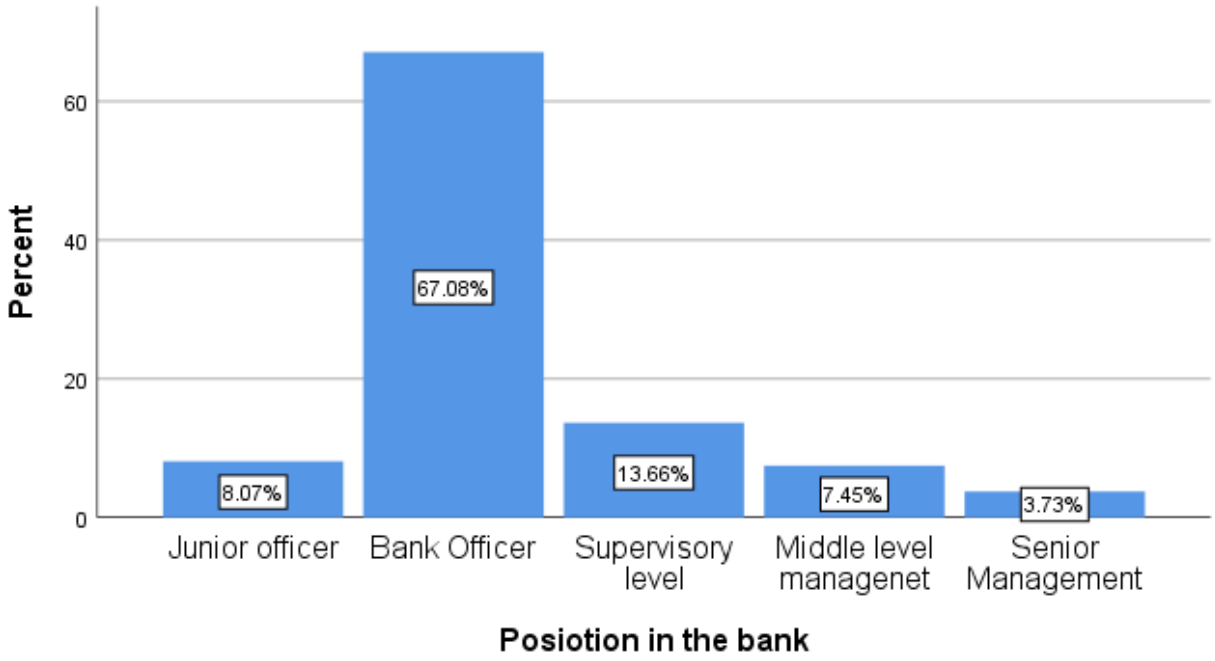

Figure 4.2.5 Position at CCC in CBE

4.2.6 Service Years in the CBE

The holder of the research project asked the respondents to indicate their service years in CBE and Figure 4.2.6 shows that 65.8% had been with CBE from 1-5 service years, 23.6% had been with CBE from 6-10 service years, 4.4% had been with CBE from 11-15 service years, 3.7% had been with CBE from 16-20 service years, and 2.5% had been with CBE from 21 and above service years. These results show that the majority of the employees working at CCC in the CBE had been with the bank 1-5 service years.

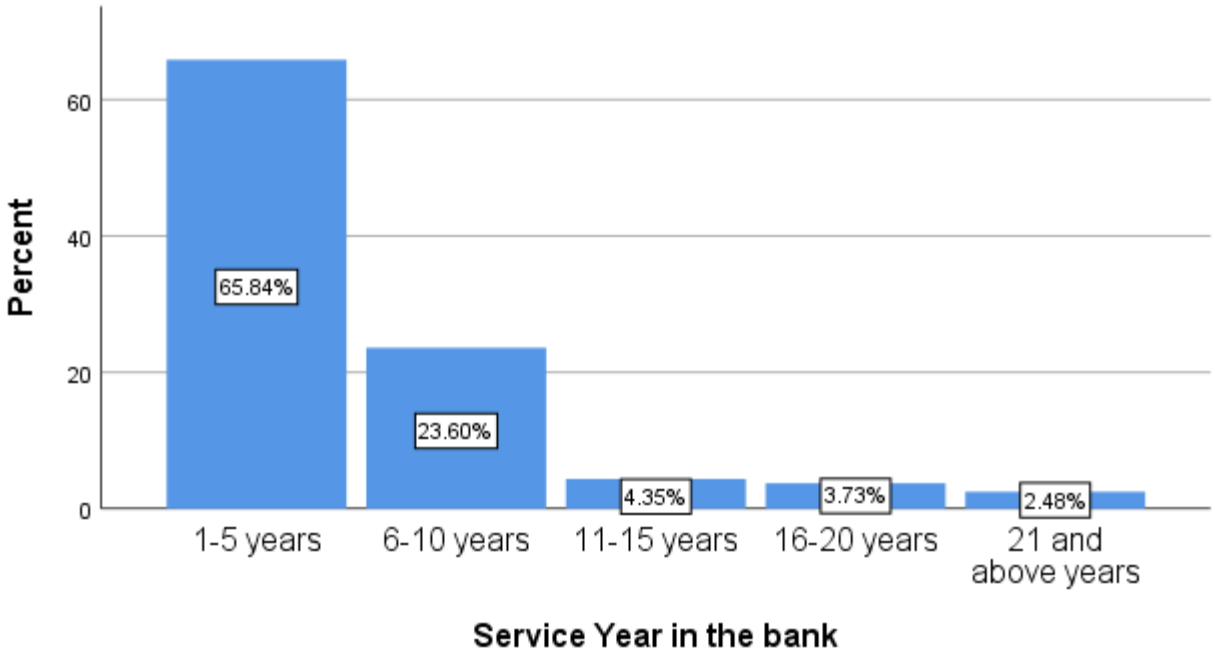

Figure 4.2.6 Service Years in the CBE

4.3 Descriptive Statistics Result

4.3.1 General opinion on the CBE

Table 4.3.1.1 Descriptive summary result of general opinion of respondents about the question:

What did you give priority in your bank?		Frequency	Valid Percent
Responses	Increasing productivity	41	25.5
	Motivating Workers	18	11.2
	Cooperation with coworker	20	12.4
	Working according to policies and procedures	80	49.7
	Other, please specify	2	1.2
	Total	161	100.0

Source: SPSS output from own research 2019

From the above table 4.3.1.1 about 25.5% of the respondents gave priority on increasing productivity in the bank. About 11.2 % of them gave priority on motivating workers in the bank; about 12.4% of them give priority on Cooperation with coworker. About 49.7 % of the respondents were give priority on Working according to policies and procedures while 1.2% of the respondents give priority on other issues not specified. Therefore, one can infer that the majority of the respondents about 49.7% of the staffs' in customer contact center give priority on working according to policies and procedures set by bank.

Table 4.3.1.2 Descriptive summary result of general opinion of respondents about question:

Work performance is managed and influenced by;		Frequency	Valid Percent
Responses	People in position of authority	37	23.0
	The system rules and procedures	66	41.0
	Their own commitment to achieving the goals of organization	40	24.8
	Their own desire to accept by other and to be good members of their work group	15	9.3
	Other, please specify	3	1.9
	Total	161	100.0

Source: SPSS output from own research 2019

From the above table 4.3.1.2 about 23% of the respondents said work performance is managed and influenced by people in position of authority in the bank. About 41% of the respondents answered work performance is managed and influenced by the system rules and procedures; about 24.8% of respondents said work performance is managed and influenced by their Owen commitment to achieving the goals of organization. And about 9.3% of them answered work performance is managed and influenced by their own desire to accept by other and to be good members of their work group while 1.9% of them on other issues not specified. Therefore, from the descriptive summary from the table 4.3.1.2 one can infer that the majority of the respondents about 41% of the staffs' in customer contact center answered work performance is managed and influenced based on customer contact center the system rules and procedures set by the Commercial Bank of Ethiopia.

Table 4.3.1.3 Descriptive summary result of general opinion of respondents about questions:

What kind of motivational performance uses your bank?		Frequency	Valid Percent
Responses	Money	51	31.7
	Participation	12	7.5
	Decision making	12	7.5
	Training/Education sponsorship	67	41.6
	Other	19	11.8
	Total	161	100.0

Source: SPSS output from own research 2019

From the above table 4.3.1.3 about 31.7% of the respondents respond a kind of motivational performance uses money. About 7.5% of them respond a kind of motivational performance uses participation; about 7.5% of them respond a kind of motivational performance uses decision making; about 41.6% of them respond a kind of motivational performance uses training/Educational sponsorship. And about 11.8% of them respond a kind of motivational performance uses on other issues not specified. Therefore, one can infer from the above table 4.3.1.3 the majority of the respondents about 41.6% of the staffs' in CCC respond a kind of motivational performance uses training/educational sponsorship in CBE.

Table 4.3.1.4 Descriptive summary result of general opinion of respondents about question:

Do you think that drawbacks brought in CBE performance by the motivational approach in the bank?		Frequency	Valid Percent
Responses	yes	116	72.0
	no	45	28.0
	Total	161	100.0

Source: SPSS output from own research 2019

From the above table 4.3.1.4 about 72% of the respondents think that drawbacks in CBE performance by the motivational approach in the bank. And about 28% of them do not think that drawbacks in CBE performance by the motivational approach in the bank. Therefore, one can infer from the above table 4.3.1.4 the majority of respondents about 72% of the staffs' in CCC thinks that drawbacks brought in CBE performance by motivational approach in the bank.

Table 4.3.1.5 Descriptive summary result of general opinion of respondents about question:

What is the role of customer contact centers play in customer satisfaction in CBE and the banking industry in Ethiopia in general?		Frequency	Valid Percent
Response	Can be able CBE to build, maintain and manage customer relationship by solving problems & resolving complaints quickly	28	17.4
	Can lead as weapon to the competitive advantage	5	3.1
	Customer contact center is an instrument for the source of information for CBE	20	12.4
	Customer contact center is the driving force for technology	2	1.2
	All are alternative solutions	105	65.2
	Other, please specify	1	.6
	Total	161	100.0

Source: SPSS output from own research 2019

From the above table 4.3.1.5 about 17.4% of the respondents answered that the role of the customer contact centers plays in customer satisfaction in CBE and the banking industry in Ethiopia in general can be able CBE to build, maintain and manage customer relationship by solving problems & resolving complaints quickly. About 3.1% of them answered that the role of the customer contact centers plays in customer satisfaction in CBE and the banking industry in Ethiopia in general can lead as weapon to the competitive advantage; about 12.4% of them answered that the role of the customer contact centers plays in customer satisfaction in CBE and the banking industry in Ethiopia in general showed the customer contact center is an instrument for the source of information for CBE; about 1.2% of them answered that the role of the customer contact centers plays in customer satisfaction in CBE and the banking industry in Ethiopia in general indicated the customer contact center is the driving force for technology. And about 65.2% of them answer all alternatives that is the role of the customer contact center plays in customer satisfaction in CBE and the banking industry in Ethiopia in general can be able CBE to build, maintain and manage customer relationship by solving problems & resolving complaints quickly; can lead as weapon to the competitive advantage; CCC is an instrument for

the source of information for CBE; customer contact center is the driving force for technology. While about 0.6% of them responded on other issues not specified. Therefore, one can infer from the table 4.3.1.5 the majority of the respondents about 65.2% of the staffs' in CCC respond the role of the customer contact center plays in customer satisfaction in CBE and the banking industry in Ethiopia in general can be able CBE to build, maintain and manage customer relationship by solving problems & resolving complaints quickly; can lead as weapon to the competitive advantage; CCC is an instrument for the source of information for CBE and customer contact center is the driving force for technology.

4.3.2 The Function of Customer Contact Center in Customer Satisfaction

4.3.2.1 Rating of Customer Contact Center's Metrics with Regards to Customer Satisfaction

The respondents were asked to rate customer contact center metrics using statements that were given making use of the scale: SA-Strongly Agree, A-Agree, N-Neutral, D Disagree, and SD-Strongly Disagree. The response received was calculated using percentages and was as indicated on Table 4.3.2.1. The resulting grand mean 3.73 indicates that the customer contact center metrics influenced customer satisfaction significantly. The standard deviation of <1.5 indicated that the response received from the population was almost similar.

Table 4.3.2.1 Rating of Customer Contact Center's Metrics with Regards to Customer Satisfaction

		SA	A	N	D	SD	Mean	Std Dev
		%	%	%	%	%		
1	The customer contact center is easily accessible through various channels	15.5	44.1	14.9	19.3	6.2	3.43	1.150
2	The customer contact center staffs have adequate knowledge to handle all queries raised by clients	18.6	49.7	13.7	15.5	2.5	3.66	1.030
3	The customer contact center team responds on time to the queries raised by clients	21.1	45.3	17.4	11.2	5.0	3.66	1.084
4	The customer contact center staffs sufficiently address any queries raised	11.2	50.3	18.6	18.6	1.2	3.52	0.962
5	The customer contact center advisors respond professionally to calls ,emails by system queries	23.6	50.9	13.7	9.9	1.9	3.84	0.959
6	Overall the customer contact center advisors are a valuable team to the bank	47.2	38.5	9.9	3.7	0.6	4.28	0.838

Source: SPSS output from own research 2019

Table 4.3.2.1 indicates that the customer contact center is easily accessible through various channels as shown by 59.6% of the respondents. The customer contact center staffs have adequate knowledge to handle all queries raised by clients as shown by 68.3% of the respondents. The customer contact center team responds on time to the queries raised by clients as shown by 66.4% of the respondents. The customer contact center staff sufficiently addresses any queries raised as shown by 61.5% of the respondents. The customer contact center advisors respond professionally to calls, emails by system queries as shown by 74.5% of the respondents. Overall the customer contact center advisors are a valuable team to the bank as shown by 85.7% of the respondents.

4.3.2.2 Rating of Customer Contact Center's Metrics with Regards to the customer contact center in your division of advisory performance behavior in the organization.

The respondents were asked to rate customer contact center metrics using statements that were

given making use of the scale: SA-Strongly Agree, A-Agree, N-Neutral, D Disagree, and SD-Strongly Disagree. The response received was calculated using percentages and was as indicated on Table 4.3.2.2 The resulting grand mean 2.87 indicates that the customer contact center metrics did not influence the advisors performance due to organizational behavior significantly. The standard deviation of <1.5 indicated that the response received from the population was almost similar.

Table 4.3.2.2 rating of Customer contact Center to the customer contact center in your division of advisory of advisory performance behavior in the organization.

		SA	A	N	D	SD	Mean	Std Dev
		%	%	%	%	%		
7	I feel that my job performance is fairly evaluated.	6.8	34.8	24.2	23.3	11.2	3.03	1.142
8	I am satisfied with the recognition I receive for my accomplishment	7.5	23.6	24.2	29.2	15.5	2.78	1.187
9	The pay matches my responsibility.	3.7	34.2	21.7	24.2	16.1	2.85	1.168
10	I am satisfied with the Empower to influence the quality of my work.	6.2	43.5	20.5	20.5	9.3	3.17	1.114
11	Money is my only motivator at the bank.	8.1	11.8	13.7	37.3	29.2	2.32	1.238
12	I am satisfied with my current salary.	3.7	18.6	14.9	36.6	26.1	2.37	1.166
13	I am satisfied with the working conditions in the bank	6.8	36.0	19.3	26.7	11.2	3.01	1.165
14	Banks leadership makes changes which are favorable to my work.	5.6	18.0	31.7	32.3	12.4	2.72	1.074
15	I am satisfied with the overall jobs security	6.2	36.0	26.1	19.3	12.4	3.04	1.142
16	My department use employee feedback to make improvement	3.7	27.3	29.2	25.5	14.3	2.81	1.104
17	Performance pay like bonus, made employees to reduce defect level	6.8	31.1	29.8	26.1	6.2	3.06	1.047
18	The existence of growth opportunity in the banks helps employees to reduce delay in service delivery time.	12.4	33.5	30.4	14.9	8.7	3.26	1.127

Source: SPSS output from own research 2019

Table 4.3.2.2 indicates that the customer contact center advisors' performance is influenced due to different organizational behaviors: I feel that my job performance is fairly evaluated 41.6% of

respondents were agreed, 24.2% were neutral that is neither agreed nor disagreed; while 34.5% were disagreed. Therefore one can infer that the majority of the advisors' feel that job performance was fairly evaluated. I am satisfied with the recognition I receive for my accomplishment 31.1% of respondents were agreed; 24.2% of the respondents were neutral; while 44.7% was disagreed. Therefore one can infer that the majority of the advisors' did not satisfy with the recognition they received for their accomplishment. The pay matches my responsibility 37.9% of the respondents were agreed, 21.7% were neutral, whereas 40.3% of the respondents were disagreed. Therefore one can infer that the majority of the advisors said that the pay did not match with their responsibility. I am satisfied with the Empower to influence the quality of my work 49.7% of the respondents were agreed, 20.5% were neutral, while 29.8% of the respondents were disagreed. Therefore one can infer that the majority of the advisors satisfied with empower to influence the quality of work. Money is my only motivator at the bank 19.9% of the respondents were agreed, 13.7% were neutral, while 66.5% of the respondents were disagreed. Therefore one can infer that the majority of the advisors were answered that money was not their only motivator. I am satisfied with my current salary 22.3% of the respondents were agreed, 14.9% of the respondents were neutral, while 62.7% of the respondents were disagreed. Therefore one can infer that the majority of the respondents were not satisfied with their current salary. I am satisfied with the working conditions in the bank 42.8% of the respondents were agreed, 19.3% of the respondents were neutral, while 37.9% of the respondents were disagreed. Therefore one can infer that the majority of the advisors were satisfied with the working conditions in the bank. Banks leadership makes changes which are favorable to my work 23.6% of the respondents were agreed, 31.7% of the respondents were neutral, while 44.7% of the respondents were disagreed. Therefore one can infer that the majority of the respondents were said that banks leadership made changes were not favorable to their work. I am satisfied with the overall jobs security 42.2% of the respondents were agreed, 26.1% of the respondents were neutral, while 31.7% of the respondents were disagreed. Therefore one can infer that the majority of the advisors were satisfied with the overall jobs security. My department use employee feedback to make improvement 31% of the respondents were agreed, 29.2% of the respondents were neutral, while 39.8% of the respondents were disagreed.

Therefore one can infer that the majority of the respondents that their department did not use employee feedback to make improvement. Performance pay like bonus, made employees to reduce defect level 37.9% of the respondents were agreed, 29.8% of the respondents were neutral, while 32.3% of the respondents were disagreed. Therefore one can infer that the majority of the advisors were answered that performance paid like bonus, made employees to reduce defect level. The existence of growth opportunity in the banks helps employees to reduce waste in service delivery time 45.9% of the respondents were agreed, 30.4% of the respondents were neutral, while 23.6% of the respondents were disagreed. Therefore one can infer that the majority of the respondents said that the existence of growth opportunity in the banks did help employees to reduce delay in service delivery time.

4.3.2.3 Rating of Customer Contact Center's Metrics in regards to the customer contact center in your division of advisory

The respondents were asked to rate customer contact center metrics using statements that were given making use of the scale: SA-Strongly Agree, A-Agree, N-Neutral, D Disagree, and SD-Strongly Disagree. The response received was calculated using percentages and was as indicated on Table 4.3.2.3. The resulting grand mean 3.14 indicates that the customer contact center metrics did not influence customer satisfaction significantly. The standard deviation of <1.5 indicated that the response received from the population was almost similar.

Table 4.3.2.3 Rating of Customer contact Center in regards to the customer contact center in your division of advisory

		SA	A	N	D	SD	Mean	Std. Dev.
		%	%	%	%	%		
19	The customer contact center is fully supported in terms of technology & processes	14.3	42.9	15.5	23.0	4.3	3.40	1.120
20	The customer contact center is fully integrated into the organizational structure	8.1	39.8	20.5	22.4	9.3	3.15	1.141
21	The customer contact center has sufficient human resources	7.5	22.4	14.9	34.2	21.1	2.61	1.251
22	The customer contact center is aligned to the organizational strategy	9.3	49.1	22.4	11.8	7.5	3.41	1.058

Table 4.3.2.3 indicates that the customer contact center in regards to the customer contact center in their division of advisory: The customer contact center is fully supported in terms of technology & processes 57.2% of the respondents were agreed, 15.5% were neutral, while 27.3% of the respondents were disagreed. Therefore one can infer that the majority of the respondents answered that the CCC was fully supported in terms of technology & processes. The customer contact center is fully integrated into the organizational structure 47.9% of the respondents were agreed, 20.5% of the respondents were neutral. And 31.7% of the respondents were disagreed. Therefore one can infer that the majority of the advisors said that the CCC was fully integrated into organizational structure. The customer contact center has sufficient human resources 29.9% of the respondents were agreed, 14.9% of the respondents were neutral, while 55.3% of the respondents were disagreed. Therefore one can infer that the majority of the respondents said that the customer contact center did not have sufficient human resources. The customer contact center is aligned to the organizational strategy 58.4% of the respondents were agreed, 22.4% of the respondents were neutral, while 19.3% of the respondents were disagreed. Therefore one can infer that the majority of the respondents were answered that the customer contact center is aligned to the organizational strategy.

4.3.2.4 Rating of Customer Contact Center's Metrics in regards to delivery of customer service in your bank

The respondents were asked to rate customer contact center metrics using statements that were given making use of the scale: SA-Strongly Agree, A-Agree, N-Neutral, D Disagree, and SD-Strongly Disagree. The response received was calculated using percentages and was as indicated on Table 4.3.2.4. The resulting grand mean 3.80 indicates that the customer contact center metrics influenced customer satisfaction significantly. The standard deviation of <1.5 indicated that the response received from the population was almost similar.

Table 4.3.2.4 Rating of customer contact center in regards to delivery of customer services in CBE.

		SA	A	N	D	SD	Mean	Std. Dev.
		%	%	%	%	%		
23	The customer contact center has a positive impact on service delivery in the bank	39.1	52.8	6.2	1.2	0.6	4.29	0.693
24	Customer contact center has played a key role in customer retention	32.3	49.1	11.8	5.6	1.2	4.06	0.882
25	The customer contact center has made a considerable impact on the business growth of the bank	29.8	50.3	14.3	5.0	0.6	4.04	0.836
26	Generally, clients appreciate the services offered by the customer contact center	12.4	50.3	23.0	12.4	1.9	3.59	0.925
27	I feel confident that the customer contact center can efficiently manage client's queries	14.9	38.5	21.7	18.0	6.8	3.37	1.144
28	The customer contact center team is able to follow up on issues conclusively	13.7	41.0	26.1	16.1	3.1	3.46	1.019

Table 4.3.2.4 indicates that the customer contact center in regards to delivery of customer services in the Commercial Bank of Ethiopia: The customer contact center has a positive impact on service delivery in the bank 91.9% of the respondents were agreed, 6.2% of the respondents were neutral, while 1.8% of the respondents were disagreed. Therefore one can infer that the majority of the respondents answered that the customer contact center has a positive impact on service delivery in the bank. Customer contact center has played a key role in customer retention 81.4% of the respondents were agreed, 11.8% of the respondents were neutral, while 6.8% of the respondents were disagreed. Therefore one can infer that the majority of the respondents were said that customer contact center has played a key role in customer retention. The customer contact center has made a considerable impact on the business growth of the bank 80.1% of the respondents were agreed, 14.3% of the respondents were neutral, while 5.6% of the respondents were disagreed. Therefore one can infer that the majority of the respondents were answered that the customer contact center has made a considerable impact on the business growth of the bank. Generally, clients appreciate the services offered by the customer contact center 62.7% of the respondents were agreed, 23% of the respondents were neutral, while 14.3% of the respondents were disagreed. Therefore one can infer that the majority of the respondents said that generally,

clients appreciate the services offered by the customer contact center. I feel confident that the customer contact center can efficiently manage client's queries 53.4% of the respondents were agreed, 21.7% of the respondents were neutral, while 24.8% of the respondents were disagreed. Therefore one can infer that the majority of the respondents answered that the advisors did feel confident that the customer contact center could efficiently manage client's queries. The customer contact center team is able to follow up on issues conclusively 54.7% of the respondents were agreed, 26.1% of the respondents were neutral, while 19.2% of the respondents were disagreed. Therefore one can infer that the majority of the respondents said that the customer contact center team was able to follow up on issues conclusively.

4.3.2.5 Rating of Customer Contact Center's Metrics in regards to the customer contact center team in CBE

The respondents were asked to rate customer contact center metrics using statements that were given making use of the scale: SA-Strongly Agree, A-Agree, N-Neutral, D Disagree, and SD-Strongly Disagree. The response received was calculated using percentages and was as indicated on Table 4.3.2.5. The resulting grand mean 3.79 indicates that the customer contact center metrics influenced customer satisfaction significantly. The standard deviation of <1.5 indicated that the response received from the population was almost similar.

Table 4.3.2.5 Rating of Customer contact Center in regards to the customer contact center team in CBE

		SA	A	N	D	SD	Mean	Std. Dev.
		%	%	%	%	%		
29	Customer centricity	20.5	51.6	22.4	4.3	1.2	3.86	0.836
30	Speed of service	15.5	51.6	17.4	13.0	2.5	3.65	0.977
31	Accuracy of executing instructions	11.8	50.3	22.4	14.3	1.2	3.57	0.920
32	Customer contact center staff friendliness	27.3	42.9	15.5	12.4	1.9	3.81	1.032
33	Customer contact Center operating times are convenient to customers	38.5	37.9	15.5	5.6	2.5	4.04	0.996

Source: SPSS output from own research 2019

Table 4.3.2.5 indicates that the customer contact center in regards to the customer contact center team in CBE: Customer centricity 72.1% of the respondents were agreed, 22.4% of the respondents were neutral, while 5.5% of the respondents were disagreed. Therefore one can infer that the majority of the advisors were said that the CCC has had customer centricity. Speed of service 67.1% of the respondents were agreed, 17.4% of the respondents were neutral, while 15.5% of the respondents were disagreed. Therefore one can infer that the majority of the respondents answered the CCC has had speed of service. Accuracy of executing instructions 62.1% of the respondents were agreed, 22.4% of the respondents were neutral, while 15.5% of the respondents were disagreed. Therefore one can infer that the majority of the respondents were said the CCC has had accuracy of executing instructions. Customer contact center staff friendliness 70.2% of the respondents were agreed, 15.5% were neutral, while 14.3% of the respondents were disagreed. Therefore one can infer that the majority of the advisors answered that the customers contact center staff was friendliness. Customer contact Center operating times are convenient to customers 76.4% of the respondents were agreed, 15.5% of the respondents were neutral, while 8.1% of the respondents were disagreed. Therefore one can infer that the majority of the respondents were said that customer contact center operating times were convenient to customers.

4.3.3 EFFECT OF TECHNOLOGY ON CUSTOMER CONTACT CENTER IN THE COMMERCIAL BANK OF ETHIOPIA.

4.3.3 Rating of Customer Contact Center's Metrics with Regards to Effect of Technology on CCC in the Commercial Bank of Ethiopia.

The respondents were asked to rate customer contact center metrics using statements that were given making use of the scale: SA-Strongly Agree, A-Agree, N-Neutral, D Disagree, and SD-Strongly Disagree. The response received was calculated using percentages and was as indicated on Table 4.3.3. The resulting grand mean 3.39 indicates that the technology on customer contact center metrics did not influence CCCs in CBE significantly. The standard deviation of <1.5 indicated that the response received from the population was almost similar.

Table 4.3.3 Rating of Customer Contact Center's Metrics with Regards to Effect of Technology on CCC in the Commercial Bank of Ethiopia.

		SA	A	N	D	SD	Mean	Std. Dev.
		%	%	%	%	%		
1	Applying technology minimizes staff turnover in the customer contact in the center	11.9	38.1	33.1	13.8	3.1	3.42	0.974
2	Technology improves customer contact center performance.	30.0	56.9	10.0	2.5	0.6	4.13	0.736
3	Customer contact center technology helps the advisors to have a faster turnaround time when responding to customer query	23.1	53.1	13.8	8.1	1.9	3.87	0.923
4	Technology improves customer contact center processes.	28.7	54.4	9.4	6.3	1.3	4.03	0.865
5	Technology has led to impersonalized services	15.0	55.0	20.6	8.8	0.6	3.75	0.839
6	The customer contact center technology gives conclusive reports that can be used in decision making	22.5	38.8	23.8	10.0	5.0	3.64	1.090
7	Customer contact center technology has led to improved productivity in the customer contact center which in turn has improved the banks bottom line	23.1	42.5	25.6	6.3	1.9	3.81	0.966
8	The customer contact center has made a return on investment on the technology procured	11.3	41.9	40.0	6.3	0.6	3.57	0.798
9	Technology is using now like IPCC, T24, B24, ACI Issuer, CRM ,CBE Birr Interface without system interruption	6.3	32.5	16.9	31.9	12.5	2.88	1.178
10	The services delivered by ATM, POS, are coordinated properly	5.0	29.4	21.3	32.5	11.9	2.83	1.128
11	The advisors have served customers by using the technology appropriately	16.3	50.6	19.4	10.6	3.1	3.66	0.977
12	The technology used in customer contact center is independent from external forces(like power, telecom network)	7.5	16.3	14.4	38.8	23.1	2.46	1.223
13	The system of technology is perfect in any incident	2.5	20.0	21.9	40.6	15.0	2.54	1.051
14	The advisor uses technology stand by and completely	6.3	40.6	18.1	28.1	6.9	3.11	1.099
15	The specialists of the technology is available when they are needed	10.0	36.3	23.1	22.5	8.1	3.17	1.136

Source: SPSS output from own research 2019

Table 4.3.3 indicates that the effect of technology on CCC in the Commercial Bank of Ethiopia: Applying technology minimizes staff turnover in the customer contact in the center 50% of the respondents were agreed, 33.1% were neutral, while 16.9% of the respondents were disagreed. Therefore one can infer that the majority of the advisors said that applying technology minimizes staff turnover in the customer contact in the center. Technology improves customer contact center performance 86.9% of the respondents were agreed, 10% of the respondents were neutral, while 3.1% of the respondents were disagreed. Therefore one can infer that the majority of the

respondents answered that the technology improves customer contact center performance. Customer contact center technology helps the advisors to have a faster turnaround time when responding to customer query 76.2% of the respondents were agreed, 13.8% of the respondents were neutral, while 10% of the respondents were disagreed. Therefore one can infer that the majority of the advisors said that customer contact center technology helps the advisors to have a faster turnaround time when responding to customer query. Technology improves customer contact center processes 83.1% of the respondents were agreed, 9.4% of the respondents were neutral, while 7.6% of the respondents were disagreed. Therefore one can infer that the majority of the respondents agreed that technology improves customer contact center processes. Technology has led to impersonalized services 70% of the respondents were agreed, 20.6% of the respondents were neutral, while 9.4% of the respondents were disagreed. Therefore one can infer that the majority of the respondents said that technology has led to impersonalized services. The customer contact center technology gives conclusive reports that can be used in decision making 61.3% of the respondents were agreed, 23.8% of the respondents were neutral, while 15% of the respondents were disagreed. Therefore one can infer that the majority of the advisors answered that the customer contact center technology gives conclusive reports that can be used in decision making. Customer contact center technology has led to improved productivity in the customer contact center which in turn has improved the banks bottom line 65.6% of the respondents were agreed, 25.6% of the respondents were neutral, while 8.2% of the respondents were disagreed. Therefore one can infer that the majority of the respondents agreed that Customer contact center technology has led to improve productivity in the customer contact center which in turn has improved the banks bottom line. The customer contact center has made a return on investment on the technology procured 53.2% of the respondents were agreed, 40% of the respondents were neutral, while 6.9% of the respondents were disagreed. Therefore one can infer that the majority of the advisors said that the customer contact center has made a return on investment on the technology procured. Technology is using now like IPCC, T24, B24, ACI Issuer, CRM ,CBE Birr Interface without system interruption 38.8% of the respondents were agreed, 16.9% of the respondents were neutral, while 44.4% of the respondents were disagreed. Therefore one can infer that the majority of the respondents answered that technology used like

IPCC, T24, B24, ACI Issuer, CRM, and CBE Birr Interface with system were interrupted. The services delivered by ATM, POS, are coordinated properly 34.4% of the respondents were agreed, 21.3% of the respondents were neutral, while 44.4% of the respondents were disagreed. Therefore one can infer that the majority of the respondents said that the services delivered by ATM, POS, were not coordinated properly. The advisors have served customers by using the technology appropriately 66.9% of the respondents were agreed, 19.4% of the respondents were neutral, while 13.7% of the respondents were disagreed. Therefore one can infer that the majority of the respondents answered that the advisors have served customers by using the technology appropriately. The technology used in customer contact center is independent from external forces (like power, telecom network) 23.8% of the respondents were agreed, 14.4% of the respondents were neutral, while 61.9% of the respondents were disagreed. Therefore one can infer that the majority of the advisors said that the technology used in customer contact center was not independent from external forces (like power, telecom network). The system of technology is perfect in any incident 22.5% of the respondents were agreed, 21.9% of the respondents were neutral, 55.6% of the respondents were disagreed. Therefore one can infer that the majority of the respondents answered that the system of technology was not perfect in any incident. The advisor uses technology stand by and completely 46.9% of the respondents were agreed, 18.1% of the respondents were neutral, while 35% of the respondents were disagreed. Therefore one can infer that the majority of the respondents said that the advisor used technology stand by and completely. The specialists of the technology is available when they are needed 46.3% of the respondents were agreed, 23.1% of the respondents were neutral, while 30.6% of the respondents were disagreed. Therefore one can infer that the majority of the advisors agreed that the specialists of the technology were available when they were needed.

4.4 Customer Contact Center Advisors (Operators) Performance Statistics

4.4.1 Customer Contact Center External Advisory Performance Statistics

1.External Advisory services of the operator traffic statistic yield out from internet protocol contact center (IPCC) as shown in the appendix I for the month of November, 2018 indicates that 131,692 offered calls; 130,908 calls answered that are 99.47% answered rate. Advisors no answered calls 0.53%.

Total number of dropped calls is 784. Idle time is 223,392.82. Total talking duration is 221,501.7 minutes. Busy duration is 822.45 minutes while un-served duration is 61,096.62 minutes from the total avail time is 487,034.12 minutes. Thus, work time utilizing efficiency is 88.85%. Therefore, we can understand from the statistics of IPCC due to system interruption & incidents of challenges on time of operation that caused dropped calls. This is caused by system problems. The consequences of the work time utilization efficiency was restricted.

2. External Advisory services of the operator traffic statistic yields out from internet protocol contact center (IPCC) as shown in appendix I for the month of March, 2019 shows that 129,741 offered calls; 128,684 answered calls; 99.35% response rate; advisors no answered rate 0.65% . The number of dropped call were 1,057; idle time (m) 188,379.67; total talking duration (m) 206,580.18; busy time duration (m) 515.77. The time for un-served duration was 54,387.22 minutes; avail time (m) 440,282.42. Work time utilizing was 89.01%. From this statistical data one can said that number of dropped calls increased 74.17% through the month of November, 2018 to the month of March, 2019. This implies that out of control of the system cannot handle even if the advisors working time utilization was increased.

4.4.2 Customer Contact Center Internal Advisory Performance Statistics

1. Internal Advisory services of the operator traffic statistics yield out from internet protocol contact center (IPCC) as shown in appendix I for the month of December, 2018. Daily system traffic statistics shows those 47,122 total incoming calls; 9,058 blocked calls; 38,064 automatic succeeded calls, 80.78% of automatic succeeded calls rate. 11,033 abandoned calls; 12.45% calls in queue. 14,951 answered calls; 67.04% dropped calls in manual service rate. 7,350 minutes talk duration. From this daily system traffic statistics one can be summarized that the dropped manual calls was high. Abandoned and blocked calls were also contribute for reduction of efficient work utilization time. Because of these resulted answered calls response was very low as compared to the total incoming calls.

2. Internal Advisory services of the operator traffic statistics yield out from internet protocol contact center (IPCC) as shown in appendix I for the month of January, 2019. Daily system

traffic statistics shows those 44,343 total incoming calls; 12,793 blocked calls; 31,550 automatic succeeded calls, 71.15% of automatic succeeded calls rate. 9,131 abandoned calls; 18,520 calls in queue. 76.02% answered call rate; dropped calls in manual service 4,441. And 59,015.5 minutes talk duration. From this daily system traffic statistics one can be summarized that calls in queue was high. Abandoned and blocked calls were also contribute for reduction of efficient work utilization time. The advisors were busy that caused the customer waited calls in queue. Because of these resulted answered calls response was very low as compared to the total incoming calls.

3. Internal Advisory services of the operator traffic statistics yield out from internet protocol contact center (IPCC) as shown in appendix I for the month of February, 2019. Daily system traffic statistics shows those 36,726 total incoming calls; 6,867 blocked calls; 29,859 automatic succeed calls; 81.30% automatic succeed calls rate. 8,234 abandoned calls; 17,995 calls in queue; 73.06% answered call rate. 4,848 dropped calls in manual service and 53,203.25 minutes talk duration. From this statistical data one can said that abandoned calls, calls in queue, and dropped calls made to lessen the efficient work utilizing time. These caused the call response rate reduced.

4.5 Weekly CCC Internal Help Desk Performance Status

The contact center of technical help desk team received one or more of the following cases were performed: Remote test at the time of connection failure, solving internal incidents remotely, supporting district system administrators & supper users, escalation of Ethio telecom cases, logging incidents to incident management system, following the incidents on the system until solved, updating of changes on the system, and re-escalation of unsolved incidents.

4.5.1 Management of Incidents in the Period of Two Weeks from Nov. 08- 14, 2018 & Nov. 15-21, 2018 as shown in appendix II

Managed incidents to each type with escalation

Ethio telecom incidents - incidents escalated to Ethio telecom that disrupted the whole services at the branches/outlets/offices on which they occurred. These incidents were caused by different

factors within Ethio telecom infrastructure.

Internal incidents – incidents that were happening related to network interruption, printer, computer application and other technical issues that were managed internally.

Distribution of Incidents in each District & Head Office Organs in Nov. 08-14, 2018 as shown in appendix II and table 4.5.1.1 one can infer that 37% of the incidents were out of internal control that is dependent on the willingness of the Ethio telecom to make resolution for the incidents happened. The internal help desk technical team could only resolved only 63% of the incidents happened in CBE.

Table 4.5.1.1 Total Incidents Escalated in the period Nov. 08-14, 2018

Incident Category	Number of incidents
Telecom	229
Internal	392
Weekly Total	621

Source: CCC in CBE 2018

From the Appendix II and table 4.5.1.2 below one can derive a conclusion that 34% of the incidents were Ethio telecom incident category which was beyond CBE. 66% of incident was managed by the internal help desk of customer contact center in the Commercial Bank of Ethiopia. The Ethio telecom and internal incidents distributed through CBE branches in the districts and head office organs as indicated by the figure 4.5.1.2 as shown in the appendix II.

Table 4.5.1.2 Total Incidents Escalated in the Period Nov. 15-21, 2018

Incident Category	Number of incidents
Telecom	190
Internal	369
Weekly Total	559

Source: CCC in CBE 2018

4.5.2 Management of Incidents in the Period of Two Weeks from Jan. 10- 16, 2019 & Jan. 17-23, 2019

Table 4.5.2.1 Total Incidents Escalated in the Period Jan. 10-16, 2019

Incident Category	Number of incidents
Telecom	211
Internal	589
Weekly Total	800

Source: CCC in CBE 2019

From the Appendix II and the table 4.5.2.1 one can derive a conclusion that 26% of the incidents were Ethio telecom incident category which was beyond CBE. 74% of incident was managed by the internal help desk of customer contact center in the Commercial Bank of Ethiopia. The Ethio telecom incidents and internal incidents distributed through CBE branches in the districts and head office organs as indicated on the figure 4.5.2.1 and figure 4.5.2.2 respectively shown in appendix II.

Table 4.5.2.2 Total Incidents Escalated in the Period Jan. 17-23, 2019

Incident Category	Number of incidents
Telecom	185
Internal	404
Weekly Total	589

Source: CCC in CBE 2019

From the table 4.5.2.2 and Appendix II one can derive a conclusion that 31% of the incidents were Ethio telecom incident category which was beyond CBE. 69% of incident was managed by the internal help desk of customer contact center in the Commercial Bank of Ethiopia. The Ethio telecom incidents and internal incidents distributed through CBE branches in the districts and head office organs as indicated on the figure 4.5.2.3 and figure 4.5.2.4 respectively shown in Appendix II.

4.5.3 Management of Incidents in the Period of Two Weeks from Mar. 14- 20, 2019 & Mar. 21-27, 2019

Table 4.5.3.1 Total Incidents Escalated in the Period Mar. 14-20, 2019

Incident Category	Number of incidents
Telecom	254
Internal	476
Weekly Total	730

Source: CCC in CBE 2019

From the table 4.5.3.1 and Appendix II one can derive a conclusion that 35% of the incidents were Ethio telecom incident category which was beyond CBE. 65% of incident was managed by the internal help desk of customer contact center in the Commercial Bank of Ethiopia. The Ethio telecom incidents and internal incidents distributed through CBE branches in the districts and head office organs as indicated on the figure 4.5.3.1 and figure 4.5.3.2 respectively shown in Appendix II.

Table 4.5.3.2 Total Incidents Escalated in the Period Mar. 21-27, 2019

Incident Category	Number of incidents
Telecom	294
Internal	568
Weekly Total	862

Source: CCC in CBE 2019

From the table 4.5.3.2 and Appendix II one can derive a conclusion that 34% of the incidents were telecom incident category which was beyond CBE. 66% of incident was managed by the internal help desk of customer contact center in the Commercial Bank of Ethiopia. The Ethio telecom incidents and internal incidents distributed through CBE branches in the districts and head office organs as indicated on the figure 4.5.3.3 and figure 4.5.3.4 respectively shown in Appendix II.

4.6 CBE Customer Contact Center Performance Status Quarterly

4.6.1 CCC External Advisory Performance Status through a Quarter

4.6.1.1 Quarter Inbound Calls of Customer Contact Advisory - 951

Customer calls through toll-free on line 951 for external advisory in any incidents that was happening at spots for requesting support. The customers could dial for resting or unlock the CBE Birr PIN (personal identification number), or about the payment card (visa card) in case of capturing, or deduct the accounts but not paid at ATM (Automatic Teller Machine), or the late for receiving the visa card, or Et-switch case (other bank) ATM machine deducted their accounts, or any other case which was related to CBE or not related CBE operational cases, or mobile banking, or internet banking cases.

These inbound calls of customer contact advisory – 951 through the quarter as shown below.

- Total Incoming Calls for Customer Contact Advisory-951:

  From January 01, 2019-March 31, 2019 is1, 179,223

  From July 01, 2018-March 31, 2019 is 3,730,662
- Total Automatic service Succeeded Calls for Customer Contact Advisory-951:

  From January 01, 2019-March 31, 2019 is 431,722

  From July01, 2018-March 31, 2019 is 1,548,531
- Total Incoming Calls (Manual) for Customer Contact Advisory-951:

  From January 01, 2019-March 31, 2019 is 336, 983

  From July 01, 2018-March 31, 2019 is 1,064,017

	2nd Quarter 2018/19	3rd Quarter 2018/19	Variation	Percentage
Total incoming calls	1,278,490	1,179,223	-99,267	-7.76%
Automatic succeeded calls	1,185,482	1,067,382	-118,100	-9.96%
Automatic service succeeded calls	504,411	431,722	-72,689	-14.41%
Answered calls	381,796	336,983	-44,813	-11.74%

Table 4.6.1 Quarter inbound calls-951

Source: CBE Customer Contact Center 2018-2019 Report

From table 4.6.1 the response rate 29.86% out of the total incoming calls, 32.21% the response rate out of automatic succeed calls, 75.69% the response rate out of automatic servicesucceeded calls in the second quarter. The response rate in the third quarter 28.58% out of the total incoming calls, 31.57% out of automatic succeeded calls, 78.06% out of automatic service succeeded calls. One can infer from the above information that inbound calls were reduced from quarter 2 to quarter 3 in all cases. These were due to incidents of problems as observed from weekly performance. For the case of succeeded automatic calls the response rate was increased.

4.6.1.2 External Customer Advisory Call Reasons in the Quarter

Customer advisory calls were very high in number and different variety of calls as shown above statistical data, weekly, and quarterly reported data. These calls reason could be categorized as the number of frequencies as top five areas of customer calls as on figure 4.6.1 CBE Birr 37.4% taken the first step, payment card 14.46% the second, Et-switch (other bank) cases 14.02% taken

third step, out of CBE cases 4.49% the fourth step, mobile banking 4.22% taken the fifth step.

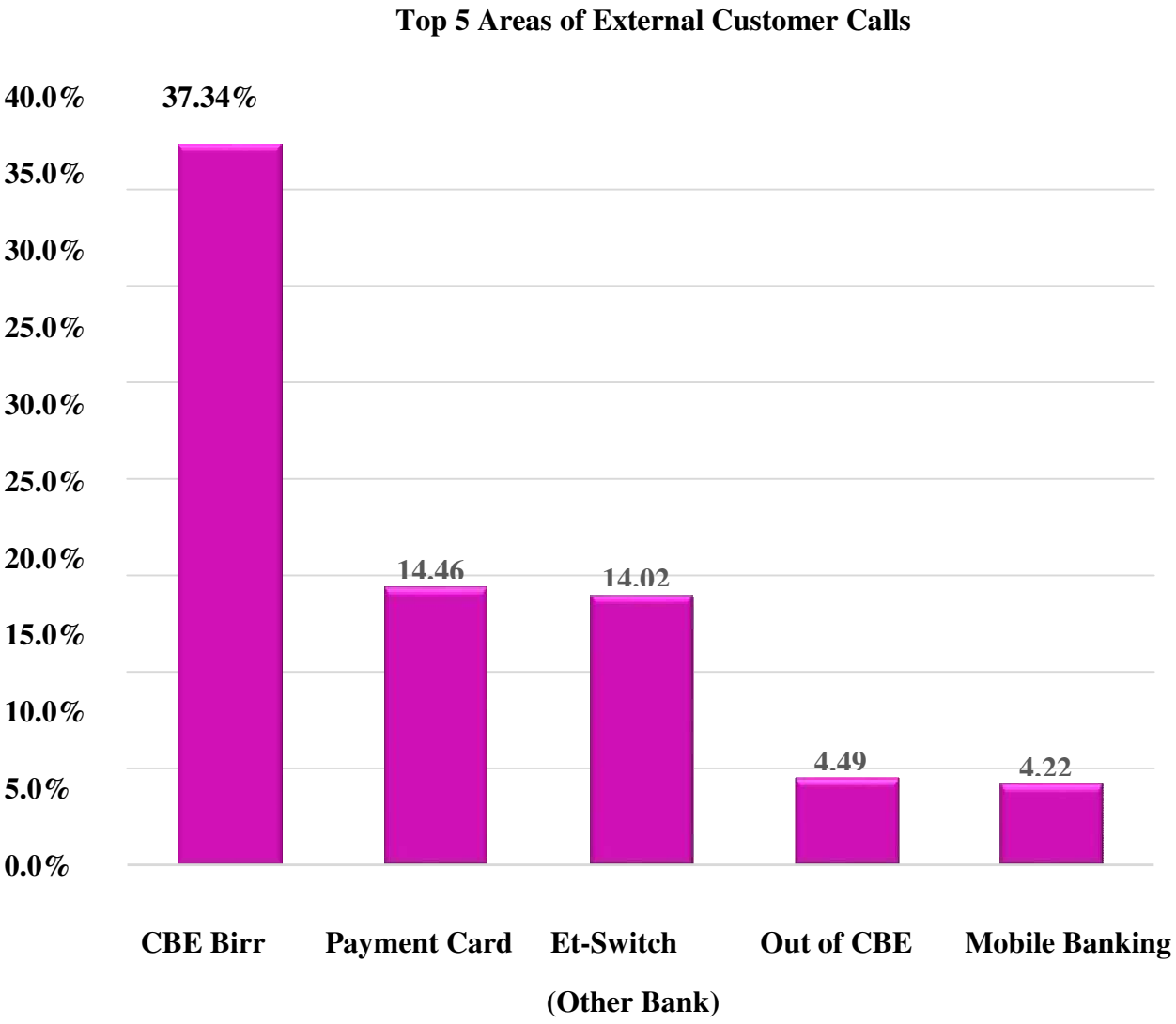

Figure 4.6.1 Top 5 Areas of External Customer Call Reasons

Source: CBE CCC Quarter Report 2018-2019

4.6.2 CCC Internal Help Desk Performance Status in the Quarter

4.6.2.1 Quarter Inbound Calls of Internal Help Desk-8879

Internal customers, staffs of commercial banks at any branches from 15 districts and head office organs calls through the line 8879 by registered phone lines of the CBE in the system of IPCC

for internal advisory in any incidents that was happening at spot requesting support. The CBE staffs dialed 8879 for technical support by internal advisory for the variety of cases like switch management, ATM not working, IT support, networking IP addressing related issues, alternative payment channel, visa card not working, EJ, activity, and financial report request.

Business operation T24, retail operation, account related issues, credit amendment, switch management card, check card status.

These inbound calls of internal advisory – 8879 through the quarter as shown below.

- Total Calls for Internal Help Desk:

  From January 01, 2019 March 31, 2019 is 46,892

  From July 01, 2018-March 31, 2019 is 126, 010

	2nd Quarter 2018/19	**3rd Quarter 2018/19**	**Variation**	**Percentage**
Answered Call	45,341	46,892	1,551	3.3%

Table 4.6.2 Quarter inbound calls-8879

Source: CBE Customer Contact Center 2018-2019 Report

4.6.2.2 Quarter Internal Customer Advisory Call Reasons

Internal customer advisory calls were high in number and different variety of calls as shown above statistical data, weekly, and quarterly reported data. These calls reason could be categorized as the number of frequencies as top five areas of customer calls as on figure 4.6.2 ATM 11,200 calls taken the first step, card 8,900 calls the second, business operation 8,700 calls taken third step, IT support 7,800 calls the fourth step, POS 900 calls taken the fifth step.

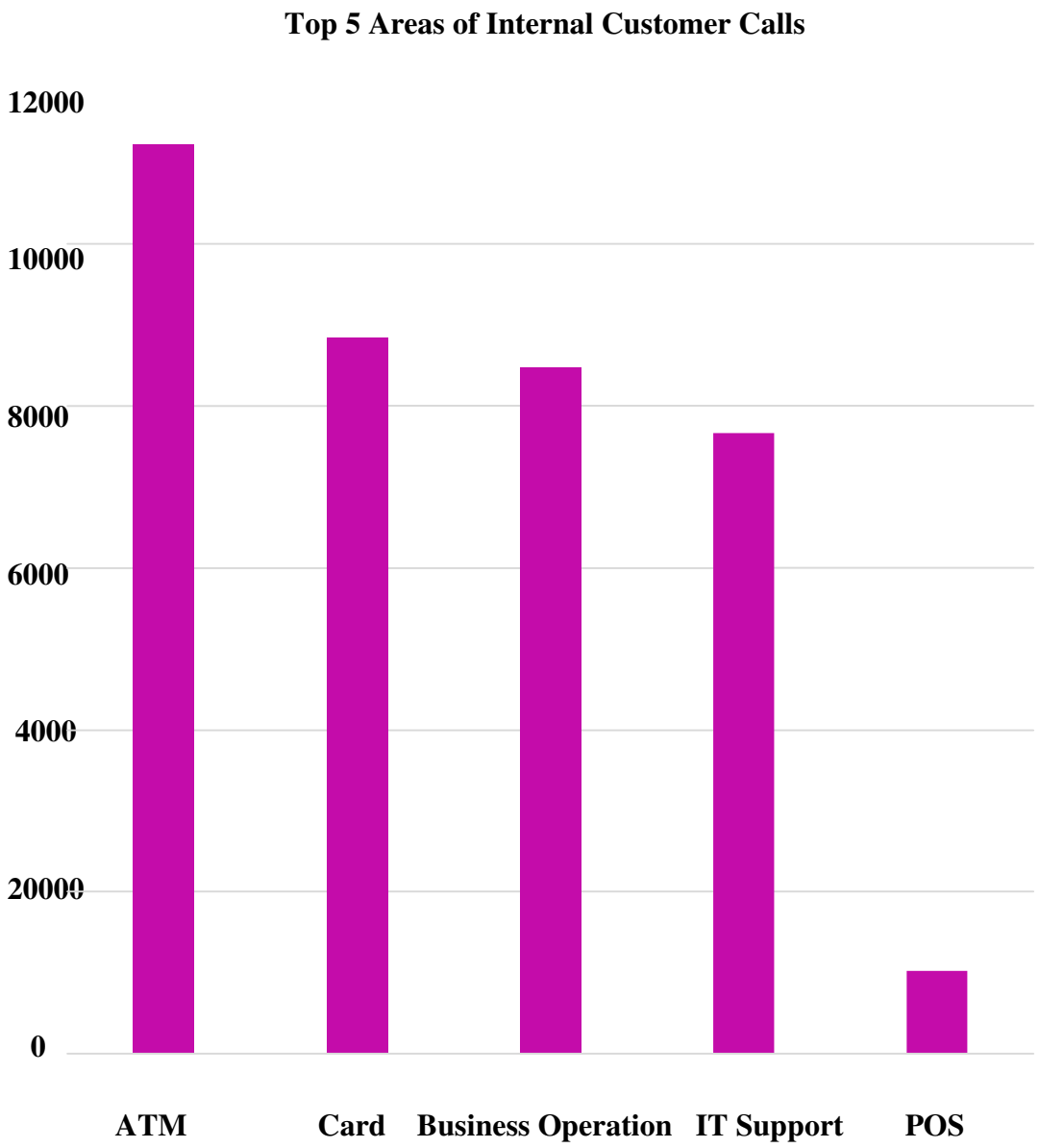

Figure 4.6.2 Top 5 Areas of Internal Customer Calls

Source: CBE Customer Contact Center 2018-2019 Report

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The ambition of this research project was to evaluate the customer contact center performance in the commercial bank of Ethiopia through detail assessment of CCC performance in CBE. For this aspiration the study was intended to answer the specific questions which were derived from the main objective. And thus, the study focused on describing CCC performance in CBE for customer satisfaction, identifying technology impact on performance of CCC in CBE, analyzing the impact of CCC in CBE.

The research approach was mixed that supported to answer the specific questions of this research in order to achieve the principal objectives of the study. According to this research analysis and interpretation, the findings revealed the following summary.

5.1.1 Summary of Findings

The study summarizes that general opinion of the CCC staffs' in CBE working performance management was influenced by the system rules and procedures set by the bank. And in CBE training and educational sponsorship used as a kind of motivational performance. The study summarized that the CCC staffs' thought that the drawbacks brought in CBE performance by motivational approach in the bank. These might be caused staffs highly migrant of professionalism to similar industry for higher payment.

The research project study concludes that the role of the customer contact center played in customer satisfaction in CBE and could be able CBE to build, maintain and manage customer relationship by solving problems & resolving complaints quickly; and might lead as weapon to the competitive advantage; CCC was an instrument for the source of information for CBE and customer contact center was the driving force for technology innovation, usage and implementation.

The study summarizes that the **CCC** advisors felt that the job performance was fairly evaluated; and they did not satisfy with their recognition they received for their job accomplished. The study also concludes the advisors payment did not match with their responsibilities. And the CCC staff current salary was not satisfied.

The research also concludes that the staffs were satisfied with the working conditions in the bank, and the advisors were satisfied the overall jobs security. The study also concludes that performance paid like buns made employees to reduce defect level that is to increase efficient use of time and resources. And the existence of growth opportunity in the banks did help employees to reduce delaying in service delivery.

The study summarizes that the customer contact center was easily accessible through direct phones, and emails. The CCC staffs had sufficient cognizance to handle all queries raised by customers. The customer contact center team answered on timely to the dubitation raised by clients. The CCC staffs adequately addressed to any queries. The Advisors in CCC responded professionally to calls, and emails by system queries. Overall CCC advisors were very important to the bank. The study concludes the customer contact center was fully supported in terms of technology & processes. CCC was fully integrated into organizational structure. CCC did not have enough human resources. CCC was aligned to the organizational strategy.

The study concludes that CCC had a positive impact on the service delivery in the bank. CCC had played a key role in customer retention. It had made considerable impact on the business growth of the bank. Generally, customers appreciated the service offered by the CCC. The advisors felt confident that the CCC could efficiently manage clients' queries; CCC team was able to follow up on issues conclusively.

The study also summarizes that CCC had customer centricity, speed of services, and accuracy of executing instructions. The CCC staffs were friendliness. The customer contact center operating time was convenient to customers. The study concludes that applying technology minimized staff turnover in the customer contact in the center. Technology improved CCC performances & processes. CCC technology helped the advisors to have a faster turnaround time when

responding to customer query. The technology had led to improve impersonalized services. CCC technology gave conclusive reports that could be used in decision making; CCC technology had led to improve productivity in CCC which in turn had improved the banks bottom line. The customer contact center has made a return on investment on the technology procured.

The study also summarize the technology used in IPCC, T24, B24, ACI Issuer, CRM, and CBE Birr interface systems were interrupted due to different incidents. The services delivered by ATMs, POS were not coordinated properly. The advisors had served customers using the technology appropriately. The technology used in CCC was not perfect in any incidents. The specialists of the technology were available when they were needed.

5.2 Conclusion

This study assesses the CCC performance in the CBE that are more influential for customer satisfaction, perceived as central in attracting and retaining customers. The influence of technology in CCC as well as in CBE has its effect in the customer satisfaction, customer retention as well as in customer attraction.

The finding shows that CCC industry is important and its advisors are valuable team for the bank. *This valuable team of the customer contact center needs care and attention. Effective and efficient customer contact center own mainly through sufficient human resources with skilled staff, current information technology systems and processes.*

5.3 Recommendations

Based on Primary data through questionnaire and IPCC on system operator statistics on working performance collected, and Secondary data daily, weekly, monthly and quarter reports presented, analyzed and conclusions made the following recommendations were made:

1. Performance motivational approach of CCC staffs in CBE that makes to be trained and highly educated with experience should be accompanied with staff status improvement as a regular time schedule for their payment increasing for the staff's better life of living. As

the consequence the bank is best competent in its human capital.

2. The management of CCC in CBE should have enough man power in order to manage CCC performance in appropriate manner by avoiding a number of queues and busy time for its operational excellence in turn that supports the banks operational excellence.
3. The system of technology should be fully administered by commercial bank of Ethiopia. These would solve the problems of the dependency by external third party.
4. The system of the technology interruption due to different incidents that would be occurred internally and externally should be managed and resolved properly.
5. CBE had capable to handle the full utilization of IPCC by its man power and capital. IPCC should be fully utilized and administered by the CBE for resolving the various incident sources of the problems. The bank should completely own the IPCC application of the system. These could help to avoid third party dependency from the vendor.

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APPENDICES

APPENDIX I Customer Contact Center Advisors (Operators) Performance Statistics

Operator Traffic Statistic – November, 2018

Start Time=10/01/2018; End Time=11/01/2018; IPCC CCNOVDN=1^4^BankVDN; IPCC Access Code=951; IPCC CC site Name=ALL; IPC

Supervisor	Operator ID	Offered calls	Answered Calls	Answer Rate	Agent no answered calls (%)	Dropped Calls	Idle Time	Total Talking Duration (m)	Busy Duration (m)	Un-ser Duration)
Super_A	45504	1615	1608	99.63%	0.37%	7	3027.33	2259.18	2.43	503.12
Super_A	45506	1210	1207	99.75%	0.25%	3	2256.28	1803.23	0.38	532.48
Super_A	45516	2	1	50.00%	50.00%	1	0.40	4.27	0.15	0.18
Super_A	45522	1368	1365	99.78%	0.22%	3	2808.08	2402.92	0.12	736.73
Super_A	45537	1412	1402	99.29%	0.71%	10	2302.88	2331.83	2.40	707.37
Super_A	45546	1457	1445	99.18%	0.82%	12	2524.25	2490.53	2.35	781.73
Super_A	45547	1510	1507	99.80%	0.20%	3	2828.70	2426.22	0.35	721.55
Super_A	45550	1190	1189	99.92%	0.08%	1	2790.68	1945.15	0.15	637.08
Super_A	45567	1485	1481	99.73%	0.27%	4	2800.50	2510.15	1.57	639.17
Super_A	45570	1411	1409	99.86%	0.14%	2	2673.58	2081.50	0.83	766.53
Super_A	45576	1560	1551	99.42%	0.58%	9	2737.20	2443.28	2.15	746.63
Super_A	45751	1203	1201	99.83%	0.17%	2	3235.13	2226.88	0.27	702.17
Super_A	45758	1481	1476	99.66%	0.34%	5	2394.78	2777.03	0.85	687.80
Super_A	45772	1793	1790	99.83%	0.17%	3	2658.85	2553.12	3.30	811.03
Super_A	45773	1382	1367	99.06%	0.94%	15	2780.50	2435.33	4.65	579.25
Super_A	45774	1455	1454	99.93%	0.07%	1	2306.68	2803.83	0.27	684.45
Super_A	45505	1421	1401	98.59%	1.41%	20	3266.03	1879.98	26.45	696.57
Super_A	45513	1354	1330	98.23%	1.77%	24	2947.78	2257.32	27.50	733.82
Super_A	45526	1084	1067	98.43%	1.57%	17	2670.98	1865.12	2.32	668.87
Super_A	45535	960	940	97.92%	2.08%	20	2061.10	1691.18	2.80	361.48
Super_A	45540	1206	1198	99.34%	0.66%	8	2422.92	2058.98	25.68	600.82
Super_A	45552	1731	1715	99.13%	0.87%	16	2396.08	2437.78	2.03	666.92
Super_A	45562	1389	1383	99.57%	0.43%	6	3262.62	1932.27	1.72	715.73
Super_A	45574	1450	1442	99.45%	0.55%	8	2667.08	2149.07	1.78	652.45
Super_A	45584	1372	1370	99.85%	0.15%	2	2340.17	2342.77	0.27	628.73
Super_A	45586	1468	1464	99.73%	0.27%	4	2896.33	2103.78	0.52	487.03
Super_A	45587	1501	1485	98.93%	1.07%	16	2844.35	2064.33	22.70	707.10
Super_A	45588	1212	1210	99.83%	0.17%	2	2969.73	2096.97	28.23	449.62

Super_A	45613	1698	1672	98.76%	1.24%	26	3400.15	2120.23	6.00	820.53
Super_A	45752	926	919	99.24%	0.76%	7	2540.08	1809.27	0.98	551.70
Super_A	45775	1677	1673	99.76%	0.24%	4	2457.00	2878.45	1.70	771.33
Super_A	45776	1812	1806	99.67%	0.33%	6	2853.62	2854.13	1.73	796.93
Super_A	45777	1217	1210	99.51%	0.49%	7	2404.07	2491.07	8.93	760.32
Super_A	Total	45012	44738	99.41%	0.59%	274	86525.95	72527.17	183.57	21307.2
Super_B	45503	1308	1303	99.62%	0.38%	5	2779.15	2084.62	0.65	631.98
Super_B	45514	1147	1143	99.65%	0.35%	4	1358.37	2081.10	1.07	600.27
Super_B	45515	1651	1650	99.94%	0.06%	1	2717.73	2412.58	11.40	649.75
Super_B	45527	874	867	99.31%	0.69%	7	1748.47	1824.23	4.53	527.25
Super_B	45530	2064	2061	99.90%	0.10%	3	2869.82	2591.20	0.33	728.50
Super_B	45531	1299	1295	99.69%	0.31%	4	2477.12	2397.28	1.33	700.33
Super_B	45533	784	779	99.36%	0.64%	5	1242.92	1253.52	0.60	358.20
Super_B	45536	806	801	99.75%	0.25%	5	859.73	1457.83	5.07	396.47
Super_B	45539	1060	1055	99.72%	0.28%	5	2317.27	1852.28	0.67	567.80
Super_B	45549	1184	1183	99.92%	0.08%	1	1940.48	1641.80	0.65	472.83
Super_B	45566	1198	1186	99.25%	0.75%	12	2543.27	1884.68	1.87	624.87
Super_B	45585	1596	1591	99.94%	0.06%	5	2792.43	2812.30	0.78	785.15
Super_B	45589	1678	1671	99.64%	0.36%	7	2723.82	2745.27	1.52	685.80
Super_B	45755	1232	1224	99.67%	0.33%	8	2536.43	2428.95	1.07	635.93
Super_B	45780	566	566	100.00%	0.00%	0	658.03	829.28	0.00	258.60
Super_B	45781	538	538	100.00%	0.00%	0	953.83	966.95	0.00	281.20
Super_B	45519	1690	1687	99.82%	0.18%	3	2603.65	2080.92	0.57	676.43
Super_B	45524	1153	1144	99.31%	0.69%	9	2332.55	1775.80	1.25	425.77
Super_B	45542	1719	1716	99.88%	0.12%	3	3002.48	2136.22	0.28	628.23
Super_B	45551	866	863	99.77%	0.23%	3	1411.45	1483.75	2.48	438.28
Super_B	45553	1399	1394	99.86%	0.14%	5	2611.25	2734.98	0.57	675.37
Super_B	45554	1720	1715	99.94%	0.06%	5	2933.87	2528.68	1.73	728.02
Super_B	45564	1518	1508	99.41%	0.59%	10	2675.37	2326.35	1.40	698.63
Super_B	45565	1545	1532	99.80%	0.20%	13	2463.50	2965.30	4.77	689.95
Super_B	45568	1726	1708	99.94%	0.06%	18	2455.58	2092.27	3.35	635.93
Super_B	45578	35	35	100.00%	0.00%	0	25.65	60.47	0.00	0.03
Super_B	45580	1432	1432	100.00%	0.00%	0	2602.87	1882.35	0.00	544.10
Super_B	45581	1645	1642	99.82%	0.18%	3	2992.50	2025.72	1.82	628.35
Super_B	45582	987	983	99.70%	0.30%	4	2191.40	1212.23	0.60	438.72
Super_B	45591	1520	1508	99.47%	0.53%	12	2981.22	2388.83	2.70	712.33
Super_B	45756	1253	1249	99.84%	0.16%	4	2704.05	2027.12	1.13	673.35
Super_B	45778	395	392	99.24%	0.76%	3	735.88	559.13	0.87	218.57
Super_B	45779	456	455	99.78%	0.22%	1	779.85	842.40	0.13	228.07

Super_B	Total	40044	39876	99.74%	0.26%	168	70021.98	62386.40	55.18	17945.0
Super_C	45502	1364	1356	99.49%	0.51%	8	2289.92	2464.25	34.30	693.75
Super_C	45508	1585	1577	99.56%	0.44%	8	2212.65	3409.62	1.18	788.70
Super_C	45509	1654	1614	97.58%	2.42%	40	2501.78	2490.18	59.62	738.07
Super_C	45512	1779	1773	99.72%	0.28%	6	2404.25	3450.20	37.40	804.38
Super_C	45517	1642	1640	99.88%	0.12%	2	2437.83	3031.17	0.23	775.15
Super_C	45521	1304	1300	99.69%	0.31%	4	1696.72	2370.90	0.57	578.58
Super_C	45523	1833	1833	100.00%	0.00%	0	2554.87	3343.05	0.00	717.67
Super_C	45525	1179	1175	99.66%	0.34%	4	2179.42	2507.87	2.02	656.78
Super_C	45532	1313	1304	99.31%	0.69%	9	2071.55	2907.23	39.95	764.23
Super_C	45538	1562	1547	99.17%	0.83%	15	2371.95	3116.60	45.82	820.70
Super_C	45544	1364	1337	98.02%	1.98%	27	2210.28	2771.83	4.98	720.22
Super_C	45545	1442	1435	99.51%	0.49%	7	2098.37	2773.62	0.92	731.98
Super_C	45753	1393	1386	99.50%	0.50%	7	2140.72	3022.85	2.35	785.85
Super_C	45754	1720	1714	99.65%	0.35%	6	2312.55	2942.75	38.68	821.77
Super_C	45782	1673	1670	99.82%	0.18%	3	2462.57	3627.92	34.77	788.65
Super_C	45783	1773	1772	99.94%	0.06%	1	2379.85	3125.58	0.42	656.33
Super_C	45520	1576	1487	94.35%	5.65%	89	2269.80	2285.78	51.50	782.25
Super_C	45529	1521	1499	98.55%	1.45%	22	2669.02	3417.98	31.07	824.17
Super_C	45541	1770	1761	99.49%	0.51%	9	2275.03	3132.37	28.22	757.55
Super_C	45548	1489	1487	99.87%	0.13%	2	2242.82	2264.62	47.67	645.80
Super_C	45556	1548	1545	99.81%	0.19%	3	2121.18	2981.28	26.08	755.13
Super_C	45558	1790	1767	98.72%	1.28%	23	2398.75	2777.42	30.30	757.83
Super_C	45559	1519	1516	99.80%	0.20%	3	2447.62	3477.57	0.82	733.13
Super_C	45560	1184	1177	99.41%	0.59%	7	1840.87	1933.85	0.98	543.97
Super_C	45561	1880	1877	99.84%	0.16%	3	2375.78	3033.48	31.22	808.37
Super_C	45569	1554	1552	99.87%	0.13%	2	2022.43	3077.78	0.22	561.42
Super_C	45573	1527	1523	99.74%	0.26%	4	1637.30	2387.77	0.43	622.90
Super_C	45577	1214	1207	99.42%	0.58%	7	1590.53	2095.12	26.55	595.60
Super_C	45579	751	735	98.00%	2.00%	16	957.53	1156.73	3.63	381.55
Super_C	45785	1364	1363	99.93%	0.07%	1	1990.25	3055.98	1.23	681.17
Super_C	45786	1369	1365	99.71%	0.29%	4	1680.70	2154.78	0.58	550.67
Super_C	Total	46636	46294	99.28%	0.72%	342	66844.88	86588.13	583.70	21844.3
Total	Total	131692	130908	99.47%	0.53%	784	223392.82	221501.70	822.45	61096.6

Source: CBE Customer Contact Center IPCC Operator Statistics, 2018

Operator Traffic Statistic – March, 2019

Start Time=03/01/2019; End Time=04/01/2019; IPCC CCNOVDN=1^4^BankVDN; IPCC Access Code=951; IPCC CC site Name=ALL; IPCC Su
Operator ID=ALL;

Supervisor	Operator ID	Offered calls	Answered Calls	Answer Rate	Agent no answered calls (%)	Dropped Calls	Idle Time	Total Talking Duration(m)	Busy Duration (m)	Un-serv Duration
Super_A	45504	1580	1573	99.62%	0.38%	7	2957.48	2112.00	0.88	596.97
Super_A	45506	1453	1451	99.86%	0.14%	2	2376.75	2327.90	0.22	706.18
Super_A	45537	1648	1629	98.85%	1.15%	19	2411.35	2494.73	2.78	606.30
Super_A	45546	72	72	100.00%	0.00%	0	387.58	125.55	0.00	0.07
Super_A	45547	1581	1578	99.81%	0.19%	3	2981.72	2186.88	0.93	636.40
Super_A	45550	1101	1090	99.00%	1.00%	11	2782.87	1715.62	1.32	626.62
Super_A	45570	1181	1177	99.66%	0.34%	4	3293.17	1593.68	0.47	662.00
Super_A	45576	1426	1401	98.25%	1.75%	25	2784.62	2041.07	5.32	668.15
Super_A	45751	889	889	100.00%	0.00%	0	2831.00	1430.60	0.00	643.23
Super_A	45772	1474	1469	99.66%	0.34%	5	2808.55	2108.65	0.93	625.80
Super_A	45773	1144	1135	99.21%	0.79%	9	2601.03	1927.10	1.18	543.62
Super_A	45774	1579	1578	99.94%	0.06%	1	2700.07	2731.92	0.15	710.60
Super_A	45505	1191	1181	99.16%	0.84%	10	2912.33	1655.62	2.80	629.83
Super_A	45513	1335	1324	99.18%	0.82%	11	2785.70	2465.47	27.78	738.47
Super_A	45526	1122	1101	98.13%	1.87%	21	2770.58	1771.63	33.23	770.02
Super_A	45535	1392	1381	99.28%	0.72%	11	2516.00	2639.70	1.57	484.60
Super_A	45540	1329	1320	99.32%	0.68%	9	2739.22	2408.82	1.27	685.45
Super_A	45552	1302	1291	99.16%	0.84%	11	3013.23	1659.73	1.52	586.18
Super_A	45562	1205	1179	98.00%	2.00%	26	2673.75	1179.65	14.10	629.90
Super_A	45574	1277	1272	99.61%	0.39%	5	1875.83	2046.62	0.70	655.80
Super_A	45584	1439	1430	99.37%	0.63%	9	2505.25	2486.80	1.23	589.17
Super_A	45586	1348	1343	99.63%	0.37%	5	2317.22	1975.23	44.35	695.97
Super_A	45587	1494	1485	99.40%	0.60%	9	2158.27	2141.92	39.67	738.68
Super_A	45588	1629	1628	99.94%	0.06%	1	3017.07	2717.55	31.82	554.53
Super_A	45613	1254	1229	98.01%	1.99%	25	2894.15	1464.33	40.70	651.50
Super_A	45752	1138	1132	99.47%	0.53%	6	2818.28	1920.35	29.02	695.50
Super_A	45775	1660	1653	99.58%	0.42%	7	2977.92	2480.93	0.98	726.70
Super_A	45776	1709	1703	99.65%	0.35%	6	2986.12	2537.12	0.75	735.20
Super_A	45777	1348	1345	99.78%	0.22%	3	2902.27	2527.07	0.43	747.70
Super_A	45790	1194	1155	98.13%	1.87%	39	1099.93	1943.33	12.98	568.03
Super_A	Total	39494	39194	99.29%	0.71%	300	77879.30	60817.57	299.08	18909.1
Super_B	45503	1825	1814	99.40%	0.60%	11	2728.32	2933.52	4.73	740.10

Super_B	45515	1492	1492	100.00%	0.00%	0	2426.55	2155.37	0.00	511.65
Super_B	45527	1439	1429	99.31%	0.69%	10	2622.75	2902.15	2.50	684.95
Super_B	45530	1915	1909	99.79%	0.21%	6	2800.90	2352.45	3.68	611.20
Super_B	45531	1804	1796	99.67%	0.33%	8	2411.75	2890.33	2.45	620.85
Super_B	45539	1	1	100.00%	0.00%	0	10.17	1.50	0.00	0.00
Super_B	45549	1302	1302	100.00%	0.00%	0	2501.33	1679.45	0.00	475.07
Super_B	45566	1686	1667	98.99%	1.01%	19	1907.83	2667.65	6.42	637.53
Super_B	45585	1574	1574	100.00%	0.00%	0	2331.30	2760.72	0.77	626.60
Super_B	45589	1437	1429	99.65%	0.35%	8	2237.02	2288.43	2.73	569.83
Super_B	45755	1542	1538	99.81%	0.19%	4	2282.60	3108.08	2.77	657.13
Super_B	45780	1322	1313	99.70%	0.30%	9	1927.23	2273.93	0.93	485.12
Super_B	45781	1109	1090	99.09%	0.91%	19	2004.22	1868.27	17.60	433.92
Super_B	45519	2001	1994	99.85%	0.15%	7	2730.17	2198.20	1.15	709.45
Super_B	45542	1646	1645	99.94%	0.06%	1	2201.10	1840.03	0.17	528.12
Super_B	45551	1667	1659	99.70%	0.30%	8	2641.47	2674.85	2.28	670.60
Super_B	45553	1608	1595	99.50%	0.50%	13	2580.15	2715.43	6.80	633.25
Super_B	45554	1980	1980	100.00%	0.00%	0	2510.65	2644.95	0.00	673.35
Super_B	45564	1249	1243	99.84%	0.16%	6	1685.97	1910.07	0.63	461.17
Super_B	45565	1264	1171	99.66%	0.34%	93	1624.87	2270.57	16.88	492.13
Super_B	45568	2022	2016	99.70%	0.30%	6	2903.68	2391.95	2.47	710.33
Super_B	45578	1320	1306	99.01%	0.99%	14	1931.58	2139.85	1.97	534.92
Super_B	45580	2032	2028	99.80%	0.20%	4	2006.78	2219.93	2.72	490.15
Super_B	45581	1989	1985	99.90%	0.10%	4	2630.47	2630.52	1.57	696.37
Super_B	45582	2181	2175	99.72%	0.28%	6	2820.83	2745.00	3.52	635.35
Super_B	45591	1180	1173	99.58%	0.42%	7	1611.43	1794.13	2.50	479.50
Super_B	45756	1732	1714	99.48%	0.52%	18	2730.62	2573.20	2.05	773.65
Super_B	45778	986	946	96.14%	3.86%	40	2034.03	1402.92	6.68	488.12
Super_B	45779	1531	1500	99.34%	0.66%	31	2387.62	3330.62	4.58	669.40
Super_B	45793	1751	1746	99.94%	0.06%	5	2149.88	2816.37	0.72	635.52
Super_B	Total	46587	46230	99.60%	0.40%	357	67373.27	70180.43	101.27	17335.3
Super_C	45502	1247	1240	99.44%	0.56%	7	1240.67	2149.65	3.50	446.78
Super_C	45508	1575	1566	99.43%	0.57%	9	1516.98	2902.50	2.20	643.47
Super_C	45509	1672	1620	96.95%	3.05%	52	1806.80	2428.38	7.62	662.38
Super_C	45512	1843	1841	99.89%	0.11%	2	1791.63	3207.50	0.47	733.20
Super_C	45517	1835	1826	99.56%	0.44%	9	1747.07	3125.43	2.23	750.05
Super_C	45518	1197	1177	98.33%	1.67%	20	1030.77	2440.85	7.95	561.50
Super_C	45521	1818	1816	99.89%	0.11%	2	1605.95	2892.52	1.27	709.10
Super_C	45523	1780	1779	99.94%	0.06%	1	1659.20	3102.08	0.30	664.55
Super_C	45532	1546	1542	99.74%	0.26%	4	1691.47	3064.77	0.72	733.22

Super_C	45544	1340	1295	96.64%	3.36%	45	1428.90	2245.67	11.68	573.13
Super_C	45545	889	874	98.42%	1.58%	15	1187.55	1842.12	8.08	532.02
Super_C	45753	1838	1810	98.48%	1.52%	28	1782.10	3054.58	8.87	768.97
Super_C	45754	1758	1750	99.54%	0.46%	8	1649.77	2894.60	4.38	700.62
Super_C	45782	1434	1430	99.72%	0.28%	4	1162.33	2716.85	0.47	594.20
Super_C	45783	1627	1625	99.88%	0.12%	2	1671.60	3061.45	0.82	688.93
Super_C	45529	1202	1184	99.16%	0.84%	18	1414.10	2777.82	5.47	578.00
Super_C	45541	1809	1795	99.23%	0.77%	14	1723.05	3094.28	5.87	750.15
Super_C	45548	1620	1613	99.57%	0.43%	7	1778.02	2429.12	2.27	673.52
Super_C	45556	1977	1957	99.34%	0.66%	20	1710.57	3225.02	2.72	714.55
Super_C	45558	1340	1314	98.06%	1.94%	26	1308.33	2351.43	5.13	541.13
Super_C	45559	1722	1716	99.65%	0.35%	6	1656.27	3603.13	3.48	747.63
Super_C	45560	1478	1447	97.90%	2.10%	31	1377.05	2742.52	14.23	631.28
Super_C	45561	2014	2010	99.80%	0.20%	4	1876.05	3183.25	0.57	784.12
Super_C	45573	1870	1864	99.68%	0.32%	6	1698.50	2591.58	1.77	666.52
Super_C	45577	1714	1699	99.12%	0.88%	15	1789.80	2568.58	4.83	736.47
Super_C	45579	1060	1042	98.30%	1.70%	18	916.93	1725.45	3.08	472.38
Super_C	45729	6	6	100.00%	0.00%	0	1.13	3.53	0.00	0.02
Super_C	45785	741	729	98.38%	1.62%	12	1068.47	1355.15	1.75	352.65
Super_C	45786	1708	1693	99.12%	0.88%	15	1836.05	2802.37	3.70	732.20
Super_C	Total	43660	43260	99.12%	0.88%	400	43127.10	75582.18	115.42	18142.7
Total	Total	129741	128684	99.35%	0.65%	1057	188379.67	206580.18	515.77	54387.2

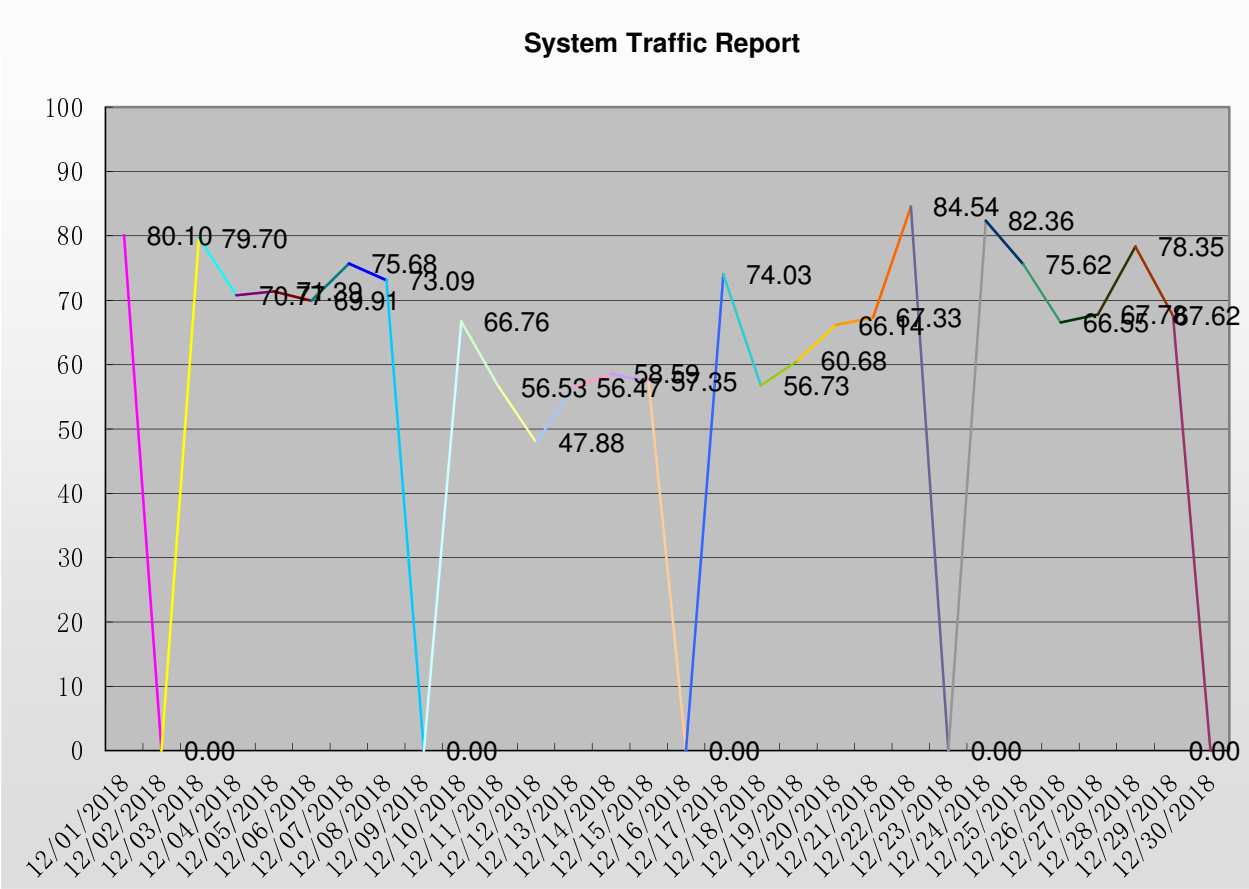
Source: CBE Customer Contact Center IPCC Operator Statistics, 2019

Daily System Traffic Statistics – December, 2018

Start Date and time=12/01/2018 00:00:00; End Date and time=12/31/2018 00:00:00; IPCC CCNOVDN=1^4^BankVDN; IPCC Access Code=8879; IPCC Statistic way=Daily;

Time	Total Incoming Calls	Blocked Calls	Automatic Succeeded Calls	Automatic Succeeded calls rate (%)	Abandoned Calls	Calls in Queue	Answered Call Rate (%)	Dropped Calls in Manual Service	Talk Duration(m
12/01/2018	1224	276	948	77.45%	296	573	80.10%	114	2124.37
12/02/2018	23	9	14	60.87%	13	0	0.00%	0	0
12/03/2018	1989	487	1502	75.52%	445	862	79.70%	175	2962.78
12/04/2018	1775	356	1419	79.94%	387	893	70.77%	261	2781.88
12/05/2018	1711	366	1345	78.61%	402	783	71.39%	224	2799.18
12/06/2018	1914	392	1522	79.52%	503	854	69.91%	257	2859.68
12/07/2018	2431	612	1819	74.83%	560	1069	75.68%	260	3134.03

12/08/2018	1356	282	1074	79.20%	324	669	73.09%	180	2230.58
12/09/2018	36	15	21	58.33%	20	0	0.00%	0	0
12/10/2018	2212	465	1747	78.98%	521	1062	66.76%	353	2971.18
12/11/2018	2389	388	2001	83.76%	542	1263	56.53%	549	3434.35
12/12/2018	2803	411	2392	85.34%	670	1320	47.88%	688	3200.82
12/13/2018	2072	386	1686	81.37%	507	997	56.47%	434	2988.18
12/14/2018	2922	618	2304	78.85%	671	995	58.59%	412	2596.12
12/15/2018	1418	225	1193	84.13%	324	748	57.35%	319	1779.92
12/16/2018	37	11	26	70.27%	15	0	0.00%	0	0
12/17/2018	1883	373	1510	80.19%	463	924	74.03%	240	2908.67
12/18/2018	2178	353	1825	83.79%	482	1084	56.73%	469	2816.78
12/19/2018	2034	332	1702	83.68%	437	1081	60.68%	425	2689.67
12/20/2018	2032	363	1669	82.14%	445	1004	66.14%	340	3180.5
12/21/2018	1850	300	1550	83.78%	477	952	67.33%	311	2960.55
12/22/2018	1151	198	953	82.80%	294	485	84.54%	75	1777.73
12/23/2018	44	8	36	81.82%	31	0	0.00%	0	0
12/24/2018	1626	345	1281	78.78%	428	737	82.36%	130	2608.32
12/25/2018	1704	301	1403	82.34%	382	886	75.62%	216	2715.72
12/26/2018	1627	331	1296	79.66%	334	870	66.55%	291	2702.15
12/27/2018	2074	452	1622	78.21%	474	841	67.78%	271	2628.83
12/28/2018	1358	201	1157	85.20%	287	753	78.35%	163	2613.98
12/29/2018	1178	179	999	84.80%	254	596	67.62%	193	1625.48
12/30/2018	71	23	48	67.61%	45	0	0.00%	0	0
Total	47122	9058	38064	80.78%	11033	12.43%	14951	67.04%	7350



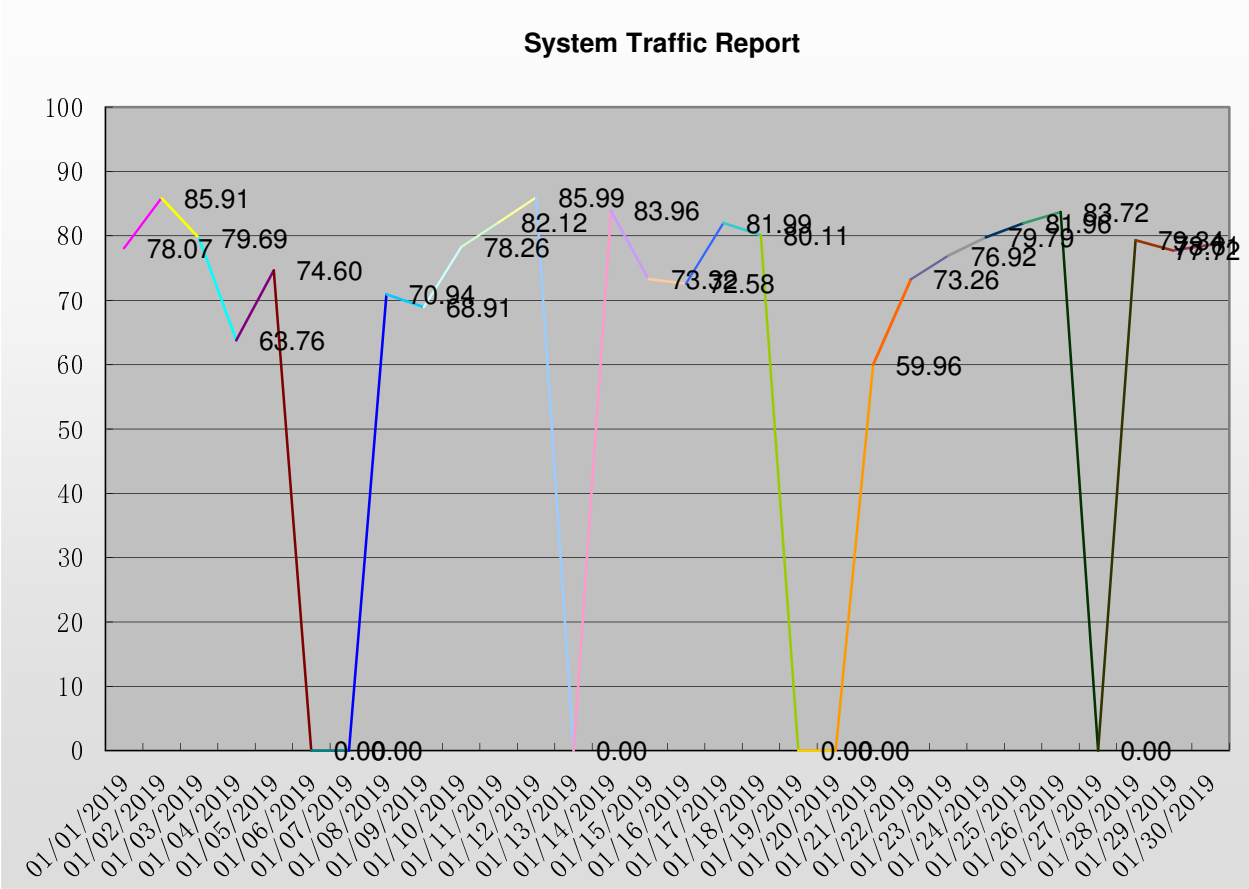
Source: CBE Customer Contact Center IPCC Daily System Traffic Statistics – December, 2018

Daily System Traffic Statistics – January, 2019

Start Date and time=01/01/2019 00:00:00; End Date and time=01/31/2019 00:00:00; IPCC CCNOVDN=1^4^BankVDN; IPCC Access Code=8879; IPCC Statistic way=Daily;

Time	Total Incoming Calls	Blocked Calls	Automatic Succeeded Calls	Automatic Succeeded calls rate (%)	Abandoned Calls	Calls in Queue	Answered Call Rate (%)	Dropped Calls in Manual Service	Talk Duration(m)
01/01/2019	1368	219	1149	83.99%	282	734	78.07%	161	2664.6
01/02/2019	1404	255	1149	81.84%	275	724	85.91%	102	2589.93
01/03/2019	1812	332	1480	81.68%	418	709	79.69%	144	2250.53
01/04/2019	2192	325	1867	85.17%	454	1134	63.76%	411	2975.43

01/05/2019	6514	5069	1445	22.18%	506	803	74.60%	204	2016.22
01/06/2019	117	27	90	76.92%	37	0	0.00%	0	0
01/07/2019	39	15	24	61.54%	15	0	0.00%	0	0
01/08/2019	2379	849	1530	64.31%	495	881	70.94%	256	2500.68
01/09/2019	1967	438	1529	77.73%	428	965	68.91%	300	2992.18
01/10/2019	1756	384	1372	78.13%	395	791	78.26%	172	2691.65
01/11/2019	1421	270	1151	81.00%	334	699	82.12%	125	2417.75
01/12/2019	987	196	791	80.14%	257	471	85.99%	66	1613.03
01/13/2019	48	13	35	72.92%	19	0	0.00%	0	0
01/14/2019	1720	365	1355	78.78%	437	742	83.96%	119	2364.25
01/15/2019	1679	310	1369	81.54%	428	772	73.32%	206	2517.37
01/16/2019	1800	364	1436	79.78%	385	897	72.58%	246	2824.78
01/17/2019	1538	300	1238	80.49%	365	694	81.99%	125	2360.72
01/18/2019	1238	239	999	80.69%	323	548	80.11%	109	1895.15
01/19/2019	76	34	42	55.26%	26	0	0.00%	0	0
01/20/2019	96	20	76	79.17%	55	0	0.00%	0	0
01/21/2019	2103	357	1746	83.02%	459	1094	59.96%	438	3219.28
01/22/2019	1636	335	1301	79.52%	380	748	73.26%	200	2525.68
01/23/2019	2180	402	1778	81.56%	456	1057	76.92%	244	2646.95
01/24/2019	1344	277	1067	79.39%	305	663	79.79%	134	2432.15
01/25/2019	1441	272	1169	81.12%	347	693	81.96%	125	2360.1
01/26/2019	948	187	761	80.27%	210	479	83.72%	78	1769
01/27/2019	31	8	23	74.19%	13	0	0.00%	0	0
01/28/2019	1551	295	1256	80.98%	348	784	79.34%	162	2689.4
01/29/2019	1500	340	1160	77.33%	337	718	77.72%	160	2446.92
01/30/2019	1458	296	1162	79.70%	342	720	78.61%	154	2251.73
Total	44343	12793	31550	71.15%	9131	18520	76.02%	4441	59015.5



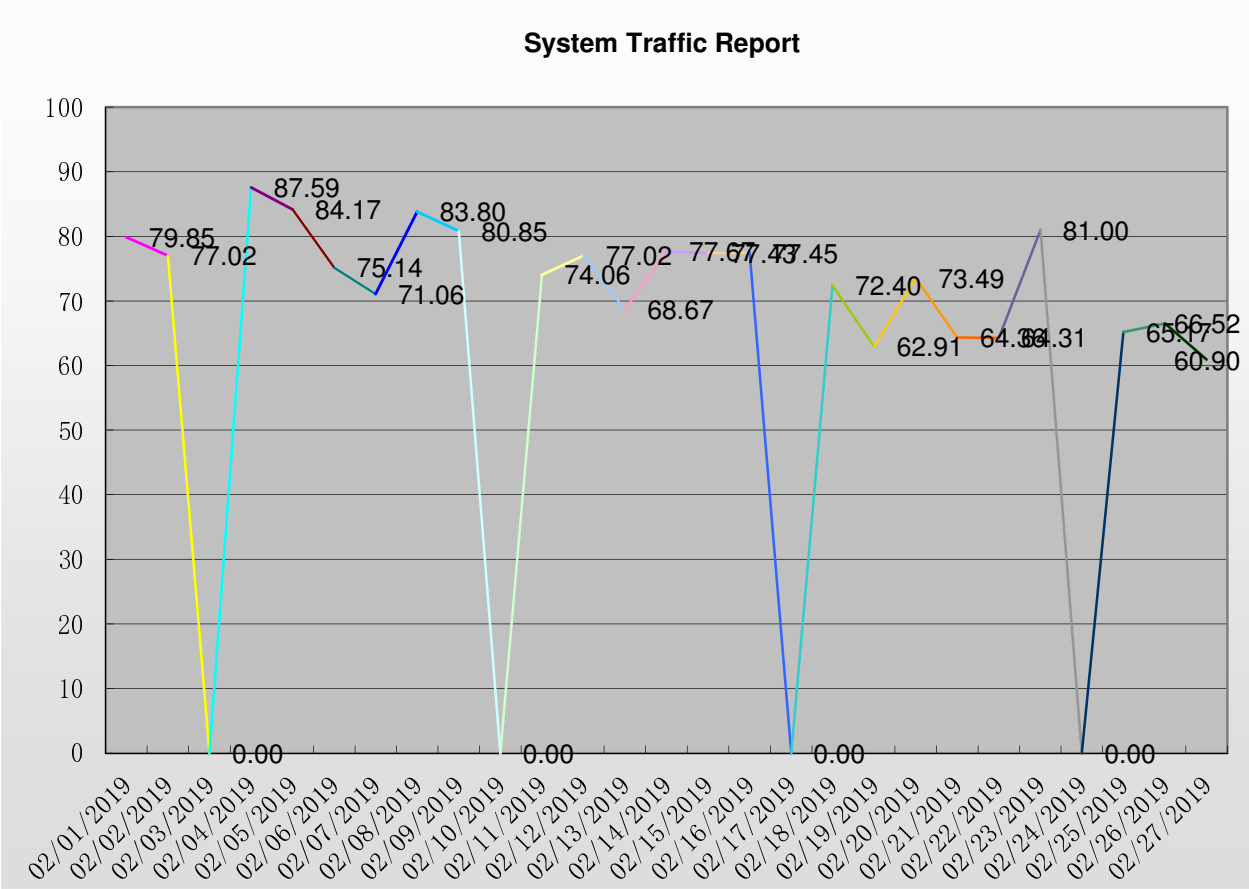
Source: CBE Customer Contact Center IPCC Daily System Traffic Statistics - January, 2019

Daily System Traffic Statistics – February, 2019

Start Date and time=02/01/2019 00:00:00; End Date and time=02/28/2019 00:00:00; IPCC CCNOVDN=1^4^BankVDN; IPCC Access Code=8879; IPCC Statistic way=Daily;

Time	Total Incoming Calls	Blocked Calls	Automatic Succeeded Calls	Automatic Succeeded calls rate (%)	Abandoned Calls	Calls in Queue	Answered Call Rate (%)	Dropped Calls in Manual Service	Talk Duration(m)
02/01/2019	1366	257	1109	81.19%	323	675	79.85%	136	2364.65
02/02/2019	1133	199	934	82.44%	286	570	77.02%	131	1699.52
02/03/2019	55	16	39	70.91%	26	0	0.00%	0	0
02/04/2019	1475	319	1156	78.37%	368	669	87.59%	83	2197.57
02/05/2019	1461	279	1182	80.90%	310	733	84.17%	116	2566.15
02/06/2019	1904	356	1548	81.30%	460	716	75.14%	178	2153.18

02/07/2019	1694	362	1332	78.63%	428	774	71.06%	224	2196.83
02/08/2019	1295	214	1081	83.47%	279	685	83.80%	111	2282.07
02/09/2019	1109	192	917	82.69%	261	590	80.85%	113	1804.43
02/10/2019	61	24	37	60.66%	21	0	0.00%	0	0
02/11/2019	1870	370	1500	80.21%	427	825	74.06%	214	2350.17
02/12/2019	1673	282	1391	83.14%	334	927	77.02%	213	3147.53
02/13/2019	1705	313	1392	81.64%	380	900	68.67%	282	3043.48
02/14/2019	1520	266	1254	82.50%	302	824	77.67%	184	2617.07
02/15/2019	1949	328	1621	83.17%	414	731	77.43%	165	2481.5
02/16/2019	1255	207	1048	83.51%	267	603	77.45%	136	1907.07
02/17/2019	30	9	21	70.00%	13	0	0.00%	0	0
02/18/2019	1689	370	1319	78.09%	320	739	72.40%	204	2018.53
02/19/2019	1979	349	1630	82.36%	465	1030	62.91%	382	2302.1
02/20/2019	1713	306	1407	82.14%	378	928	73.49%	246	2553.45
02/21/2019	1588	279	1309	82.43%	320	881	64.36%	314	2269.65
02/22/2019	1711	304	1407	82.23%	385	905	64.31%	323	2460.2
02/23/2019	1036	204	832	80.31%	238	521	81.00%	99	1761.52
02/24/2019	30	4	26	86.67%	22	0	0.00%	0	0
02/25/2019	1752	341	1411	80.54%	407	893	65.17%	311	2409.47
02/26/2019	1790	361	1429	79.83%	388	899	66.52%	301	2293.13
02/27/2019	1883	356	1527	81.09%	412	977	60.90%	382	2323.98
Total	36726	6867	29859	81.30%	8234	17995	73.06%	4848	53203.25



Source: CBE Customer Contact Center IPCC Daily System Traffic Statistics - February, 2019

APPENDIX II **Weekly CCC Internal Help Desk Performance Status**

4.5.1.1 Distribution of Incidents in each District & Head Office Organs in Nov. 08-14, 2018

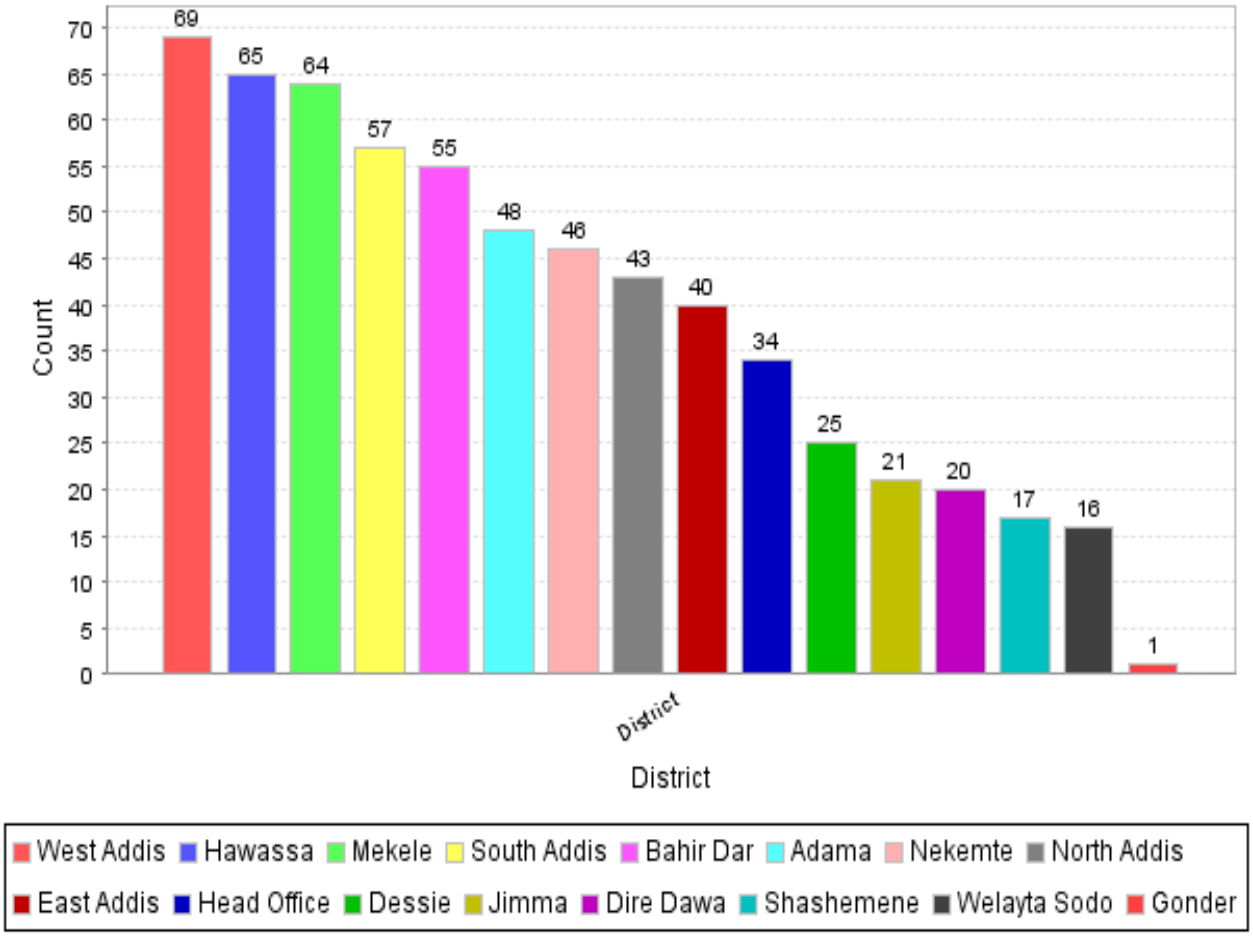


Figure 4.5.1.1 Distribution of Incidents in each District and Head office Organ

Source: Customer Contact Center in Commercial Bank of Ethiopia 2018

4.5.1.2 Distribution of Incidents in each District& Head Office Organs in Nov. 15-21, 2018

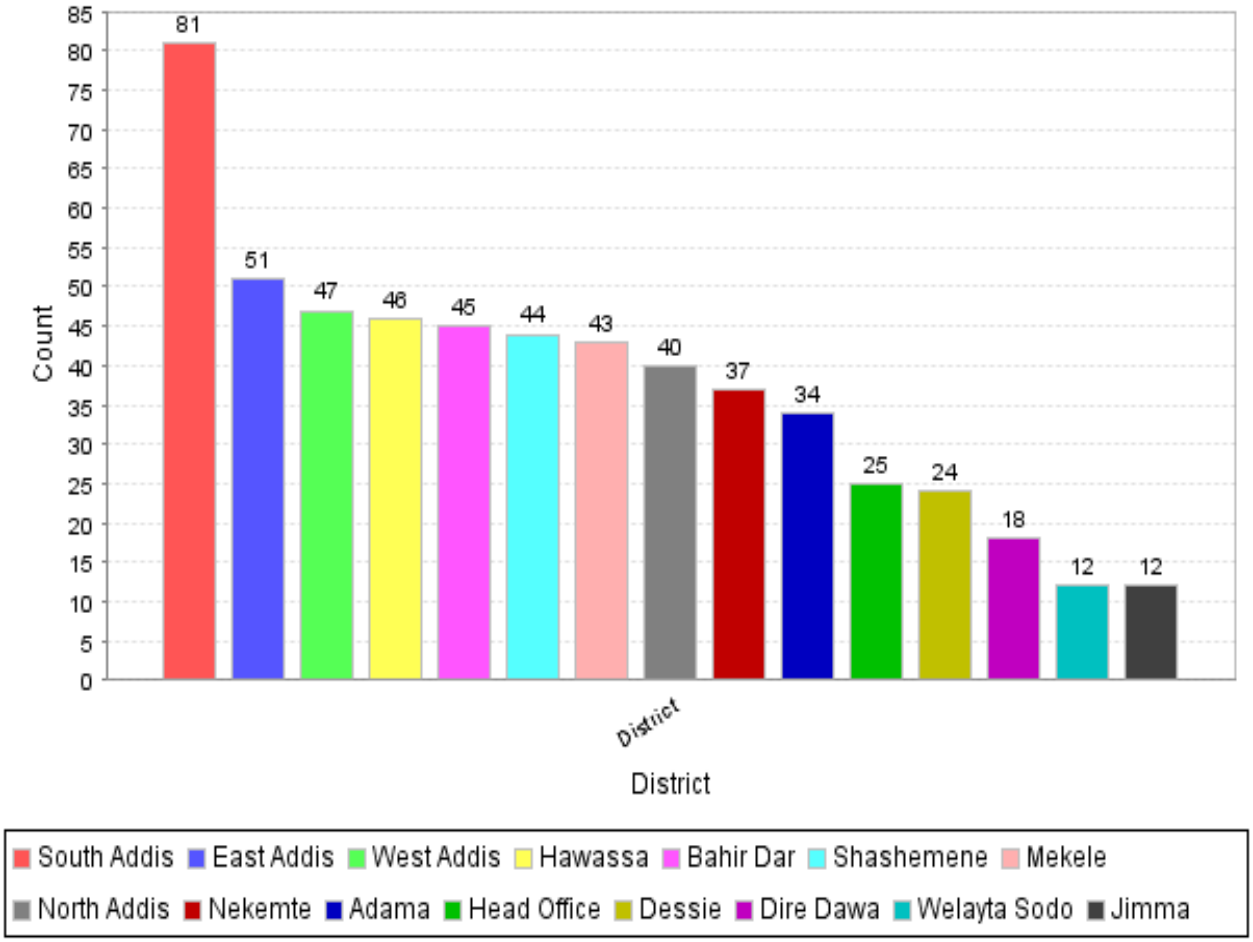


Figure 4.5.1.2 Distribution of Incidents in each District and Head office Organs

Source: Customer Contact Center in Commercial Bank of Ethiopia 2018

4.5.2.1 Distribution of Incidents in each District & Head Office Organs in Jan. 10-16, 2019

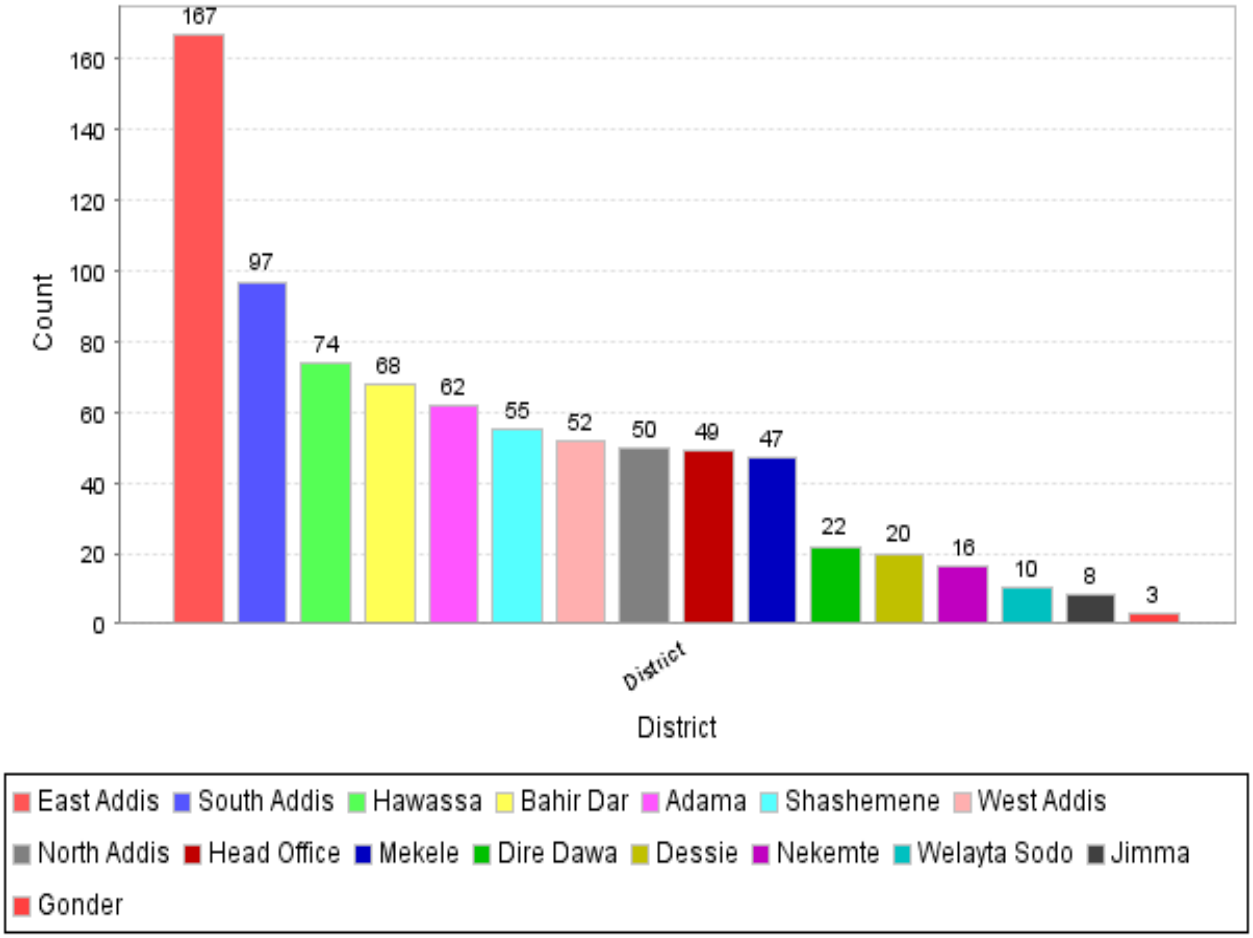


Figure 4.5.2.1 Distribution of Incidents in each District and Head office Organ

Source: Customer Contact Center in Commercial Bank of Ethiopia 2019

4.5.2.2 Telecom Incidents Distribution in each District & Head Office Organs in Jan. 10-17, 2019

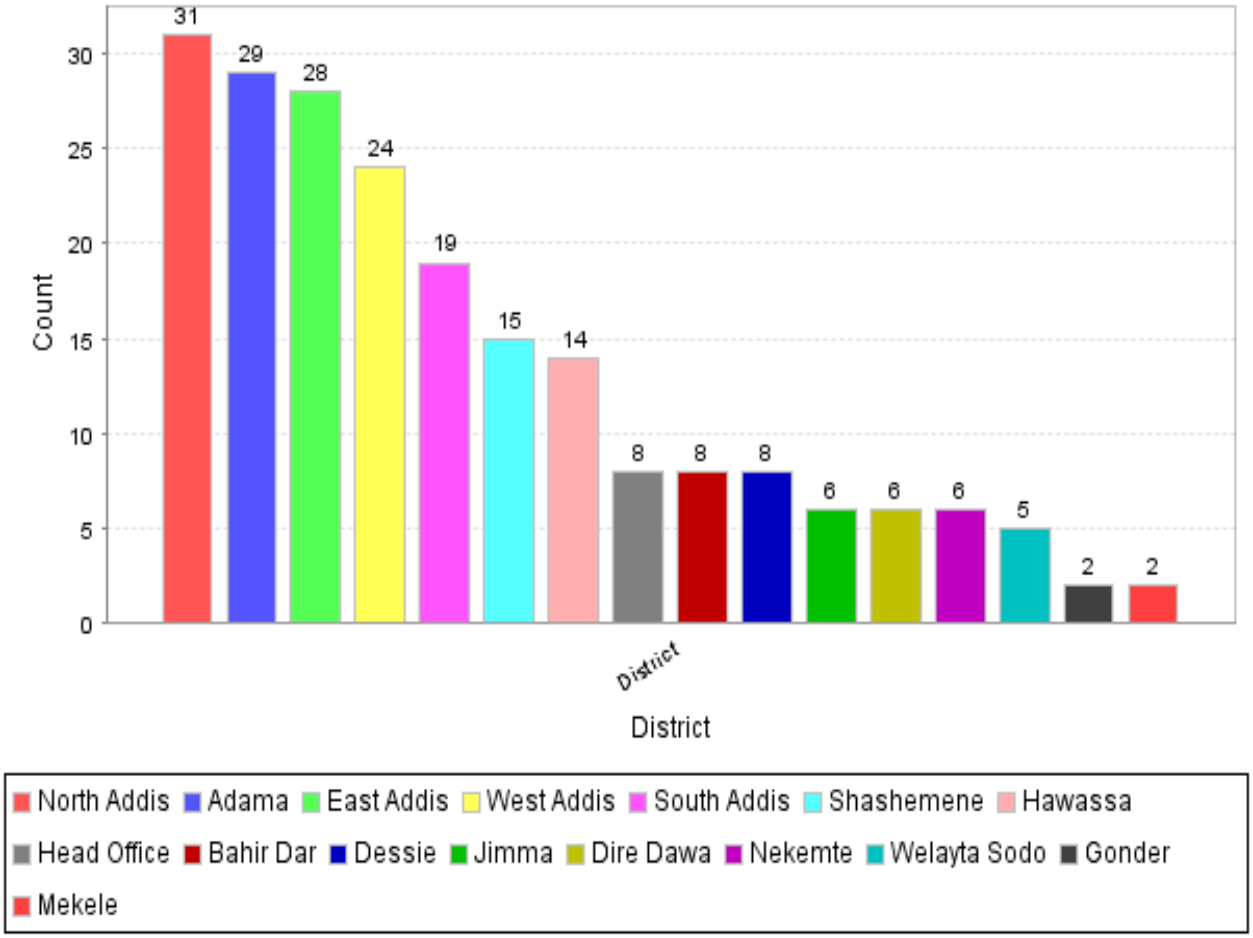


Figure 4.5.2.2 Telecom incidents distribution in each district and Head office organ

Source: Customer Contact Center in Commercial Bank of Ethiopia 2019

4.5.2.3 Distribution of Incidents in each District & Head Office Organs in Jan. 17-23, 2019

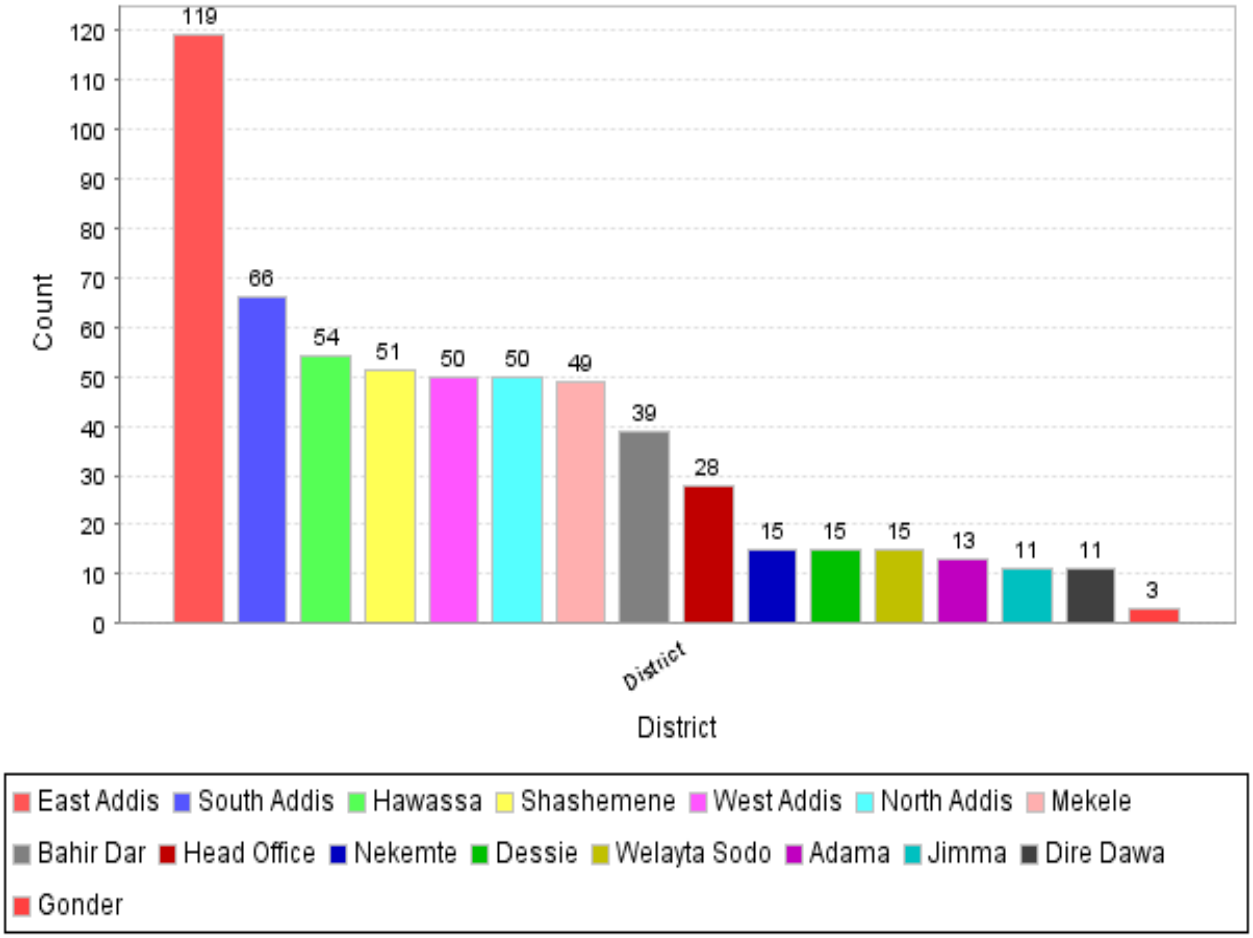


Figure 4.5.2.3 Distribution of Incidents in each District and Head office Organs

Source: Customer Contact Center in Commercial Bank of Ethiopia 2019

4.5.2.4 Telecom Incidents Distribution in each District & Head Office Organs in Jan. 17-23, 2019

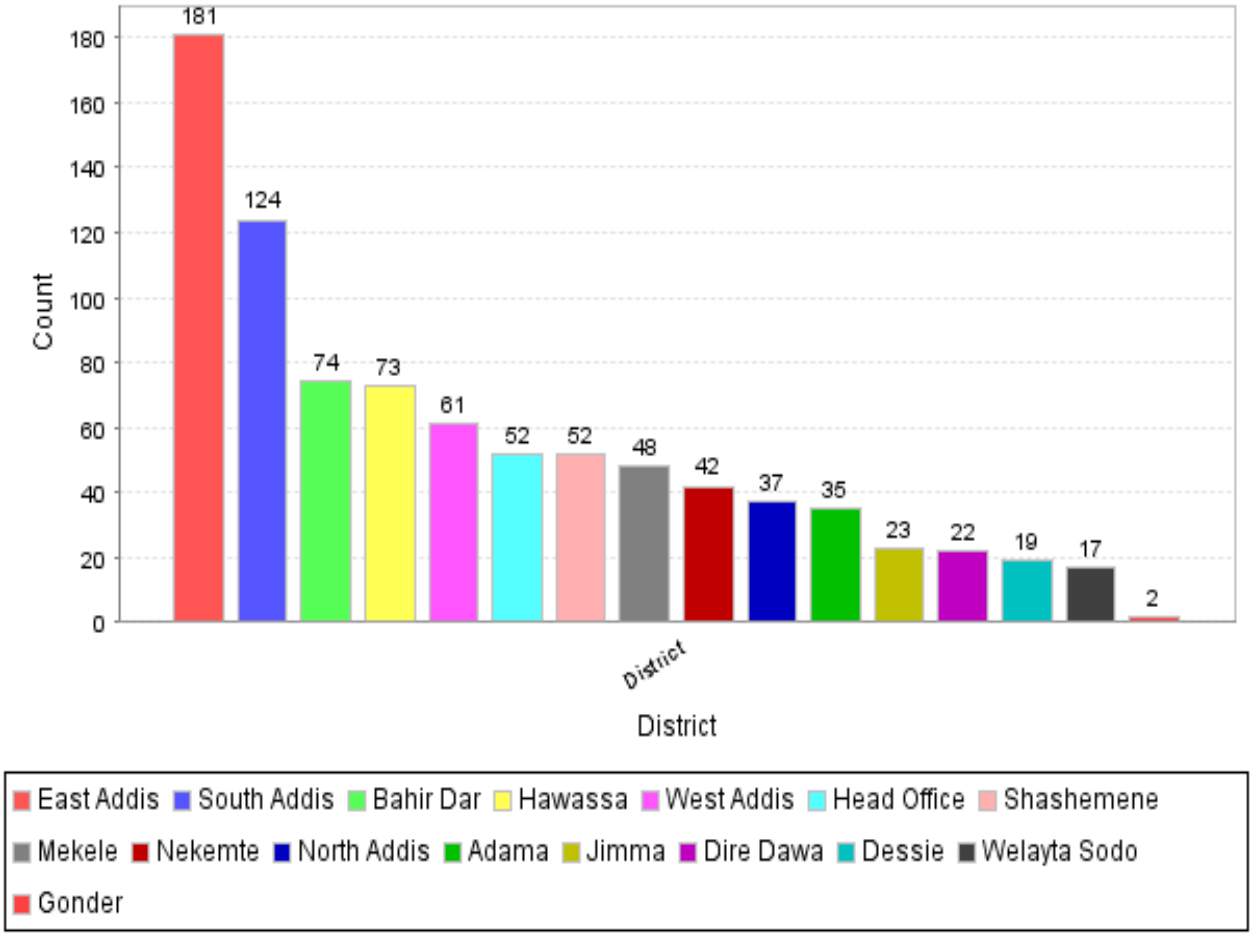


Figure 4.5.2.4 Telecom incidents distribution in each district and Head office organs

Source: Customer Contact Center in Commercial Bank of Ethiopia 2019

4.5.3.1 Distribution of Incidents in each District & Head Office Organs in Mar. 14-20, 2019

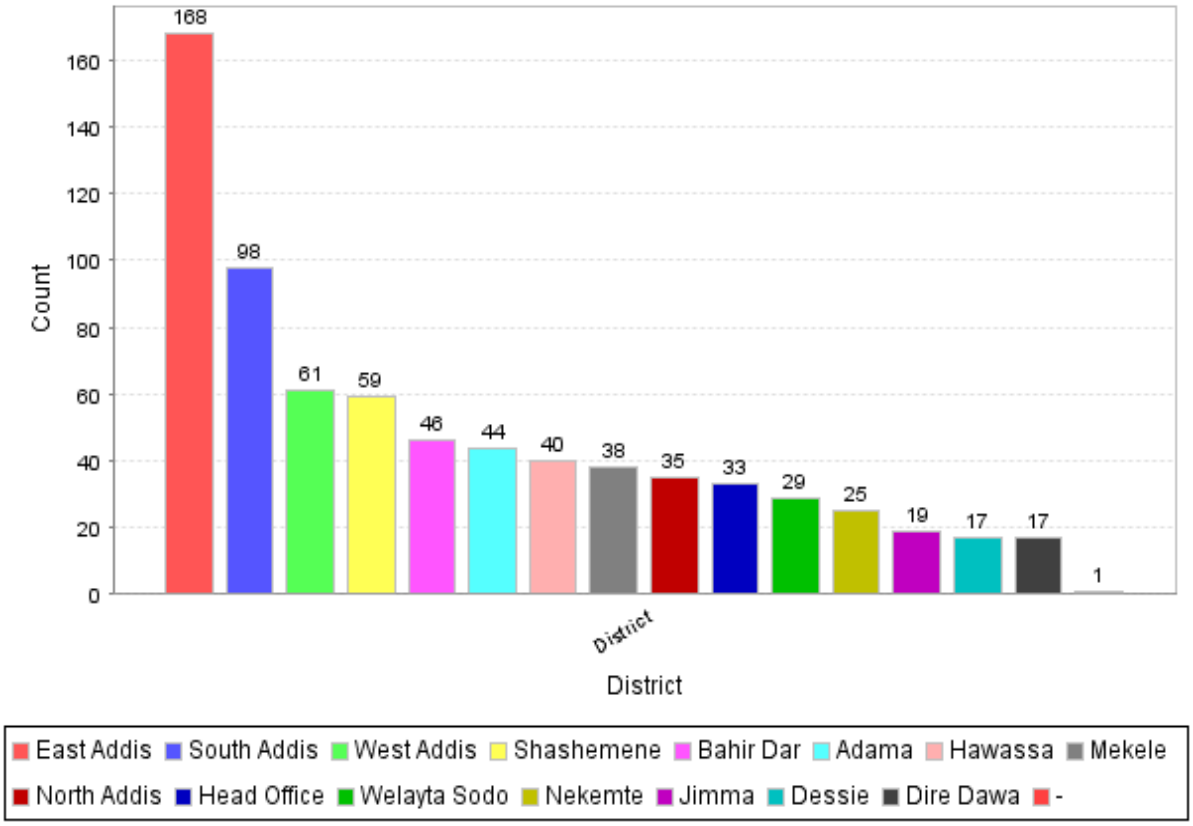


Figure 4.5.3.1 Distribution of Incidents in each District and Head office Organs

Source: Customer Contact Center in Commercial Bank of Ethiopia 2019

4.5.3.2 Telecom Incidents Distribution in each District & Head Office Organs in Mar. 14-20, 2019

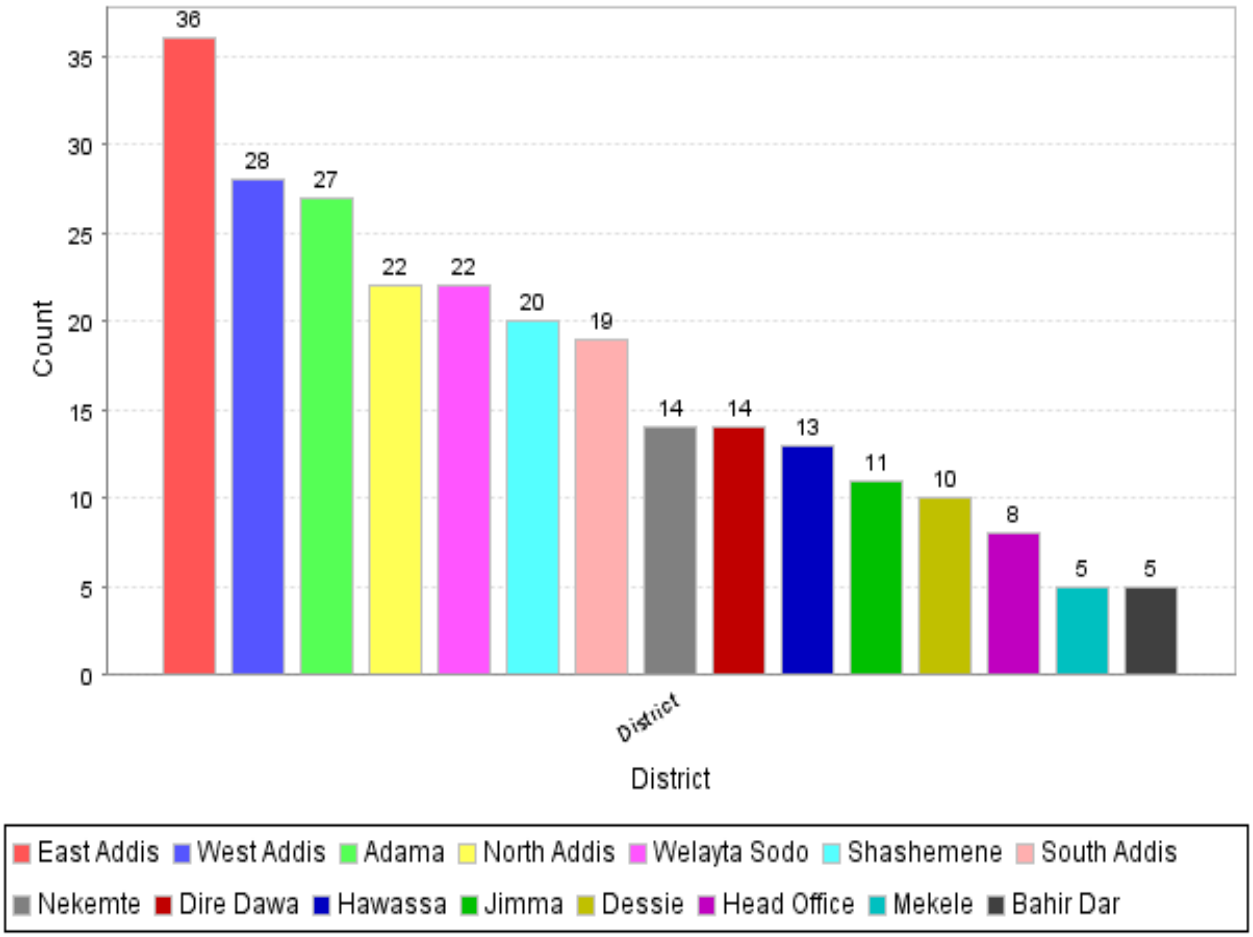


Figure 4.5.3.2 Telecom incidents distribution in each district and Head office organs

Source: Customer Contact Center in Commercial Bank of Ethiopia 2019

4.5.3.3 Distribution of Incidents in each District & Head Office Organs in Mar. 21-27, 2019

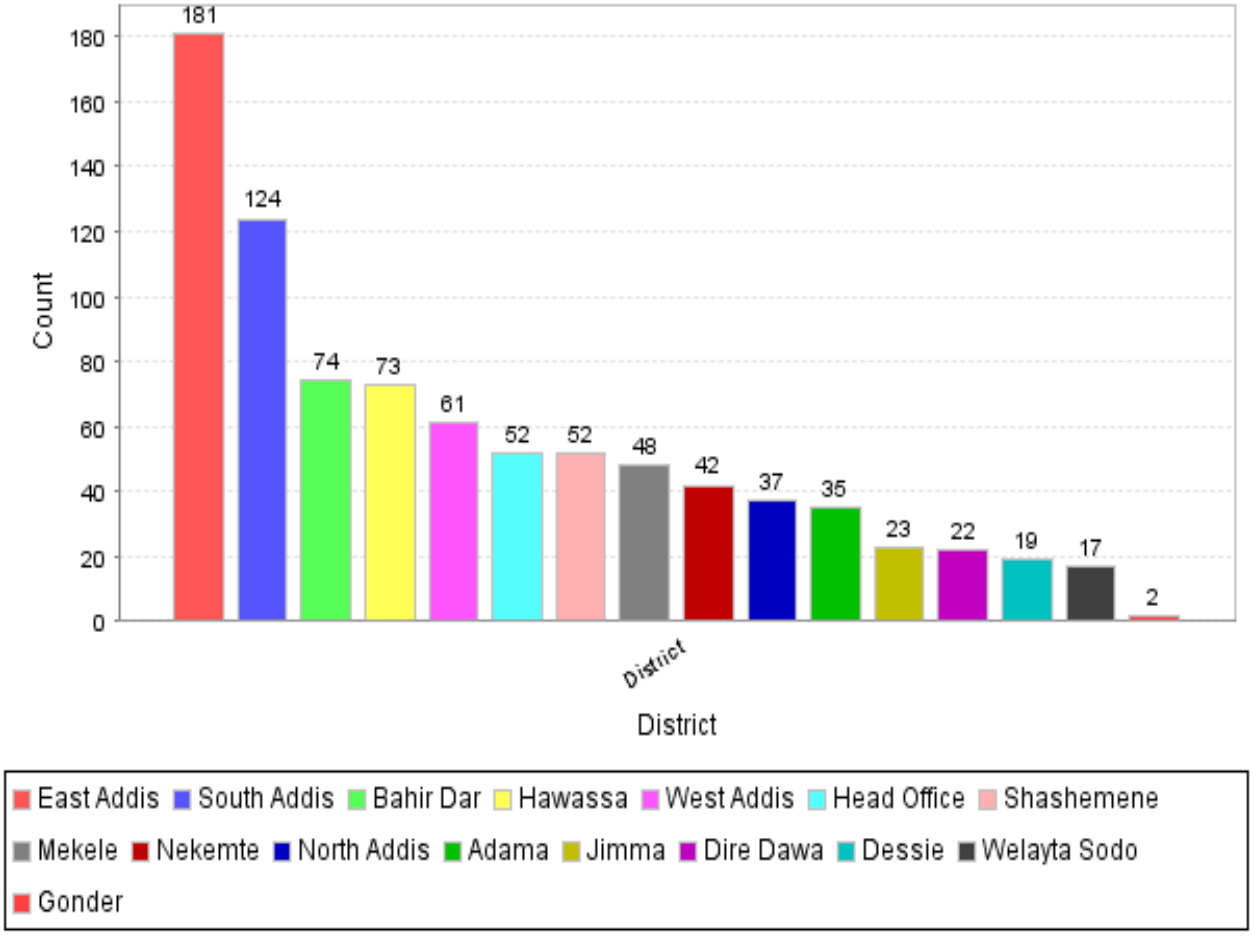


Figure 4.5.3.3 Distribution of Incidents in each District and Head office Organs

Source: Customer Contact Center in Commercial Bank of Ethiopia 2019

4.5.3.4 Telecom Incidents Distribution in each District & Head Office Organs in Mar. 21-27, 2019

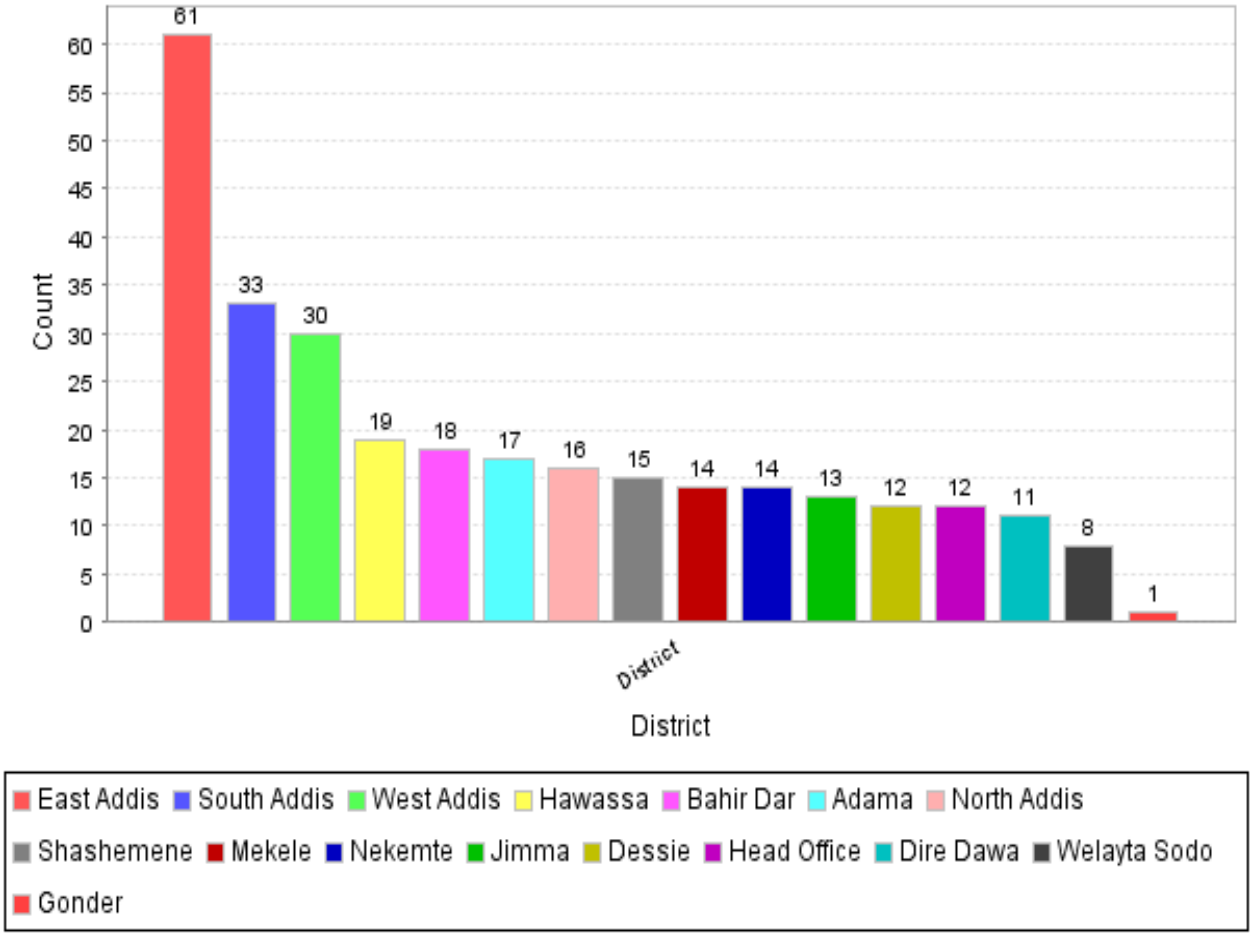


Figure 4.5.3.4 Telecom incidents distribution in each district and Head office organs

Source: Customer Contact Center in Commercial Bank of Ethiopia 2019

APPENDIX III: LETTER OF INTRODUCTION

Addis Ababa University,

College of Business and Economics,

Addis Ababa, Ethiopia

RE: REQUEST TO RESPONDING TO THE ATTACHED QUESTION

The bearer of this letter is a graduate student at the Addis Ababa University pursuing a Master's degree in Executive Master's in Business Administration (EMBA). As part of partial fulfillment of the course, he will be conducting a research project on "**impact assessment on customer contact center performance in the Commercial Bank of Ethiopia."**

Attached with each questionnaire is a letter of informed consent notifying the participant about the purpose of the study and that their participation is voluntary and anonymous, participation in the study will be based on the participant's agreement of consent.

Yours Faithfully,

Fekadu Kidanemariam Berhanu.

Mobile 0920257272/0915760864/0913359967/0946455363

APPENDIX IV: QUESTIONNAIRE

Please take a few minutes to fill this short questioner that has been designed to find out impact assessment on customer contact center performance in the Commercial Bank of Ethiopia. The information given will be confidential and used for academic purposes.

SECTION I

SECTION I- GENERAL INFORMATION

1. Kindly indicate tick mark (√) in the boxes for your gender

	Male	Female
Gender		

2. Kindly indicate tick mark (√) in the boxes for your age.

Age	18-24	
	25-31	
	32-38	
	39-45	
	46 and above	

3. Kindly indicate tick mark (√) in the boxes for the customer contact center division you work for and the advisory category under

External advisory	
Internal advisory	

4. Please indicate tick mark (√) in the boxes for your academic qualification

Academic qualification	Below College Diploma	
	Diploma	
	First Degree (BA, BSc)	
	Second Degree (MA, MSC)	
	Third Degree (PhD)	

5. Please indicate tick mark (√) in the boxes for your position in the bank.

Senior Management	
Middle level Management	
Supervisory level	
Bank Officer	
Junior Officer	

How long have you worked with the bank? ……..

SECTION II- GENERAL OPINION ON YOUR BANK

Choose the correct answer according to your banks.

1. What did you give priority in your bank?
   a. Increasing productivity
   b. Motivating Workers.
   c. Cooperation with coworker.
   d. Working according to policies and procedures.
   e. Other, please specify; ——————————————
2. Work performance is managed and influenced by;
   a. People in position of authority.
   b. The system rules and procedures.
   c. Their own commitment to achieving the goals of organization.
   d. Their own desire to accept by other and to be good members of their work group.
   e. Other, please specify; ——————————————
3. What kind of motivation uses your bank?
   a. Money
   b. Participation
   c. Decision making
   d. Other; ——————————————

4. Do you think that draw backs brought by the motivational approach in the bank?
    a. Yes; ——————————————————————
    b. No; ——————————————————————
5. The role of customer contact centers play in customer satisfaction in CBE and the banking industry in Ethiopia in general
    a. Can be able CBE to build, maintain and manage customer relationship by solving problems & resolving complaints quickly
    b. Can lead as a weapon to the competitive advantage
    c. Customer contact center is an instrument for the source of information for CBE
    d. Customer contact center is the driving force for technology
    e. All are possible alternative solutions
    f. Other, please specify; ——————————————————

SECTION III: THE FUNCTION OF CUSTOMER CONTACT CENTER ON CUSTOMER SATISFACTION

i.Please tick mark (√) in the level to which you strongly agree (SA), agree (A), neutral (N), disagree (D) or strongly disagree (SD) with the following Metrics on the Customer Contact Center in regards to customer satisfaction.

		SA	A	N	D	SD
1	The customer contact center is easily accessible through various channels					
2	The customer contact center staffs have adequate knowledge to handle all queries raised by clients					
3	The customer contact center team responds on time to the queries raised by clients					
4	The customer contact center staffs sufficiently address any queries raised					
5	The customer contact center advisors respond professionally to calls ,emails by system queries					
6	Overall the customer contact center advisors are a valuable team to the bank					

ii. Kindly indicate tick mark (√) the level to which you agree with the statements below in regards to the customer contact center in your division of advisory performance behavior in the organization.

		SA	A	N	D	SD
7	I feel that my job performance is fairly evaluated.					
8	I am satisfied with the recognition I receive for my accomplishment					
9	The pay matches my responsibility.					
10	I am satisfied with the Empower to influence the quality of my work.					
11	Money is my only motivator at the bank.					
12	I am satisfied with my current salary.					
13	I am satisfied with the working conditions in the bank					
14	Banks leadership makes changes which are favorable to my work.					
15	I am satisfied with the overall jobs security					
16	My department use employee feedback to make improvement					
17	Performance pay like bonus, made employees to reduce defect level					
18	The existence of growth opportunity in the banks helps employees to reduce delay in service delivery time.					

		SA	A	N	D	SD
19	The customer contact center is fully supported in terms of technology & processes					
20	The customer contact center is fully integrated into the organizational structure					
21	The customer contact center has sufficient human resources					
22	The customer contact center is aligned to the organizational strategy					

iii. Please indicate tick mark (√) the extent with which you agree with the statements below in regards to delivery of customer service in the Commercial Bank of Ethiopia

		SA	A	N	D	SD
23	The customer contact center has a positive impact on service delivery in the bank					
24	Customer contact center has played a key role in customer retention					
25	The customer contact center has made a considerable impact on the business growth of the bank					
26	Generally, clients appreciate the services offered by the customer contact center					
27	I feel confident that the customer contact center can efficiently manage client's queries					
28	The customer contact center team is able to follow up on issues conclusively					

iv. Please indicate your level of agreement to which of these statements in regards to the customer contact center team in CBE

		SA	A	N	D	SD
29	Customer Centricity					
30	Speed of service					
31	Accuracy of executing instructions					
32	Customer contact center staff friendliness					
33	Customer contact Center operating times are convenient to customers					

Any other comments that you would like to add

……
……
……
……
……

……
……

SECTION V: EFFECT OF TECHNOLOGY ON OF CUSTOMER CONTACT CENTERS IN THE COMMERCIAL BANK OF ETHIOPIA.

Please answer the questions below to indicate the impact of technology on the functioning of the customer contact center.

		SA	A	N	D	SD
1	Applying technology minimizes staff turnover in the customer contact in the center					
2	Technology improves customer contact center performance.					
3	Customer contact center technology helps the advisors to have a faster turnaround time when responding to customer query					
4	Technology improves customer contact center processes.					
5	Technology has led to impersonalized services					
6	The customer contact center technology gives conclusive reports that can be used in decision making					
7	Customer contact center technology has led to improved productivity in the customer contact center which in turn has improved the banks bottom line					
8	The customer contact center has made a return on investment on the technology procured					
9	Technology is using now like IPCC, T24, B24, ACI Issuer, CRM, CBE Birr Interface without interruption					
10	The services delivered by ATM, POS, are coordinated properly					
11	The advisors' have served customers by using the technology appropriately					
12	The technology used in customer contact center is independent from external forces(like power, telecom network)					
13	The system of technology is perfect in any incident					
14	The advisor uses technology stand by and completely					
15	The specialists of the technology is available when they are needed					

Any other comments that you would like to add

……
……
……
……

Thank you for taking time to fill this questioner. The information submitted is confidential and will be used only for academic purposes.

INTERVIEW QUESTIONS

1. Describe customer contact canter at CBE
   - Its mission within the bank
   - Its position in the structure of the bank
   - The technology
   - Its capability
   - Its current state
   - The service policy
   - Its practices
2. How management defines the customer contact center performance?