COLLEGE OF BUSINESS AND ECONOMICS

SCHOOL OF COMMERCE

DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

EXAMINING EFFECT OF POSTPAID BILL COLLECTION PRACTICE ON THE PERFORMANCE OF ETHIO TELECOM

BY

MILLION MEKIBIB MULUGETA

A Thesis Submitted To Addis Ababa University School of Commerce Department of Logistics and Supply Chain Management in Partial Fulfilment of the Requirements for the Degree of Master of Arts in Logistics and Supply Chain Management

ADIVISOR: DR. MENGISTU BOGALE

June, 2020

ADDIS ABABA UNIVERSITY

SCHOLL OF COMMERCE

EXAMINNING EFFECT OF POSTPAID BILL COLLECTION PRACTICE ON THE PERFOMANCE OF ETHIO TELECOM

BY

MILLION MEKIBIB MULUGETA

APPROVED BY BOARD OF EXAMINER

Internal Examiner **Dr.Matiwos Ensermu** Signature: _____

External Examiner **Dr.Bogale Alemu** Signature: _____

Research Advisor: **Dr.Mengistu Bogale** Signature: _____

Declaration

I, the undersigned, hereby declare that the work contained in this thesis, **"Examining effect of Post-Paid Bill Collection Practice on the Performance of Ethio Telecom''** is my own original work that I have not previously in its entirety or in part submitted at any university for a degree. It is done and presented under the guidance of my advisor Dr. Mengistu Bogale.

Million Mekibib

Signature: _____ Date: _____

Endorsement

This is to certify that Million Mekibib has carried out his research work on the topic entitled “Examining effect of Post-Paid Bill Collection Practice on the Performance of Ethio Telecom” for the partial fulfillment of Master of Arts in Logistics and Supply chain Management at Addis Ababa University, School of Commerce. This study is an original work and is suitable for submission of Master of Arts Degree in Logistics and Supply chain Management.

_____ _____

Dr. Mengistu Bogale Date & Signature

ACKNOWLEDGEMENTS

First and foremost, all praise & thanks be to the almighty God, for enabling me complete and accomplish a lot in this academic journey.

Then, I would like to acknowledge and extend my deepest gratitude and honorable appreciation to my adviser Dr. Mengistu Bogale, for his guidance, invaluable assistance, and constructive comments.

I am extremely grateful to my beloved Families, FD for the courage, and support for and motivation. You are always my proud and I am thankful to God that he gave me a wonderful supportive in my life.

Finally, my heartfelt thanks go to all my classmates in Addis Ababa University who earnestly encouraged and morally supported me to keep up with the good work.

I owe all of you my sincere and deepest gratitude - thank you very much indeed!

TABLE OF CONTENT

Contents Page

LIST OF TABLES

LIST OF FIGURES

ACRONMYS

B&CC	Billing and Customer Care System
IQB	Issuance of Quality bill
CO	Collection Option
DUN	Dunning Management
DM	Dispute Management
PER	Performance
CDR	Call Detail Record
CBS	Convergent Billing System
DC	Debt Control
AR	Account Receivable
CRM	Customer Relation Management
ERP	Enterprise resource Planning

ABSTRACT

This research has aim to examine the effect of post-paid bill collection practice of Ethio Telecom, the only telecom service provider in Ethiopia. A sample of 173 were taken from the employee of Ethio Telecom, Billing and Credit Control Section and Bill complaint Management section of customer service division and Billing operation section under information system division. The methodology used for data collection was Questionnaire which is conducted on online bases to combat COVID-19 pandemic. Explanatory and quantitative research method was Employed to collect the data through questionnaire, accordingly 148 respondents filled the questionnaire fully, which represented 85.54% of the sample size. The study adopted quantitative method and the descriptive as well as inferential analysis has been done using SPSS Version 20. The major finding of the study indicated that , The independent Variables, Issuance of Quality Bill, Billing and Customer Care system, Collection Options, Debt control Management and Dispute Management were positively and moderately correlated with dependent variable, Post paid bill collection performance. From the regression analysis model summary result indicated that the independents variables represented the dependent variable by 64.5%.

Generally, this report would identify the general issues of bill collection practice mainly issuance of quality bill, Billing and customer care System, collection options, debt control management, dispute management and their level of effects and relationships on efficiency of postpaid bill of Ethio Telecom.

Key Words*:* Issuance of Quality Bill, Bill collection efficiency, Billing and customer care system, Collection option, debt control, Ethio Telcom

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Telecom operators charging their customers for the communication services they delivered, with two modalities: Post-Billing modalities and Pre-Paid billing modalities. To segregate the customers payments modalities with respect to the subscribed services by customers, the operators deployed billing system to collect the usages and calculate the billings. The billing system consists collection of the communication consumption, record the usage , process payment settlement by the customers.

Telecom services providers need to have advanced billing system which to support rating the customers accurately, and the company to secure their revenue and collect the receivables from their customers. The system that deployed by the telecom operators will processed the usages of the customers appeared on network systems and changed to CDR (call Detail Record). This process may contained, collecting the records of bills from network switches, define the billing rates in respect to the records of usages, analyze the usage and make calculation of the costs related to the bill records, generate invoice and issued to clients of the operators and make collection of the payments.(***Hatem Mostafa (2005)***.

The billing system has to be handled many complex billing scenarios, like package services, Data bundle packages (Voice plus Data Services), Voice bundle Package (data plus SMS), value added services, customized products requested by customers, and ISDN

services related bills. The system need to support new products according to the market need, and has to be flexible for any configuration.

In most Telecom Operators convergent billing system deployed to charge both prepaid and postpaid users. The customer's bill accounts contains all service charges that the delivered by the operators, the charges may include, IDD (International Call), outbound and inbound roaming charges, Broadband data and Internet usages, VSAT services, wireless services internet service protocol(ISP), and other charges, ***(Hunter (2003)***.

As the main activities of telecom companies are providing communication services to their customers, the billing system linked the operators and the services users. Hence, the operators need to have effective systems to bill their customer to smoothen the relations and accelerate the collection time. In most countries the operators are used same features of billing system since the services are the same. Billing is a critical element for the operators to secure the collections and retain customers, hence this study is focused to investigate the post-paid billing practice and its performance of Ethio Telecom.

1.2. Background of the Organization

In Ethiopia, the first telecommunication services has been introduced by Emperor Menelik II in 1894. The first telecom service was constructed from Hrara to Addis Ababa by Emperor Emperor Menelik II. The telecom services was administered by Ministry of Posts Telephone and Telegraph until 1952 and during this time the telecom services expanded to other regions of Ethiopia. With the expansion of the expansion of the telecom services in Ethiopia the company has then separated from the Ministry of Posts Telephone and Telegraph with Proclamation No. 131 of 1952 and become an

independent entity and to continue providing the telecom services without limits. The company name was Ethiopian Telecommunication Authority(ETA) until November 1996. The federal Democratic of Ethiopian government then Established to Ethiopian telecommunication Agency with proclamation 49/1996 and later emended with proclamation No. 281/2002. With the continue enhancement of telecom service in Ethiopia, the Monopoly government owned telecom service Provider, Ethiopian Telecommunication Corporation (ETC) by Council of Ministers Regulation No. 10/1996.

After forty years of services, the old Ethiopian Telecommunication Corporation has been restructured and the new Ethio Telecom was born in Nov 2010. The company was established with new ambitions to fulfilled the telecommunication need based on the Growth and Transformation program(GTP). Ethio Telecom was lead by France telecom with three years management contract and later extended partial of the contract with two years. Ut was lead by Michel Latute and latter by Bruno. After the completion of the contract Ethiopians fully takeover the managements and the campy was led by Ethiopian Dr. Andualem Admassie until July 2018. Below is the Vison and mission of Ethio Telecom.

Source, Ethio Telecom Website.

Vision: - To be a world-class telecom service provider

Mission: -

1. Connect Ethiopia through state-of-the-art telecom services

2. Provide high quality, innovative and affordable telecom products and services that enhance the development of our nation and ensure high customer satisfaction
3. Build reputable brand known for its customers' consideration
4. Build its managerial capability and manpower talent that enables Ethio Telecom to operate at international level
5. Support community and environmental development

Currently the company have 27 divisions with the standardization of Enhanced Telecom Operations Map (eTOM) Business process and lead by Chief executive officer, Ms. Frehiwot Tamru. The company has working for service enhancement and start the new budget year with three years BRIDGE strategic plan (2020-2022), Best customer experience, Reputable brand, Innovative product/service and technology excellence, Develop people oriented learning organization, Growth in financial capacity, and Excellence in operation. The company currently has a total customer base of 43.6M. Its annual revenue was ETB 36.2B and achieved 84% from the target. The company has currently 15,646 permanent employees with 28% and 72% female and male contribution, respectively. (source Ethio Telecom 2011E.C annual performance report).

1.3. Statement of the Problem

Telecom companies need to produce quality bills to keep their customers and increase revenue and collection efficiency. The existing system currently deployed at ethio Telcom is convergent billing System (CBS) and Customer Relation management System (CRM). Customer Relation management(CRM) system used to register new customer, to

make new sales of different products operated by the company, to have access to view the customer profiles in 360 degree, to grant different access to customers. Whereas Convergent billing system (CBS) is deployed to collect the usages from different networks through mediation system, configure different billing tariffs, Rates the customer usage, to generate invoice and ready for payment. The exiting Bill collection report shows that Ethio Telecom is collecting 91.5% of post-paid bills on average on monthly bases. This shows that the 8.5% of defaulted customers which due to different reason. The higher postpaid issuance is for Enterprise customers and the collection may delay due to different factors.(*Ethio Telecom performance report*)

Following the recent political reformation the federal Government decided to open telecom market for international companies and Expression of Interest (EOI) announced by the new Ethiopian communication Agency. Accordingly, Ethio Telecom will be privatized keeping 60% shares and will compute with the additional two operators. Since, the government owned company Ethio Telecom is new for competitive markets, the business may be affected by customer churn to other operators so that excellent service execution required to tackle the coming competition.

Previously different researches are conducted on Ethio Telecom mainly, after sales Service Quality, Call Center service Quality and efficiency, employee satisfaction related but no research conducted related to postpaid bill collection practice which is the crucial factors to keep the customers within the company within the competitive market environment and exceeds collection efficiency.

Currently Ethio Telecom is facing different challenges related to bill Collection practice, Mainly on Issuance of Quality bill, resolving customer bill Complaints timely, inefficient

on effective dunning implementation, lack of payment options, invoice clarity gap and system related issues for management of uncollected bills. With the cause of above issues Ethio Telecom is losing collection of 8.5% on average on monthly bases.(*Ethio Telecom performance report*).

Though, this study is intended to examine the effect of Post-Paid bill collection practice on the performance of Ethio Telecom designed to analyze the main gaps of the bill collection practice in respect to the mentioned gaps on previous paragraph and propose the possible recommendation to improve the efficiency level, hence this is the reason of the researcher aimed to contribute with this study.

1.4. Research questions

1. On what level the Bill Quality affect the bill collection performance of Ethio Telecom?
2. To what level currently deployed billing and customer system in Ethio Telecom affect the bill collection practice of the company?
3. Does the bill Collection option deployed by the company much enough to secure the collection target?
4. To what extent the Debt control management is efficient for exceling ng the billing collection permeance of Ethio Telecom?
5. To What extent he Bill related Dispute affect Ethio Telecom bill collection?
6. How the performance of Ethio Telecom affected by Post-Paid bill collection efficiency?

1.5. Research Objectives

The main objective this research is to examine the effect of postpaid bill collection practice and its impact on the overall performance of Ethio Telecom

Specific objective to:

- To analyze the impact of bill Quality problem on the performance of Ethio-Telecom
- Identify to which level the existing billing and customer care system is support the business of Ethio Telecom to smoothen the collection practice
- To analyze the level of available bill collection options of Ethio Telecom
- To analyze the implementation of debt control management and its impact on the performance of bill collection
- To analyze the impact of complaint on post-paid bill collection performance
- To understand the impact of post-paid bill collection practice on the Ethio Telecom

1.6. Significance of the study

This study is important inputs for Ethio Telecom managements, the researchers and for the academics. The study will have very good values to Ethio Telecom to work strongly on the identified gaps of the collection process, Billing and customer care system related issues, Debt control management, extending collection options and resolving customers disputes timely and exceed the efficiency of postpaid bill collection.

1.7. Scope of the study

As mentioned above the telecom services providers have two billing modalities: Prepaid billing and post-paid billing. With this study, the focus was on post Paid bill collection practices. The study includes the process of Issuance of Quality Bill, the efficiency of the system, the collection management, the effectiveness of managing dunning's, Managing customer complaints related to billing. Making study on both billing practice(Postpaid and Prepaid) will be difficult and the researcher focused on post-paid billing practice only. This because of the average usage of post-paid bill is exceeds by 250% than pre-paid users(recent data) and the collection practice is risky than prepaid since the customers are expected to pay after using the service.

1.8. Limitation of the Study

The study was focused with internal process of Ethio Telecom bill collection practice and the customer voice not considered. And it also focused on post-paid billing practice only and prepaid billing not part of this study, hence the recommendation part of the study will be with respect to the analysis made with internal process of postpaid bill only.

1.9. Organization of the Paper

The content of this paper was arranged with five chapters, the one is Introduction for which the study background, the problem statements, the significance of the study., the scopes and objectives are included. The related literature reviews presented on chapter two of the document whereas the research methodology, conceptual frameworks and reacted data collection methods and sampling techniques discussed on chapter three. The

data analysis & interpterion and conclusion and recommendation presented on chapter four and chapter five respectively.

1.10. Description of key words.

Post-Paid billing Modalities: This types of payment modalities are offered by telecom company for which the customer to pay for services usages after using the services. The customer are expected to settle the payment with the invoice information issued by the company keeping the due date not impact for service disconnection.

Pre-paid Billing Modalities: This is the type of services for which the customer has to make/recharge balance before using the services. here, there will not be any invoice preparation for the customers and the revenue will be realized after the customer using the recharged amount.

Bill Rating: after the customer used the service or during using the service the rating process will be takes place. This is the main steps to the company to cinvert the usage to values and realize revenues.

Payments: After the rating process completed the bill invoice will be issued by the system and ready for collection, so that the customer shall pay the bill based on the invoice history.

Collection Action: Customers will be notified for the monthly invoices and aware them to pay the outstanding with the given due Date before service disconnection. The Dunning process or collection actions includes, notifying customers, taking action i.e.

disconnect the services, and coordinate with legal for court action for defaulted customers.

Bill Adjustment Payment: Bill adjustment is performed to adjust a subscriber's bill charge, account balance, bonus, or free unit. Account adjustment is performed when Charges on bills are incorrect and a carrier wants to provide a discount for subscribers.

Bill cycle: An operator can define bill cycles required to support their business needs. A bill cycle is an interval for charging account for using a service. A bill cycle is a period of time used as a parameter to bill account for using the services within that time period. The bill cycle depends on the marketing policy of carriers including x days, x weeks, x months, yearly, and is usually set to one month

Payment Due Date: The payment due dates can be arranged based on the Bill Cycle. Payment due dates can be defined X days after the bill date.

CHAPTER TWO

LITERATURE REVIEW

2.1. Theoretical Review

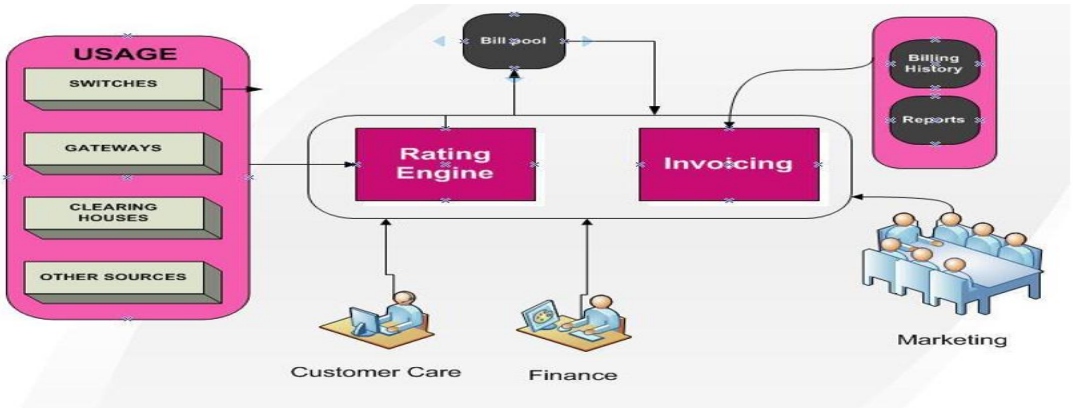
Customers' needs accurate bill invoice to pay their usage fees, so that the telecom operators need to have effective billing system to be able to issue quality bills for their customers. Producing error free bills will increase trust for the company and increase the collection efficiency. This days telecom service is an important needs for day to day transactions as the industries are rapidly growing all over the world. If more than one operators exited, the market share will be high and it creates high computations so that the operators expected to have better bill collection practices to stay on the market. Deploying advanced billing system will be an important factor to retain the customer within the company and reduce customers churn, it will also good for smoothen the collection activities and building of trusts between the users(*Hunter 2005*).

Telecom Service providers monitors all networks switches and other systems related to service provisioning. Based on the communication information recorded on the networks system, the operates will charge the customers. The customers may select the operators based on the network quality and the history of bill clarities and the fulfillment of their communication needs(*Hunter 2005*).

Since the billing is major factors for the company as well as the customers the telecom service provider need to deploy advanced system with full features of flexibility for the products and collection modalities.

Most Telecom service providers have the same Billing and customer care system and provide same types of services and networks (*Hunter 2005*).

Fig 1. Billing System structure



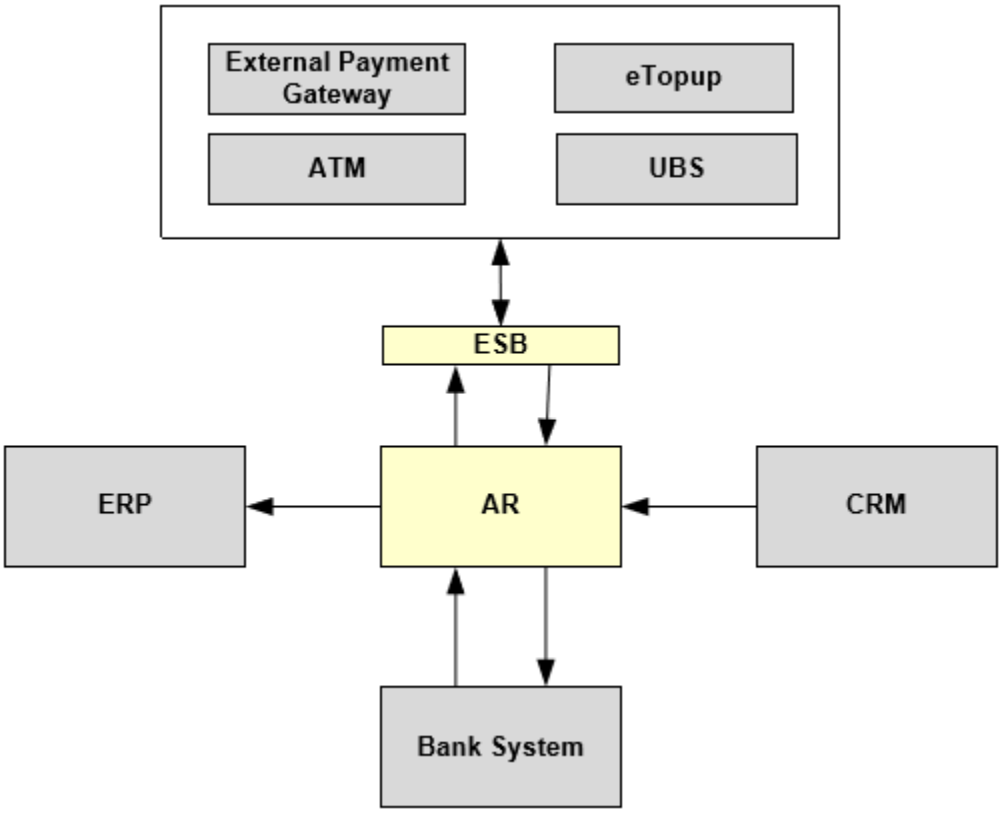
Source: telecommunication convergent billing System. @academia.edu

2.1.1. Telecommunication Convergent Billing(CBS)

Convergent billing system is an important system currently using by many telecom service providers. The system allow to charge both postpaid and prepaid customers and support different complex charging's.

Accounts Receivable (AR) is a payment subsystem of convergent billing system (CBS) that provides the payment, adjustment, transfer, recharge, Payment Reversal, unallocated payment, write-off, refund, dispute, autopay, deposit and late payment fee functions. These functions are implemented in customer service centers and a carrier's financial department. Convergent billing Account Receivable (AR) provides interfaces to connect to the customer relation Management (CRM) system, bank system, payment gateway.

Fig. 2 Interface between CBS-Account Receivable and external systems



Source: Huawei Convergent billing Module

External Payment system: External payment system (Payment Gatewat, e-TOPUP, ATM and UBS) invokes the web service interfaces provided by Account Receivable (AR) to complete payment transaction for the customers.

Bank system: Carriers generally transfer all types of bank data files using FTP. The autopay function enables Account Receivable (AR) to send various requested files to a bank. The bank deducts fees, and then sends back response files to AR for payment confirmation.

CRM: Customer Relationship Management (CRM) can invoke the WebService interfaces provided by Account Receivable (AR) to complete the payment transaction for customers.

ERP: Account Receivable(AR) synchronizes financial related data to ERP via file interface.

Bill Payment application in converged billing system:

- A customer initiates a payment request in a customer service center: A postpaid subscriber uses the payment function provided by AR to pay the bill in a customer service center via cash/Voucher card/Credit card/Debit card/Cheque.
- A customer initiates a payment request in a bank: A postpaid subscriber applies for Autopay in a bank. For detail
- An external system initiates a payment request. A postpaid subscriber uses an external system, for example, the payment gateway, E-care, or ATM, eTopup, to send a payment request to CBS. CBS provides a Web-Service interface for this type of payment request.

Payment scenarios based on different payment purposes are as follows:

- Bill: The billing function generates bills for a postpaid subscriber, which will be sent to AR. AR charges the subscriber based on the bills.
- Advance payment: A postpaid subscriber who does not have any outstanding amounts can pay an advance payment in a customer service center. If a subscriber overpays the outstanding amount, the subscriber can get a change or use it as an advance payment.

- Deposit: A subscriber can pay a deposit in a customer service center

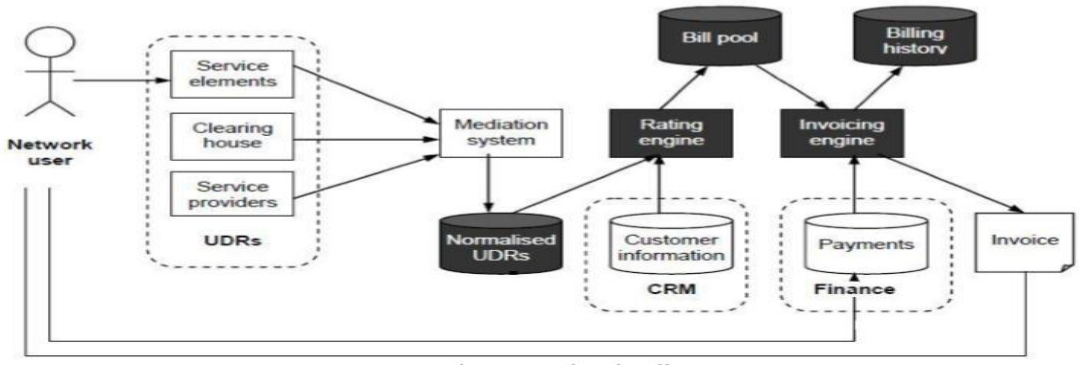
The Convergent billing support all billing operations and most operators used for effectively manage the operations*(Hunter, J. & Thiebaud, M. (2003)*

Convergent billing system support to rate different products and service with all the operation from bill rating and payment collection activities with synching the financial records to Finance system*(Bell, A.T. (2005).*

2.1.2. Billing Process

The real billing process involves Customer Relationship Management (CRM). CRM manages customer-account-subscriber and product subscription information. CRM synchronizes business one-time fee to CBS. Invoicing accumulates CDRs, collects and calculates billing data, and generates unformatted bills. Bill Management Bill Management formats the bills generated by Invoicing(*Maria Reppa, 2008*).

Fig 3: Standard Billing process



Source: telecommunication convergent billing System. @academia.edu

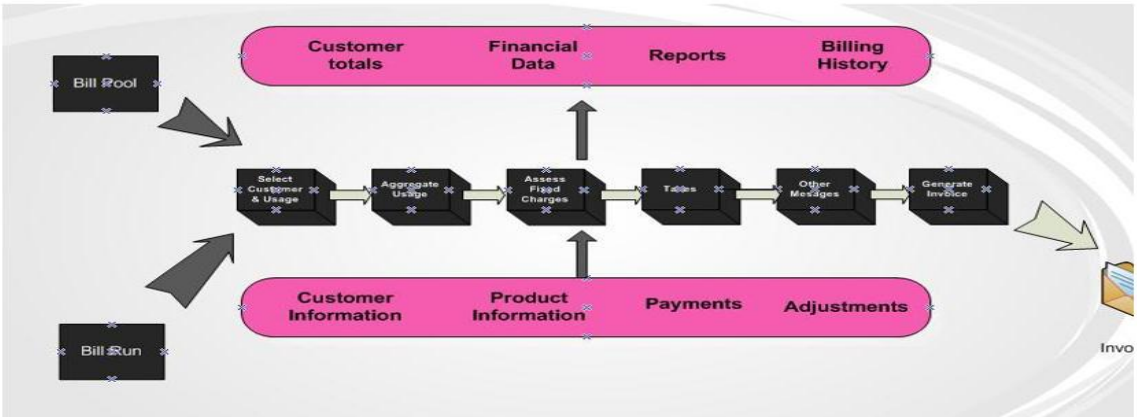
2.1.3. Calculating and Rating Bills

Bill calculation includes account-level incentive calculation, tax calculation, and bill charge creation. Unformatted Bill generation is performed to generate XML bill files based on the bill run result table. Bill formatting converts XML bill files to formatted files, such as PDF, or PCL. Operators can suspend, or resume bill calculation, bill generation, and bill formatting by bill run task. Multiple bill run tasks can be executed at the same time, and one bill run task can be executed by several processes at the same time. Bill run tasks are executed in the liner mode. The linear mode allows a step to be executed even when some accounts failed in the previous step. For example: during subscriber level billing discount calculation, some of subscribers failed because of un-correct customer profiles, but the process continues to process other subscribers other than exit.

After bill calculation is successfully executed for all bill run tasks and the results are correct, financial administrators perform bill run confirmation on the interface. Bill run confirmation is not dependent on bill generation and bill formatting. After bill run is confirmed, outstanding data is sent to AR, and reward data is sent to Rating. Bill run tasks cannot be undone or redone after confirmation. Bill run can be confirmed by account segment, so there may be multi confirmation for a bill cycle. Bill run confirmation can be redone for failed accounts. Rating calculates recurring fees and generates rated call detail records (CDRs) and supports an integrated recurring charge process for offering *(Source Huawei Bill Rating process, 2015), (Bihina Bella, University of Pretoria)*

2.1.4. Invoicing

Figure 4. Invoicing



Source: telecommunication convergent billing System. @academia.edu

As a subsystem of Convergent Billing System (CBS), Invoicing manages billing information about postpaid subscribers.

Invoicing provides the following functions of *Real billing;* After a bill cycle ends, Invoicing calculates fees generated in the bill cycle for postpaid subscribers and generates bills. The fees include monthly rentals, service usage fees, and incentives.

Test billing, Manual or automatic test billing is performed before real billing to detect potential bill run problems. *Hot billing*, Before a bill cycle ends, Invoicing executes a real-time bill run and generates a bill if requested by a postpaid subscriber. For example, Invoicing executes hot billing when a postpaid subscriber applies for hot billInvoicing is only for postpaid subscribers. Invoicing includes features of CDR process (CDR accumulation, CDR loading, CDR dispatching, error CDR processing), Real bill , bill incentive, bill sum statement, calculating rebates, bill hold, test billing, sampling billing and hot billing(*(Bell, A.T. (2005)*

2.1.5. Debt collection

Debt Collection provides the collection action function. When Invoicing executes bill run, Accounts Receivable (AR) synchronizes outstanding invoices to Debt collection action. Then Debt Collection generates collection objects such as customers, accounts and invoices for overdue outstanding invoices based on the collection object selection rules and assigns the collection objects to the corresponding collection groups. A collection group is associated with a collection plan. Each collection plan contains multiple collection policies. Each collection policy specifies the time plan for executing collection actions. DC generates collection instances and orders based on collection actions in collection policies. Then DC generates external orders based on the collection orders and executes them to notify external subsystems.

2.2. Empirical review

As the researcher observed from different sites, there is no research conducted related to Telecom bill collection practice for which it is a critical element of the telecom operators. In 2004 one survey was conducted related to Telcom charging management by The world's largest technical professional organization for the advancement of technology(IEEE). The study states the telecom billing has different business models and affected by different network systems, hence this indicated the bill collection can be affected by with network functionalities which leads for customer dissatisfaction and complaint.

2.3. Research Gap

From the literature review, the researcher understood that there is no research made related to Telecom Bill collection activities. The researcher observed a gap for Bill collection management from the staff and customers, so that this gaps intended to study on examining bill collection practice of Ethio Telecom.

2.4. Conceptual Framework

Conceptual framework summarizes that, Issuance of Quality bill, Billing and Customer Care System, Collection options, Debt control, and Dispute Management to examine the efficiency of of postpaid bill collection.

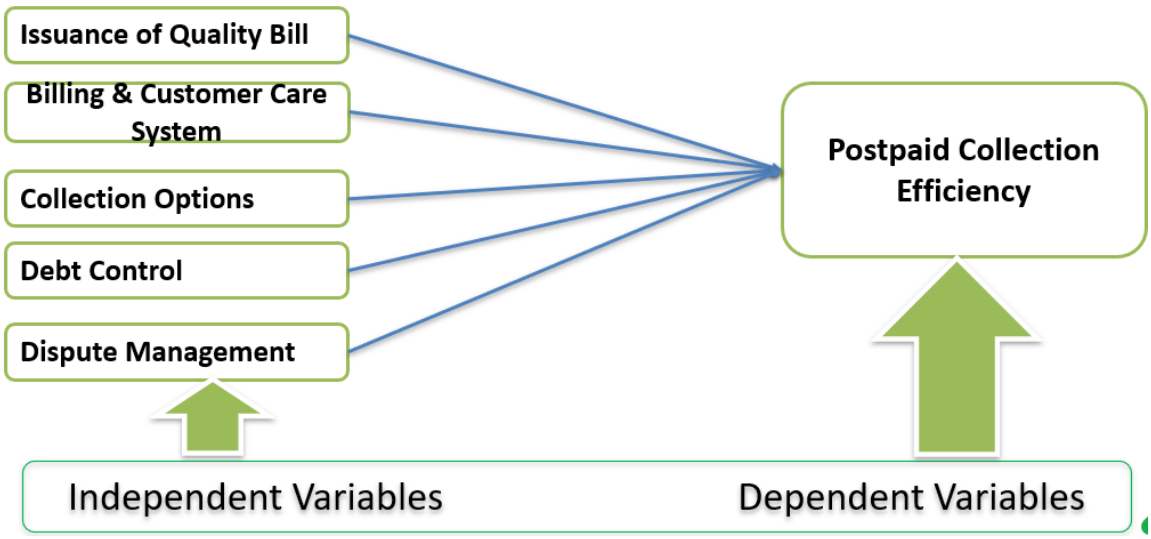


Fig 5. Conceptual framework (Adopted from Grace Wambui Kamau(2012)).

2.5. Summary of literatures and related gaps

The researches didn't find enough literatures related to subject of the studies, but from the finding, deploying effective Billing system will control effectively the overall practice of bill collection activities. Nowadays, telecom service is essential for day to day activities and customers will choice the carriers based on the service quality and the billing aspects, so that the service provider need to deploy effective bill collection practice to keep their customers and increase revenue, hence this study's aims to analyze the gap related to the billing management and propose possible improvement areas.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1. Description of the study

This research was focused on examining post bill collection practice of Ethio Telecom and the study was conducted on Billing and Credit Control section and Bill Complaint Management section of Ethio Telecom customer service division and Billing operation team of information system division. This was because of the section were engaged in Managing, dispute handling and production of ethio telecom bill respectively per sections. All job level of staff were participated on the study to analyze the bill collection practice.

3.2. Research approach

The researcher used quantitative approach to examine the effect of bill collection practice of postpaid bill. This approach applied to investigate the cause and effect of the variables with respect to the survey and instruments. For the study the two sections, Billing and credit control Section and Complaint management selected for the study purposefully since both are engaged to manage the bill collection activities.

3.3. Research Design

To have accurate and reliable picture of the study output, the researcher used explanatory research approach and descriptive approach was also employed.

Explanatory research design used for the study, which provides an accurate and representation of the factors that are relevant to the research question. The descriptive survey involves acquiring information about one or more groups of people asking them questions and tabulating their answers (*Anol (2012*). Explanatory or analytical research aims to understand phenomena by discovering and measuring causes and effect relations among them. The research used quantitative method to gather the most appropriate data to answer the research questions.

3.4. Population and sampling

Since the study was conducted in two selected sections (Billing and Credit Control and Complaint management section) the researcher used purposive sampling methods. According to (*Engel & Schutt, 2009)* purposive sampling Is used when the researcher study on the specific areas. Hence, from this perspective staff were engaged from Billing operation section, complaint management section and Billing and Credit control sections which were a total 305 staff.

3.5. Sampling Techniques and size

From the total population of 305 employees of the three sections, 173 sample size identified as per the suggested basic formula of *(Yemane 1967).* According to him the following formula used to calculate the sample size with 95% confidence level and $\boldsymbol{p}$=0.5

$$n = N/1 + (e)^2$$

- Where n is the sample size,
- N is the population size,
- **e** is the level of precision

3.6. Data Source and Types

Primary data source was used which had collected with detail questionnaire and also information from literatures acquired from different sources.

3.7. Data collection Techniques

The data's were collected with online questionnaire using Google survey module. The questionnaire was designed covering all bill related activities, the collection options approaches, system related, Debt collection management and dispute management with respect to those section, Billing and Credit Control, Billing Operations and Complaint Management sections.

3.8. Ethical consideration

The information collected from the respondents will keep its confidentiality and will used for this study only. Based on the collected data the researcher recommended the possible solution the company to have effective billing practice and was secured for this purpose only.

The researcher was not challenged the respondents fillings while filling the questionnaire. All the recommended points and analysis was done professionally and no other factors and personal biased affect the output of this study.

3.9. Methods of Data Analysis

For the analysis and interpretation of the data's the researcher employed Statistical package for social Science (SPSS) version 20. Based on the Questionnaire results the frequency mean, standard division was analyzed with the SPSS software. Other and analysis, Correlation and regression analysis also analyzed to know the cause and relations between the independent variables (Issuance of Quality bill, Collection Options, Debt collection Policy, Billing and Customer Care system and dispute management) and dependent variable i.e. collection efficiency of postpaid bills. The researcher used descriptive statistics to analyze and present the demographic data.

CHAPTER FOUR

RESULTS AND DISCUSSION

This section explained the analysis of the data, the findings of the researches in related to the post-Paid bill collection practice of Ethio-Telecom. The demographic related information of respondents data, the gender distributions, the job or occupation of the respondents, education levels of the respondents, were discussed respectively. The descriptive statistics, regression analysis and correlation analysis result also discussed in detail.

The total population targeted for the study were 173 from the Ethio Telecom Customer service division and Information division staff who engaged on billing process activities. From the total expected respondents 148(85.55%) of them were responded the questionnaire fully. The questionnaire were collected through online system using google questionnaire form due to the current pandemic COVID-19 issues. 25(14.55%) of Expected respondent didn't reply for the questionnaire due to different reasons. While filling the online questionnaire, restriction was made the respondents not to jump the questions and not to fill more than one.

Accordingly, with respect to the 148 (85.55%) respondents, the analysis conducted using Statistical package for social Science (SPSS) software.

4.1. Reliability Test

The research conducted on customer service division Billing and Credit Control Section and Complaint management section and the questioner were sent to staff using group email and the staff responded accordingly. To evaluate the consistence of the research result, reliability test must be conducted*(Mohajan 2017).* As per the suggestion of *(Kothari, 2004)* the reliability test was conducted using Cronbach's Alpha. The reliability test report was done using Statistical package for social Science/SPSS and the result shows 0.878 which is high reliable(Table 4.1), the study was passed the reliability test.

Table 4.1. Reliability Statistic

Reliability Statistics	
Cronbach's Alpha	N of Items
0.878	6

Source: Own Research Result, 2020

4.2. Data Processing

The researchers exports the respondents result from the online questionnaire using excel file and uploaded to SPSS version 20 package. Accordingly; the system analyzed all the data, frequency distribution, descriptive analysis, correlation and regression analysis proceed with SPSS software and the result presented below case by case.

4.3. Respondents for demographic related Questions

4.3.1. Age of Participants

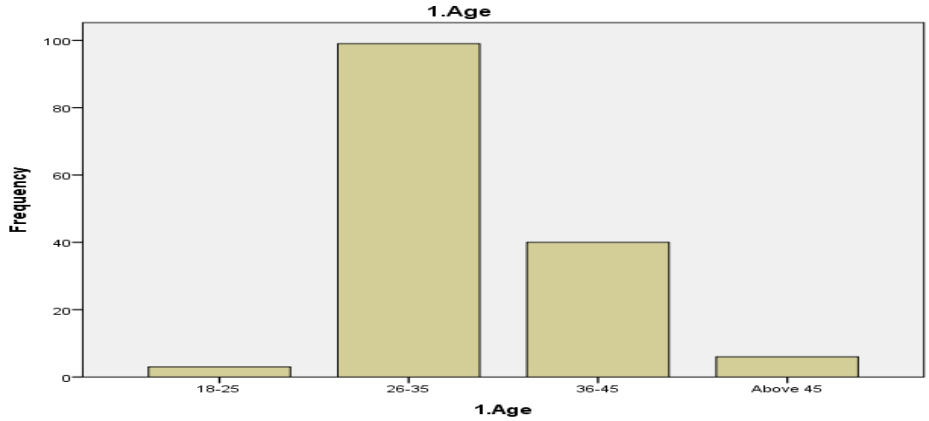
As per SPSS result, from the total respondents of 148 participants 102(71.3%) of them were on the middle ages from 18 to 35, where the rest respondents were above 36 ages which are 46 respondents and covers 31.07% from the total participants. From the result we concludes are all ages group were represented Fairley.

Table 4.2: Age

Age Group	Frequency	Percent	Cumulative Percent
18-25	3	2.0	2.0
26-35	99	66.9	68.9
36-45	40	27.0	95.9
Above 45	6	4.1	100.0
Total	148	100.0	

Source: Own Research Result, 2020

Fig.5. Graphical Demographic respondent, Age of Respondent



4.3.2. Gender Participants on the Questionnaire

From the system result the distribution of genders were almost similar, for which Female representatives covers 72 (48.6%) of the total responds while Males representatives covered 76(51.4) of the total respondents (Table 4.3).

Table: 4.3. Gender of Participants

Gender	Frequency	Percent	Cumulative Percent
Female	72	48.6	48.6
Male	76	51.4	100.0
Total	148	100.0	

Source: Own Research Result, 2020

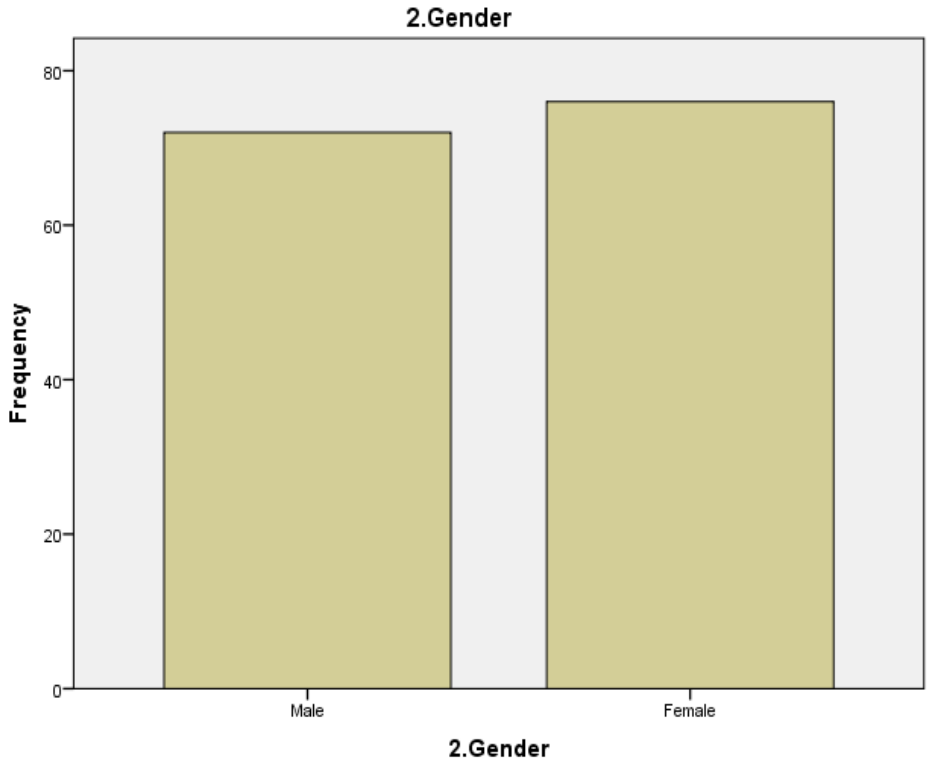


Fig 6: Graphical presentation of Gender Respondents

4.3.3. Participants Educational level

The Questionnaire were included the education level from Diploma to Masters level of education. Accordingly all of education levels represented on the response and of which the highest respondents were Bachelor's Degree holders which covers 76 (51.4%)represented and the Master's Degree level of respondents were 70(47.3%) of the total respondents while diploma holders were 2(1.4%). This implies the highest degree of respondents were Bachelors and Masters level which is good to have better result on the study.

Table: 4.4. Educational level

Education level	Frequency	Percent	Cumulative Percent
Diploma	2	1.4	1.4
Bachelor's Degree	76	51.4	52.7
Master's Degree	70	47.3	100.0
Total	148	100.0	

Source: Own Research Result, 2020

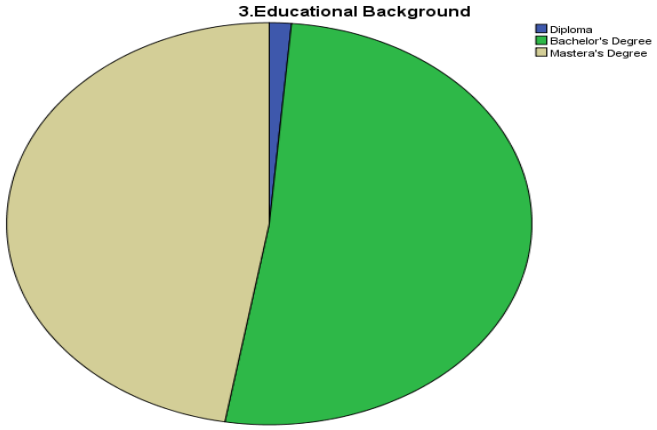


Fig 7. Graphical Presentation of Educational Back ground

4.3.4. Respondents Job Classification

The researcher tried to includes all job level of Ethio Telecom customer service staff , accordingly as per the result from the data, almost all level of occupations were fairly represented according to the level of head counts. Table 4.5 shows that, 114(77%) of the employees are advisory level position respondents, supervisory level positions were 29(19.6%) representatives while a=Mangers and Above managers covers 5(10.45%) from the total respondents.

Table: 4.5. Job Classification

Occupation	Frequency	Percent	Cumulative Percent
Advisor/Specialist	114	77.0	77.0
Supervisor/Coach	29	19.6	96.6
Manager	3	2.0	98.6
Director and Above	2	1.4	100.0
Total	148	100.0	

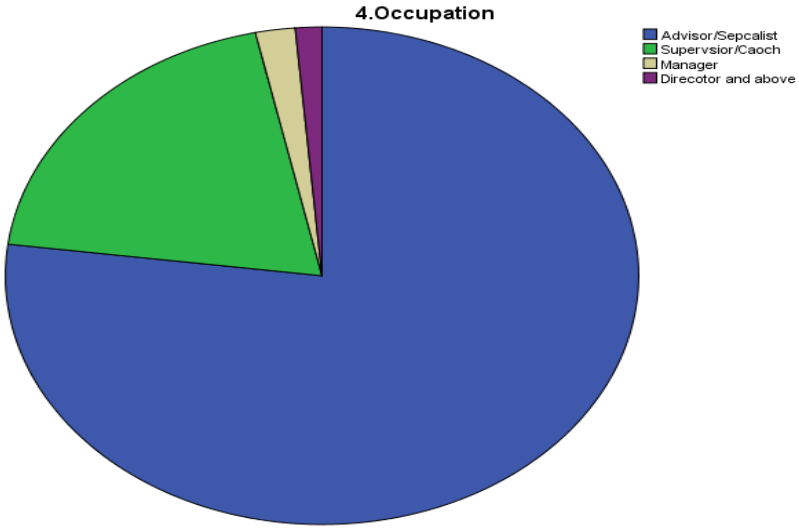


Fig 8. Job Classification

4.4. Descriptive Statistics of the Variables

Descriptive statistics results shows the average response of the participants on the survey which is represented by mean values. The standard deviation also presented here to show how much is the deviation between the mean values, the was understood with the value of the standard deviation results. If the standard deviation values smellier than the mean the result indicated the close opinion of the respondents, while if it is high compared to mean the result shows with high variation.

Hence, from the result presented on Table 4.6, the mean value average is 3.4168 and the variables mean us ranging from 3.3074 to 3.5405. From this we understood that the independents variables contributes to affect the collection performance while the average means depicted that dependent variables, post-paid bill performance contribution is high for the company if the independent variables effectively managed.

Table 4. 6. Descriptive characteristics of the variables

Variables	N (Total)	Minimum	Maximum	Mean	Std. Deviation
Issuance of Quality bill	148	1.50	4.75	3.3074	.69991
Billing and Customer care System	148	1.50	4.75	3.3598	.78150
Collection Options	148	1.50	5.00	3.4527	.75669
Debt Control Management	148	1.75	4.75	3.3514	.72600
Dispute Management	148	2.00	5.00	3.5405	.65339
Post Paid bill Efficiency	148	1.50	4.50	3.4890	.62388

Source: Researcher Own Works, 2020

4.4.1. Description of issuance of Quality Bill

The below analysis result shown the mean value of Issuance of Quality bills related question. Accordingly from the result of 48 respondents, the mean values is between 3.20 and 3.37 and its average value is 3.3075, this implies the response of the respondents are almost moderate and Ethio Telecom need to review the gaps related to issuance of Quality bills.

Table 4.7: Explanation of issuance of Quality bill

	N	Mean	Std. Deviation
Bill Quality check has been conducted on each billing cycles before issuance to customers	148	3.33	.958
There is no ambiguity on clarity of billing tariffs and rating	148	3.37	.935
The bill rating and the tariff always the same and no difference observed	148	3.33	.936
Always there is no problem in issuance of quality bill observed which leads to uncollectible risk.	148	3.20	.938
N (listwise)	148		

Source: Researcher Own Works, 2020

4.4.2. Description of Billing and Customer Care System

Here to show the description statistics of the system and accordingly the result shown he average mean of 3.3598 which implies Ethio Telecom to work strongly on the system enhancement. The mean values represented between 3.2973 and 3.4459, which indicate the reasonable results.

Table 4.8: Explanation of Billing and Customer Care System

	N	Mean	Std. Deviation
The Billing and Customer Care system is always flexible for new revenue stream	148	3.2973	1.01993
The Billing and Customer Care system is controlling the collection activities as required level	148	3.3919	1.08568
The Billing and Customer Care system support to generate unbilled product and services	148	3.3041	.95232
There is reconciliation parameter on collection history of different products	148	3.4459	.96386
N (listwise)	148		

4.4.3. Collection Options Description

The average mean value of collection options related question shown 3.452725 which implies better than all variables but still moderate, and indicated Ethio Telecom to maximize collection operations across the country. Table 4.9 depicted that the mean of the payment options related questions are ranging from 3.3514 to 3.5270, so that moderate result and the participants assumption was almost same om each parameters.

Table 4.9: Description of Collection Options

	N	Mean	Std. Deviation
The available collection options are addressable for all customers	148	3.5068	.96536
All collection options are Friendly and error free	148	3.3514	.98191
No collection Risk on all commercialized collection options of Ethio Telecom	148	3.4257	.95541
Currently deployed collection options on Ethio Telecom fulfilled to maximize the collection performance	148	3.5270	1.01315
N (listwise)	148		

4.4.4. Description of Debt control Management

Debt control related Question designed to know the debt control implementation status, the effectiveness and its impact, accordingly from the mean result shown the average of 3.35135 and the mean is ranging between 3.2838 and 3.4797, which implies the moderate result and Ethio Telecom expected to work more for implementation of dunning for better collection efficiency (Table 4.10)

Table 4.10. Explanation of Debt Management Policy

	N	Mean	Std. Deviation
Debt collection has been applied for all postpaid services	148	3.3378	1.00714
Ethio Telecom exercises effective debt collection parameters to maximize collection performance	148	3.3041	.98048
Ethio Telecom have flexible debt management policy	148	3.2838	.90381
Credit Control/Credit limit is a crucial system to control uncollectible risk	148	3.4797	1.01331
N (listwise)	148		

4.4.5. Descriptions of Dispute Management

Bill Dispute may be raised due to different reason, may be for issuance of wrong bill, surprise billing, service disconnection due to disputed amount and the like, accordingly the questionnaire was developed to answer the question to the impact level of bill complaint on bill collection activities, Hence, accordingly the result shown on below Table 4.11, the mean value of related questions falls between 3.41and 3.85, The highest mean for the impact of addressing bill complaint timely, for which the staff replied as if the complaint addresses timely the collection efficiency will also increase. Hence, Ethio Telecom need to access the problem why the bill related complaints are delayed to be resolved timely and take appropriate action to exceed collection efficiency.

Table 4.11: Description of Dispute Management

	N	Mean	Std. Deviation
The dispute related to postpaid services are affected bill Collection	148	3.47	1.013
Most of the time there is a challenge to address bill related disputes timely.	148	3.44	1.005
The collection impact related to bill dispute is very low	148	3.41	.917
Quick Dispute resolution will increase postpaid collection performance	148	3.85	1.096
N (listwise)	148		

4.4.6. Description of collection efficiency of Postpaid bill

This to show the response level of the respondents of the efficiency of postpaid bill status whether to know the overall performance level us at required level and other performance related issues, Hence, from the result the average mean of the permeance indication is 3.4900 which shows Ethio Telecom to work strongly to increase the level of postpaid performance with effective management of dispute Handling system implementation, timely complaint management, availing collections options and with effective collection policy implementation i.e. dunning(Table 4.12)

Table: 4.12: Description of Postpaid bill Efficiency

	N	Mean	Std. Deviation
Overall, the collection efficiency is as required level	148	3.37	.978
There is no uncollectible risk of postpaid bills collection @Ethio Telecom	148	3.39	.987
The top Management members support is as required level to meet the collection efficiency of post Bill	148	3.55	.992
The performance of bill collection can affect the company cash follow highly	148	3.47	.929
I feel, efficiency of post-paid bill can be increased with the issuance of error free bills	148	3.47	.965
I did feel that existing Billing and customer Care System is good much enough for controlling postpaid bill.	148	3.57	.905
The bill Collection section actively engage to increase the postpaid collection efficiency	148	3.44	.920
I feel good for efficiency of arrears bills which is managing as required level	148	3.66	.988
N (listwise)	148		

4.5. Correlation Analysis

To analyze the relation between dependent and independent variables and among variables correlation test conducted.

The value of correlation coefficients are between (-1) and 1, for which the correlation among variables negatively or positively correlated, while if the result is 1, the correlation among variables shown positively corelated. (Asuero 2006), classifies the relation among variables as stated in below Table 4.13.

Table 4.13: Correlation values among variables

Correlation Among Variables	Correlation Indication
If the correlation result falls in to zero	The correlation between the Variables are no correlation or zero correlation
If the correlation result depicted from 0.1 to 0.290	The relation shows few between variables
If the result of collection between o.300 and 0.4900	Shows little correlation among variables
If the correlation result falls between 0.500 and 0.6900	The reaction ship between variables shows moderate
If the result of correlation between 0.700 and 0.900	This indicates high correlation
If the correlation results 0.900 to 1.000	Indicates very high correlation

Source, Asuero 2006, correlation between Variables

Form the study, the SPSS result presented on below Table 4.14 indicated that the correction between dependent and independent variables are all positive and moderate relationship according to Asuero 2006 model. As shown on the table, the correlation between Quality of Bill and Collection Efficiency of postpaid bill is 0.616, the Relation between System and Collection Efficiency of postpaid bill is 0.584, the correlation between collection options availability and Collection Efficiency of postpaid bill is 0.645, collection Efficiency between debt collection management and Collection Efficiency of postpaid bill is 0.639, the relation of Dispute management and Collection

Efficiency of postpaid bill is 0.648, all shows the moderate correlation among the dependent and independent variables.

Table 4.14. Correlations between Dependent and Independent variables

Correlations

		BQ	BSY	PON	DUNM	COMM	PPER
Issuance of Quality bill	Pearson Correlation	1	.585**	.497**	.503**	.499**	.616**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	148	148	148	148	148	148
Billing and Customer Care System	Pearson Correlation	.585**	1	.637**	.512**	.311**	.584**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	148	148	148	148	148	148
Collection Options	Pearson Correlation	.497**	.637**	1	.605**	.451**	.645**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	148	148	148	148	148	148
Debt Control	Pearson Correlation	.503**	.512**	.605**	1	.534**	.639**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	148	148	148	148	148	148
Dispute Management	Pearson Correlation	.499**	.311**	.451**	.534**	1	.648**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	148	148	148	148	148	148
Efficiency of Postpaid Bill	Pearson Correlation	.616**	.584**	.645**	.639**	.648**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	148	148	148	148	148	148

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

Source: Researcher Own Works, 2020

4.6. Regression Analysis

To know the impact level of the independent variables on the dependent variables, regression analysis has been tested. The multicollinearity test, The Variance inflation factor (VIF) , Tolerance level, normality test and linearity test was conducted to be assure on the data before conducting regression analysis. Statistical packages for social since (SPSS) used to analyze test and to know the cause and effect between variables with linear regression analysis model.

4.6.1. Common Assumption Test:

Below are the common assumptions tests of linear regression done on this study.

4.6.1.1. Multicollinearity Assumption Test

Here the relation between dependent variable (Collection efficiency of postpaid bill) and the independent variables issuance of quality Bill, Customer care System, Collection options, collection Policy, dispute management analyzed and presented the result.

The Variance inflation factor ((VIF) and Tolerance used to analyze the multicollinearity between independent variables. If the Variance inflation factor (VIF) value more than 10 and the tolerance level below 0.1. there exist multicollinearity problem*(Cochran,1977).*

Table 4.14. Correlations among variables

Variables		Collinearity Statistics	
		Tolerance	VIF
	Issuance of Quality Bill	.537	1.862
	Customer care System	.480	2.085
	Collection Options	.471	2.122
	Collection Policy	.518	1.931
	Dispute Management	.618	1.617
a. Dependent Variable: Postpaid bill collection efficiency			

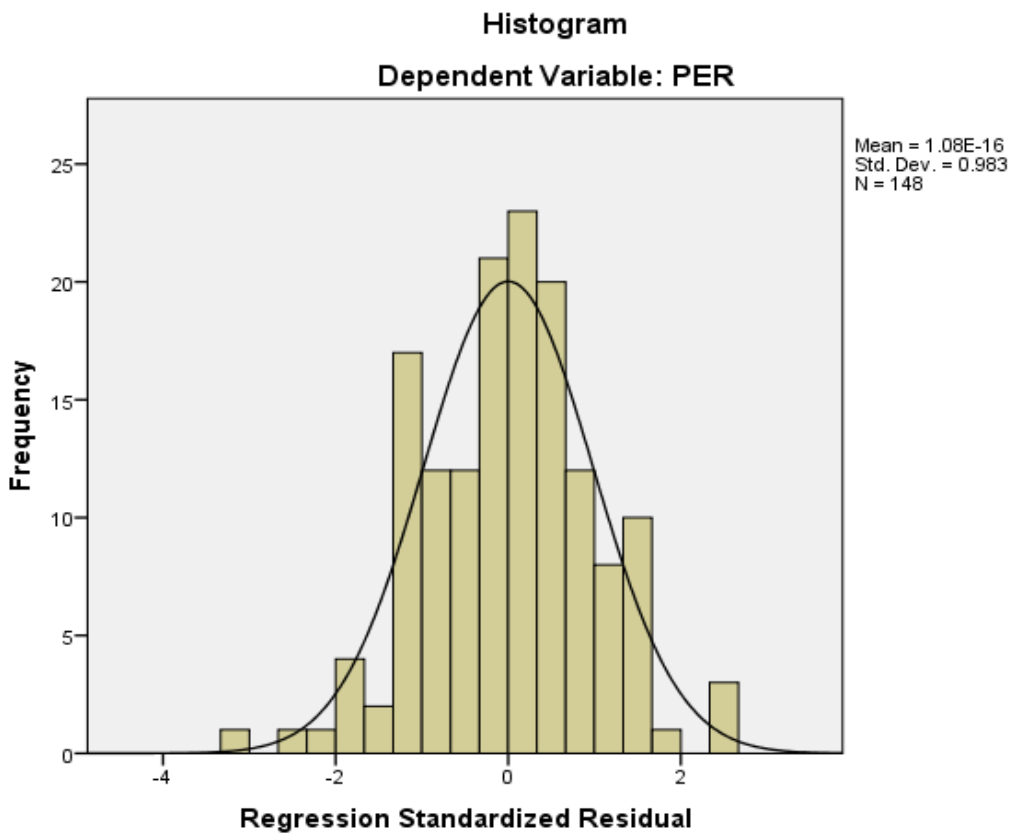
Source: Researcher Own Works, 2020

As per the result of multicollinearity test the Variance inflation factor (VIF) of independent Variables, Issuance of Quality Bill, Customer Care System, Collection Options, Collection policy, and dispute managements are below 10 while the tolerance result of all Independent variable is also below above 0.10 which implies the fulfilment of multicollinearity assumption test.

4.6.1.2. Normality Test for Residuals

From the Figure 5 below, the normality test of the residual distributed normally and the Bell-Shaped histogram result, which indicated the residuals are distributed normally. Hence, the study Qualify the normality test assumption.

Figure 5: Assumption of Normality Test

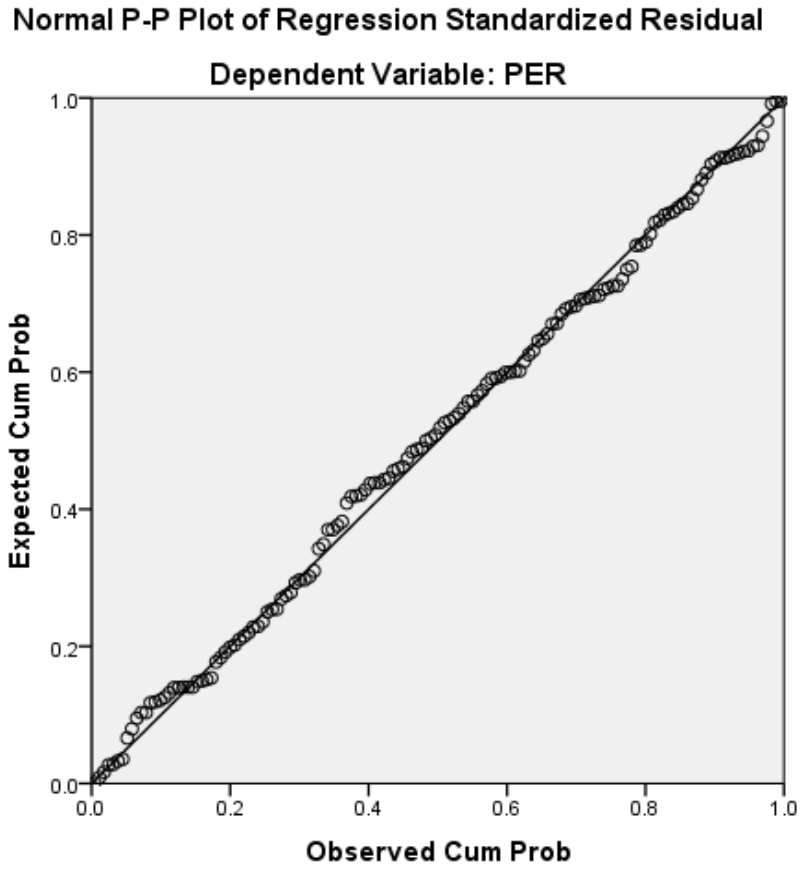


Source: Own Research Result, 2020

4.6.1.3. Linearity Test

Linearity test conducted to show the relation between the degree of changes in dependent variables are related with the change in independent variables. This is to test the dependent variable Collection efficiency of Postpaid bill, and independent variables issuance of Quality bill, Billing and Customer Care System, collection options, collection policy and dispute managements are linear with test using normal probability plot of the residuals. Though the below diagram , Fig 6 indicated that the P-P plots approximately falls very close to the diagonal line, this indicated the study appropriately fit the linearity assumption model

Figure 6: p-p plot of regression



Source: Own Research Result, 2020

4.6.1.4. ANOVA Model fit

Table 4.16: Model fit [ANOVA[a]]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.424	5	7.485	53.699	.000[b]
	Residual	19.793	142	.139		
	Total	57.217	147			
a. Dependent Variable: Postpaid bill collection efficiency						
b. Predictors: (Constant), DM, BCS, DC, BQ, CO						

Source: Own Research Result, 2020

ANOVA model is conducted to understand the degree of linear relation between the independent variables, The independent variables, Issuance of Quality of Quality Bill, Billing and Customer Care system, collection Options, collection policy and dispute management and the dependent variables Collection efficiency of Postpaid bill. from the result of AOVA model test above in Table 4.16 the significant values is 0.000 which is less than 0.5 hence the model is fit for this study.

4.7. Regression Result and Discussion

To measure the variance of dependent Variables and the averages of means that explained the predictors or independent variables, Adjusted R Square used from the regression model*(Saccani, 2007).* Hence from the below Model Summary Table (table 4.17) the adjusted R Square is 0.642 which shows the independent variables, Issuance of Quality bill, billing and Customer Care system, collection options, collection policies and dispute management explained the dependent variable, i.e. Collection efficiency of Post-Paid bill. the determined that the collection efficiency of postpaid bills are impacted by the by those independent variables by 64.2% while the other factors impacted the efficiency by 35.8 which were not part of this study, so that additional research required to know the factors that affected the collection efficiency of Ethio Telecom.

Table 4.17: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.809a	.654	.642	.37334
a. Predictors: (Constant), Complaint Management, Billing System, Dunning Management, Bill Quality Check, Payment Option				
b. Dependent Variable: Postpaid bill collection efficiency				

Source: Own Research Result, 2020

From the beta coefficient result below (Table 4.18) the independent variables factors Issuance of Quality bill, Billing and Customer Care System, collection Options, Collection Policy, dispute Management, constant at 0, the collection efficiency of postpaid bill become 0.364. While if Ethio Telecom improved the issuance of Quality bill, the collection efficiency will be increased by 0.150, if Ethio Telecom improved on Billing and customer care System the collection efficiency will be increased by 0.132, if Ethio Telecom improved on availing Collection options, the collection efficiency will be increased by 0.169, if Ethio Telecom improved on Debt control (collection actions) the collection efficiency will be increased by 0.146 if Ethio Telecom improved on Managing disputes the collection efficiency will be increased by 0.315. This indicated that the collection efficiency of postpaid bill affected by Dispute Management highly than other variables, Collection Options, Billing and Customer care System, collection policy and issuance of Quality bills, hence Ethio Telecom need to work highly for the improvement of managing disputes.

For the significant level assessment result, the dispute management has high significant level which is 0.000, Collection Options at 0.005 significant level, issuance of Quality bill at 0.014, Collection policy(Action) at 0.015, billing and Customer Care at 0.022, hence form the significant level of assessment result, Dispute management still has high significant so that Ethio Telecom need to focus on handling disputes timely.

However, for the analysis made by statistical Package for Social Science (SPSS) showed that the Collection of Post-paid bill is affected at 0.05 level of significant with the variables of issuance of Quality Bill, Billing and Customer Care system, collection options, collection actions and dispute Management. (Table 4.18

Table 4.18: Beta Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	.364	.195		1.869	.064
	Issuance of Quality Bill	.150	.060	.168	2.493	.014
	Billing & CC System	.132	.057	.165	2.321	.022
	Collection Option	.169	.059	.205	2.850	.005
	Debt Control Management	.146	.059	.170	2.474	.015
	Dispute Management	.315	.060	.329	5.249	.000

a. Dependent Variable: Postpaid bill collection efficiency

Source: Own Research Result, 2020

CHPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Summary of Major findings

The objective of the study was to examine the effect of Pots paid bill collection practice on Ethio Telecom permeance. The researcher used explanatory research design and the population were from Ethio Telecom customer service division of two sections, Billing and Credit Control Section and Compliant Management section and from IT Operation department, Billing Operation team participated. Accordingly responses were collected from 148 employees the two sections. With respect to the research objectives, the major findings from the research is presented below.

From the total Respondents of the targeted population, the respondent level with respect the gender representative, 72 (48.6) Respondents were females representative whereas the 76(51.6%)respondents Male category. Related to the education level respondents 76(51.4%) and 70(47.3%) of the respondents were bachelor's degree and Master's degree holders respectively while the rest of respondents 2 (1.4%) employee were diploma holders. As mentioned above the participants on the survey was from Billing and Credit Control Section, Complaint Management section and billing operation section for which the exact representative to evaluate the bill collection practice of Ethio Telecom.

From the correlation result of the finding shows that the relationship between dependent Variables (Bill Collection efficiency of postpaid billing) and the independent variables

i.e. Issuance of Quality Bill, Billing and Customer Care System, Collection options, collection Actions, and dispute management are positive and moderate. The detail result of the Correlation analysis are presented below:

The correlation between issuance of Quality bill and Collection efficiency of postpaid bill is significantly correlated at 0.616 and it is positive correlation. The Correlation between Billing and customer care system and efficiency of postpaid bills are positive and moderate at significant level of correction 0.584. The correlation between collection options and efficiency of postpaid bills are positive at significant level of 0.645 which is strongly correlated. The correlation of collection actions and efficiency of postpaid bills have significant correlation at 0.639 which is positive and moderate relation. The correlation among Dispute management and efficiency of postpaid bills have positive relation at 0.648 which is the highest value of correlation from other Variables(Table 4.14).

From the regression analysis the finding depicted that The independent variables, Issuance of Quality Bill, Billing and Customer Care system, Collection Options, collection actions and dispute management affected the collection efficiency of postpaid Ethio Telecom bill by 64.2%. the other factors of elements which affect the collection efficiency covered 35.80%. from the regression result we found that that the independent variables stated on this study affected 64.2% where us the others factors affected 35.8% so that additional research required to sort out those external and internal factors. This may support the company to know the factors and improve the collection practice across the country.

5.2 Conclusion

Telecom service providers are expected to have efficient bill collection management after delivering communication services, so that the collection risk will be reduce and the company will collect the bill as soon as issuance of the bill. As the main reason of studying this research is to examine bill collection practice of Ethio Telecom, accordingly the following conclusion summarized as per the analysis and research findings.

With respect to the respondents education profiles 98.64% were Bachelors and Master's degree holders , and their Job Classification were Specialist/Advisory , Supervisory, managers and Above managers level positions, which indicates the respondents were with required level of education and their inputs were with better knowledge of bill collection practice. from the analysis result of correlations, the relation between the dependent variable (Collection efficiency of postpaid bill) and independent variables((Issuance of Quality Bill, Collection Options, Billing and Customer care system, collection policy and Dispute Management) shown positive relation and therefore working on effective system deployment and effective management of other practices will increase the efficiency of postpaid bills of Ethio Telecom. From the result of regression analysis all the conducted test of models indicated that the significant impact of independent variables for bill collection efficiency.

As a conclusion working hard on improvement of independent variables, with issuance of quality bills with effective rating process, by deploying advanced standard of billing and

customer care system, by availing different options of payment modalities, by implementing effective collection policies and receivables management, and addressing customers complaint timely and efficiently, will increase the efficiency of postpaid bill collection. Hence, the complaint management section and Billing and Credit Control Section of Ethio Telecom need to work more accordingly to meet the required collection targets.

5.3 Recommendations

The government owned Telcom operator in Ethiopia, Ethio Telecom need to look to have efficient bill collection practice. The contribution of this study will be good input for Ethio Telecom to improve the bill collection practices as the researched was understood from the analysis and findings. from the detail analysis and finding the following recommendation proposed to Ethio Telecom to work on it and meet the its targets.

Improvement recommended on Issuance of Quality bills to customers

- Telecom operators expected to produce Quality of bill to their esteemed customers. Since Billing is a crucial factors for the customers and the company as well, and as per the study findings of the mean value stated on Table 4.5 of chapter four, the value shows Ethio Telecom to work aggressively for improving the issuance of quality bill, this will contribute for the Increment of collection efficiency of postpaid bill and will also good to retain the customers. To this, the company must fill the required monitoring tool for service provisioning and bill run process.

- As part of the improvement plan Ethio Telecom need to make periodical check of the issuance of bills which need to be supported by system. Hence, working process need to be set to check issuance of quality bill before communicated to customers.
- For the improvement plan of issuance of quality bill , Ethio Telecom need to defines areas where to improve and set targets, this will enforce responsible staff to go through the defined areas of parameters for improving producing error free bills.
- As indicated on the mean value and the relation of the variables under correlation analysis, on table 4.5 and table 4.13 respectively, issuance of unqualified bill will lead Ethio Telecom for collection risk, so that it need focus with this perspective too.

Recommended improvement areas on Billing and Customer System

- For effective collection management, deploying advanced system with full fledges features required. The system need to support complex billing and rating for different products availed by the company, this will be good to have better collection practice for delivered communication packages.
- As indicated on the correlation between bill collection efficiency and billing and Customer care system, Ethio Telecom has to work on availing system with advanced level. Deploying effective system will secure revenues and smoothen the bill collection activities , and will be good to compete with the market of the coming competition by launching different products and collection modalities.

- From the research survey and findings; most of the responded has an issues on the system effectiveness and this shown Ethio Telecom to give attention on the areas and improve for better delivery of the service as well as excelling the collection practice.

Improvement areas recommended In respect to availing different collection Options

- Currently deployed collection options in the company is better than other companies in Ethiopia but compared with other international telecom company still need to improve by availing different collection mechanisms so Ethio Telecom required to expand the options across the courtly by engaging different financial institutions.
- It will be good the company to work with all banks across the country which ware more addressable with all methods.
- The company need to work for the system security of the collection transaction between third party system so as to secure fraud activities related to it.
- Ethio Telecom need to have reconciliation parameters to check the transactions between the collection modalities which helps reduce collection risk

Suggested improvement areas Debt Collection Policy

- The operators have receivable collection policy which has configured on Billing and Customer care system, Ethio Telecom was also have Debt

collection policy which was supported by system, hence, from the study on this perspective the relation of debt collection with respect to the bill collection efficiency is high, so that Ethio Telecom need to monitor the implementation of debt collection management consciously.

- From the survey result findings the debt collection policy falls on moderate mean values with strong positive correlation among the collection efficiency so the impact is high for the collection and Ethio Telecom management team, required to focus and work on improving implementation of effective debt management system.
- From the survey result of respondents, the researchers understood that most of the employees has an issues on the implementation of effective collection polices so that suggested to look the issuance and work on the improving areas.
- The researcher also suggested Ethio Telecom to have effective collection reminding tools, like email, SMS, collection letters and other invoice reminding mechanism as well us phone reminder customer to settled the bill, this will increase the collection efficiency highly.
- Periodically it shall be checked the debt collection system efficiency whether the collection action was taking for all product and services which has defaulted, with doing this ethio telecon will reduce collection risk and increase performance.

Suggested improvement areas for Dispute management

- Managing dispute timely will create positive relations between the company and customers so that addressing disputed bill timely will increase the collection time which will be a positive impact on all over efficiencies
- Form the analysis findings with respect to the dispute management, the correlation was strong so this shows Ethio Telecom to work hard on addressing complaint timely. This can be effective with measuring the resolution time with predefined KPI(Key Performance Indicator).
- The researcher advise the company to deploy dispute management tool specific to Bill, thus this will give time to evaluate the resolution status everyday.
- Ethio Telecom need to empower the staff who managing disputes, to have better knowledge on the enquires and address with efficient manners.
- It needs also to have follow up on the bill adjustment related issues if the dispute accepted and approved to correct the bill, this will show how much the company is issuing wrong bills that leads for complaint and work for permanent solutions.
- Ethio Telecom's need to give strong attention on managing complaints related to bill since it has a major impact on postpaid bill collection performance

As a final point, Ethio Telecom need to analyze all issues related to bill collection practice and smoothen the activities. With the current revised economic strategy of the government of Ethiopia, the telecom service has going to open for the market and this will lead for the high competition, hence Ethio Telecom management team required to

focus on adopting efficient bill collection practice to meet the collection target and stay on the market competitively.

5.4. Direction for future research

The researcher suggested further research to be conducted to sort out other factors with engaging external customers which will support the company to have End to End view on the current practice of collection activities and work on the improvement areas.

References

Frechtling, J. Sharp, L. (1997) User-Friendly Handbook for Mixed Method Evaluations Westat: National Science Foundation

Telecommunication convergent Billing , by Maria Reppa, 2008 , Available @www.academia.edu

Avi Ofrane, Lawrence Harte (2003) Introduction to Telecom Billing ALTHOS Publishing Inc.

Bell, A.T. (2005) Telecommunications Billing Virtual Bookworm.Com Pub Inc)

Hatem Mostafa (2005) Billing System: Introduction [Online] Available at: http://www.codeproject.com/KB/architecture/billing.aspx [Accessed 12th June 2008]

Hunter, J. & Thiebaud, M. (2003) Telecommunications Billing Systems. United States of America: McGraw-Hill

Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed.). Thousand Oaks, CA.

Kowalczyk, D. (2016). Research methodologies: Quantitative, qualitative, and mixed methods [video file]. Retrieved from http://study.com/academy/lesson/research- methodologies-quantitative-qualitative-mixed-method.html

MA Bihina Bella, JHP Eloff, MS Olivier Using the internet protocol detail record standard for next- Generation network Billing and Fraud, University of Pretori

Managementhelp.org: http://managementhelp.org/businessresearch/planning.htm

Maxwell, S. E., & Delaney, H. D. (2004). Designing experiments and analyzing data: A model comparison (2nd ed.). New Jersey: Lawrence Erlbaum Associates.

McNamara, C. (n.d.). Basic Advice About Planning Your Research. Retrieved from

Petersen, A.C. (1998) Evaluation Handbook, The W.K. Kellogg Foundation [Online] Available at: http://www.wkkf.org/pubs/Tools/Evaluation/Pub770.pdf

Engel, R., & Schutt, R. (2009). *Fundamentals of Social Work Research.* Thousand Oaks.

Anol Bhattacherjee 2012, Ph.D.University of South Florida.

Powoh, T. V. (2016). International staffing: Strategic considerations for different world regions.

Richard McBride (2004) Can you bill for convergence? Telecommunications International [Online] Available at: http://findarticles.com/p/articles/mi_m0IUL/is_7_38/ai_n6175564 [Accessed 15th June 2008]

Schouwenaar, M. & Martin, E. (2003) Optimization of a telecommunications billing system. Winter Simulation Conference

Woolf, H. Future of Wireless Billing [Online] Available at: http://www.billingoss.com/articles/wireless_billing_future_by_howard_woolf_com verse.htm

Web sites:

http://www.Ethio Telecom.

APPENDIX ONE

QUESTIONNAIRE

ADDIS ABABA UNIVERSITY COLLEGE OF BUSSINESS & ECONOMICS

SCHOOL OF COMMERCE

DEPARTMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Dear Respondent, I am a graduate student in Addis Ababa University School of Commerce. Currently I am conducting a research on "Examining effect of postpaid bill collection practice on the performance of Ethio Telecom, the research is undertaken as academic requirements of partial fulfillment for the Master of Arts Degree in logistics and Supply chain Management.

You have been selected to participate in this study due to the importance of your information in the study. The information you provide will only be used for the purpose of this study and will be treated with utmost confidentiality. Please feel free and answer all the questions truthfully. Thank you in advance for your kind cooperation and dedicating your time.

Please put tick mark √ on the most appropriate answer against each question

Section One: General Information

1. **Age**:
   a. 18- 25 ☐
   b. 26-35 ☐
   c. 36 - 45 ☐
   d. Above 45 ☐
2. **Gender**:

   a. Female ☐ Male ☐

3. Educational Background:

   a. Certificate ☐ c. bachelor's & Above ☐

   b. Diploma ☐ d. Other /PHD/ ☐

4. Occupation

   a. Advisor ☐ c. Coach ☐

   b. Supervisor ☐ d. Manager and Above ☐

Part II- Postpaid bill collection efficiency level

Instruction: Please put a tick mark √ for the most appropriate response number against each statement where (5=Strongly Agree; 4= Agree; 3=Neutral; 2= Disagree; 1= Strongly Agree)

No	Variables	Strongly Disagree	Disagree	Neither agree nor Disagree	Agree	Strongly Agree
	Issuance of Quality Bill	1	2	3	4	5
5	Bill Quality check has been conducted on each billing cycles before issuance to customers	1	2	3	4	5

6	There is no ambiguity on clarity of billing tariffs and rating	1	2	3	4	5
7	The bill rating and the tariff always the same and no difference observed	1	2	3	4	5
8	Always there is no problem in issuance of quality bill observed which leads to uncollectible risk.	1	2	3	4	5
	Billing and Customer Care System					
9	The Billing and Customer Care system is always flexible for new revenue stream	1	2	3	4	5
10	The Billing and Customer Care system is controlling the collection activities as required level	1	2	3	4	5
11	The Billing and Customer Care system support to generate unbilled product and services	1	2	3	4	5
12	There is reconciliation parameter on collection history of different products	1	2	3	4	5
	Collection Options	1	2	3	4	5
13	The available collection options are addressable for all customers	1	2	3	4	5
14	All collection options are Friendly and error free	1	2	3	4	5
15	No collection Risk on all commercialized collection options of Ethio Telecom	1	2	3	4	5
16	Currently deployed collection	1	2	3	4	5

	options on Ethio Telecom fulfilled to maximize the collection performance					
	Debt Control	1	2	3	4	5
17	Debt control Management has been applied for all postpaid services	1	2	3	4	5
18	Ethio Telecom exercises effective debt control parameters to maximize collection performance	1 III	2	3	4	5
19	Ethio Telecom have flexible debt management policy	1	2	3	4	5
20	Credit Control/Credit limit is a crucial system to control uncollectible risk	1	2	3	4	5
	Dispute Management	1	2	3	4	5
21	The dispute related to postpaid services are affected bill Collection	1	2	3	4	5
22	Most of the time there is a challenge to address bill related disputes timely.	1	2	3	4	5
23	The collection impact related to bill dispute is very low	1	2	3	4	5
	Quick Dispute resolution will increase postpaid collection performance	1	2	3	4	5
		1	2	3	4	5
	Efficiency of postpaid bill	1	2	3	4	5
24	Overall, the collection efficiency is	1	2	3	4	5

	as required level					
25	There is no uncollectible risk of postpaid bills collection @Ethio Telecom	1	2	3	4	5
26	The top Management members support is as required level to meet the collection efficiency of post Bill	1	2	3	4	5
27	The performance of bill collection can affect the company cash follow highly	1	2	3	4	5
28	I feel, efficiency of post-paid bill can be increased with the issuance of error free bills	1	2	3	4	5
29	I did feel that existing Billing and customer Care System is good much enough for controlling postpaid bill.	1	2	3	4	5
30	The bill Collection section actively engage to increase the postpaid collection efficiency	1	2	3	4	5
31	I feel good for efficiency of arrears bills which is managing as required level	1	2	3	4	5
32	Quick complaint resolution will increase bill colocation efficiency	1	2	3	4	5

IV

Questions Responses 148

148 responses

Not accepting responses

Message for respondents

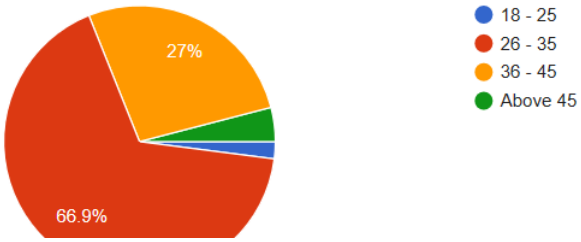
This form is no longer accepting responses

Summary Question Individual

Section One:

1. Age

148 responses



APPENDIX TWO

DETAIL SPSS RESULT

1. Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	3	2.0	2.0	2.0
	26-35	99	66.9	66.9	68.9
	36-45	40	27.0	27.0	95.9
	Above 45	6	4.1	4.1	100.0
	Total	148	100.0	100.0	

2. Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	72	48.6	48.6	48.6
	Female	76	51.4	51.4	100.0
	Total	148	100.0	100.0	

3. Educational Background

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	2	1.4	1.4	1.4
	Bachelor's Degree	76	51.4	51.4	52.7
	Master's Degree	70	47.3	47.3	100.0
	Total	148	100.0	100.0	

4. Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Advisor/Specialist	114	77.0	77.0	77.0
	Supervisor/Coach	29	19.6	19.6	96.6
	Manager	3	2.0	2.0	98.6
	Director and above	2	1.4	1.4	100.0
	Total	148	100.0	100.0	

Bill Quality check has been conducted on each billing cycles before issuance to customers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	3.4	3.4	3.4
	Disagree	28	18.9	18.9	22.3
	Neither agree nor Disagree	36	24.3	24.3	46.6
	Agree	71	48.0	48.0	94.6
	Strongly Agree	8	5.4	5.4	100.0
	Total	148	100.0	100.0	

There is no ambiguity on clarity of billing tariffs and rating

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.7	2.7	2.7
	Disagree	26	17.6	17.6	20.3
	Neither agree nor Disagree	38	25.7	25.7	45.9
	Agree	71	48.0	48.0	93.9
	Strongly Agree	9	6.1	6.1	100.0
	Total	148	100.0	100.0	

The bill rating and the tariff always the same and no difference observed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	3.4	3.4	3.4
	Disagree	24	16.2	16.2	19.6
	Neither agree nor Disagree	45	30.4	30.4	50.0
	Agree	65	43.9	43.9	93.9
	Strongly Agree	9	6.1	6.1	100.0
	Total	148	100.0	100.0	

Always there is no problem in issuance of quality bill observed which leads to uncollectible risk.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1.4	1.4	1.4
	Disagree	37	25.0	25.0	26.4
	Neither agree nor Disagree	49	33.1	33.1	59.5
	Agree	50	33.8	33.8	93.2
	Strongly Agree	10	6.8	6.8	100.0
	Total	148	100.0	100.0	

The Billing and Customer Care system is always flexible for new revenue stream

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	3.4	3.4	3.4
	Disagree	32	21.6	21.6	25.0
	Neither agree nor Disagree	39	26.4	26.4	51.4
	Agree	58	39.2	39.2	90.5
	Strongly Agree	14	9.5	9.5	100.0
	Total	148	100.0	100.0	

The Billing and Customer Care system is controlling the collection activities as required level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	4.1	4.1	4.1
	Disagree	29	19.6	19.6	23.6
	Neither agree nor Disagree	36	24.3	24.3	48.0
	Agree	55	37.2	37.2	85.1
	Strongly Agree	22	14.9	14.9	100.0
	Total	148	100.0	100.0	

The Billing and Customer Care system support to generate unbilled product and services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	4.1	4.1	4.1
	Disagree	24	16.2	16.2	20.3
	Neither agree nor Disagree	46	31.1	31.1	51.4
	Agree	63	42.6	42.6	93.9
	Strongly Agree	9	6.1	6.1	100.0
	Total	148	100.0	100.0	

There is reconciliation parameter on collection history of different products

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	30	20.3	20.3	20.3
	Neither agree nor Disagree	42	28.4	28.4	48.6
	Agree	56	37.8	37.8	86.5
	Strongly Agree	20	13.5	13.5	100.0
	Total	148	100.0	100.0	

The available collection options are addressable for all customers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1.4	1.4	1.4
	Disagree	24	16.2	16.2	17.6
	Neither agree nor Disagree	39	26.4	26.4	43.9
	Agree	63	42.6	42.6	86.5
	Strongly Agree	20	13.5	13.5	100.0
	Total	148	100.0	100.0	

All collection options are Friendly and error free

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1.4	1.4	1.4
	Disagree	32	21.6	21.6	23.0
	Neither agree nor Disagree	42	28.4	28.4	51.4
	Agree	56	37.8	37.8	89.2
	Strongly Agree	16	10.8	10.8	100.0
	Total	148	100.0	100.0	

No collection Risk on all commercialized payment options of ethio telecom

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.7	.7	.7
	Disagree	30	20.3	20.3	20.9
	Neither agree nor Disagree	38	25.7	25.7	46.6
	Agree	63	42.6	42.6	89.2
	Strongly Agree	16	10.8	10.8	100.0
	Total	148	100.0	100.0	

Currently deployed collection options on Ehio Telecom fulfilled to maximize the collection performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.7	2.7	2.7
	Disagree	23	15.5	15.5	18.2
	Neither agree nor Disagree	34	23.0	23.0	41.2
	Agree	65	43.9	43.9	85.1
	Strongly Agree	22	14.9	14.9	100.0
	Total	148	100.0	100.0	

Debt control Management has been applied for all postpaid services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.7	2.7	2.7
	Disagree	28	18.9	18.9	21.6
	Neither agree nor Disagree	48	32.4	32.4	54.1
	Agree	50	33.8	33.8	87.8
	Strongly Agree	18	12.2	12.2	100.0
	Total	148	100.0	100.0	

Ehio Telecom exercises effective debt control parameters to maximize collection performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.7	.7	.7
	Disagree	36	24.3	24.3	25.0
	Neither agree nor Disagree	44	29.7	29.7	54.7
	Agree	51	34.5	34.5	89.2
	Strongly Agree	16	10.8	10.8	100.0
	Total	148	100.0	100.0	

Ehio Telecom have flexible debt management policy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.7	.7	.7
	Disagree	31	20.9	20.9	21.6
	Neither agree nor Disagree	52	35.1	35.1	56.8
	Agree	53	35.8	35.8	92.6
	Strongly Agree	11	7.4	7.4	100.0
	Total	148	100.0	100.0	

Credit Control/Credit limit is a crucial system to control uncollectible risk

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	4.1	4.1	4.1
	Disagree	21	14.2	14.2	18.2
	Neither agree nor Disagree	35	23.6	23.6	41.9
	Agree	68	45.9	45.9	87.8
	Strongly Agree	18	12.2	12.2	100.0
	Total	148	100.0	100.0	

The dispute related to postpaid services are affected bill Collection

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.7	.7	.7
	Disagree	32	21.6	21.6	22.3
	Neither agree nor Disagree	34	23.0	23.0	45.3
	Agree	59	39.9	39.9	85.1
	Strongly Agree	22	14.9	14.9	100.0
	Total	148	100.0	100.0	

The collection impact related to bill dispute is very low

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.7	2.7	2.7
	Disagree	21	14.2	14.2	16.9
	Neither agree nor Disagree	45	30.4	30.4	47.3
	Agree	67	45.3	45.3	92.6
	Strongly Agree	11	7.4	7.4	100.0
	Total	148	100.0	100.0	

Most of the time there is a challenge to address bill related disputes timely.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.7	2.7	2.7
	Disagree	26	17.6	17.6	20.3
	Neither agree nor Disagree	37	25.0	25.0	45.3
	Agree	63	42.6	42.6	87.8
	Strongly Agree	18	12.2	12.2	100.0
	Total	148	100.0	100.0	

Quick Dispute resolution will increase postpaid collection performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	25	16.9	16.9	16.9
	Neither agree nor Disagree	26	17.6	17.6	34.5
	Agree	43	29.1	29.1	63.5
	Strongly Agree	54	36.5	36.5	100.0
	Total	148	100.0	100.0	

Overall, the collection efficiency is as required level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.7	2.7	2.7
	Disagree	27	18.2	18.2	20.9
	Neither agree nor Disagree	41	27.7	27.7	48.6
	Agree	62	41.9	41.9	90.5
	Strongly Agree	14	9.5	9.5	100.0
	Total	148	100.0	100.0	

There is no uncollectible risk of postpaid bills collection @ethio telecom

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.7	2.7	2.7
	Disagree	28	18.9	18.9	21.6
	Neither agree nor Disagree	36	24.3	24.3	45.9
	Agree	66	44.6	44.6	90.5
	Strongly Agree	14	9.5	9.5	100.0
	Total	148	100.0	100.0	

The top Management members support is as required level to meet the collection efficiency of post Bill

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.7	2.7	2.7
	Disagree	19	12.8	12.8	15.5
	Neither agree nor Disagree	40	27.0	27.0	42.6
	Agree	62	41.9	41.9	84.5
	Strongly Agree	23	15.5	15.5	100.0
	Total	148	100.0	100.0	

The performance of bill collection can affect the company cash follow highly

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1.4	1.4	1.4
	Disagree	23	15.5	15.5	16.9
	Neither agree nor Disagree	42	28.4	28.4	45.3
	Agree	65	43.9	43.9	89.2
	Strongly Agree	16	10.8	10.8	100.0
	Total	148	100.0	100.0	

I feel, efficiency of post-paid bill can be increased with the issuance of error free bills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.7	2.7	2.7
	Disagree	20	13.5	13.5	16.2
	Neither agree nor Disagree	45	30.4	30.4	46.6
	Agree	61	41.2	41.2	87.8
	Strongly Agree	18	12.2	12.2	100.0
	Total	148	100.0	100.0	

I did feel that existing Billing and customer Care System is good much enough for controlling postpaid bill.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	2.0	2.0	2.0
	Disagree	15	10.1	10.1	12.2
	Neither agree nor Disagree	43	29.1	29.1	41.2
	Agree	69	46.6	46.6	87.8
	Strongly Agree	18	12.2	12.2	100.0
	Total	148	100.0	100.0	

The bill Collection section actively engage to increase the postpaid collection efficiency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	29	19.6	19.6	19.6
	Neither agree nor Disagree	40	27.0	27.0	46.6
	Agree	64	43.2	43.2	89.9
	Strongly Agree	15	10.1	10.1	100.0
	Total	148	100.0	100.0	

I feel good for efficiency of arrears bills which is managing as required level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1.4	1.4	1.4
	Disagree	20	13.5	13.5	14.9
	Neither agree nor Disagree	34	23.0	23.0	37.8
	Agree	63	42.6	42.6	80.4
	Strongly Agree	29	19.6	19.6	100.0
	Total	148	100.0	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Issuance of Quality bill	148	1.50	4.75	3.3074	.69991
Billing & CC System	148	1.50	4.75	3.3598	.78150
Collection Option	148	1.50	5.00	3.4527	.75669
Debt Control	148	1.75	4.75	3.3514	.72600
Dispute Management	148	2.00	5.00	3.5405	.65339
Postpaid collection Effi.	148	1.50	4.50	3.4890	.62388
Valid N (listwise)	148				