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**ADDIS ABABA UNIVERSITY SCHOOL OF  
COMMERCE  
POST GRADUATE STUDIES**

***THE EFFECT OF TELE BIRR FINANCIAL SERVICE QUALITY ON  
CUSTOMER SATISFACTION: THE CASE OF ETHIO TELECOM***

*A Thesis Submitted to Addis Ababa University School of Commerce in  
Partial Fulfillment of the Requirements for the degree of Masters of Arts in  
Marketing Management (MM)*

**By  
Tesfaye Nebiy**

**Advisor  
Mulugeta Gebremedhin (Dr.)**

**June, 2023  
Addis Ababa, Ethiopia**

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**JUNE, 2023**

**ADDIS ABABA, ETHIOPIA**

# APPROVAL SHEET

**ADDIS ABABA UNIVERSITY**

**COMMERCE OF COMMECE**

**DEPARTMENT OF MARKETING MANAGEMENT**

*The Effect of Tele Birr Financial Service Quality on Customer Satisfaction:  
The Case of Ethio Telecom*

**BY: TEFAYE NEBIY BAWOKE**

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## DECLARATION

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## ENDORSEMENT

This is to certify that this thesis entitled as “*THE EFFECT OF TELE BIRR FINANCIAL SERVICE QUALITY ON CUSTOMER SATISFACTION: THE CASE OF ETHIO TELECOM*” submitted in partial fulfillment of the requirements for the award of the degree of MA in Marketing management, to the Department of marketing management, Addis Ababa University. This study is clearly done by **TESFAYE NEBIY BAWOK (ID NO: GSR/2265/14)** and is his authentic work and genuinely carried out by him. To the best of our knowledge, the work reported here has never been submitted earlier for award of any degree or diploma.

**Name of principal advisor: Mulugeta Gebremedhin (Ph.D.)**

**Signature and Date:** \_\_\_\_\_



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## ABSTRACT

*The major objective of the studied is to examine the effect of Tele Birr Financial Service Quality on Customer Satisfaction: the case of Tele birr in Ethio telecom. The studied employed Quantitative researched approached with explanatory researched design. A total of 384 study participants who was customers of Telebirr mobile money were selected for the study. Data collected used liker scaled questioner and both descriptive and inferential analysis were used. Multiple Linear Regression (MLR) model used to determine the relationship between customer satisfaction and the stated variables. Data is presented using texted, tables and charts. The analysis conducted on the factors influenced customer satisfaction in Telebirr Mobile Money services revealed several significant findings. Based on multiple linear regression, Reliability, Efficiency, Privacy, and Contact had positive significant effect on customer satisfaction. However, Responsiveness, was not shown as significant factor for customer satisfaction. It is recommended that Telebirr Mobile Money continued to prioritize these service quality components to ensured high leveled of customer satisfaction and maintained a competitive edge in the market.*

**Keywords:** customer satisfaction, service quality, Telebirr, Ethio Telecom.

# CHAPTER ONE

## 1. INTRODUCTION

On this chapter we are going to discuss the background of Tele birr mobile money services in Ethiopia, statement of the problem, the general objectives of the study, the specific objective of the study, also we are going to discuss the research questions, the significance of the study, the scope of the study were presented.

### 1.1. Background of Study

Due to the influence of customer satisfaction on repeat purchases and word-of-mouth recommendations, customer satisfaction is considered crucial for all businesses (Yuksel, 2002). Customer satisfaction is the most important factor affecting service management. By providing high-quality services to their clients, service providers can maintain their competitive advantage in this fast-paced and dynamic environment (Hu et al., 2009). Loyalty to the service provider, participation in positive word-of-mouth promotion, and paying premium prices are all benefits that satisfied customers can bring to the service provider as a ripple effect. As a result, both academics and practitioners have paid close attention to customer satisfaction (Yuksel, 2002).

With the advent of new technologies, the current business climate is becoming more competitive. A new platform known as mobile services (MFS) has emerged as a result of the wireless and mobile networks' recent emergence, and the business community is beginning to pay attention to it. According to (Khraimet al, 2015 ), technology is an essential component in the financial services industry's fiercely competitive landscape, particularly when a company seeks to expand its market share and satisfy its customers. Many businesses have always strived to improve themselves by creating better products and services for their customers in order to increase customer satisfaction as a result of these new advancements (Wei et al., 2012).

By providing an unprecedented opportunity for financial development and access, mobile phones are used by billions of people worldwide, including the poor. They are also expected

to become a common tool for conducting financial transactions in the near future (Chatain et al, 2008). Mobile money transfer (MMT) service is the process of carrying out financial transactions using a mobile phone (Allen, 2003). According to (Ndung'u, 2009),

Ethio Telecom is a state-owned monopoly operator in Ethiopia and engaged in selling of different product and services portfolios like, SIM cards on 3G, 4G (LTE), VC cards, CUG Service, Fixed line, ADSL, VPN Services, SMS and Data Roaming but the public authority of Ethiopia has been on the approach to privatizing telecom and opening the region for contention. So Ethio Telecom introduced and implement different projects which improve and develop company service. Among different projects Ethio Telecom launched tele birr in 11 May 2021. It is groundbreaking mobile money solution for its users. It allows customers to deposit, receive and transfer money using their mobile in areas where mobile network is accessible. The undertaking expects to stretch out versatile administrations to monetarily prohibited areas of the general public. Mobile financial service is among the alternative ways that the universe is implementing in order to modernize telecom services (Hizkel.H, 2021).

Ethio Telecom's Tele Birr, the most recent competitor in the mobile money industry, is very likely to dominate Ethiopia's digital economy. In two years since its launch, this mobile money service has attracted 32 million users, helped in part by a Birr 15 promotional incentive. Micro-credit, bill payments, agent network cash-in and cash-out, and airtime top-up are among the services. As all current Ethio Telecom's endorsers are an obvious objective market, Ethio Telecom can almost certainly meet its objective of arriving at in excess of 8 million clients in the primary year. As of the December 2022 company report, Tele Birr has more than 32 million customers, more than 97.3 thousand Tele birr agents, 24.3 thousand merchants, and 17 banks to tele birr wallet integration. (EthioTelecom, 2022)

Mobile money is becoming increasingly popular in developing nations and is widely used in developed nations. However, cash is still the most common form of payment in Ethiopia, and electronic payment systems are still in their infancy. Ethiopia's financial sector cannot stand still when it comes to expanding the use of electronic payment systems, which are rapidly spreading across both developed and developing nations. According to (Wonderimu, 2013), all of the financial institutions in Ethiopia are too late to keep up with technological

advancements, and they ought to clearly plan out a timetable for their integration and technological advancement.

## **1.2. Statement of the Problem**

The E-Commerce space in Ethiopia is still in very early stages, facing several regulatory and infrastructure limitations. The overall addressable market is also very small due to still limited urbanization, low average incomes and high delivery costs. Moreover, one of the challenges facing the E-Commerce warehousing, delivery, and payments sites is the need to integrate: Until now, the digital payment ecosystem has been very limited, mostly limited to cash on delivery or bank transfers, and very limited options to pay directly through the website or the app of a service provider. Another key challenge facing operators in this space is the need for cash flow/working capital, as this business has a very large upfront investment to penetrate the market and sustain long enough to build a loyal customer base. In this context, the opening of the e-commerce sector to foreign investment could potentially bring international players into the ecosystem with the necessary long-term funding, operational experience, and the technical skills which are largely still under-developed in the current market (CRA, 2021).

According to (Coulibaly, 2021), In contrast to developed nations, to developing nations like Ethiopia, where cash is a prevalent form of payment, Mobile Money systems are uncommon. Despite the fact that businesses seem to be aware of the advantages of electronic commerce, the number of organizations placing more trust in the service is rising which aimed to have a user-friendly package and reduce the use of cash as a medium of exchange in the economy. Tele Birr presented this opportunity. Since Ethio Telecom started accepting Tele Birr as payment about a year ago, there have been agents operating improperly. It is important to note the significant obstacle Tele Birr is facing, which is both intentional and observable. Tele birr was also the subject of some other studies, but their primary focus was on the adoption of electronic banking rather than its effect on customer satisfaction. (G/Amanuel, 2018) carried out his research on the factors that influence customers' attitudes toward M-Birr adoption in Ethiopia. Adoption of mobile money services in Addis Ababa, Ethiopia, was also investigated (Essayas, 2018). The adoption of telebirr, specifically its challenges and opportunities, is the primary focus of each of these studies. As a result, since

very few studies have been conducted on the topic of the title, the current investigation will concentrate on the impact of mobile money on customer satisfaction at Ethio Telecom. The impact of the tele birr financial service on customer satisfaction must be determined by Ethio Telecom.

Several studies have been carried out in the developed countries regarding customer satisfaction and prescriptions on telecom mobile money. (Nimako, 2012) , studied service quality dimension in Ghana’s mobile industry. The findings indicate that Technical Quality is the most important service quality dimension to the customers, followed by Empathy, Reliability, Economy, Responsiveness, Image, and Assurance. (Krishna, 2010), after studying service quality and its effect on customer satisfaction in retailing in India concluded that customers have the highest expectations on promptness of service, accuracy of transactions and security issues. (Manyi.J, 2011), while studying the relationship between customer satisfaction and service quality found out that all the five dimensions of service quality were significantly related to customer satisfaction. (Akaka, 2012), studied service quality dimensions and customer satisfaction in Kenyan telecommunications industry and established that all the five.

Service quality dimensions had positive impact on customer satisfaction. (Maina, 2010), focused on, perceived quality and value proposition but failed to study the response of consumers while utilizing the service. (Gitari, 2010) focused on the challenges organization face in meeting consumer expectations but there was no documented research data available to show people's response to the new facility of accessing their money through their mobile hand-sets beyond normal working hours, easily and almost everywhere. The above study still focused on perceived service quality and value proposition offered by mobile company like Safaricom M-Pesa services and other African country.

In addition, researchers believed more studied would be done to examine effect of Mobile Money on customer satisfaction of other company like-payment systems in the country on banks and insurance but not Ethio Telecom Mobile Money context. Therefore, the researcher would motivate us to fill those aforesaid gaps and try to conduct research on mobile money services which was help to assess effect of Mobile Money on customer

satisfaction in Ethio Telecom Therefore, the purpose of this research was to examined effect of Mobile Money on customer satisfaction in Ethio Telecom Mobile Money Service.

Considering these studies critically, none of them has tried to address the effects of service quality on customer satisfaction on Tele birr and also, researchers thought that more research would be done to find out how Mobile Money affects how satisfied customers are with other businesses, like payment systems in the country for banks and insurance, but not in the Ethio Telecom Mobile Money context. As a result, the researcher would inspire us to try to fill in the aforementioned gaps and conduct research on mobile money services in order to evaluate the impact of mobile money on customer satisfaction at Ethio Telecom. Accordingly, the goal of this study was to examine the effect of Tele Birr Financial Service Quality on Customer Satisfaction at Ethio Telecom Mobile Money Service.

### **1.3. Research Questions**

- ❖ How does the reliability of tele birr financial service quality affect customer satisfaction?
- ❖ To what extent dose the efficiency of tele birr financial service quality affect customer satisfaction?
- ❖ How does the privacy of tele birr financial service quality affect customer satisfaction?
- ❖ How does the responsiveness of tele birr financial service quality affect customer satisfaction?
- ❖ How does the contact of tele birr financial service quality affect customer satisfaction?

## **1.4. Objective of the Study**

### **1.4.1. General Objective of the Study**

The study's main goal was to examine the effect of Tele Birr Financial Service Quality on Customer Satisfaction at Ethio Telecom.

### **1.4.2. Specific objective of the Study**

- 1 To examined the effect of the reliability of tele birr financial service quality on customer satisfaction.
- 2 To determine the effect of the efficiency of tele birr financial service quality on customer satisfaction.
- 3 To analyze the effect of the privacy of tele birr financial service quality on customer satisfaction.
- 4 To examine the effect of the responsiveness of tele birr financial service quality on customer satisfaction.
- 5 To examine the effect of the contact security of tele birr financial service quality on customer satisfaction.

## **1.5. Scope of the Study**

The study examined the Tele Birr Financial Service Quality on Customer Satisfaction, Geographically, this study is delimit to address only Ethiopia Ethio Telecom mobile money customers in Addis Ababa city, because the researcher cannot address all other cities due to time, financial constraints, and even the researcher's ability and Addis Ababa was chosen because it had a wide range of potential respondents to the study like it was the country's capital and had a diverse population,.

Conceptually, the study is delimit Mobile Money customer satisfaction and service quality components (reliability, efficiency, privacy, responsiveness, and contact), Addis Ababa Ethio telecom five administrative zones. Focused on Telebirr customers who had used the product because customers can provide real information about how they feel about Telebirr

The study was covering the period from December 2023 to June, 2023. Methodologically the study is delimiting was focus on Ethio telecom customers specifically located from respondents of Addis Ababa. The study was use both descriptive and explanatory research design which embodied quantitative phases. Furthermore convenience non random sampling was be used to select respondents and structured questioner as data collection instrument. Moreover, empirical studies reliability, efficiency, privacy, responsiveness, and contact was be addressed

### 1.6. Significance of the Study

The research would have assisted Ethio Telecom in determining how customers felt about the telecommunications mobile money services they received. Any company's primary goal was to ensure that its customers were satisfied; As a result, the findings of this study would support the enhancement of these services to meet customer demand. Additionally, the concentrate through the assessment of administration quality willed empower Ethio Telecom made a decision about its exhibition in the performance of how clients passed judgment on it. Consequently this study leads the researcher having experiences and motivations for further investigation. It also initiates other researcher to study on untouched area of the research topics that are relate with the problem area of the topic.

### 1.7. Definition of Terms

**Customer satisfaction:** is the consumer's response to the evaluation of the perceived discrepancy between prior expectations (or some other norm of performance) and the actual performance of the product as perceived after its consumption.

**Reliability:** is the ability to perform the promised service dependably and accurately. Doing what you say you're going to do when you say you're going to do it is essential to pleasing your customers.

**Efficiency:** is the ability of companies to deliver efficient and quality services to customers in a cost-effective manner.

**Privacy:** is privacy of your consumer's data is important because, like your business and you as an individual, you value your privacy

**Responsiveness:** is the willingness to help customers and provide prompt service. Responding quickly to customer questions and concerns is vital, especially in today's fast-paced world.

**Contact:** is the process of handling a query of the customer before, during, and after the purchase of any product or service. It is the process of resolving customer's issues and providing them with an appropriate solution, crafted with excellent call center services.

**Customers:** - shall be defined as any legal entity or natural person (individual or corporate) with whom the telecom agree to conduct a business

**Satisfaction:** - refers to the degree at which the needs and wants of customer has to be served.

## **1.8. Organization of the study**

There were five chapters in the research report: The beginning of the chapter focuses on the study's background, problem statement, objective, significance, and limitations. In order to acquire pertinent information regarding Telebirr Mobile Money, a variety of literature reviews are compiled in chapter 2. In section three, detail of philosophy followed to accomplish results is illustrated. The study's design, sampling, sampling method, data source and type, and data analysis are all included. The study's findings and discussion were presented in Chapter 4, with additional research findings supporting them. The main findings, conclusions, and recommendations are the focus of Chapter 5.

## CHAPTER TWO

### 2. REVIEW OF RELATED LITERATURE

This chapter provides an overview of relevant research and problems that are important to understanding how non-banking financial services, such as mobile money, affect customer satisfaction. A number of research that have examined the theoretical and practical issues with mobile money service have also been discussed. There are two parts to the review. A theoretical overview is presented in the first section. A review of empirical research was presented in the second portion.

#### 2.1 Theoretical Literature

##### 2.1.1 Development of the Telephone

Mobile phones may have emerged as a means of technological advancement for the majority of developed nations. However, the majority of sub-Saharan African nations developed mobile phones out of necessity. It is essential to provide a brief historical overview of the development of the telephone in order to appreciate this. Traditionally, telephone lines were used for communication. The majority of these lines were made of copper wire. Copper is preferred due to its superior conductivity, durability, corrosion resistance, ductility, and infinite recycling capacity. Copper is also ideal for residential use because of this. A pair of copper wires connected houses to a line, usually on a pole. The line ran from the house to the local exchange in the early days. As a result, a line of wires connected the exchange's poles. A switch would be used at the exchange to combine the signals from the wires (multiplex them), and the result would be a pair or more (depending on capacity) that would connect exchanges.

##### 2.1.2 Definition of Mobile Money

The use of a mobile phone for financial transactions and services was a waiting event. This is accomplished by means of the interactive SMS, a data-messaging channel that is accessible on GSM-based phones. The mobile phone basically imitates key components that are necessary to provide banking services. The SIM can confirm clients. Telecommunications providers create mobile money services, which operate alongside

standard telecommunications services. Access to a mobile phone and mobile money are inextricably linked. As a result, areas with a strong mobile network are more likely to see an increase in the use of mobile money.

Money can be transferred using a mobile phone with mobile payment. It is a technology that lets people use their cell phones to receive, store, and spend money. It's occasionally alluded to as a 'versatile wallet'. You can pay with mobile payments without having to use checks, credit cards, or cash. Both digital and physical goods can be purchased with mobile payments. The goal of mobile payment is to stop physical money from being circulated and to speed up the processing of payment transactions. Mobile Money is a mobile payments system based on accounts held by a mobile operator and accessible from subscribers' mobile phones ( Lovisa, 2016). The changes in payment habits have led to the development of new services like mobile payments to meet customer demands and also improve efficiency (Simon, 2021). At retail stores (or agents), cash is converted into electronic value and vice versa. It's possible that the portable cash system's major plan is different,

Mobile money is electronic money that is essentially digital and has attributes related to mobility and portability, and it is equivalent to mobile-money or mobile-cash. However, the overall concept was to enable modest and dependable money transfers between individuals who approach a cell phone (Odoyo, 2016). It can be separated from other electronic payment methods such as smart cards, credit cards, and debit cards, because it can replicate the essential features of conventional money, like liquidity, acceptance, and anonymity. Peer-to-peer transactions (P2P) between machines or mobile devices (M2M) from users of the same service are made possible by mobile money, which can also be referred to as a mobile wallet. Mobile money is a digital source of electronic money that is created and carried out on mobile devices. According to (G/Amanuel, 2018), it can store money as well as credit and debit cards in a manner that is analogous to a typical physical wallet.

To fully comprehend the inventiveness of mobile money's development as a service, it is necessary to first examine the evolution of the mobile phone. One could say that the mobile phone is a modern person's sanctuary in the same way that the home is an Englishman's castle. The subscriber identification module (SIM) is the mobile phone's heart, memory bank, and nerve center all rolled into one. Phones that work with the Groupie Special Mobile

(GSM) family of protocols use the subscriber identity module. It "drives the phone's menu," "contains encryption keys," and "secures the user's personal identification number (PIN) on entry." The GSM, which started out as a European standard in the early 1980s, quickly became a global standard.

### 2.1.3 Mobile Money Remittance

In the majority of developing nations, money transfer across geographically dispersed locations is a problem. Remittances benefit ironically as a service when families are split up. "Urban migrant population who seek better employment options and send money regularly to relatives in rural kilns" is their ideal audience. Africa is not the only place where migrant workers face difficulties sending money home. In the Center East and Asia, the Hawala has been utilized for quite a while as a casual approach to sending homegrown as well as worldwide settlements. The bottlenecks in the country's infrastructure and institutions are primarily to blame for these issues.

- Road Network
- Inaccessibility of Banking Services
- Expensive Remittance Services
- Unreliable but Relatively Expensive Postal Services
- Unreliable Friends and Relatives

Mobile money is more than just a money service; it also offers other financial products and takes deposits, which has become a game-changer since deposit-taking is the mainstay of banks. Road Network Inaccessibility of banking services Expensive remittance services Unreliable but relatively expensive postal services Unreliable friends and relatives As a result, mobile money is a complete payment method. It is still up for debate whether mobile network operators' marketing messages regarding deposit have the same meaning as those of banks. It is argued that it does not at this time. Utilizing the mobile money payment system, mobile network operators have developed a singular network of solutions to the remittance dilemma:

**Make everything local:** - The majority of the country already has agents who sell airtime or credit on behalf of mobile network operators. The community will readily accept the service if it uses the same agents as mobile money agents.

**Cut down on transactions costs:** - The costs associated with sending and receiving money are manageable and low. In point of fact, the fees are so low that other money transfer services now face the possibility of adapting or going out of business. Install a new money transfer service on a telecommunications service that is already in use: - The telecommunication platform and user interface that mobile phone users are accustomed to are used by mobile money services. This platform was built by mobile network operators. It is based on SMS, a feature that has been around since mobile phones were first introduced.

**Make use of the fact that mobile phones are everywhere:** - Nowadays, mobile phones can be found almost anywhere. It is also trusted. It may be simple to convince someone to use the same device for other services like sending and receiving money or purchasing goods and services if they can rely on it to send a message over hundreds of thousands of kilometers. Additionally, it is a useful tool.

**Create a dynamic ecosystem:** - In order to encourage customers to obtain or pay their bills using mobile money, mobile money issuers have collaborated with the major utility service providers. Some of the utilities that are a part of the mobile money ecosystem are the water and electricity utilities. The inclusion of retail fuel providers and pay television services suggests that the target population is not limited to the unbanked only

#### 2.1.4 Mobile Money in Operation

The mobile money service is modeled after the cell infrastructure. Anyone with a mobile phone can potentially interact financially with other users in addition to having access to them. Products can be ordered both locally and internationally. A mobile phone user's presence, including all communications, is immediately reported to the main station by the base station when they are within a specific base station. This digital footprint may prevent people from denying responsibility for debts incurred through mobile money transactions on the basis of a false alibi.

It is simple to switch from cash to electronic value and back again with services for mobile money. It also makes it possible for users to trade e-values. As a result, it works as a three-step system for sending money:

- Change cash into digital money;
- Change the value of an electronic item from one account to another;
- Convert digital value into cash.

Each customer creates an account for the mobile money service in addition to registering for the mobile service with the mobile network operator. Consequently, the transfers are made through these accounts. According to Camner and Sjöblom, mobile network operators are uniquely positioned to operate mobile money services "because they have a great number of both banked and unbanked customers and an established network of airtime resellers which can be turned into agents" (Sjöblom, 2009). The majority of central banks therefore believe that the influence of innovations in retail payments on through a cascading system of agents, mobile money is typically distributed in bulk, and agents are required to make cash deposits with the mobile network operator. Despite the fact that electronic money has become more important in some countries, the impact of these developments on the composition of the monetary base has been considered to be negligible up to this point.

The mobile network operator records all transfers to ensure that the funds in the pool or trust account and the system's electronic money are always the same. Several different things, such as the wages of low-income workers and school fees, can be paid for with mobile money. Mas, 2009 says that the service helps in the following ways: simplicity of use due to the fact that users can access it from the convenience of their homes or, in the case of farmers, from the field.

- Because the transactions are digital, there is a sense of safety and dependability.
- Users have more control over the services, and they are not restricted by typical banking service constraints like transaction time.

"Customers in town understood that [it] was for sending money whereas those in the rural areas understood it was for receiving," according to Mas and Ng'weno's ethnographic study of Kenya's mobile money service. The common remitter is a city laborer or metropolitan finance manager, probably a transient. The recipient is typically a rural woman, (Ng'weno, 2018)

### 2.1.5 Function of Mobile Money

A service called "mobile money" stores cash in a safe electronic record that is linked to a person's cell phone number. The phone number and the mobile money number may or may not always be the same. Pre-pay and contract customers alike can use mobile money, which is typically provided by the same companies that manage the country's telecom services.

(Rakhi, 2021), the technology enables mobile phone users to store, send, and receive money. They are able to make purchases in stores or online, pay their bills and school fees, top up their mobile airtime, and get packages. They can also get cash from licensed agents. The user only needs to select the appropriate service information from the mobile money menu on their phone and fill it in if they want to send money to another person, pay a bill in bulk, or pay a bill. Sending a text message is all that is required.

A recent development, mobile money offers mobile phone-based financial transaction services, including to the unbanked poor of the world. The technology has spread rapidly throughout the developing world, "leapfrogging" the provision of formal banking services by addressing the shortcomings of conventional banking's cost structure and weak institutional infrastructure. Aron investigates the development of mobile money and the crucial role it plays in expanding financial inclusion. It critically examines the empirical literature on the economic impact of mobile money and examines the channels of economic influence of mobile money from a micro perspective. While direct evidence of the promotion of welfare and saving is still mostly rather less robust, the evidence strongly suggests that mobile money encourages risk-sharing, (Aron, 2018)

### 2.1.6 Tele birr services in Ethio Telecom

**Send and Receive Money:** You can quickly send money to your family, friends or beloved ones anywhere whether they are users or non-users of tele birr service living in any corner of the country.

**Buy Mobile Airtime:** Tele birr airtime allows you to top up your own or someone else's service using options such as Web, Mobile App, USSD and SMS. Registered customers can easily charge airtime for their mobile phones using their tele birr account.

**Pay with tele birr:** Conveniently pay Ethio telecom bill or purchase tickets (e.g. Unity Park, Admas lottery) using tele birr anywhere, anytime. Tele birr enables you to easily settle your utilities bills to organizations anytime, anywhere through your tele birr account. Typical applications include paying water, electricity, gas, insurance, and tuition fees.

**Tele birr International Remittance Service:** You can conveniently receive money via your mobile number sent from your family, friends or beloved ones and/or others residing abroad

### 2.1.7 Telebirr Financial Service

**Tele birr Mela (Micro Credit):** It is a method of lending small sum of e-money to individuals and merchants/agents to start or expand a small business.

**Medaresha;** is part of tele birr mela service which will enable public and private employees to get credit if they receive their salary via tele birr

**Tele birr Endekise (Overdraft Service):** It allows individual customers and organizations to activate and use Credit service when their balance is insufficient.

**Tele birr Sanduq (Saving):** It is a method of saving small sum of e-money to individual's tele birr account using tele birr app or USSD (\*127#).

**Interest bearing Saving Account:** It allows customers to securely store money anytime from anywhere and any amount that enables customers to get an interest fee.

**Non-interest-bearing saving service:** Interest will not be applicable. Customers can save and withdraw anytime.

### **Tele brr have some features**

**Accessible:** There's no need to travel long; you can get it at any agent or shop near to you.

**Fast:** Pay, deposit, and transfer funds whenever you need them—in real time. Receive immediate confirmation.

**Reliable:** You can be sure! Tele Brr is safe thanks to its secure system and reputable operator (no theft, no need for cash to make transactions). There is no need to carry cash or have a bank account. Use only your mobile phone for all transactions.

**Multipurpose:** Use your mobile phone to deposit, receive, send, spend, and transfer money with flexibility.

**Easy:** Cashless and easy access at your mobile phone.

## **2.2 Customer Satisfaction &Service Quality**

For service businesses like telecoms, the idea of customer satisfaction is just as important because many of them believe that satisfied customers will be more loyal to them (Boulding, 1993). A person's feelings of pleasure or disappointment when comparing a product's perceived performance (or outcome) to their expectations are also included in Kotler's definition of satisfaction. An assessment of the perceived disparity between the product's actual performance and expectations can serve as an illustration of satisfaction.

Since the rise of the internet and electronic banking, numerous studies have attempted to comprehend service satisfaction in relation to the virtual business environment. As a result, the extensive human-computer interactions and high level of self-service found in internet-based services may indicate that customers perceive online services as more satisfying than offline ones ((Ribbink, 2004). Because of this, a lot of researchers have looked into what aspects (dimensions) influence the quality of e-commerce in general and e-banking in particular to meet customer expectations.

The product's perceived performance in relation to a buyer's expectations is a major factor in customer satisfaction. The customer is dissatisfied with the product if its performance falls short of expectations. The client is pleased if the performance meets expectations. When performance meets or exceeds expectations, the client is extremely pleased or satisfied. Customers who are extremely pleased continue to make purchases and recommend the product to others. According to (Reinartz, 2016), customer satisfaction is critical to the accomplishment of an organization's goals. As a result, it needs to be well understood and communicated to everyone in the organization. When completing a task, each individual ought to take into consideration how it will impact customer satisfaction. Financial instruments, institutions, markets, and services make up the financial system. Financial institutions are part of an organized system that organizes, markets, and distributes financial products to various segments of society. In the country, banks and non-banking financial companies are the main types of financial institutions. Banks initially cater to large market segments before expanding to serve smaller ones. Since its inception, the banking industry has dominated the global financial system; however, as a result of liberalization, privatization, and globalization reforms, the non-banking sector has significantly increased its contribution.

Despite its relative newness, mobile money services are already having a significant impact on the financial industry. There have been a number of studies that have been carried out to describe the nature of the service, its applicability, the business models that should be followed, its support for financial inclusion, economic growth, poverty reduction, the difficulties associated with its implementation, and the opportunities it presents for the business and the nation as a whole. The results of the studies show that mobile phones can be used for a variety of services. Based on empirical research conducted to determine the viability of banks' mobile banking services, (Tiwari R.& Buse S, 2014 ).

Customers are willing to pay for such services, according to the study, which identified services that can be used from mobile phones (three of which are bundles). R. Tiwari and S. Buse the perspectives on mobile commerce: a strategic evaluation of banking industry opportunities. Mobile accounting, which includes remittance (transfer), bill payment, standard insurance subscription, and administrations services (PIN), is the first and most

popular service. Other than their desired reality to utilize the assistance they were additionally able to pay for the administrations advertised. In various regions of the world, mobile money services have expanded. There has been a significant and encouraging increase in the number of services available worldwide since the introduction of M-Pesa MMS in Kenya in 2007. At the end of 2015, there were 271 services in 93 countries, 51 of which had MMS-enabling regulatory frameworks, according to the GSMA 2015 report.

There will be a total of 411 million customers by the end of 2015, and during the three months of October through December, 134 million accounts will have been active. 33 million transactions per day are made by all consumers. The majority of these sub-Saharan African nations are affected. This section of the research aims to examine studies conducted in other nations, particularly in east African nations. Even if the service is new for east African nations, such as Kenya's M-Pesa, which launched its pilot program in 2007, they are the mobile money service success stories featured in the majority of publications.

A study on mobile money, also known as "mobile money banking," was carried out in developing nations, with a focus on mobile money provided by microfinance institutions, (Erickson, 2010). According to Erickson, cell phone banking entails the transfer of either domestic currency or mobile credits, and he emphasized that mobile money can reduce poverty by increasing access to financial services and creating jobs and increasing savings rates. The study came to the conclusion that mobile money could be beneficial to microfinance institutions in particular because of their strategic location to serve the general public. Even though the benefits are boldly described, mobile money is not widely adopted due to regulatory and initial investment obstacles. The author suggested that governments should subsidize the creation of domestic mobile money infrastructure and implement policies that facilitate the growth of mobile money service and agent network on the basis of the service's potential.

According to a study that was carried out in Tanzania and was titled "Use Barriers and Opportunities" and was conducted by the Inter Media Group (GSMA, 2016), the existence of several mobile money services is regarded as a replacement for informal money transfer for the purpose of sending money between family members. Additionally, these services are used to purchase other services that are made available and to deploy the service

establishment of trusties, which serves as the foundation for each type of service that is available (M-Pesa, Tigo As the primary obstacle for agents to overcome when carrying out transactions, liquidity is increased, and the availability of agents within their premises is also increased.

One of the most successful mobile money services in the world, easy paisa, which was created by Telenor Pakistan, a MNO in Pakistan, and Tameer bank (an MFI), is the dominant mobile money service in Pakistan. They were able to increase their share of the sector's market thanks to Telenor Pakistan and Tameer Bank working together. They have been able to achieve this level of success thanks to the organizational structure that was developed to make it simple to monitor and build agents' capacity, the rapid rollout of a national distribution network, and on-the-job and off-the-job training. At the national level, Pakistan had 41,567 agents at the end of 2012, with 33 over-the-counter transactions (OTC) for agents who performed well and 2 for agents who performed poorly.

(GSMA, 2016) Talked about the difficulties mobile money services face when putting them into place and interacting with their customers. In addition to other obstacles, the study identified three primary obstacles. The target market segmentation, the complicated customer journey of the mobile money service, and the marketing mix required to promote the service are all examples of these. By June 2011, there were 60 million registered customers, but only 6 million were active, according to this study. The study demonstrated cycles of customer usage of MMS when discussing the complexity of the MMS customer journey. ( (GSMA, 2016), A study on M-PESA, one of the most popular and well-known mobile money services, was conducted by numerous authors and the industry itself (Hinz, 2016), deemed the study to be the best of the two descriptions. Other things remain constant in the study described by the author; A significant factor is Safaricom's telecom market share in Kenya. FIs and MNOs needed to have the majority of the market in order to succeed and increase their market share in order to achieve the same level of success elsewhere in a different market. Interoperability between the services is essential when there are multiple MNOs and FIs.

Users can use short message service (SMS) to transfer either mobile minutes or local currency to pay for goods and services with mobile money. Financial services can be more

accessible with mobile money. Regulative and initial investment restrictions on mobile money are unfortunately widespread. By increasing access to financial products offered by microfinance institutions, increasing savings rates, and creating jobs, this paper demonstrates that mobile money can serve as a tool for poverty reduction. We recommend that governments subsidize the creation of local mobile money infrastructure and implement policies that make it possible to establish a decentralized network of dependable mobile money agents in light of the potential benefits of mobile money. Omollo, 2014) An incorrect source was provided. Using Tricity Tangibility, Reliability, Responsiveness, Assurance, and Empathy as independent variables and customer satisfaction, a study on customer satisfaction and mobile banking services found that tangibility, reliability, responsiveness, assurance, and empathy have a significant impact on customer satisfaction.

The given source is invalid. Efficient, Reliable, Privacy/Trust, Site Aesthetics, Fulfillment, Responsiveness, and Ease of Use were studied as independent variables, and customer satisfaction was studied as a dependent variable. The results showed that Security/Trust, Site Aesthetics, and Ease of Use had a significant impact on customer satisfaction, while responsiveness/contact had no effect on customer satisfaction. Customer perceptions of overall quality, value, and loyalty intentions are dependent variables in the Study of a Multiple-Item Scale for Assessing Electronic Service Quality. The findings indicate that the effects of efficiency and fulfillment on all three dependent variables are positive and significant, whereas the effects of system availability and privacy were insignificant

Efficient, Reliable, Privacy/Trust, Site Aesthetics, Fulfillment, Responsiveness, and Ease of Use are independent variables in the study on E-Service Quality Dimensions and Their Effects on E-Customer Satisfaction in Internet Banking Services (Zavareh, 2012). The study found that Security/Trust, Site Aesthetics, and Ease of Use had a significant impact on customer satisfaction, while responsiveness/contact had no this is because the e-service factor used to measure service quality varies between the service quality models that have been discussed in the literature thus far. By redefining the initial model, one researcher used certain factors, while another researcher used other factors. As a result, using these models to evaluate the quality of mobile money service might be a good idea. As a result, the following is the definition of the study's independent variable

- I. **Reliability:** The accuracy, credibility, basic service quality, system availability, and customer service are all aspects of the reliability dimension (Yang, 2008). Reliability also refers to the alignment of expectations and service delivery.
- II. **Privacy:** According to (Gilly, 2012), security and privacy in an online environment are better defined together. This dimension focuses primarily on accurate billing and prompt responses to customer communications. The degree to which a website guarantees the safety of customers' financial and personal information is known as assurance about security, and research into this topic has grown in recent years. Authorized access, confidentiality, limiting large-scale transactions, and a firm commitment to security measures all contribute to security (Okeke, 2015).
- III. **Efficiency:** According to Wu and Tao (2012), the efficiency dimension is connected to the aesthetics/contents/ease of use, transaction support, and web interface of a website. (Ahmad & Al-Zu'bi, 2011), say that this factor is measured by: Speed of e-transactions flow is faster than traditional banking channels, and there are frequent connection breakdowns. The bank site is easy to navigate due to its smooth speed. The transition is efficient and there is no waiting time.
- IV. **Responsiveness:** The responsiveness dimension encompasses customer service, problem solving, politeness, and competence. According to (Lin, 2010), responsiveness was related to providing a means of communication for evaluating the competence and politeness of e-banking services. The promotion of customers' development and expression of views through online communities and forums is another aspect of this dimension (Lin & Lee, 2005). According to (Achieng, 2015), responsiveness is the customer's perception of receiving assistance when required. Response and feedback encourage any activity. The speed with which a mobile operator, bank, or agent responds to a customer can have a significant impact on their level of satisfaction.
- V. **Contact:** Access is also conveyed through a contact dimension. It includes communication with customers via e-mail, SMS, phone, interactive website, postal

communication, and fax. Contact has an effect on customer satisfaction in the Internet Banking Services service (Jun, 2011) and (Zavareh, 2012). (Lia Jung, 2020), claims that frequent customer contact has a positive effect on customer satisfaction, indicating that customers believe the service provider treats them like valuable customers when they are contacted frequently.

### **2.2.1 Mobile Money in Africa**

The mobile phone provider contracts a network of agents to interface with customers and operates the telecommunications infrastructure for effecting transactions and storing virtual money in the majority of African nations. The economies of Africa stand to benefit greatly from the use of mobile money.

The number of mobile money transactions and payment options has skyrocketed across the continent. The majority of Africans now have access to commerce thanks to mobile money solutions like MM-Trade (Sionfou, 2021). Kenya, Uganda, and Zimbabwe are the most prominent examples of countries in Africa that offer mobile money services. There have been some remarkable successes in Kenya, such as M-Pesa, a joint venture between Vodafone and Safaricom. M-Pesa had 15 million customers, or 37.5% of the country's population, and was handling \$10 billion annually within five years of its launch. It demonstrates that the mobile banking system has a tremendous potential to attract a large number of customers, particularly those from unbanked societies (Raj Lal, 2015).

According to (Eva G. and Tony C. 2014), Uganda is also one of the countries where the majority of people use mobile phones to pay bills and send or receive money. This makes up about 27% of the country's adult population. About half of those who use mobile money services don't have a bank account. Eco-Cash has been extremely successful in Zimbabwe, registering 2.3 million customers within 18 months of its launch (equivalent to 31% of the adult population there), with 1 million of those customers remaining active in 2015 and an annualized transaction volume that was equivalent to 22% of the country's GDP (Jenny etail, 2016).

Utilizing the example of M-PESA in Kenya, (Morawczynski,2009) investigated the adoption, utilization, and outcomes of mobile money services. The study's findings revealed that the service has experienced phenomenal growth in Kenya since its launch in 2007. M-PESA has registered over 7.5 million users, or 34% of the adult population. There were two perspectives on the analysis. To begin, M-PESA was presented as a complex system rather than an isolated application using the socio-technical systems framework. This perspective made it abundantly clear that M-PESA's dedicated team of 16 system builders contributed to its rapid expansion. In order to enroll the components and maintain the system's stability, these individuals employed numerous strategies. They also worked to engineer the technology's social, economic, legal, and political environments. According to the analysis, M-PESA's success led to the development of a whole mobile money industry.

According to (James and Jane 2016), Safaricom PLC is a mobile network operator in Kenya. It is one of the most successful businesses in the East and Central African region and Kenya's largest provider of broadcast communications. The company has more experience with other telecom services and mobile money. Since 2007, it has launched a Mobile Money service. Ethio telecom, on the other hand, will launch this project in May 2021. (Sionfou, 2021) Between 2011 and 2020, the variety of service providers increased the number of mobile money accounts in Africa by 11 times. 48% of registered agents and 45 percent of all registered mobile money accounts were in the region. Sub-Saharan Africa has a 30- and 90-day account activity rate of 29%-40% higher than other regions. After signing up, the user continues to use their mobile money accounts, which helps the industry determine whether mobile money is just a fad or a necessity.

### **2.2.2 Mobile Money in Ethiopia**

Ethio Telecom, the state-owned telecom service provider in Ethiopia, introduced a brand-new mobile money service in May. It had already acquired 10 million subscribers and processed transactions worth more than 21 million Ethiopian birr, developed in collaboration with Huawei, a major manufacturer of telecom equipment in China. Tele birr is not the first mobile money product from Ethiopia. Since 2016, numerous service providers, most of which are operated by financial institutions and some of which are operated by banks like CBE birr, Amole, and Awash Wallet, have launched, offering

services such as airtime top-ups, airline tickets, utilities, school fees, pay TV subscriptions, and transportation. Some of these service providers include M-Birr and Hello Cash. However, regulatory restrictions, a lack of interoperability, limited product use cases, undeveloped merchant payment services, and inadequate outreach have all made these services vulnerable (CRA, 2021).

This study found that there was a lack of adequate telecommunication infrastructure, low internet penetration, fraud risk, low customer trust in mobile wallets, and a low level of ICT literacy and perception. Nevertheless, the platform is susceptible to frequent signup issues, system outages, transaction caps, and the inaccessibility of certain features, among other issues. Due to the fact that GizePay is not affected by problems with sign-up, malfunction, or feature unavailability on a regular basis (Seyum, 2021). Additionally, members' inability to access training and technical support is minor (Seyum, 2021).

### **2.2.3 Ethio Telecom Mobile Money**

M birr, E birr, and Hello cash were among the mobile money payment/systems introduced by some mobile money operators and financial institutions in Ethiopia in the past. Additionally, the majority of Ethiopian banks have launched mobile money payment services like CBE brr, Awash Wallet, and Amola. However, the national bank's proclamation to implement the mobile money system has prevented network operators from introducing a mobile money system. Ethio Telecom has officially launched its Tele Birr (Hizkel) mobile money services. H, 2021) Ethio Telecom Tele Birr, the most recent player in the mobile money industry, is very likely to dominate Ethiopia's digital economy. Within the first few weeks of its launch, this mobile money service has already attracted 3 million users, which was helped in part by a Birr 15 promotional incentive. P2P transfers, bill payments, merchant payments, airtime top-up, micro-credit, and cash-in/cash-out via agent network are among the services.

Ethio Telecom is likely to reach its goal of 21 million users in the first year due to the simple target market of all existing subscribers (possibly 45 million or more unique users). Per organization signs (at its sendoff), an accepted 60 percent dynamic client base will deal with 710mn exchanges by volume and Birr 69.6 billion by esteem toward the finish of the primary

year, suggesting on normal of 4.7 exchanges per client each month and close to Birr 100 of significant worth for every individual exchange (CRA, 2022).

### 2.3 Empirical Literature

In many countries in Sub-Saharan Africa, telecommunications companies and formal banking institutions offer a major retail financial service called mobile money. To remain competitive, telecommunications companies must improve the quality of service they provide in response to the growing demand for mobile money services. Customer satisfaction is influenced by the availability of services, facilities, and security, while customer retention is influenced by the service provider's expertise, the operator's network system, and responsiveness. The study's findings will be helpful to policymakers and mobile money service providers in designing services that will improve customer satisfaction and retention. In the context of mobile money, the study contributes to the identification of service quality constructs that influence customer satisfaction and continued usage.

According to (Palmer, 2001) and (Soni, 2012), the level of contentment with financial services is influenced by their dependability, responsiveness, security, user-friendliness, and tangibles. In addition, they asserted that e-banking's ease of use, quick services, and reasonable service fees contribute to customer satisfaction. E-banking has gained popularity in Nigeria due to its convenience, flexibility, and transaction-related benefits like speed, efficiency, and accessibility, according to another study (Ogunlowore, 2014) despite the risks of insecurity and, most importantly, power issues. In a similar vein, another study carried out in Iran by (Fatemeh, 2015), found a positive and significant correlation between customer satisfaction and speed, efficiency, security, trust, accountability, and information.

(Parasuraman, 2005), as indicated by Dad Finding on Numerous Thing Scale for Evaluating Electronic Help Quality on factors like Proficiency, Framework Accessibility, Satisfaction, Security are autonomous variable and client view of generally quality, worth, and dedication goals are reliant factors, so the finding impacts of productivity and satisfaction on every one of the three ward factors are positive and critical, though the impacts of framework accessibility and protection made immaterial difference.

(Stephen, 2011), In the study "Evaluation of Customer Satisfaction with Internet Banking Service Quality," variables such as "customer service," "web design," "assurance," "professional design," and "information provision" were considered independent variables, and the results indicate that the variables can predict customer satisfaction.

(Hitesh, 2015). In a study on customer satisfaction and electronic banking services in Tricity, Tangibility, Reliability, Responsiveness, Assurance, and Empathy were found to be independent variables of customer satisfaction. The findings in this study indicate that dimensions of service quality such as tangibility, reliability, responsiveness, assurance, and empathy have shown to have shown a greater or lesser impact on customer satisfaction.

The definition of quality may vary from person to person and from situation to situation. The definitions of service quality vary only in wording but typically involve determining whether perceived service delivery meets, exceeds or fails to meet customer expectations (Parasuraman, 2008). Ethio telecom provides two forms of agent training. The first is the initial training session when a new agent is brought on board. This session is in depth and covers all aspects of the operation of the platform and the requirements for AML and KYC compliance. The team that manages telebirr has a dedicated department to provide current training materials and to facilitate training sessions. The second form of training happens in the field and is provided by an external agency that has been hired by Ethio telecom to travel around the country and provide refresher sessions for master and retail agents.

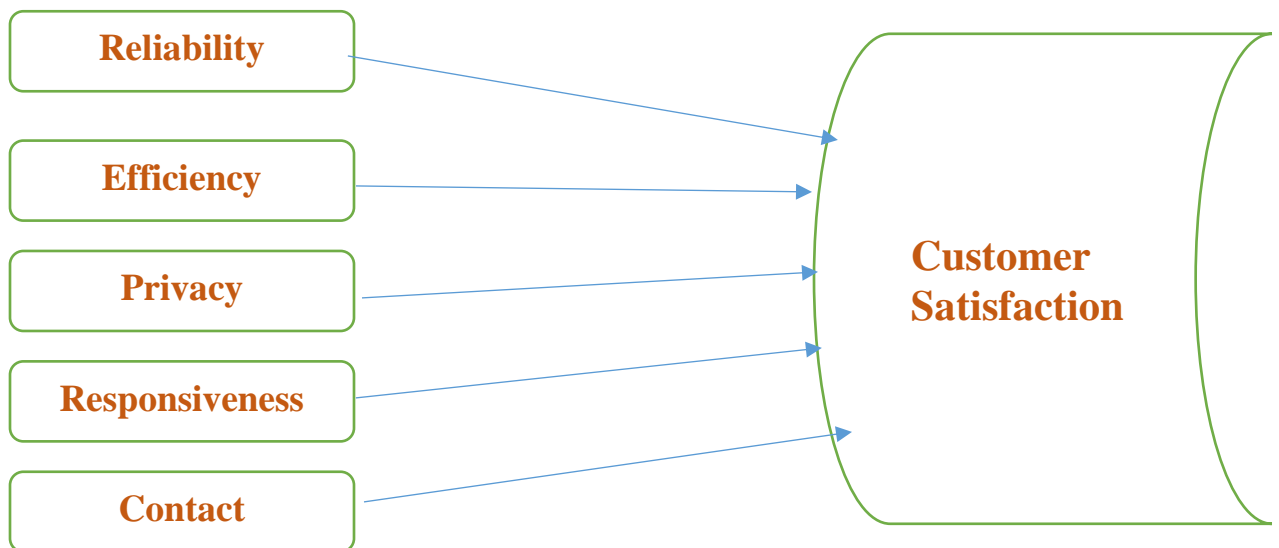
A study by (Parasuraman et al. 2005) on the Internet service quality of online shopping websites resulted in the development of a service quality scale, the e-SQ scale, consisting of seven dimensions: efficiency, system availability, fulfillment, privacy, responsiveness, compensation and contact. According to (Zeithaml et al. 2001), he has developed 11 dimensions of service quality that is: reliability, responsibility, access, flexibility, and ease of navigation, efficiency, assurance, security, price knowledge, site aesthetics and customization / personalization

## 2.4. Conceptual Framework

This study's main goal was to determine how non-banking financial services affected customer satisfaction. The model that was used for this study's research is shown in Figure.1, the independent factors taken into consideration while analyzing the features of service quality.

A frame of work is created for the study given to explore the link between the non-banking service quality dimension and customer satisfaction in the non-banking business based on the aforementioned literature and its dimensions. As a result, the researcher created the conceptual framework below.

Figure 1 Conceptual Framework



## 2.5. Research Hypothesis

(Tao, 2021) has proposed a model for evaluating non-banking customer satisfaction. The following hypothesis was developed based on this model, on customer satisfaction and Telebirr Mobile Money service accordingly. I hypothesized that each of those variables has a significantly effect on Customer Satisfaction.

H1: Reliability has positive and significant effect on customer satisfaction

H1: Efficiency has positive and significant effect on customer satisfaction

H1: Privacy has positive and significant effect on customer satisfaction

H1: Responsiveness has positive and significant effect on customer satisfaction

H1: Contact security has positive and significant effect on customer satisfaction

## **CHAPTER THREE**

### **3. RESEARCH METHODOLOGY**

The study's approach and method, data source, population, sample size, sampling procedures, data collection methods, and data analysis methods were all discussed in this chapter. Additionally, the chapter provides an overview of the research design, the location of the study, the targeted population, the sampling design, the data collection tools, the pilot test, and data analysis.

#### **3.1. Research Approach**

In this studied Quantitative research approach used to examined the effect of Non-banking Financial Service to Customer Satisfaction: the case of Tele birt in Ethio Telecom. In this approach, Quantitative data collected through structured surveyed, captured customers' ratings and perceptions of service quality components and overall satisfaction.

#### **3.2. Research Design**

In this study both explanatorily research and descriptive research design configuration was utilized. Since the study's objective was to study's main goal was to examine how non-banking financial services affected customer satisfaction in the context of tele birt on Ethio Telecom, Mobile Money customer satisfaction and service quality components (reliability, efficiency, privacy, responsiveness, and contact), the explanatory research design would have been appropriate. The design provided an opportunity to comprehend the extent to which these factors impact satisfaction levels and allowed for the identification of factors that influenced customer satisfaction. The conceptual framework of the research was the research design; According to (Robson, 2002), explanation research seeks to gain an explanation of a specific situation or problem, typically in the form of causal relationships. It is the blueprint for the collection, measurement, and analysis of data.

### **3.3. Sources of Data**

The study was conducted by collecting data from both primary and secondary sources. The primary sources were any Tele birr users of the selected ethio telecom administrative zones. The source of secondary data is, the Ethio telecom annual report, website page, books and published journals. In order to strength the result and findings of the study the researcher examine the finding and conclusion some related researches. This helped to see what others say about the subject matter, what are their findings and recommendations. In order to achieve the goals of the study the majority of the studied relied on questionnaire-collected primary data.

### **3.4. Data Collection instrument**

According to (Yin 1989), structured questioners are important method for collecting primary data and that it further allows the researcher to be well focused on the specific research topic.

In order to collect sufficient data so as to answer the research questions, researcher designed two surveys; the first was a questionnaire to get quantified results. The items were developed based on previous empirical literature. Specifically most of the items were taken from the model that was developed by (Wu and Tao 2012). The questionnaire has two parts; the first part aimed at the collection of demographic information of the participants such as sex, age, marital status, education level and occupation. This is to determine the category of individuals and also to test if there is relation between demographic characteristics and customer satisfaction.

In addition questionnaires (four items) related to measure level of satisfaction also included in this part. This was aimed to examine the level of customer satisfaction in using Tele birr. The second part of the questionnaires consists of a 22-item Likert scale instruments which measure e banking service delivery. This will enable the researcher to determine which dimension has more impact on customer satisfaction. The questionnaires are structured mainly in close-ended questions by which the respondents were asked to indicate their level of agreement using a five Likert rating scale measurement where: Strongly Agree= 5; Agree = 4; Neutral =3, Disagree = 2; and Strongly Disagree =1. The use of Likert scale is to make it easier for respondents to answer question in a simple way. In order to supplement the

primary data, secondary data was collected through document analysis. The 384 questionnaires were distributed manually and online through google form as part of the data collection procedures, and respondent was given a printed copy and send google link to complete the questionnaire on their own.

### **3.5. Population and Sampling Design**

#### **3.5.1. Population of Study**

Tele birr customers in Ethiopia are the study's target in Geographical demography. The specific population about which information is desired is the target population. So From more than 32 million customers use Ethio Telecom. The study focused on five Addis Ababa tele birr mobile money zones in its customer base for the sake of convenience's.

#### **3.5.2. Sample Method**

According to (Creswell,1994), sampling is the procedure of selecting a number of people for a study in such a way that the chosen people represent the larger group from which they were selected. According to (Sekaran and Bougie, 2009), non-probability convenient sampling is used to select respondents from specific Ethio Telecom tele birr, customers. This method is relatively quick, convenient, and less expensive to collect data. The reliability, efficiency, privacy, responsiveness, and contact sections of the customer satisfaction in non-banking finance questionnaire were developed for this study.

#### **3.5.3. Sample Size**

It is difficult to determine the precise number of Ethio Telecom customers, despite the fact that the company has more than 32 million tele birr customers. This is because there are more customers coming in every day. The infinite population formula was used to determine the sample size for this study, which was 384 customers. To decide the example size, an assessment of the normal extent of achievement should be thought of (Kothari, 2004). In this instance, a more conservative percentage of success (p) of 50%, a level of confidence of 95% (z), and a sampling error of no more than 5% (e) were chosen,

$$n = Z^2 (P (1-p)/e^2)$$

Where:

n = the sample size

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

e= acceptable sample error (0.05)

p = probability of success (assume it is 0.5)

$$n = Z^2 (P (1-p)/e^2)$$

$$n = (1.92)^2 (0.5(1-0.5) \div (0.05)^2)$$

$$n = 384$$

Therefore, the final sample size for this study is 384.

### 3.6. Method of Data Analysis

According to Kothar (2004), data analysis is the computation of specific measures in addition to the search for pattern groups descriptive statistics were utilized. The data were summarized using frequency, percentage, mean, and standard deviation through descriptive analysis. The Multiple Linear Regression (MLR) model was used to determine the relationship between customer satisfaction and the stated variables because the study aimed to investigate the impact on customer satisfaction of non-banking service quality dimensions—reliability, efficiency, responsiveness, privacy, and contact.

The ability of the regression method to determine the nature of the influence of independent variables on a dependent variable makes it useful. The coefficients of a linear equation with one or more independent variables that best predicted the value of the dependent variable can be estimated using regression.

The researcher used ANOVA, R-square, and F statics to validate the model. In addition, the four underlying premises of multiple linear regressions were examined. Multicollinearity, homoscedasticity, linearity, and the normality test are all part of this. A VIF was used to verify that the model did not have a strong correlation between the explanatory variables in order to check for multicollinearity. A scatterplot of standardized residuals against

standardized predicted values was used to test residuals in addition to homoscedasticity. Finally, the SPSS software was used to plot a histogram of residuals for the normality test.

SPSS version 25 is a statistical software for social science that can be used to estimate the model. In the regression model, customer satisfaction is the dependent variable, and the components of service quality are the independent variables. The equation for the regression can be shown as:

$$\text{Customer Satisfaction} = \beta_0 + \beta_1(\text{Reliability}) + \beta_2(\text{Efficiency}) + \beta_3(\text{Privacy}) + \beta_4(\text{Responsiveness}) + \beta_5(\text{Contact}) + \varepsilon$$

### **3.7. Validity and Reliability of the Tool**

#### **3.7.1. Validity**

In quantitative research, validity generally refers to the correctness of the measurement (instrument accuracy). For instance, if a researcher seeks to look at anxiety, then looking at anxiety is invalid and should not be done. On the other hand, if a study employs the same conditions and a research tool that regularly yields a quantitative study, then the study is considered to be trustworthy (Heale & Twycross, 2015). Content validity, according to (Mohamed et al., 2016), is the degree to which an item in an instrument completely encompasses all of the important components of the subject matter under study.

In this study, the researcher addressed the issue of research validity through A variety of actions were taken to guarantee the study's validity:

- By using 10% of the study's sample size, the validity of the questionnaire was tested.
- Information was gathered from respondents with experience using Tele birr service and from trustworthy sources.
- To ensure the validity of the results, survey questions based on literature reviews and frames of references were used.
- Moreover, the instruments were evaluated by the expertise (advisor) to assess the face and content validity.

### 3.7.2. Reliability

Reliability analysis is concerned with the research instrument's internal consistency, which is the extent to which results are consistent over time and an accurate representation of the whole population under study (Thatcher, 2010). An instrument's reliability refers to its capacity to guarantee the consistency of the phenomena it is intended to record.

In order to get input on the reliability, pilot testing was also done among another study participants and 30 samples was used to test the reliability of the tool. Using Cronbach's alpha to demonstrate how the variables are best suited for the questionnaire, the reliability value for all variable constructs of service quality of Telebirr mobile money service, and customers satisfaction were evaluated. Based on the following table, the tool used was shown as reliable with acceptable value of Cronbach alpha (NB a reliability coefficient of 0.70 or higher is considered “acceptable” in most social science research situation).

**Table 1: Reliability test Cronbach alpha value, 2023.**

| <b>Components</b>     | <b>Cronbach's Alpha</b> | <b>N of Items</b> |
|-----------------------|-------------------------|-------------------|
| Reliability           | 0.795                   | 4                 |
| Efficiency            | 0.827                   | 4                 |
| Privacy               | 0.827                   | 4                 |
| Responsiveness        | 0.794                   | 4                 |
| Contact               | 0.772                   | 4                 |
| Customer satisfaction | 0.907                   | 6                 |

Source: Own survey result, 2023

### **3.8. Ethical Research Consideration**

Ethics-related concerns including anonymity and confidentiality were given careful consideration throughout the study. As a result, the study's relevance and goal were initially explained to the participants, who were also informed that their responses would be kept anonymous and utilized solely for academic purposes. The studies also ensure that their name and the identity of their organization are kept secret, and that any kind of harm—physical, social, psychological, or otherwise—is kept to an absolute minimum. They agreed to participate in the study willingly and accepted this as a guarantee.

## CHAPTER FOUR

### 4. RESULT AND DISCUSSION

#### 4.1. Introduction

This section provides a discussion on the quantitative result of the study. It focuses on the regression relationship of the independent and dependent variables. All variables are observed for each cross-section. hence, this part deals with the result of the study which includes descriptive statistics, Pearson correlation coefficient analysis, test for linear regression model assumptions and regression results of the model which is relevant for the study.

#### 4.2. Demographic Analysis

##### 4.2.1 Demographic characteristics of respondents

This research was enclosed the main demographic characteristics such as gender, age groups, marital status, educational levels, monthly income, and occupational of customer involved. Gender was considered to find out whether male or female customers have been highly involved in Telecom Mobile money service. Age group of respondents was considered to find out the age groups that were dominant in Tele birr service. Educational level was considered to find out the customers level of educations that were mostly engaged. Whereas, marital status was considered to uncover which marital status was more involved as a customer of Ethio telecom the findings were indicated below one by one.

##### 4.2.2 Response Rate

The totals of 100 questionnaires were distributed to five Ethio telecom administrative zones o tele birr customers in Addis Ababa city and the response rate was indicated in the table below. From the 100 questionnaires distributed, though all questioners were returned back, a response rate of 97.1 percent was achieved with 273 of the 284 sample questions that were distributed and valid responses were used for analysis.

Table 2: Gender profile of participants, Ethio Telecom, 2023.

|       |        | Frequency | Percent | Cumulative Percent |
|-------|--------|-----------|---------|--------------------|
| Valid | Female | 149       | 39.9    | 39.9               |
|       | Male   | 224       | 60.1    | 100.0              |
|       | Total  | 373       | 100.0   |                    |

Source: Own survey result, 2023

#### 4.2.3 Gender Profile

The Respondents profile based on table 4.2 describes that finding concerning the gender status of respondents are Females 39.9 % and males 60.1%, and here in categories the shares of females are lower than males. Therefore, the Ethio telecom should have to concentrate on all of the gender of customer for betterment of tele birr mobile money.

Table 3 Age of participants, Ethio Telecom, 2023.

|       |       | Frequency | Percent | Cumulative Percent |
|-------|-------|-----------|---------|--------------------|
| Valid | 15-24 | 34        | 9.1     | 9.1                |
|       | 25-35 | 292       | 78.3    | 87.4               |
|       | 36-50 | 24        | 6.4     | 93.8               |
|       | 51-60 | 23        | 6.2     | 100.0              |
|       | Total | 373       | 100.0   |                    |

#### 4.2.4 Age Profile

From the above table, 50% of the respondents were categorized under the 18-26, 33% of the respondents were categorized under 27-35, 14% of the respondents were under age group of 36-43 and 3% of the respondents were categorized under age group of above 44,

from these description, the majority of the respondents were from age group of 18-26 which were productive age.

Table 4 7 Marital Status of participants, Ethio Telecom, 2023

|       |           | Frequency | Percent | Cumulative Percent |
|-------|-----------|-----------|---------|--------------------|
| Valid | Married   | 159       | 42.6    | 42.6               |
|       | Separated | 11        | 2.9     | 45.6               |
|       | Widowed   | 12        | 3.2     | 48.8               |
|       | Single    | 191       | 51.2    | 100.0              |
|       | Total     | 373       | 100.0   |                    |

Source: Own survey result, 2023

#### 4.2.5 Marital Status profile

From the above table, 42.6% Married, 2.9% separated, 3.2% widowed and 51.2% single. So the majority of the people who responded to the survey (42.6%) were married.

Table 5 Educational background profile of participants, Ethio Telecom, 2023

|       |                         | Frequency | Percent | Cumulative Percent |
|-------|-------------------------|-----------|---------|--------------------|
| Valid | Illiterate              | 5         | 1.3     | 1.3                |
|       | Primary education       | 6         | 1.6     | 2.9                |
|       | secondary(high school)  | 93        | 24.9    | 27.9               |
|       | TVET                    | 30        | 8.0     | 35.9               |
|       | University degree       | 142       | 38.1    | 74.0               |
|       | Master degree and above | 97        | 26.0    | 100.0              |
|       | Total                   | 373       | 100.0   |                    |

Source: Own survey result, 2023

#### 4.2.6 Educational background profile

Concerning the educational background of the respondents, 1.3% of the respondent are illiterate, 1.6 are Primary education, 24.9% are secondary, 8.0 % are TVET, 38.1% are University degree holders and 26.0% of the respondent are categorized under master degree and above, and from this the majority of the respondents are BSc(BA)degree Holder. This shows that the majorities of the respondents were educated and hence, there response were contribute a lot for the effectiveness of the system and the process of the Ethio telecom

Table 6 Occupation profile of participants, Ethio Telecom, 2023

|       |                    | Frequency | Percent | Cumulative Percent |
|-------|--------------------|-----------|---------|--------------------|
| Valid | Unemployed         | 43        | 11.5    | 11.5               |
|       | Student            | 110       | 29.5    | 41.0               |
|       | Salaried/employed  | 107       | 28.7    | 69.7               |
|       | Business men/women | 113       | 30.3    | 100.0              |
|       | Total              | 373       | 100.0   |                    |

Source: Own survey result, 2023

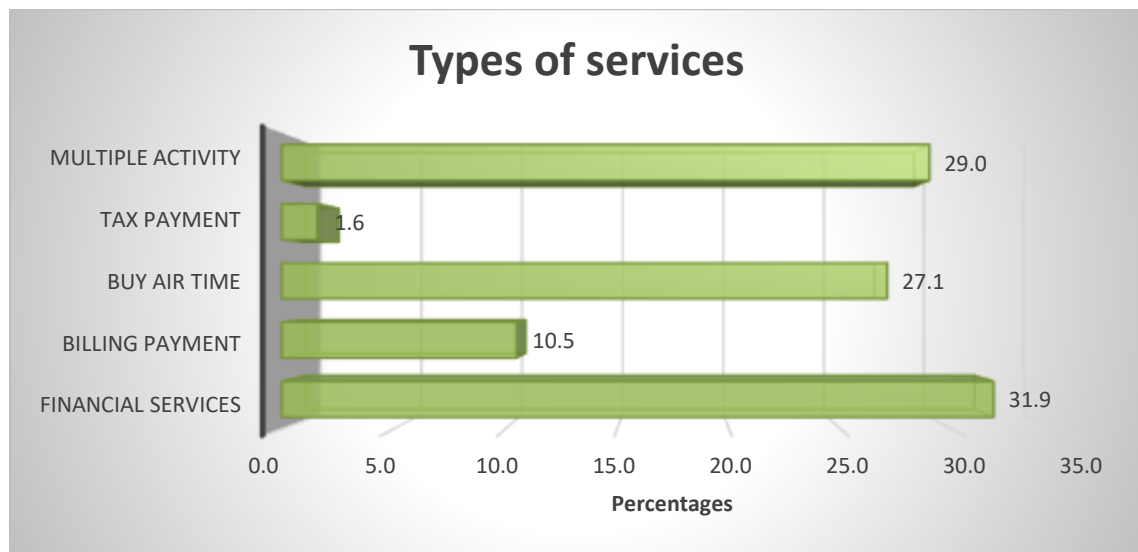
#### 4.2.7 Occupation Profile

As shown from the above table, 30.3% of the total respondents are which have their own business, 28.7 % of the respondents are salaried/employed, 28.7% of the total respondents are student, 11.5% of the total respondent are categorized Unemployed. As indicated above, the majorities of the total respondents are categorized under Business men/women and the minorities of the respondents are categorized under unemployed.

## 4.2 Types of Services Used by Customers

The client service options available through Telebirr mobile money are shown in the figure below. The Telebirr mobile money was used by most clients (52.8 percent) to purchase airtime, and 30.3 % of clients using services like mobile banking and fund transfers. Moreover, 10.5% of clients made advantage of billing payment services to effortlessly pay their utility bills. The services for paying taxes was less often used and each accounted for a smaller proportion of clients.

Figure 2 Types of services used by, Telebirr customer, Ethio telecom, 2023

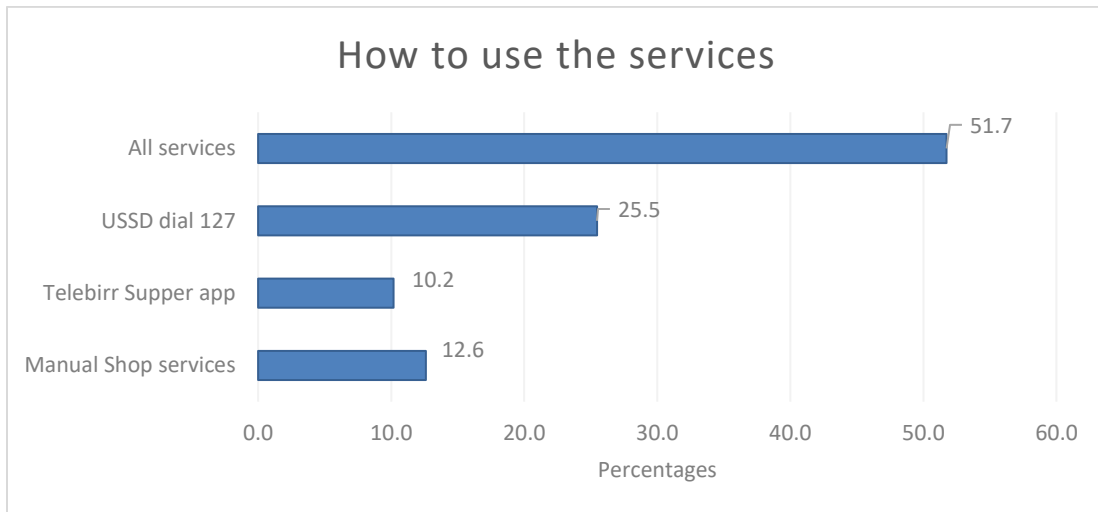


Source: Own survey result, 2023

## 4.3 The Way How to Use Telebirr Mobile Money Services

Among the respondents, 12.6% reported using the Manual Shop services, Telebirr Super app was used by 38 (10.2%) of the total. The USSD dial 127 service was the most commonly used, with 95 (25.5%) utilizing it. Using all services (multiple ways) received the highest usage, with 193 (51.7%).

Figure 3 The way how to use the services, Telebirr mobile money, Ethio telecom, 2023



Source: Own survey result, 2023

#### 4.4 Customer Feelings about Tele Birr Mobile Money Services

##### Mean and Standard Deviation

In order to compare the different factors that affect the level of customer satisfaction, mean and standard deviation of the respondents have been computed. The result of the analysis is shown in the table 4.3 below.

Table 7 Mean and Standard Deviation

|                        | N   | Mean   | Std. Deviation |
|------------------------|-----|--------|----------------|
| Customers Satisfaction | 373 | 3.1037 | 1.10614        |
| Reliability            | 373 | 3.0496 | .76523         |
| Efficiency             | 373 | 3.0261 | 1.17667        |
| Privacy                | 373 | 2.9169 | 1.25153        |
| Responsiveness         | 373 | 2.8901 | 1.17303        |
| Contact                | 373 | 2.8036 | 1.11554        |
| Valid N (listwise)     | 373 |        |                |

#### 4.4.1 Reliability

Based on the descriptive data analysis, Telebirr mobile money delivers services exactly as promised," has a mean of 3.12, indicating a moderate level of agreement among respondents. Moreover, the mean score of 2.73 for Telebirr mobile money services are free from deficiencies suggesting a slightly lower level of agreement and potentially some perceived deficiencies in the services. Moderate mean score was rated that Telebirr mobile money offers 24/7 services with a mean score of 3.31, indicating a relatively higher level of agreement among respondents. Finally, the reliability for the transaction had mean score of 3.04, implying a moderate level of agreement. These statistics provide insights into the perceived reliability of Telebirr mobile money services based on respondent feedback.

**Table 8: Reliability of the Services, Telebirr Mobile Money, Ethio Telecom, 2023.**

| <b>Reliability</b>   | <b>Mean</b> | <b>Std. Deviation</b> |
|--|-------------|-----------------------|
| Telebirr mobile money delivers services exactly as promised. | 3.12        | 1.072                 |
| Telebirr mobile money services are free from deficiencies.   | 2.73        | 1.045                 |
| Telebirr mobile money offers 24/7 services.                  | 3.31        | 1.142                 |
| Transaction termination not happen in Telebirr Mobile money. | 3.04        | 1.018                 |

Source: Own survey result, 2023

#### 4.4.2 Efficiency

Based on the data, Telebirr mobile money is not time-consuming had mean score of 3.16, suggests a moderate level of agreement. This indicates that users generally find the service to be relatively efficient in terms of time. However, the statement regarding the speed of transaction completing through Telebirr Mobile Money, a lower mean score of 2.76 was observed. This indicates a lower level of agreement and potentially highlights some challenges or delays experienced by users during transaction processes. Regarding the cost

of the transaction using Telebirr mobile money, the mean score of 3.19 was rated that suggests a moderate level of agreement regarding affordability. Users perceive Telebirr mobile money as a relatively cost-effective method for conducting transactions. The simplicity and understandability of the Telebirr mobile money language had received a mean score of 2.95. This indicates a relatively lower level of agreement and suggests that some users may encounter difficulties in comprehending the language used within the service.

**Table 9: Efficiency of the services, Telebirr mobile money, Ethio telecom, 2023**

| <b>Efficiency</b>   | <b>Mean</b> | <b>Std. Deviation</b> |
|---|-------------|-----------------------|
| Using Telebirr mobile money is not time-consuming.                      | 3.16        | 1.363                 |
| Completing transactions through Telebirr Mobile Money is fast and easy. | 2.76        | 1.373                 |
| Telebirr mobile money is the cheapest way of making transaction         | 3.19        | 1.591                 |
| Telebirr mobile money language is easy to understand.                   | 2.95        | 1.462                 |

Source: Own survey result, 2023

#### **4.4.3 Privacy**

The table provides information on the perceived privacy and transaction safety of Telebirr mobile money services. The safety of making transactions through Telebirr mobile money received a mean score of 3.24 indicating a moderate level of agreement among respondents regarding the safety of transactions. However, the statement "Telebirr Mobile Money protects my privacy and transaction information" received a lower mean score of 2.86, suggesting a relatively lower level of agreement and potentially highlighting concerns about privacy and data protection. Similarly, regarding clear transaction safety policy Telebirr mobile money had a mean score of 2.90 indicating a lower level of agreement indicating some ambiguity or lack of clarity in the perceived safety policies. There is a restriction on

large volume transactions in Telebirr mobile money with a lower mean score of 2.67, implying a relatively lower level of agreement and indicating that some users may perceive limitations or restrictions on larger transactions. These findings provide insights into the perceptions of users regarding the privacy and transaction safety aspects of Telebirr mobile money services, which can be used to identify areas for improvement and address any concerns or gaps in privacy protection.

**Table 10: Privacy of the services, Telebirr mobile money, Ethio telecom, 2023**

| <b>Privacy</b>   | <b>Mean</b> | <b>Std. Deviation</b> |
|--|-------------|-----------------------|
| Making transactions through Telebirr mobile money is safe.                   | 3.24        | 1.714                 |
| Telebirr Mobile Money protects my privacy and transaction information.       | 2.86        | 1.534                 |
| Telebirr mobile money has clear transaction safety policies.                 | 2.90        | 1.469                 |
| There is a restriction on large volume transactions in Telebirr mobile money | 2.67        | 1.483                 |

Source: Own survey result, 2023

#### **4.4.4 Responsiveness**

The table presents data on the responsiveness aspect of Telebirr Mobile Money services. Based on the data, regarding response from the administrator with good gesture within Telebirr Mobile Money. The mean score was 2.82 indicating a moderate level of agreement but also some variability in responses. Having Telebirr Mobile Money Administrator solves whatever problems you sincerely express has a higher mean score of 3.02, suggesting a relatively higher level of agreement among respondents. However, Telebirr Mobile Money has knowledgeable staff to solve problems, has a mean score of 3.09, indicating a moderate level of agreement. However, regarding Telebirr mobile money fast query in online services to respond the compliant of customers, the Telebirr money has a lower mean score of 2.64, suggesting a slightly lower level of agreement indicating the online customer services is not fast and reachable.

**Table 11: Responsiveness of the services, Telebirr mobile money, Ethio Telecom, 2023**

| <b>Responsiveness</b>  | <b>Mean</b> | <b>Std. Deviation</b> |
|--|-------------|-----------------------|
| The administrator of Telebirr Mobile Money responds to needs happily and rap | 2.82        | 1.537                 |
| Telebirr Mobile Money Administrator solves whatever problems you sincerely e | 3.02        | 1.431                 |
| Telebirr Mobile Money has knowledgeable staff to solve problem               | 3.09        | 1.551                 |
| There is a Telebirr mobile money help fast query in online                   | 2.64        | 1.494                 |

#### **4.4.5 Contact**

The descriptive statistics provide insights into the contact aspect of Telebirr Mobile Money services, focusing on four statements related to customer support and accessibility. Regarding Telebirr Mobile Money customer service through email address, it had lower mean score of 2.77, suggesting a room for improvement since lower mean score is observed in respondents' perceptions of the availability and effectiveness of email support.

Similarly, having Telebirr Mobile Money offers an accessible telephone service hotline received a mean score of 2.91 indicating a relatively lower level of agreement regarding the presence of a hotline, potentially mixed opinions on its accessibility and effectiveness. The simplify in contacting Telebirr Mobile Money administrators received a mean score of 2.76, indicating a lower level of agreement on the ease of contact. And easily access of Telebirr mobile money with agent had a mean score of 2.73 indicating there is a problem regarding the ease of accessing the service and satisfaction with the agents. These findings highlight areas that Telebirr Mobile Money can focus on to improve customer contact and accessibility.

**Table 12: Contact Services, Telebirr Mobile Money, Ethio Telecom, 2023**

| <b>Contact</b>   | <b>Mean</b> | <b>Std. Deviation</b> |
|--|-------------|-----------------------|
| Telebirr Mobile Money offers a customer service email address. | 2.77        | 1.494                 |

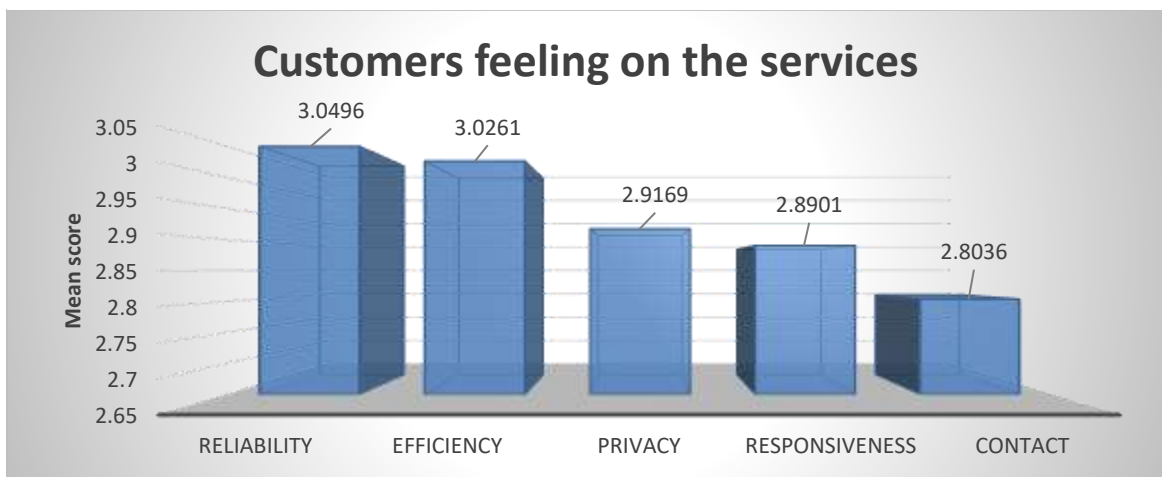
|  |      |       |
|--|------|-------|
| Telebirr Mobile Money offers accessible telephone service hotline. | 2.91 | 1.679 |
| Contacting Telebirr Mobile Money administrators is very easy.      | 2.76 | 1.362 |
| Can easily access Telebirr mobile money with agent satisfaction.   | 2.73 | 1.359 |

Source: Own survey result, 2023

#### 4.5 Overall Mean Score Of Feelings about Tele Birr Mobile Money Services

Customers generally have a moderately moderate opinion of the services' reliability (M = 3.0496) and effectiveness (M = 3.0261). The average rating for the privacy element is slightly lower (M=2.9169). Customers also have a lower mean score for responsiveness (M= 2.8901) and contact options (M= 2.8036). These results offer vital information that Telebirr may use to pinpoint problem areas and raise consumer satisfaction levels for their mobile money services in terms of dependability, effectiveness, privacy, responsiveness, and contact options.

Figure 4 Overall customer perception on Telebirr mobile money, Ethio telecom, 2023



Source: Own survey result, 2023

## 4.6 Customers Satisfaction

Customer's satisfaction level on the Telebirr mobile money services is assessed using Likert scaled questions using different aspects of satisfaction with Telebirr mobile money services. on average, users are satisfied with Telebirr mobile money application with the mean value of 3.14. Similarly, the mean value of 2.98 suggests a slightly lower level of satisfaction with Telebirr mobile money SMS notification. However, regarding satisfaction with Telebirr mobile money multi-purpose service, the user rated moderate mean score of 3.18. Moreover, the mean value of 3.49 suggests a relatively higher level of satisfaction with Telebirr mobile money in terms of avoiding visits to shops and agents unless necessary. However, lower level of satisfaction was observed with the accessibility and reliability of Telebirr mobile money services with the mean value of 3.18. This information provides an overall understanding of the average satisfaction levels.

**Table 13: Customer's satisfaction, Telebirr mobile money, Ethio telecom, 2023**

| Satisfaction  | Mean | Std. Deviation |
|---|------|----------------|
| Satisfied with Telebirr mobile money application.                                 | 3.14 | 1.293          |
| Satisfied with Telebirr mobile money SMS notification.                            | 2.98 | 1.210          |
| Satisfied by Telebirr mobile money multi-purpose service.                         | 3.18 | 1.380          |
| Satisfied by Telebirr mobile money to not visit shops and agents unless necessary | 3.49 | 1.269          |
| Satisfied by Telebirr mobile money accessibility and reliability.                 | 2.90 | 1.260          |
| Satisfied by Telebirr fast and convenient services.                               | 2.93 | 1.356          |

Source: Own survey result, 2023

## 4.7 The Effect of Service on Customer Satisfaction

### 4.7.1 Correlation between customer satisfaction and services quality

The table describes the correlation between the independent variables and the dependent variables using the Pearson correlation analysis. The correlation between predictors indicates that there are no Multicollinearity issues among the variables, and the result demonstrates that the research variables have acceptable reliability. Many of these results have significant relationships between the independent and dependent variables, with a significance level of (P0.01 to P0.05).

Additionally, correlation is a statistical measure of the degree to which two variables have a linear relationship. Its possible values are -1 and 1. A perfect negative, or inverse, correlation is one in which values in one series rise while those in the other series fall, and vice versa, with a correlation coefficient of -1. A coefficient of one indicates a direct or perfect positive correlation. The absence of a linear relationship is indicated by a correlation coefficient of zero.

Therefore, there was a strong correlation of 0.720 between the dependent variable, customer satisfaction (CS), and Reliability, indicating that Reliability and customers' satisfaction are more strongly linked. In a similar vein, efficiency has a strong positive correlation with customer satisfaction (0.831), indicating that efficiency increases customer satisfaction. Protection (0.715), Responsiveness (0.609), and Contact (0.654) likewise show positive relationships with Clients Fulfillment, recommending that more elevated levels of Security, Responsiveness, and Contact add to expanded fulfillment. These correlations can provide insights for enhancing the overall customer experience with Telebirr mobile money services and highlight the significance of these factors in influencing customer satisfaction.

**Table 14: Pearson correlation between customer satisfaction and deamination of services quality, Ethio telecom, 2023**

|                        | Customers Satisfaction | Reliability | Efficiency | Privacy | Responsiveness | Contact |
|------------------------|------------------------|-------------|------------|---------|----------------|---------|
| Customers Satisfaction | 1                      |             |            |         |                |         |
| Reliability            | .720**                 | 1           |            |         |                |         |
| Efficiency             | .831**                 | .722**      | 1          |         |                |         |
| Privacy                | .715**                 | .624**      | .757**     | 1       |                |         |
| Responsiveness         | .609**                 | .554**      | .609**     | .660**  | 1              |         |
| Contact                | .654**                 | .623**      | .584**     | .613**  | .732**         | 1       |

Source: Own survey result, 2023

## 4.7.2 Multiple Linear Regression

### 4.7.2.1 Model assumptions for multiple regression

**Multicollinearity:** When two or more predictors in a regression model have a strong correlation, Multicollinearity is present. To test for Multicollinearity, all variance inflation factor (VIF) values were evaluated and found to be less than 10. In addition, the fact that the paired values of all predictors in the correlation matrix are less than 0.80, as shown in the preceding table, indicates that there were no multicollinearity issues that affected the analysis of the findings. Instead, it leads to the acceptance of the r value, tolerance, and VIF values. This indicates that there is no significant concern regarding multicollinearity among the independent variables.

**Table 15: Multicollinearity Test, 2023.**

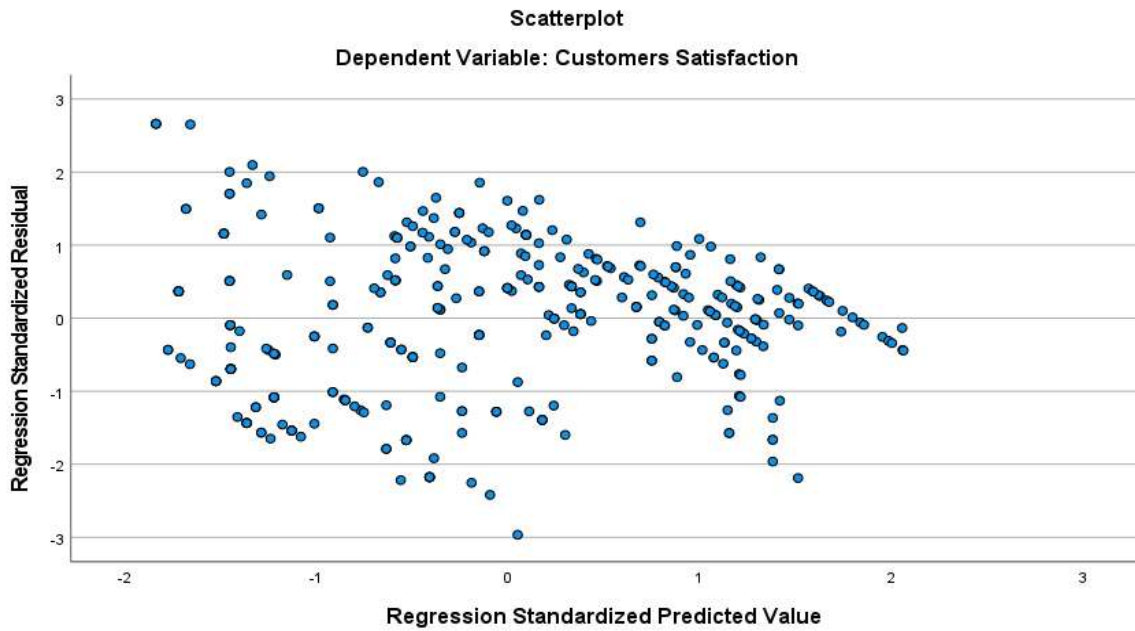
| Model          | Tolerance | VIF   |
|----------------|-----------|-------|
| (Constant)     | -         | -     |
| Reliability    | .416      | 2.405 |
| Efficiency     | .320      | 3.124 |
| Privacy        | .356      | 2.806 |
| Responsiveness | .387      | 2.586 |
| Contact        | .390      | 2.561 |

Source: Own survey result, 2023

**Homoscedasticity:** The variance of the residual terms ought to remain constant at each level of the (the) predictor variables. Simply put, homoscedasticity means that the residuals at each level of the predictor(s) should have the same variance. Heteroscedasticity is the term for extreme unequal variances. The points are distributed evenly and randomly throughout the plot, as depicted in the figure below. The pattern indicates a situation in which the homoscedasticity assumptions have been satisfied because the variance in each point is distributed at random. (Fig 5)

**Linearity:** For each increment of the predictors, the mean values of the outcome variable follow a straight line. This essentially entails the assumption that the relationship we are modeling is linear. The findings' generalizability is clearly limited if a linear model is used to model a non-linear relationship. As a result, the researcher used a scatter plot to examine the linear relationship between the predicted value and the standardized residual. (Fig 5)

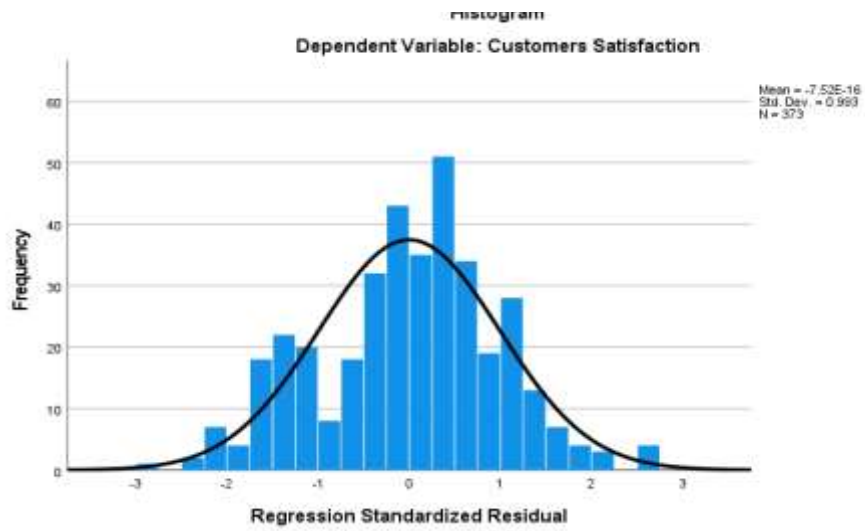
Figure 5 Scatter plot that shows heteroscedasticity and linearity, 2023



Source: Own survey result, 2023

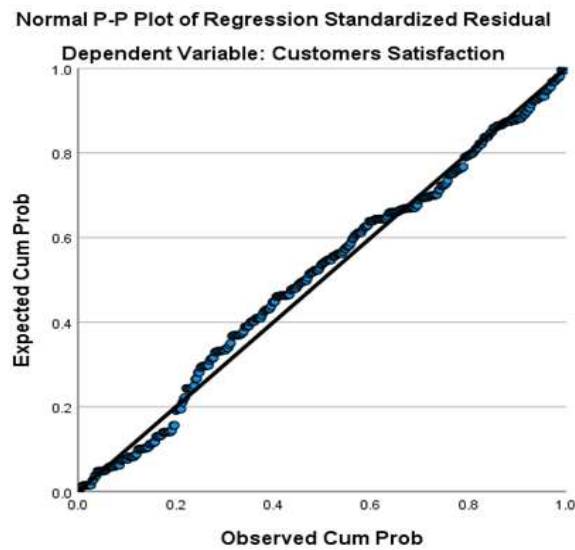
**Normality:** The model's residuals are thought to be random variables with a mean of 0 and a normally distributed distribution. This assumption essentially states that discrepancies significantly bigger than zero are rare and that the majority of the time the model and observed data differ by zero or a very small amount. The histogram and normal probability plot were used by the researcher to examine the distribution of the data. The distribution is nearly normal (although there is a tiny deficit of residuals exactly on zero), suggesting that the data is slightly normally distributed. Therefore, the assumption fulfilled. (Fig 6)

Figure 6: Normality test in histogram 2023



Source: Own survey result, 2023

Figure 7: Normality test in probability plot 2023



Source: Own survey result, 2023

## Kurtosis and Skewness Test

The degree to which a variable's distribution is symmetrical is evaluated using skewness. A variable's response distribution is considered to be skewed if it tends to the right or left of the normal distribution. A higher number of larger values is indicated by a negative skewness, while a higher number of smaller values is indicated by a positive skewness. A skewness value between -1 and +1 is generally regarded as excellent, while a value between -2 and +2 is generally regarded as acceptable. Considered to be significant non-normality are values above 2 and +2, (Hair, 2022)

Kurtosis is a way to determine whether the distribution is too peaked—a very narrow one in which the majority of responses are located in the middle. A distribution that is more peaky than normal is indicated by a positive kurtosis value. A negative kurtosis, on the other hand, indicates a shape that is flatter than usual. Similar to skewness, the general rule is that the distribution is too peaked if the kurtosis is greater than +2. Similarly, a distribution with a kurtosis of less than 2 indicates that it is too flat. The pattern of responses is deemed to be a normal distribution when both kurtosis and skewness are close to zero (Hair, 2022), The pattern of responses is regarded as a normal distribution when both skewness and kurtosis are zero, which is a circumstance that researchers are extremely unlikely to ever encounter

**Table 11: Kurtosis and Skewness Test, 2023.**

|                        | N         | Skewness  |            | Kurtosis  |            |
|------------------------|-----------|-----------|------------|-----------|------------|
|                        | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Customers Satisfaction | 373       | -.332     | .126       | -1.034    | .252       |
| Reliability            | 373       | .161      | .126       | -.001     | .252       |
| Efficiency             | 373       | -.270     | .126       | -1.162    | .252       |
| Privacy                | 373       | .051      | .126       | -1.362    | .252       |
| Responsiveness         | 373       | .079      | .126       | -1.178    | .252       |
| Contact                | 373       | .344      | .126       | -1.147    | .252       |
| Valid N (listwise)     | 373       |           |            |           |            |

Source: Own survey result, 2023

### 4.7.2.2 Model fitness

**Table 12: Model fitness and explained variation of the variables, 2023.**

| Model Summary <sup>b</sup>   |                   |          |                   |                            |
|--|-------------------|----------|-------------------|----------------------------|
| Model  | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1  | .865 <sup>a</sup> | .749     | .746              | .55797                     |
| a. Predictors: (Constant), Contact, Efficiency, Reliability, Responsiveness, Privacy |                   |          |                   |                            |
| b. Dependent Variable: Customers Satisfaction  |                   |          |                   |                            |

Source: Own survey result, 2023

The R value and the R square values are shown in the model summary table above. The R value, which indicates a high level of correlation and is (0.865), represents the simple correlation. The proportion of the total variation in the dependent variable that can be explained by the independent variable is shown by the R square value, which is (0.749). This means that 74.9 percent, or the 74.9% change in customer satisfaction, could be attributed to the combined effects of the predictor variables. (Table 12)

### 4.7.2.3 One way ANOVA

In linear regression, ANOVA can tell us if using the mean as a "best guess" is better than using the model to predict the outcome. The F-ratio, in particular, is the ratio of the improvement in prediction that comes from fitting the model to the model's remaining inaccuracy. As a result, the ANOVA table that follows demonstrates that the dependent variable and the independent variables differ significantly. The study's F-value for this model is  $F(5, 372) = 218.997$ ,  $P 0.001$ , indicating that it is a good fit (Table 13)

**Table 13: ANOVA for model fitness, 2023.**

| ANOVA <sup>a</sup>   |            |                |     |             |         |                   |
|--|------------|----------------|-----|-------------|---------|-------------------|
| Model  |            | Sum of Squares | df  | Mean Square | F       | Sig.              |
| 1  | Regression | 340.901        | 5   | 68.180      | 218.997 | .000 <sup>b</sup> |
|  | Residual   | 114.258        | 367 | .311        |         |                   |
|  | Total      | 455.158        | 372 |             |         |                   |
| a. Dependent Variable: Customers Satisfaction  |            |                |     |             |         |                   |
| b. Predictors: (Constant), Contact, Efficiency, Reliability, Responsiveness, Privacy |            |                |     |             |         |                   |

Source: Own survey result, 2023

#### 4.7.2.4 *Result from multiple linear regression and interpretations*

The multiple linear regression analysis reveals the impact of different factors on Customers Satisfaction in Telebirr Mobile Money services.

**Table 16: Multiple linear regression of customer satisfaction, and services quality and Telebirr Mobile money, Ethio telecom, 2023**

| Model |                | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|-------|----------------|-----------------------------|------------|---------------------------|--------|------|
|       |                | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)     | .124                        | .121       |                           | 1.032  | .303 |
|       | Reliability    | .229                        | .059       | .158                      | 3.898  | .000 |
|       | Efficiency     | .505                        | .043       | .537                      | 11.618 | .000 |
|       | Privacy        | .090                        | .039       | .101                      | 2.314  | .021 |
|       | Responsiveness | -.008                       | .040       | -.009                     | -.207  | .836 |
|       | Contact        | .184                        | .042       | .186                      | 4.444  | .000 |

Source: Own survey result, 2023

## 4.8 Hypothesis Test

The research hypothesis was examined more thoroughly and precisely using the regression analysis of the results shown in the preceding tables. Based on the standardized coefficient (beta value) and P-value, these hypotheses were tested using the model's regression results to determine whether the hypothesis was accepted or rejected.

### **H1: Reliability has positive and significant effect on customer satisfaction.**

Based on the multiple linear regression, Reliability has a positive and significant effect on customer satisfaction. Thus, a unit increase in Reliability is associated with a 0.158 unit (15.8%) increase in Customers Satisfaction ( $\beta_1 = 0.158$ ,  $P < 0.001$ ). Since the p-value is less than the significance level (usually 0.05), we reject the null hypothesis ( $H_0$ ) and accept the alternative hypothesis ( $H_1$ ). This implies that improving the reliability of Telebirr Mobile Money services, ensuring consistent availability and accurate transaction processing, can result in a noticeable improvement in customer satisfaction levels. It suggests that focusing on improving and maintaining reliable service delivery can lead to higher levels of customer satisfaction.

### **H2: Efficiency has positive and significant effect on customer satisfaction**

For every unit increase in Efficiency of the Telebirr mobile money services, customers Satisfaction is expected to increase by 0.537 units (53.7%) ( $\beta_2 = 0.537$ ,  $P < 0.001$ ). Again, the p-value is less than the significance level, leading us to reject  $H_0$  and accept  $H_1$ . This indicates that Efficiency has a positive and significant effect on customer satisfaction. This means that enhancing the efficiency of Telebirr Mobile Money services, such as faster transaction processing or smoother user interfaces, can lead to a significant boost in customer satisfaction. Enhancing operational processes, minimizing transaction times, and streamlining procedures can contribute to a positive customer experience and higher satisfaction levels.

### **H3: Privacy has positive and significant effect on customer satisfaction**

For Privacy, the coefficient ( $\beta_3$ ) is 0.090 and a p-value of 0.021, thus, for every unit increases in privacy of the mobile money services, the customers satisfaction will raise by 0.09 unit (9%). Since the p-value is less than the significance level, we reject  $H_0$  and accept  $H_1$ , suggesting that Privacy has a positive and significant effect on customer satisfaction. This suggests that customers value and appreciate the security and privacy measures in place. Ensuring data protection, implementing robust security protocols, and transparent

### **H4: Responsiveness has positive and significant effect on customer satisfaction.**

Regarding Responsiveness, the coefficient ( $\beta_4$ ) is -0.008 and a p-value of 0.836. Here, the p-value is greater than the significance level, leading us to fail to reject  $H_0$ . This indicates that Responsiveness does not have a significant positive effect on customer satisfaction. This means that improvements in responsiveness may not directly influence customer satisfaction levels. However, it is important to note that customer expectations regarding responsiveness may vary, and addressing their needs promptly and effectively can still contribute to overall customer satisfaction.

### **H5: Contact has positive and significant effect on customer satisfaction.**

Moreover, Contact also has a positive effect on customer's satisfaction, with a coefficient of 0.186. This suggests that for every unit increase in the quality and accessibility of contact options, such as accessible telephone hotlines or responsive email services, customer satisfaction is expected to increase by 0.186 units. ( $\beta_5 = 0.186$ ,  $P < 0.001$ ). Since the p-value is less than the significance level, we reject  $H_0$  and accept  $H_1$ , suggesting that Contact has a positive and significant effect on customer satisfaction. Having responsive customer service channels, such as telephone hotlines or email support, can contribute to positive customer experiences and increased satisfaction.

The following table displays the study's hypothesis, the approach taken to test it, and the results.

**Table 4.15. Summary of Hypothesis Test**

| <b>Alternative Hypothesis</b> | <b>Hypothesis</b>   | <b>Statistical Result</b>        | <b>Remark</b> |
|-------------------------------|---|----------------------------------|---------------|
| (H1)                          | Reliability has positive and significant effect on customer satisfaction      | $\beta_1 = 0.158$ ,<br>$p=0.000$ | Supported     |
| (H2)                          | Efficiency has positive and significant effect on customer satisfaction       | $\beta_2 = 0.537$<br>$p=0.000$   | Supported     |
| (H3)                          | Privacy has positive and significant effect on customer satisfaction          | $\beta_3 = 0.101$<br>$p=0.021$   | Supported     |
| (H4)                          | Responsiveness has positive and significant effect on customer satisfaction   | $\beta_4 = -0.009$<br>$p=0.836$  | Rejected      |
| (H5)                          | Contact security has positive and significant effect on customer satisfaction | $\beta_5 = 0.186$<br>$p=0.000$   | Supported     |

#### 4.9 Discussion and Summary of Findings

In order to determine how they influenced consumer satisfaction, the study looked at reliability, efficiency, privacy, responsiveness, and contact.

According to (Tao, 2021) findings, the reliability dimension, which is connected to accuracy, credibility, basic service quality, system availability, and customer service, has a positive and significant impact on customer satisfaction. The findings of this study indicate that efficiency has a positive and significant effect on customer satisfaction.

(Yang, 2008), He discovered that efficiency has a positive and significant effect on customer satisfaction. (Richard, 2014), found that efficiency has a positive and significant impact on customer satisfaction, which lends credence to this conclusion. (Zavarehe, 2012) Also the finding is also different with the study by (Ahmad & Al-Zu'bi, 2011) reported efficiency has a positive and significant effect on customer satisfaction. (Ahmad & Al-Zu'bi, 2011)

This study's findings also show that customer satisfaction is positively and significantly impacted by privacy. According to (Okeke, 2015), customer satisfaction is positively and significantly influenced by privacy. This finding is also supported. Additionally, privacy has a positive impact on customer satisfaction (Gilly, 2012). (Richard, 2014) found that privacy has a positive and significant impact on customer satisfaction, and his findings were supported by the study.

According to this study's findings, responsiveness significantly and positively influences customer satisfaction. The study by (Lin, 2010), which found that responsiveness has a positive but insignificant effect on customer satisfaction, backs up this finding. In addition, the study by (Achieng, 2015) found that responsiveness has a positive and significant impact on customer satisfaction; this finding is also distinct. (Lin & Lee, 2005) also find that responsiveness has a positive impact on customer satisfaction; however, our findings indicate that responsiveness has no significant positive impact on customer satisfaction.

Supported by (Zavareh, 2012), they found and reported that contact has a positive and significant effect on customer satisfaction, this study's result indicates that contact has a positive and significant effect on customer satisfaction. He discovered that contact has a positive and significant effect on customer satisfaction, which is supported by the study (Lia Jung, 2020).

## CHAPTER FIVE

### 5 CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary of Finding

The study's main goal was to examine the effect of Tele Birr Financial Service Quality on Customer Satisfaction at Ethio Telecom. Accordingly this part of the research summarizes the major findings of the study.

The result of the background information of respondents indicated that the majority of the respondents are younger which is below 35 years age or age range with the highest percentage of responses (78.3%) is 25 to 35 years old. These shows the younger strata of population were more inclined towards the use of tele birr services. The finding also shows that majority of the respondents are educated and also the majority of the people who responded to the survey (42.6%) were married. finally the majority of participants the questioners were businessmen and businesswomen, who made up 113 (30.3%), followed by 107 people who were hired or paid a salary (28.7%).

Further to measure the satisfaction level of customer the study calculate mean and standard deviation of responses. Accordingly out of the study variables the finding reveals that except responsiveness all variables (i.e. reliability, efficiency, privacy & contact) are above satisfactory level.

In overall, the results of the study the regression result indicates except responsiveness all the stated service quality dimensions have a positive significant effect on customer satisfaction and responsiveness is the dominant service quality dimension which affects customer satisfaction in Ethio telecom. Beside From the R square value it is depicted that 75% of variation in customer satisfaction is explained by the service quality variables that all independent variables (i.e. reliability, efficiency responsiveness, privacy and contact) and other unexplored variables may explain the variation in customer satisfaction which accounts for about 25%.

Thus the findings are important to enable the Ethio telecom to have a better understanding of customers perception of service quality of banking and consequently of how to improve their satisfaction with respect to aspects of this service quality.

## **5.2 Conclusion**

Reliability, efficiency, privacy, responsiveness, and contact were all examined in the study to see how they affected customer satisfaction.

Based on descriptive data, customers believe the service is fair in terms of reliability and efficiency, suggesting opportunity for improvement to live up to their expectations. Customers' mild concerns about privacy and data security point to the need for more robust safeguards and transparent messaging. A moderate rating is also given to responsiveness to customer needs, highlighting the significance of providing timely and attentive customer care.

According to the findings, efficiency and reliability have a positive and significant effect on customer satisfaction. This implies that customers place a high value on timely and effective service delivery, and that improvements in these areas may raise customer satisfaction levels. Additionally, it was discovered that privacy had a positive and significant effect on customer satisfaction, underscoring the significance of putting in place strong security safeguards and protecting customer privacy.

Additionally, it was discovered that Contact had a positive and significant effect on customer satisfaction, highlighting the need of easily available and practical customer care channels. Offering a variety of contact methods and quick customer service may raise client satisfaction levels.

However, the study could not identify any appreciable positive effect of responsiveness on customer satisfaction. Despite the fact that being responsive to customer needs is crucial, the findings imply that other aspects may have a bigger impact on overall satisfaction. To create a pleasant customer experience, it is nevertheless essential to respond to client requests immediately and effectively.

## 5.2 Recommendations

Based on the conclusions the following recommendations can be made to enhance customer satisfaction in Tele birr services.

- It is essential to concentrate on enhancing the service's reliability based on the current study finding to increase customer satisfaction by providing tele birr financial service just as promised, offered the services with faultless, provide the services 24/7 and decreasing transactions termination. Customers consider the service to be only fairly reliable, pointing out the need for improvements. Enhancing its technological foundation, reducing service interruptions, and assuring reliable and accurate service delivery should be tele birr financial service top priorities.
- In to improve the efficiency of tele birr financial service on customer satisfaction Ethio telecom will provided its service small time to use, quick and simple, with least expensive of doing transactions and the service language will be simple and easy to understand this will help the customers will have more faith and confidence in the service as a result of higher reliability, which will increase satisfaction.
- It is crucial to address client concerns about privacy. Tele birr financial service should put in place strong security measures, communicate clearly about privacy policies, and give users control over their personal information to allay these worries. Customers will feel more comfortable using the service and trust that their data is safeguarded if security and privacy safeguards are improved, which will eventually enhance satisfaction.
- On the responsiveness of tele birr financial service to customer satisfaction the study didn't get a significant positive effect. Despite the fact that being responsive to customer needs is crucial, the findings imply that other aspects may have a bigger impact on overall satisfaction. To create a pleasant customer experience, it is nevertheless essential to respond to client requests immediately and effectively.

- By identifying their need contact security was one of tele birr financial service on customer satisfaction. Ethio telecom will provide an email address for customer care is with accessible hotline phone service, administrators of may be reached fairly easily with accessible agents and shops to its tele birr financial service.

### **5.3 Limitations and Direction for Future Research**

By collecting customer data, this study primarily focused on a select group of Ethio Telecom Telebirr users in the city of Addis Ababa. In this study, the 74.9% change in customer satisfaction could be attributed to the combined effects of predictor variables, as finding shows that all independent variables that were statistically found to be significant and hypothesized variables express the model. However, another factor that was not included in the study accounts for 25.1% of the variance. As a result, I suggest that a different researcher collect data from customers who use Telebirr mobile money, which was not included in this study.

The research suggests that, in the future, an increase in sample size and a test of the internal factor were result in the expected result of variables because the sample was taken only from Ethio Telecom customers in Addis Ababa City.

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# APPENDIX 1

## DATA COLLECTION TOOL

### Customers' Questionnaire

**Addis Ababa University Faculty of Business and Economics**

**School of Commerce**

**Marketing Management: Post Graduate Program**

**Dear Sir/Madam**

I am a Master of Management (MM) student at Addis Ababa University. Currently, I am conducting research on the subject of the Impact of Tele-Birr Mobile Money on Customer Satisfaction. I would greatly appreciate your assistance in completing the questionnaire with honest responses. I guarantee that the provided information will only be used for academic research purposes and kept strictly confidential.

#### **General instructions**

- ✚ Leave off the name and address.
- ✚ Try to submit relevant responses in the space provided.
- ✚ Finally, I can assure you in confidence that providing accurate and useful facts won't affect your personality or work (business activity).

***Thank you for your cooperation !!***

**Tesfay Nebiy**

**Email: tesfaye2121nebiy@gmail.com**

**Mob: +251948800930/11570676**

## Part I

Please put right mark (✓) in front of your choice box that express yourself

- 1) Gender: Male  Female
- 2) Age: 15-24  25-35  36-50  51-60  Above60
- 3) Relationship status: Single  Married Separated Divorced Widowed
- 4) Current level of academic achievement. Illiterate Primary school High school  TVET  University degree  Above Master Degree
- 5) Present Employment: Unemployed  Student  Salaried  Business Person  other
- 6) Which of these tele birr mobile money services do you mostly use?
- 7) Manual shop service  Telebirr super App USSD 127 Channel  all service
- 8) Which type of tele birr mobile money service delivery do you mostly use?  
Financial service  Bill payment Buy air time  Tax payment  other

## Part II

### Customer Feelings about Tele birr mobile money

In accordance with your experience using Tele Birr mobile money from Ethiopian telecom, kindly mark (\*) any number between 1 and 5.

| S.N | Service dimension   | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|-----|---|-------------------|----------|---------|-------|----------------|
|     |   | 1                 | 2        | 3       | 4     | 5              |
| 1   | <b>Reliability</b>  |                   |          |         |       |                |
| 1.1 | Services from Telebirr mobile money are provided just as promised.              |                   |          |         |       |                |
| 1.2 | The mobile money services offered by Telebirr are faultless.                    |                   |          |         |       |                |
| 1.3 | 24/7 services are provided through Telebirr mobile money.                       |                   |          |         |       |                |
| 1.4 | In Tele Birr mobile money, transactions are not terminated.                     |                   |          |         |       |                |
| 2   | <b>Efficiency</b>   |                   |          |         |       |                |
| 2.1 | It doesn't take time to use Telebirr mobile money.                              |                   |          |         |       |                |
| 2.2 | Transacting with Telebirr mobile money is quick and simple.                     |                   |          |         |       |                |
| 2.3 | The least expensive method of doing transactions is with Telebirr mobile money. |                   |          |         |       |                |
| 2.4 | The language of Telebirr mobile money is simple and easy to understand.         |                   |          |         |       |                |

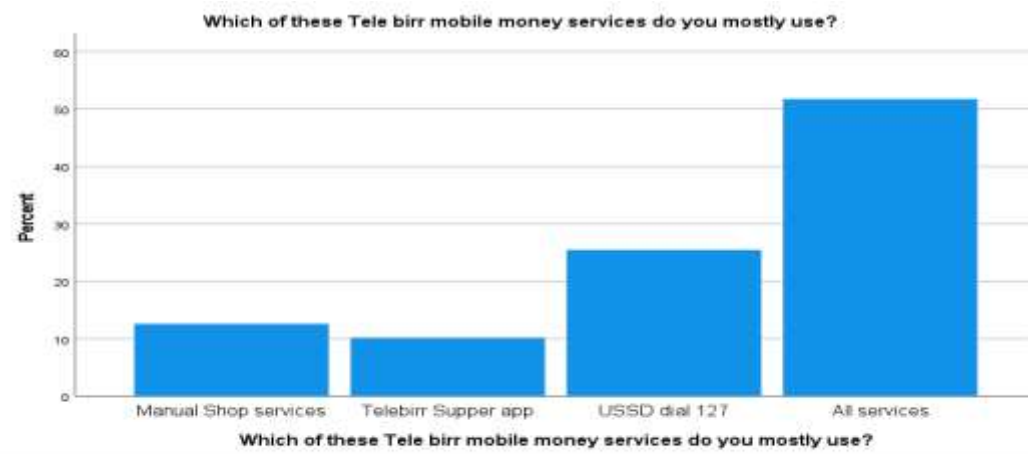
|          |  |  |  |  |  |  |
|----------|--|--|--|--|--|--|
| <b>3</b> | <b>Privacy</b>   |  |  |  |  |  |
| 3.1      | It is secure to do transactions with Telebirr mobile money.                            |  |  |  |  |  |
| 3.2      | My transaction details and privacy are protected by Telebirr mobile money.             |  |  |  |  |  |
| 3.3      | Transaction safety policies for Telebirr mobile money were well-defined.               |  |  |  |  |  |
| 3.4      | Large volume transactions are restricted in Telebirr mobile money.                     |  |  |  |  |  |
| <b>4</b> | <b>Responsiveness</b>  |  |  |  |  |  |
| 4.1      | The Telebirr mobile money administrator replies to requests quickly and kindly.        |  |  |  |  |  |
| 4.2      | Any issues you genuinely have with Telebirr's mobile money administrator are resolved. |  |  |  |  |  |
| 4.3      | The personnel at Telebirr mobile money is skilled in resolving issues.                 |  |  |  |  |  |
| 4.4      | There is an online Telebirr mobile money help request.                                 |  |  |  |  |  |
| <b>5</b> | <b>Contact</b>   |  |  |  |  |  |
| 5.1      | An email address for customer care is provided by Telebirr mobile money.               |  |  |  |  |  |
| 5.2      | Accessible hotline phone service is provided by Telebirr mobile money.                 |  |  |  |  |  |
| 5.3      | Administrators of Telebirr mobile money may be reached fairly easily.                  |  |  |  |  |  |

|          |   |  |  |  |  |  |
|----------|---|--|--|--|--|--|
| 5.4      | Accessing Telebirr mobile money Agents and shops is simple.                                 |  |  |  |  |  |
| <b>6</b> | <b>Customer Satisfaction</b>  |  |  |  |  |  |
| 6.1      | I am satisfied by Telebirr mobile money application   |  |  |  |  |  |
| 6.2      | I am satisfied by Telebirr mobile money SMS information                                     |  |  |  |  |  |
| 6.3      | I am satisfied by Telebirr mobile money multi propose service                               |  |  |  |  |  |
| 6.4      | Telebirr mobile money has met my need to avoid visiting shops unless there is an emergency. |  |  |  |  |  |
| 6.5      | I am satisfied by Telebirr mobile money accessibility and reliability                       |  |  |  |  |  |
| 6.6      | I am satisfied by Telebirr mobile money fast and convenient services                        |  |  |  |  |  |

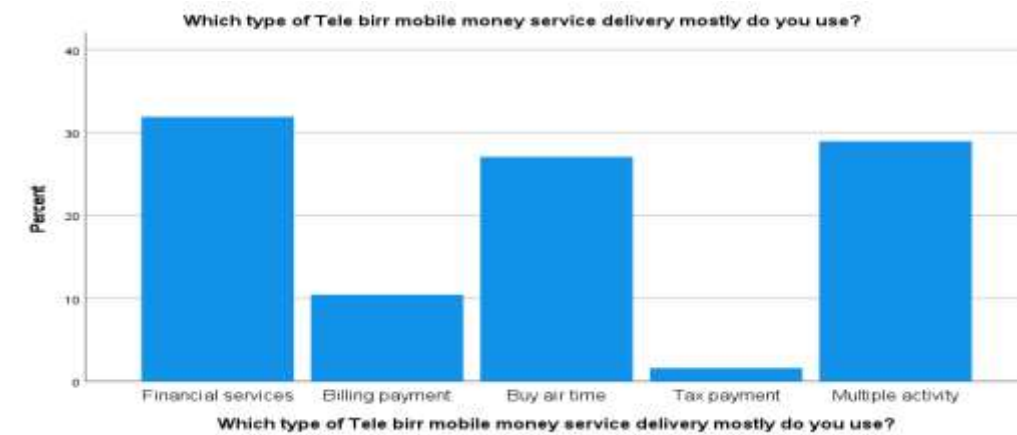
## STATISTICAL OUTPUT

| <b>Gender</b>                   |                         |           |         |               |                    |
|---------------------------------|-------------------------|-----------|---------|---------------|--------------------|
|                                 |                         | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                           | Female                  | 149       | 39.9    | 39.9          | 39.9               |
|                                 | Male                    | 224       | 60.1    | 60.1          | 100.0              |
|                                 | Total                   | 373       | 100.0   | 100.0         |                    |
| <b>Age:</b>                     |                         |           |         |               |                    |
|                                 |                         | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                           | 15-24                   | 34        | 9.1     | 9.1           | 9.1                |
|                                 | 25-35                   | 292       | 78.3    | 78.3          | 87.4               |
|                                 | 36-50                   | 24        | 6.4     | 6.4           | 93.8               |
|                                 | 51-60                   | 23        | 6.2     | 6.2           | 100.0              |
|                                 | Total                   | 373       | 100.0   | 100.0         |                    |
| <b>Marital Status:</b>          |                         |           |         |               |                    |
|                                 |                         | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                           | Married                 | 159       | 42.6    | 42.6          | 42.6               |
|                                 | Separated               | 11        | 2.9     | 2.9           | 45.6               |
|                                 | Widowed                 | 12        | 3.2     | 3.2           | 48.8               |
|                                 | Single                  | 191       | 51.2    | 51.2          | 100.0              |
|                                 | Total                   | 373       | 100.0   | 100.0         |                    |
| <b>Current Education Level.</b> |                         |           |         |               |                    |
|                                 |                         | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid                           | Illiterate              | 5         | 1.3     | 1.3           | 1.3                |
|                                 | Primary education       | 6         | 1.6     | 1.6           | 2.9                |
|                                 | secondary(high school)  | 93        | 24.9    | 24.9          | 27.9               |
|                                 | TVET                    | 30        | 8.0     | 8.0           | 35.9               |
|                                 | University degree       | 142       | 38.1    | 38.1          | 74.0               |
|                                 | Master degree and above | 97        | 26.0    | 26.0          | 100.0              |
| Total                           | 373                     | 100.0     | 100.0   |               |                    |

| Occupation: |                     |           |         |               |                    |
|-------------|---------------------|-----------|---------|---------------|--------------------|
|             |                     | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid       | Unemployed          | 43        | 11.5    | 11.5          | 11.5               |
|             | Student             | 110       | 29.5    | 29.5          | 41.0               |
|             | Salaried/employed   | 107       | 28.7    | 28.7          | 69.7               |
|             | Bussines men/woemen | 113       | 30.3    | 30.3          | 100.0              |
|             | Total               | 373       | 100.0   | 100.0         |                    |



## Services



## Reliability

|  | N   | Minimum | Maximum | Mean | Std. Deviation |
|--|-----|---------|---------|------|----------------|
| Telebirr mobile money delivers services exactly as promised. | 373 | 1       | 5       | 3.12 | 1.072          |

|  |     |   |   |      |       |
|--|-----|---|---|------|-------|
| Telebirr mobile money services are free from deficiencies.   | 373 | 1 | 5 | 2.73 | 1.045 |
| Telebirr mobile money offers 24/7 services.                  | 373 | 1 | 5 | 3.31 | 1.142 |
| Transaction termination not happen in Telebirr Mobile money. | 373 | 1 | 5 | 3.04 | 1.018 |
| Valid N (listwise)   | 373 |   |   |      |       |

### Efficiency

|   | N   | Minimum | Maximum | Mean | Std. Deviation |
|---|-----|---------|---------|------|----------------|
| Using Telebirr mobile money is not time-consuming.                      | 373 | 1       | 5       | 3.16 | 1.363          |
| Completing transactions through Telebirr Mobile Money is fast and easy. | 373 | 1       | 5       | 2.76 | 1.373          |
| Telebirr mobile money is the cheapest way of making transaction         | 373 | 1       | 5       | 3.19 | 1.591          |
| Telebirr mobile money language is easy to understand.                   | 373 | 1       | 5       | 2.95 | 1.462          |
| Valid N (listwise)  | 373 |         |         |      |                |

### Privacy

|  | N   | Minimum | Maximum | Mean | Std. Deviation |
|--|-----|---------|---------|------|----------------|
| Making transactions through Telebirr mobile money is safe.                   | 373 | 1       | 5       | 3.24 | 1.714          |
| Telebirr Mobile Money protects my privacy and transaction information.       | 373 | 1       | 5       | 2.86 | 1.534          |
| Telebirr mobile money has clear transaction safety policies.                 | 373 | 1       | 5       | 2.90 | 1.469          |
| There is a restriction on large volume transactions in Telebirr mobile money | 373 | 1       | 5       | 2.67 | 1.483          |
| Valid N (listwise)   | 373 |         |         |      |                |

### Responsiveness

|  | N | Minimum | Maximum | Mean | Std. Deviation |
|--|---|---------|---------|------|----------------|
|--|---|---------|---------|------|----------------|

|  |     |   |   |      |       |
|--|-----|---|---|------|-------|
| The administrator of Telebirr Mobile Money responds to needs happily and rap | 373 | 1 | 5 | 2.82 | 1.537 |
| Telebirr Mobile Money Administrator solves whatever problems you sincerely e | 373 | 1 | 5 | 3.02 | 1.431 |
| Telebirr Mobile Money has knowledgeable staff to solve problem               | 373 | 1 | 5 | 3.09 | 1.551 |
| There is a Telebirr mobile money help fast query in online                   | 373 | 1 | 5 | 2.64 | 1.494 |
| Valid N (listwise)   | 373 |   |   |      |       |

### Contact

|  | N   | Minimum | Maximum | Mean | Std. Deviation |
|--|-----|---------|---------|------|----------------|
| Telebirr Mobile Money offers a customer service email address.     | 373 | 1       | 5       | 2.77 | 1.494          |
| Telebirr Mobile Money offers accessible telephone service hotline. | 373 | 1       | 5       | 2.91 | 1.679          |
| Contacting Telebirr Mobile Money administrators is very easy.      | 373 | 1       | 5       | 2.76 | 1.362          |
| can easily access Telebirr mobile money with agent satisfaction.   | 373 | 1       | 5       | 2.73 | 1.359          |
| Valid N (listwise)   | 373 |         |         |      |                |

### Satisfactions of Customer

|   | N   | Minimum | Maximum | Mean | Std. Deviation |
|---|-----|---------|---------|------|----------------|
| Satisfied with Telebirr's mobile money application.                     | 373 | 1       | 5       | 3.14 | 1.293          |
| Satisfied with Telebirr's mobile money SMS notification.                | 373 | 1       | 5       | 2.98 | 1.210          |
| Satisfied by Telebirr's mobile money multi-purpose service.             | 373 | 1       | 5       | 3.18 | 1.380          |
| satisfied by Telebirr's mobile money to not visit shops and agents unle | 373 | 1       | 5       | 3.49 | 1.269          |

|   |     |   |   |      |       |
|---|-----|---|---|------|-------|
| Satisfied by Telebirr's mobile money accessibility and reliability. | 373 | 1 | 5 | 2.90 | 1.260 |
| Satisfied by Telebirr's fast and convenient services.               | 373 | 1 | 5 | 2.93 | 1.356 |
| Valid N (listwise)  | 373 |   |   |      |       |

## Correlations

|                        |                     | Customers Satisfaction | Reliability | Efficiency | Privacy | Responsiveness | Contact |
|------------------------|---------------------|------------------------|-------------|------------|---------|----------------|---------|
| Customers Satisfaction | Pearson Correlation | 1                      | .720**      | .831**     | .715**  | .609**         | .654**  |
|                        | Sig. (2-tailed)     |                        | .000        | .000       | .000    | .000           | .000    |
|                        | N                   | 373                    | 373         | 373        | 373     | 373            | 373     |
| Reliability            | Pearson Correlation | .720**                 | 1           | .722**     | .624**  | .554**         | .623**  |
|                        | Sig. (2-tailed)     | .000                   |             | .000       | .000    | .000           | .000    |
|                        | N                   | 373                    | 373         | 373        | 373     | 373            | 373     |
| Efficiency             | Pearson Correlation | .831**                 | .722**      | 1          | .757**  | .609**         | .584**  |
|                        | Sig. (2-tailed)     | .000                   | .000        |            | .000    | .000           | .000    |
|                        | N                   | 373                    | 373         | 373        | 373     | 373            | 373     |
| Privacy                | Pearson Correlation | .715**                 | .624**      | .757**     | 1       | .660**         | .613**  |
|                        | Sig. (2-tailed)     | .000                   | .000        | .000       |         | .000           | .000    |
|                        | N                   | 373                    | 373         | 373        | 373     | 373            | 373     |
| Responsiveness         | Pearson Correlation | .609**                 | .554**      | .609**     | .660**  | 1              | .732**  |
|                        | Sig. (2-tailed)     | .000                   | .000        | .000       | .000    |                | .000    |
|                        | N                   | 373                    | 373         | 373        | 373     | 373            | 373     |
| Contact                | Pearson Correlation | .654**                 | .623**      | .584**     | .613**  | .732**         | 1       |
|                        | Sig. (2-tailed)     | .000                   | .000        | .000       | .000    | .000           |         |
|                        | N                   | 373                    | 373         | 373        | 373     | 373            | 373     |

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

## Model Summary<sup>b</sup>

| Model  | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|--|-------------------|----------|-------------------|----------------------------|
| 1  | .865 <sup>a</sup> | .749     | .746              | .55797                     |
| a. Predictors: (Constant), Contact, Efficiency, Reliability, Responsiveness, Privacy |                   |          |                   |                            |
| b. Dependent Variable: Customers Satisfaction  |                   |          |                   |                            |

**ANOVA<sup>a</sup>**

| Model  |            | Sum of Squares | Df  | Mean Square | F       | Sig.              |
|--|------------|----------------|-----|-------------|---------|-------------------|
| 1  | Regression | 340.901        | 5   | 68.180      | 218.997 | .000 <sup>b</sup> |
|  | Residual   | 114.258        | 367 | .311        |         |                   |
|  | Total      | 455.158        | 372 |             |         |                   |
| a. Dependent Variable: Customers Satisfaction  |            |                |     |             |         |                   |
| b. Predictors: (Constant), Contact, Efficiency, Reliability, Responsiveness, Privacy |            |                |     |             |         |                   |

| <b>Coefficients<sup>a</sup></b>               |                |                             |            |                           |        |      |                                 |             |                         |           |
|---|----------------|-----------------------------|------------|---------------------------|--------|------|---------------------------------|-------------|-------------------------|-----------|
| Model   |                | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. | 95.0% Confidence Interval for B |             | Collinearity Statistics |           |
|   |                | B                           | Std. Error |                           |        |      | Beta                            | Lower Bound | Upper Bound             | Tolerance |
|   |                | 1                           | (Constant) | .124                      | .121   |      | 1.032                           | .303        | -.113                   | .361      |
|   | Reliability    | .229                        | .059       | .158                      | 3.898  | .000 | .113                            | .344        | .416                    | 2.405     |
|   | Efficiency     | .505                        | .043       | .537                      | 11.618 | .000 | .419                            | .590        | .320                    | 3.124     |
|   | Privacy        | .090                        | .039       | .101                      | 2.314  | .021 | .013                            | .166        | .356                    | 2.806     |
|   | Responsiveness | -.008                       | .040       | -.009                     | -.207  | .836 | -.086                           | .070        | .387                    | 2.586     |
|   | Contact        | .184                        | .042       | .186                      | 4.444  | .000 | .103                            | .266        | .390                    | 2.561     |
| a. Dependent Variable: Customers Satisfaction |                |                             |            |                           |        |      |                                 |             |                         |           |

