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FACTORS AFFECTING ADOPTION OF MOBILE MONEY SERVICES IN ADDIS ABABA: THE CASE OF TELE BIRR.

BY

HIZIBAYEN LEGESSE

JUNE, 2024

ADDIS ABABA, ETHIOPIA

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BY: HIZIBAYEN LEGESSE

ADVISOR: Dr. KELIFA SRMOLO KEMAL

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DECLARATION

I, Hizibayen Legesse, hereby declare that the thesis work entitled ***"FACTORS AFFECTING ADOPTION OF MOBILE MONEY SERVICES IN ADDIS ABABA: THE CASE OF TELE BIRR."*** submitted by me in Partial Fulfillment of the requirements for the Award of master of science in Accounting and Finance to Addis Ababa University, College of Business and Economics, School of Graduate Studies is the outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged. The matter embodied in this thesis work has not been submitted for any degree in this or any other university.

Hizibayen Legesse

Signature____________________

Date: June, 2024

APPROVED BY BOARD OF EXAMINERS

Kelifa Semolo ________ 01/07/2024

Advisor	Signature	Date

Temesgen W ________ 02/07/24

Internal Examiner	Signature	Date

Lemesa Bayissa (PhD) ________ 29/06/2024

External Examiner	Signature	Date

STATEMENT OF CERTIFICATION

This is to certify that the thesis work entitled ***"FACTORS AFFECTIN ADOPTION OF MOBILE MONEY SERVICES IN ADDIS ABABA: THE CASE OF TELE BIRR."*** by Hizibayen Legesse who carried out the research under my guidance. The matter embodied in this thesis work has not been submitted earlier for award of any degree or diploma. I further certify that, the work reported herein doesn't form part of any other thesis work or project report.

Advisor: **____________________________**

Signature ___________________________

Date ______________________________

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Abstract

Mobile money has aided several low- and middle-income nations in overcoming the difficulties associated with traditional banking, as well as promoting financial inclusion and economic progress. This study aimed to identify the factors that affect the adoption of telebirr mobile money service in Addis Ababa, Ethiopia.

For this study, a quantitative research approach was employed used to analyze and collect data from all sampled respondents. The samples were taken by using convenient sampling technique. To analyze the factors that may affect the adoption of Tele birr mobile money service, on this study a descriptive and explanatory research design was used. Multiple regression model were used to examine the relationship and to identify the effect of explanatory variables on the adoption of telebirr mobile money service. The analysis was conducted by using SPSS V.26.

This study result shows, the independent variables Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness have a significant effect on adoption of tele birr mobile money service. The variable Perceived Risk has a negative impact on adoption of tele birr mobile money service, whereas the other independent variables have a positive influence on adoption of tele birr mobile money service.

The study recommends that telebirr service providers and marketers should concentrate on the four determinant variables that have the greatest influence on the adoption of telebirr service.

Keywords: Technology Awareness, Mobile Money/ Tele birr, Perceived Risk,

Chapter One

Introduction

1.1. Background of the study

Information and communication technology (ICT) advancements as well as the debut and quick uptake of smartphones have made it possible for new mobile services that are revolutionizing the payments sector (Apanasevic et al., 2018). According to (Kokkola, 2010), payment is the act of transferring money from the payer to the payee in exchange for goods or services. Payment refers to the exchange of cash, products, or services for goods and services in an amount that is mutually agreeable and has been prearranged. Cash, checks, wire transfers, credit cards, debit cards, and even crypto currencies can be used to make payments. You can buy items with cash now because of the way money functions. Money is a simple and practical form of payment that is also straightforward to store. It has simplified financial transactions.

Using a mobile phone to conduct financial transactions and access financial services is known as mobile money. These services may or may not be linked directly to a bank account. Previously, recharging your phone meant adding additional airtime, but in time, you'll be able to add money to it, keep all of your credit cards and loyalty cards, access your bank account, and use it just like a regular wallet to make purchases. Future changes in the way individuals pay for products and services could be significant as a result of innovations in mobile money. In order to enhance cash handling for both the shop and the client, this mobile wallet service allowed users to pay by USSD code or mobile app with fewer lines during busy times, increasing payment collection due to different payment methods and the option of going cashless and customers will experience a higher level of safety. Examples of product sectors where this system performs well include refueling locations (cafes, bars, lounges, and restaurants), retailer shops, various governmental offices, health institutions, and school owners for tuition (Chernyk et al., 2017a).

Numerous advantages are provided by mobile payment systems to various stakeholders, including: Cash is replaced by mobile and contactless payments. According to (Chen, 2008; Mallat & Tuunainen (n.d.), and Riksbank (2013), using these services results in significant savings for businesses and society as compared to the costs associated with handling currency.

For both users and businesses, mobile payment systems can guarantee simpler, quicker, and more convenient service. Merchants have the possibility to establish direct ties with customers through the integration of loyalty programs with payment services (Ondrus & Lyytinen, 2011). Comparing mobile payments to bank cards, a quicker transaction time may be available. According to Karnouskos & Fokus (2004) and Mallat & Tuunainen (n.d.), benefits for merchants in this situation include less lines, higher sales, more revenues, and a good impact on the company's reputation. Mobile payment solutions can be connected with other offerings, such as public transportation ticketing, to give clients a special added benefit (Chen, 2008). Mobile payments promote digital transactions and could create a society where there is no need for cash.

The historically low degree of financial inclusion has been a barrier to the socioeconomic growth of sub-Saharan African nations. In 2021, 45% of sub-Saharan Africans aged 15 and older lacked access to banking services, according to the World Bank (Chokossa, 2023).

Because of the relatively low banking system penetration, there are frequently few point-of-sale (POS) and ATM machines available, which put them even more out of reach for many customers due to onerous application procedures and high service costs. For instance, the service ratio in nations like Ethiopia, which had 30 banks and 8,944 branches in June 2022, was 1 to 11,500 people. For African telecommunications companies, mobile money has grown significantly. There are about 144 mobile money companies operating in Sub-Saharan Africa, with two firms, such as M-Pesa, MoMo, and Orange Money, controlling a sizable portion of the market(Taylor, 2023).

Safaricom, a division of the Vodafone group, introduced M-Pesa in 2007, the first well known mobile money program. M-Pesa (M for mobile and PESA for money in Swahili) represents the most successful mobile-money platform to date. The service initially targeted underserved lower- and middle-income Kenyan households with the goal of enabling remittance transactions. The concept of mobile money has evolved into a driver for innovation and a pillar in attaining sustainable economic development in emerging economies as a result of the pandemic's widespread adoption. The growth resulted in over 600 million registered mobile money accounts and transactions of over USD600 billion in sub-Saharan Africa in 2022 (Chokossa, 2023).

Five collaborating Micro Finance Institutions (MFIs) created Ethiopia's first mobile money service, M-BIRR, in the year 2015 (Awel & Yitbarek, 2019). In order to serve unbanked populations, the National Bank of Ethiopia (NBE) released a Mobile money and Agent banking directive in January 2013. The directive made it possible for banks and microfinance organizations to offer agent and mobile banking services. Awash Wallet, Hello Cash, M Birr, and other mobile money services were subsequently introduced in Ethiopia. In December 2017, the Commercial Bank of Ethiopia (CBE) established and formally launched the CBE Birr mobile money service. The number of customers, agents, and merchants steadily increased over the first four to five years, catapulting the bank to the top of the mobile money service sector.

Following the NBE's revised directive in 2020 allowing non-financial firms to provide mobile money services, ethio telecom launched tele birr, the country's first telecom-led mobile money service, in May 2021(Damtew, 2023). Nowadays, it is not recommended to carry a wallet with all of your cash and credit cards. Well, if you have a Tele Birr account, that is. Ethio Telecom's Tele Birr mobile payment and digital wallet service enables users to conduct a variety of financial transactions using their smartphones. Tele birr is a service that primarily assists urban residents who are under different social and economic pressures. On May 11, 2021, as previously indicated, it was launched in Ethiopia's capital city of Addis Ababa. You can deposit, receive, transfer, and pay utilizing Ethio telecom tele birr services with a mobile number. You can conduct cashless transactions and get money transfers internationally. Additionally, it enables you to buy things and pay at convenient retailers using QR codes (Chernyk & and others, 2017b).

Mobile ecosystems to find, create, and distribute innovation that is essential to improving business conditions and bringing about societal change. One of the main factors influencing economic growth and the decrease of poverty is formal financial inclusion. It makes it possible for individuals to save money for unexpected financial shocks and their long-term well-being, to get credit to start and grow enterprises or pay for school, and to get vital insurance like health and crop insurance (GSMA, 2023).

Additionally, there is proof that digital payments can boost an entrepreneur's profitability by facilitating more convenient, secure, and affordable financial transactions with suppliers, customers, and the government.

Mobile money has aided several low- and middle-income nations in overcoming the difficulties associated with traditional banking, as well as promoting financial inclusion and economic progress. The concept of accessibility, usability, and availability which is determined by how many people, especially the underprivileged, have access to financial services lays the foundation for the definition of financial inclusion (Karen-Sowon & and others, 2023).

Mobile money accounts have the ability to reach unbanked people who are typically excluded from the formal financial system by offering more accessible and cheap financial services outside the boundaries of bank offices (World Bank, 2021). The adoption rate of the tele birr service still is not wide spread compared to its potential for these reasons. The researcher will nonetheless make an effort to determine the factors that affect the adoption of telebirr mobile money services.

1.2. Statement of the Problem

A reliable retail payments infrastructure is essential for the success of digital payments. To include those who are financially excluded in a formal financial network, this is necessary. A cost-effective network should be set up for this, and in this case, mobile phones can be effectively used to access payments via a bank account or a mobile money network. The mobile money network is now operating in a constrained setting (Raj, 2015). Mobile phones will play a significant role in changing how transactions are conducted as the focus shifts to digital payments for financial inclusion. This is even more crucial when you consider how expensive it is to open and run a bank branch. Therefore, branch less financial services is necessary right now; it costs less per transaction than bank branches (Raj, 2015). The payments industry is changing as a result of mobile payments. These services give non-banking actors a chance to enter the market. Banks, established participants in the payments business, are compelled to introduce mobile payments in order to meet this challenge (Apanasevic et al., 2018).

Banks and micro-finance organizations, however, have long dominated Ethiopia's financial sector, including digital money. Since 2020, regulations have changed to permit non-banks to offer mobile money services. The transition from state-led to privately driven growth is part of a larger liberalization of the economy. Following deregulation, state-owned Ethio-Telecom, the only mobile operator in the market, debuted its mobile money service, tele birr, in May 2021 and quickly increased subscription rates (APA, n.d.).

In the modern world, more than a billion people have cell phones but no bank accounts (Chernyk & and others, 2017b). This is primarily due to the fact that banks believe it is too expensive to locate ATMs and retail stores in less-developed and typically rural areas. As a result, those at the bottom of the pyramid frequently have no other options for storing and transferring money beyond informal networks. Even yet, these unofficial avenues are vulnerable to theft and other hazards, and they have substantial transaction costs. For instance, low-income people would be more vulnerable to unforeseen events like illness or drought if they were saving by putting their money in animals. This problem is by using mobile money services, which offers a range of financial services, from straightforward transfers or deposits to other, more intricate solutions. Mobile money deployments are popular as a result of this, as well as the rapid expansion in mobile phone use, particularly in developing economies (Chernyk & and others, 2017b).

In terms of account ownership and usage, Ethiopia lags behind its neighbourhood nations and regional rivals like Kenya, Uganda, and Tanzania. Ethiopia not only has lower account access, but also much lower utilization rates overall, particularly for digital payments. In the year before the Global Findex survey, only 42% of account holders—or 20% of adults—used their accounts to make digital payments, which is significantly lower than the average adoption rate of 57% seen across all developing economies. This is much less than other countries in the region like Tanzania, where 96% of individuals with accounts (or 50% of the total adult population) used digital payments (Klapper & Rawlins, 2023). This demonstrates that, in comparison to its potential, the adoption rate of the tele birr service still needs to be increased. Analysis of the potential and difficulties related to the adoption of mobile money is the main goal of this study.

The studies that have been done on mobile payments in Ethiopia either have concentrated on those that pertain to the banking industry or failed to explore both the challenges and opportunities of mobile money service in Tele birr. For instance Tilahun (2022),conducted a study on the tele birr mobile money service which the study exclusively concentrates only on the difficulties. As a result, there is little written about the opportunities and challenges of employing tele birr mobile money service. This means that there is scanty literature in the area of the study because of tele birr is a new mobile money service platform in Ethiopia and also as discussed above we have tried to explore opportunities and challenges of tele birr mobile money service. As a result, the researcher's primary job in this paper is filling the literature gap by exploring the factors that affect the adoption of telebirr mobile money services in Addis Ababa.

1.3. Objectives of the study

1.3.1. General objective

The main objective of this study is to explore factors that affect the adoption of telebirr mobile money services in Addis Ababa.

1.3.2. Specific Objectives

1. To assess the effect of Perceived usefulness on the adoption of telebirr mobile money service.
2. To measure the influence of Ease of use on the adoption of telebirr mobile money service.
3. To identify the effect of Technology Awareness on the adoption of telebirr mobile money service in.
4. To test the influence of perceived risk on the adoption of telebirr mobile money service.

1.4. Research Hypotheses

The researcher formulated the following hypotheses to help the study reach its broad and detailed goals.

H1: Adoption of the tele birr mobile money service is positively and significantly impacted by perceived usefulness.

H2: The adoption of tele birr mobile money service is positively and significantly impacted by perceived ease of use.

H3: The adoption of tele birr mobile money service is positively and significantly impacted by technology awareness.

H4: Perceived risk has negative and significant impact on the adoption of tele birr mobile money service.

1.5. Significance of the study

This study helps fill the gap in the field by providing information regarding the Factors Affecting Adoption of Mobile Money Services in Addis Ababa: The Case of Tele Birr., and does so because there are few thorough literary works on the subject. Additionally, Ethio-telecom profits immensely from understanding the genuine demands of their consumers and how they adopt new technology in order to position their service and make money by producing superior customer satisfaction. It is crucial for clients to have thorough knowledge about the service. The research can also help telecom service policy makers by illuminating the variables that affect tele birr uptake. Generally speaking, the study could act as a springboard for additional research and as a resource for other academic researchers.

1.6. Scope of the study

In respect to tele birr mobile payment services, the thesis focuses on the strategies utilized by various categories of tele birr mobile payment users and nonusers. Individuals (working for the government or the commercial sector) and fuel users (home autos and various taxi service provider drivers) are taken into consideration in the thesis. Therefore, this study has been geographically limited only to Addis Ababa city and the researcher used quantitative research approach and interpretation has been done qualitatively. Although different factors can affect the adoption of telebirr mobile money services, this study considered only four factors; perceived usefulness, perceived ease of use, technology awareness, and perceived risk and investigated their impact on the adoption of telebirr users and nonusers in Addis Ababa.

1.7. Limitation of the study

There are a number of limitations in the current study. Even if there are different determinant factors affecting adoption of Tele birr mobile money service, addressing the whole factors is impossible due to the researcher constraint like; lack of time, researcher skill and ability.

Therefore, this study has been geographically limited only to Addis Ababa city. Although different factors can affect adoption of Tele birr mobile money service, this study was considered only four factors; perceived utility, perceived ease of use, technical awareness, and perceived risk and investigated their impact on of Tele birr on mobile money adoption in Addis Ababa.

1.8. Organization of the Paper

There are five chapters in this thesis. The first chapter covers the introduction section, which includes the study's background, problem statement, objectives, research hypotheses, scope or delimitation, and significance of the study I go over the literature review for the topic of the study in Chapter 2 and lay out the conceptual, theoretical, and empirical frameworks for the research. I also go over the thesis' methodology in Chapter 3, which includes the research approach, design, population study, data gathering tools, and finally the analysis of the supplied data. This followed by presents the findings from the respondents, and the data collected are examined, evaluated and the methods of statistical analysis are then covered, and describe the result and discussion of this study in depth in chapter 4. Finally, the conclusions and recommendation are discussed in Chapter 5.

Chapter Two

Literature Review

2.1. Introduction

This chapter presents the key aspects of related work on mobile money services and also mobile banking. The main overviewed concept is layout the theoretical, empirical and conceptual frameworks for the research. After reviewed the related literatures in the area, we have provided the theoretical review, empirical review and conceptual frameworks for this study in the following sections.

2.2. Theoretical Review

2.2.1 Concept of Mobile Money Service

Mobile wallet, a digital vault of electronic money created and implemented on mobile devices and enabling M2M (machine-to-machine) transactions between mobile devices from customers of the same service, may be related to mobile money. It resembles a typical physical wallet and has storage for cash, credit cards, and debit cards (Wadada, 2019).

About the concept of mobile money service, a study by (Akinyemi & Mushunje, 2020) states that mobile money technology (MMT) is utilized for transmitting or receiving payments via mobile phones. It entails financial innovation that utilizes Short Message Service (SMS) technology to pay service providers utilizing a commission structure (Upadhyay & Jahanyan, 2016). Remittance transfers, airtime purchases, utility bill payments, school fee payments, savings, and mobile banking are just a few of the financial and banking operations that can be carried out using MMT (IFC, 2011). MMT also uses nontraditional banking tools to reach unbanked users in rural and remote places with financial services. Since payments are conducted via an electronic method, mobile money speeds up money transfers (Morawczynski, 2009).

Mobile money services also make remote payments possible. They are frequently created especially to make payments between distant parties easier. Domestic transfers in developing nations are typically made from urban to rural areas. There is data that implies mobile money has increased rural household incomes in African nations, particularly in rural areas, through remittances from urban areas (Kikulwe et al., 2014).

In other terms Mobile money transfer services are information communication technology business innovation facilitating movement of money from one account to another electronically(GSMA, 2023).

2.2.2. Mobile banking

One of the most recent mobile technical marvels is mobile banking, or m-banking. Although automated teller machines (ATMs), telephone, and Internet banking provide efficient delivery channels for traditional banking products, m-banking is likely to have a significant impact on the market as the most recent delivery channel established by retail and microfinance banks in many developed and developing countries (Safeena et al., 2012). Particularly, the expanded uses of smartphones have increased demand for m-banking services, prompting many more banks, microfinance institutions, software companies, and service providers to offer this innovative service alongside new sets of products and applications designed to expand their client reach (including to unbanked populations), improve customer retention, enhance operational efficiency, increase market share, and provide new employment opportunities (Shaikh & Karjaluoto, 2014).

Performing balance checks, account transactions, payments, credit applications, and other banking transactions via a mobile device such a cell phone or Personal Digital Assistant (PDA) is known as mobile banking, according to (Wadada, 2019). M-banking, m-banking, and SMS Banking are further names for it. M-banking was initially introduced by the German company Pay box in conjunction with Deutsche Bank at the tail end of the 1990s. The majority of the European nations where it was initially used and tested were Germany, Spain, Sweden, Austria, and the United Kingdom. Kenya was the first developing nation to launch M-Pesa, a text-based mobile banking service, in 2007. According to Shaikh & Karjaluoto (2014), Kenya had more than seven million registered M-Pesa users by 2012. These patterns show that there are still enormous growth opportunities, which raises the possibility of extremely large rises in the number of m-banking customers. These numbers also call for more research into any ongoing m-banking acceptance problems, particularly those involving mobile consumers.

2.2.3. Mobile Money

Mobile money refers to transactions made with handheld devices and digital mobility technologies, either with or without the aid of mobile telecommunications networks. These payments are electronic financial transactions that may or may not be connected to banks or financial institutions (Dawood et al., 2022; Wadada, 2019). Dawood et al.(2022) claim that financial technology (FinTech) has moved conventional business models to mobile platforms that are known for their simplicity of use and speedy transactions. Mobile technology has emerged as the primary support system for FinTech developments and serves as a conduit for the delivery of FinTech services that cross all geographic and temporal boundaries, hence promoting financial inclusion.

2.2.4. Benefits of Mobile money payment services

Instead of paying with cash, a check, a credit card, or any other type of financial instrument, a customer can use mobile money to pay for a wide range of services and physical or digital goods. It examined the advantages of mobile money from the viewpoints of customers and service providers generally. Mobile money payment generally refers to electronic payments for goods and services using mobile devices and is operated under financial regulation.

Mobile service payment benefits users as well as service providers (Ethio-telecom). Mobile money services enable customers without credit cards or bank accounts to make purchases both online and offline. Businesses can use this platform, for instance, to take payments from clients both online and offline. Similar to individuals, corporations utilize mobile money networks to send and receive government payments. Most crucially, mobile payment networks give firms access to funding. Additionally, mobile money systems promise to both be a vehicle for financial inclusion and a new market for providers to capitalize on. Mobile money can open doors into vast, mainly untapped markets for digital financial service providers like Ethiopia Telecom. Cash-in-cash-out (CICO) services and transactions between two accounts are two examples of the types of activities that mobile money providers charge customers for (Marc, n.d.).

2.2.5. Risks associated with mobile money payment service

Deh (2020), asserts that managing risk with mobile money is difficult, particularly when it comes to the possibility of fraud. Fraud causes clients and mobile money providers to lose money, but it also harms the service's reputation with the customer, making for a negative customer experience. The most likely hazards, according to research, include a lost password, a fraudulent transaction request, phony money, SIM swap fraud, etc.

2.2.6. Mobile money service Challenges

According to customers, cash-outs and money transfers accounted for the majority of their transactions. Despite the fact that airtime topping through mobile money services was prevalent, a higher percentage of users have not yet used these services to buy airtime. Insufficient knowledge of value-added services is to blame for this (J. Smith, 2023). Customers were not using mobile money services as a wallet, which was another factor in this. Customers asserted that there was still room to expand the number of services offered through mobile money, including the payment of school fees, the disbursement of salaries, the provision of micro insurances to cover accidents, failures of crops and livestock, and other dangers, and the provision of small loans with low or affordable interest rates to the unbanked population (A. Jones & Lee, 2022). Customers' complaints that some services weren't dependable necessitated higher quality for those service kinds. Additionally, there were a lot of delays and charges for unfinished transactions. For instance, charges for incomplete and reversed bank transactions were made, and the associated money was not reimbursed. Therefore, all of those issues must be resolved for the mobile money service to be widely accepted (Senso & Venkatakrishnan, 2013).

2.2.7. M-pesa practices

Millions of people with access to a mobile phone but no or limited access to a bank account can send and receive money transfers and carry out simple banking transactions using M-PESA (M is for mobile and pesa is Swahili for money). M-PESA is the outcome of collaboration between Vodafone and Safaricom, a Kenyan mobile network provider, and was first introduced in Kenya in 2007. Anyone desiring to send money to Kenya may do so by visiting one of the several Safaricom IMT partners (including Post Finance, World Remit, and Western Union) and sending money to an M-PESA mobile phone in Kenya. Nearly instantaneously and without cost to the recipient, money transfers are received. M-PESA Kenya was claimed to have 15 million active users at the end of March 2012 who sent an estimated KES 56 billion in transfers per month. M-PESA has approximately 37,000 mobile money agents, is connected to 25 banks, and is accessible through 700 ATMs. Since it was first introduced, the service has been extended to a number of additional nations, including Tanzania, Fiji, South Africa, the Democratic Republic of the Congo, India, Mozambique, Egypt, Lesotho, and Romania (ILO, 2015). Ethiopia has recently joined the list of nations accepting M-Pesa.

Financial inclusion, which primarily targets underbanked or unbanked people, is one of the driving forces behind Fintech developments like M-Pesa. In the age of digital banking, financial inclusion looks for alternatives for those who lack access to banks or who cannot afford the requisite minimum deposits. To create a valuable digital platform, diverse sectors must work together to share data in order for this endeavor to be successful. In sub-Saharan Africa, where the banking and telecommunications industries are collaborating to offer mobile banking services for those with limited access to traditional banking, this cross-communication strategy adopted by M-Pesa is evolving quickly (Kagan, 2023). Market vendors, debt collectors, farmers, and cab drivers can all avoid carrying significant amounts of cash by using mobile payment services like M-Pesa. Thus, the likelihood of theft, robbery, and fraud can be decreased. Additionally, since M-Pesa can be used to pay power and water bills, people and business owners don't need to stand in huge lines for hours.

M-Pesa is governed by the proper offices of each nation where it is available in order to combat fraud. Users must submit a government ID and any other information requested by their home country's government, such as a home address, in order to register for an M-Pesa account. This way, the name of the person transferring, paying, depositing, or withdrawing money from an account is noted next to every transaction. M-Pesa works very similarly to PayPal or other popular payment apps, with the exception that users are not required to have a bank account. Customers can deposit cash at M-Pesa agents spread out across the nations where the service is offered in exchange for comparable monies that are immediately transferred to their electronic account. Customers can send cash in exchange for electronic payments, which is also, true (Kagan, 2023).

Internet and phone service provider in Ethiopia, Ethio telecom, introduced telebirr, its newest offering, on May 11, 2021. telebirr, the new offering, is a mobile money service (Ethio-Telebirr, 2024).

2.2.8. Overview of Tele Birr adoption in Ethiopia

Digital innovation is genuinely gaining ground in the Ethiopian economy, albeit slowly. One of the major barriers to turning invention into value over the years, particularly for digital goods and services, has been the lack of worthy and simple payment options. The Ethiopian young now have access to tele birr as a genuine opportunity (Atalo, 2021). Since there weren't enough market-based incentives to innovate, there has been a glaring absence of innovation in the business environment over the years. As seen in the surrounding nations, mobile money services like tele birr are a true formula for financial inclusion, especially for the majority of Ethiopians who live in rural areas and would otherwise not have access to any financial services for many years. Increased and new needs for goods and services arise when financial inclusion spreads across the nation as a result of the use of tele birr (Atalo, 2021).

Ethio telecom, a supplier of internet and communications services, unveiled Telebirr as its newest product. Mobile money service Telebirr is the brand-new item. Therefore, Telebirr simplifies the delivery of cashless transactions and how exactly does telebirr make cashless transactions possible? Each and every Ethio telecom subscriber has a mobile SIM card, which they use in their mobile phones to make calls and stay in touch with loved ones. However, the SIM cards now have an additional function related to the mobile money service thanks to the telebirr service. All Ethio telecom SIM cards are capable of storing digital currency thanks to the mobile money service. The funds stored on the SIM cards can subsequently be used to make purchases at retail stores (of course electronically), pay for services online, and purchase airtime, among many other things. There are various methods for adding electronic funds to the SIM card (Ethio-telebirr, 2024).

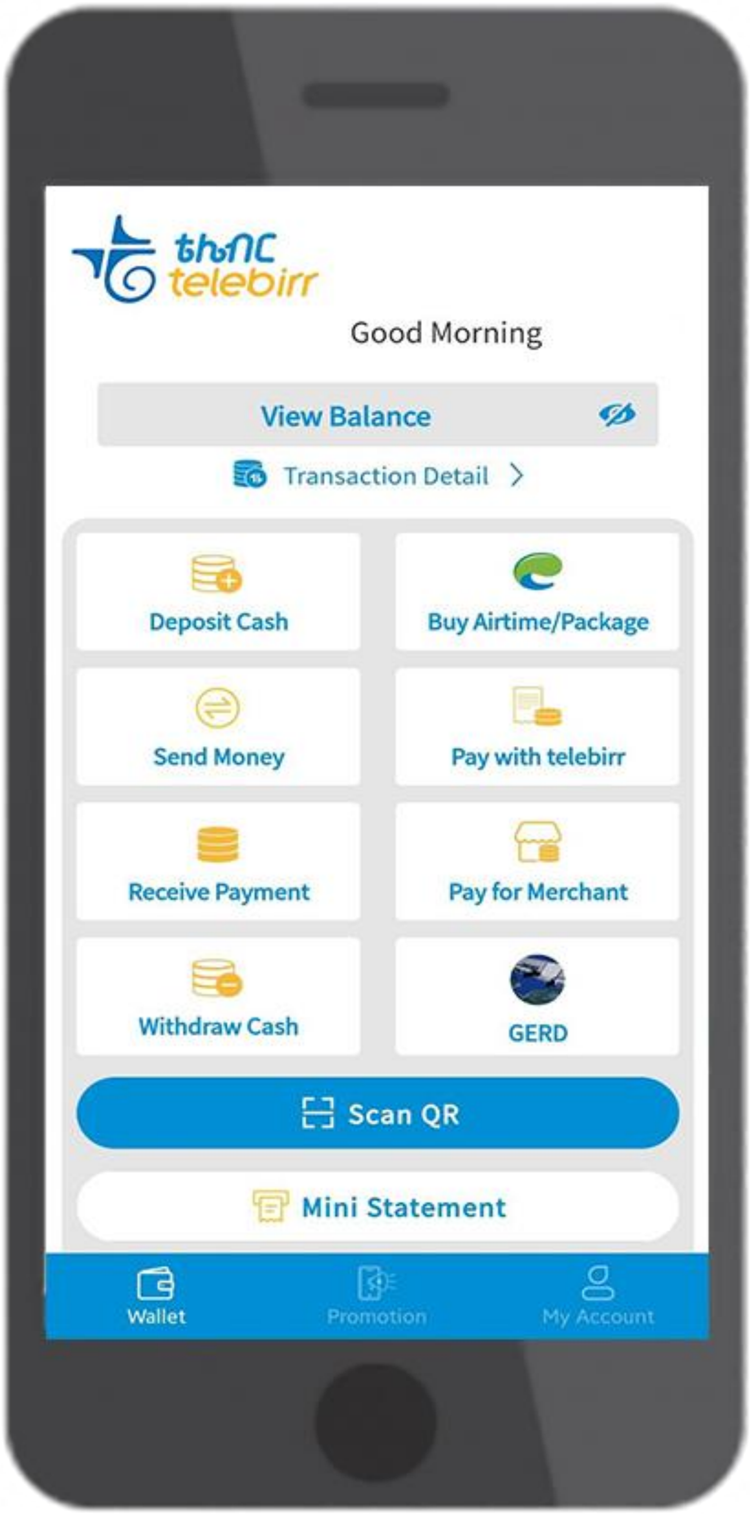
According to Ethio Telecom 2022/23 Annual Business Performance report, As part of enhancing digital economy, Our Mobile Money business “telebirr” which was introduced with the aim of meeting the country’s growing demand for digital financial services and to ensure financial inclusion has 34.3 Million subscribers with a total transaction value of ETB 679.2 Billion (Ethio-telecom, 2023).

The telebirr digital financial services namely telebirr sanduq, telebirr Mela and Endekise were launched in partnership with Dashen Bank in August 2022 to ensure access to financial services and promote financial inclusion. As a result, a micro loan services of over 4.1 Billion Birr were provided to 2.4 Million customers using tele birr Mela and Endekise. And over 768 K customers were able to save more than 3.6 billion birr using telebirr sanduq (micro saving). Furthermore, in our partnership with Commercial Bank of Ethiopia (CBE), we launched additional telebirr digital financial services namely telebirr Sinq, telebirr Enderas and telebirr Adrash in June 2023. And within 13 days of the launch micro loan services of 155.3 million birr were provided to 25,666 customers and 2,564 customers were able to save 14.2 Million birr (Ethio-telecom, 2023).

In order to ensure accessibility as well as benefit our partners, 615 service centers, 136 master agents, over 107.3K agents and 58.4 merchants have been engaged so far. In addition, integration with Banks is completed enabling money transfer from Bank to telebirr in 23 Banks and from telebirr to Bank in 21 Banks.

521 governmental and non-governmental institutions have integrated their payment system with telebirr as part of building digital Ethiopia. As part of fuel management digitalization initiative, 1,263 gas stations have started receiving fuel payments via telebirr and with this, more than 66.5 Billion Birr fuel transactions (both subsidized and non-subsidized) were made through telebirr (Ethio-telecom, 2023).

Figure 2.1. telebirr service --- Source: Ethio telecom,2022



2.3. Technology Adoption Theories and model

Theories and models in ICT adoption and use research have reportedly played a crucial role, according to (Youngseek Kim & Crowston, 2012). Theories and models offer frameworks that help researchers design their studies and analyse their findings. According to (Eisenhardt, 1989), theory may be used in three different ways: as a starting point for research design and data collecting; as a component of an iterative process of data gathering and analysis; and as the study's final output. Theories and models have been employed at the starting stage of study in order to guide the research and interpret its results since ICT adoption and use research generally uses a positivist approach (Punch, 2005). The adoption of technology has been studied using a variety of models and theories. These ideas and models have been expanded for use in researching how mobile money services are adopted. They consist of the Unified Theory of Use and Acceptance of Technology (UTAUT) (Lema, 2017; Venkatesh & Davis, 2000), dissemination of innovations, and the Technology Acceptance Model (TAM) (Davis, 1989a). The above three models are explained by (Wadada, 2019).

The TAM information systems theory simulates how people utilize and accept technology. According to the model, users' decisions regarding, how, and when they will use new technology are influenced by two distinct elements. These are "perceived usefulness," which is the extent to which an individual thinks that using a particular application system will improve his or her job performance, and "perceived ease-of-use," which is the extent to which an individual thinks that using a particular system will be effortless (Davis, 1989a). Even more than one theory was applied in some cases. To examine consumer acceptance of mobile money payment, (Pousttchi & Wiedemann, 2007) integrated TAM and TTF in Germany. Innovation Diffusion Theory (IDT) is another theory that has been applied to explain how information systems get accepted.

According to Everett M Rogers (1995), innovation is the process by which innovation or perceived new technology is disseminated through time among members of a social system through specific channels. Innovation is characterized as a concept, practice, or item. In addition to relative advantage, compatibility, complexity, trial-ability, and observability, DoI also incorporates five more key innovation characteristics. The degree to which an innovation is thought to be superior to the current technique of completing the same task is known as relative advantage. The hypothesis contends that behaviour is positively impacted by relative advantage. The level of compatibility between a new innovation and people's practices, current values, experiences, and requirements is known as compatibility. The degree to which an innovation is deemed to be somewhat challenging to understand and use is characterized as complexity. Trial-ability is characterized as the extent to which an innovation may be explored on a small scale before reaching a choice regarding acceptance (or rejection). According to Everett M Rogers (1995), observability refers to how easily other people can see the benefits of an innovation.

Eight IT adaptation theories, including TAM, Motivational Model, Theory of Reasoned Action, Theory of Planned Behaviour/Technology Acceptance Model, Model of PC Utilization, Innovation Diffusion Theory, and Social Cognitive Theory, were reviewed and combined to create UTAUT, which was first proposed by Venkatesh et al. (2003). The UTAUT seeks to explain users' initial information system usage goals and subsequent usage behaviour. The theory proposes four key constructs: performance expectancy (the degree to which an individual believes that using a system will help him or her achieve better results on the task); effort expectancy (the degree of ease associated with using the system); social influence (the degree to which an individual perceives that significant others believe he or she should use the new system); and facilitating conditions (the degree to which an individual believes there are conditions that will make using the system easier for him or her to do the task) (Venkatesh et al., 2003).

The Tele Birr mobile money service's penetration will be assessed by the study using the Technology Acceptance Model (TAM). This model is being used in order to better understand user acceptance of technology, particularly with regard to the acceptance and use of mobile money services.

2.4. Empirical review

When conducting an empirical review, the researcher looks for empirical studies in a related area or, more accurately, it is a synthesis of previously published works on the factors that influence the uptake of mobile money services. The researcher looks at earlier research done in Ethiopia, India and other African nations like Kenya, Tanzania, and Botswana. Examining the relationship between mobile money service uptake and its factors as well as its opportunities is of concern.

A study on the tele birr mobile money service by Tilahun (2022), was one of a few related types of research on mobile money services in Ethiopia. In his study, perceived utility, awareness, perceived ease of use, prior knowledge, and perceived risk were five factors that were utilized to determine whether mobile money services would be adopted. This study demonstrates that although though all correlation coefficients are statistically significant, the degree of link between the dependent variable and the independent variables varies for all explanatory variables identified as factors affecting the adoption of tele birr. This suggests that the use of tele birr service and the independent variables were significantly correlated.

A study by Tesfaye (2019), also found that behavioural intention to use CBE-BIRR mobile money is significantly and positively impacted by perceptions of perceived usefulness, perceived ease of use, and perceived risk.

A study by Awel & Yitbarek (2019), demonstrates how attitudes about adopting technology were positively influenced by the variables of confidence, service quality, and trial ability and adversely influenced by the constructs of compatibility, relative advantage, and complexity. The study came to the conclusion that customer attitudes influence the adoption of technology in a beneficial way. Using the M-Birr system as the innovation's endpoint, this study empirically assessed the DOI's characteristics as well as other aspects.

The results of studies on the variables impacting the adoption of mobile money services among Kenyan higher education institutions Kithinji (2014), show that that banking alternatives significantly influence the uptake of mobile money services, as shown by the highest coefficient of 0.801. Due to market customisation, the availability of conventional banking alternatives has a significant impact. As an alternative to traditional banking, mobile money services are practical and provide users with extra value through location-free access. Due to the convenience of the systems, sending money through a mobile phone is a quicker and timelier banking alternative.The study also comes to the conclusion that there is a strong correlation coefficient of determination of 0.635—between financial reporting and the uptake of mobile money services. The study comes to the conclusion that financial reporting affects the use of mobile money services because it accounts for openness in financial departments (Otieno et al., 2016). This study proved that there were many obstacles that prevented the use and adoption of mobile phone money. Users and potential users of mobile phone money from rural poor communities were most impacted by the issues, which included language barriers, a lack of national ID cards among potential users, a dearth of mobile phone money agents, insufficient cash and e-floats for the agents, and lack of awareness of how to use specific features of the mobile money platform.

In Tanzania, factors impacting the uptake of mobile financial services among the unbanked population were studied using six variables in accordance with the Technology Acceptance Model (TAM). The factors were perceived ease of use, perceived trustworthiness, perceived expense, perceived danger, and social influence. According to the study, adoption of mobile financial services was significantly influenced by perceived cost, perceived usefulness, and social impact. The uptake of mobile financial services was found to be unaffected by perceived trust, perceived risk, and perceived simplicity of use.

Additionally, a study was carried out by Maradung (2013), With the help of the Technology Acceptance Model (TAM) and demographic information from the literature on the adoption of mobile money services, this study set out to investigate the factors influencing the adoption of mobile money services in Botswana's banking and financial sectors. Age and education were found to be important factors in determining the adoption of mobile money services in Botswana, according to the results analysis (Lema, 2017).

In addition to examining the adoption patterns of mobile banking users and non-users in India, this article also analyses opportunities and difficulties related to the uptake of mobile banking. This research evaluates behavioural intention, social impact, facilitating factors, performance expectation, effort expectation, and trust to barriers such perceived risk. The paper discusses potential as well as difficulties. According to the report, young, educated women who work for private sector banks are heavy consumers of mobile banking services. The results of the descriptive and ANOVA analyses of the data show a clear distinction between users and non-users. There is a slight but considerable decrease in ease of use (effort expectations) among non-users. The biggest obstacle to the adoption of MB services is perceived risk and lack of confidence.

All the above literature gives a context for understanding the background of mobile money technologies and many factors that influence the adoption of these technologies. The literature review revealed that perceived usefulness, perceived ease of use, technology awareness, and perceived risk all influences the adoption of mobile money services. The finding of the above studies used as a good foundation for the current study which means to examine factors affecting the adoption of telebirr mobile money service.

2.5. Conceptual Framework of the Study

The conceptual framework represents the researcher's understanding of the relationships between the specific study variables. As a result, it pinpoints the variables needed for the research study. It serves as the researcher's "map" for carrying out the inquiry. The TAM model is used to evaluate the uptake of the Tele Birr mobile money service. Instead of using a copy of the TAM model, the researcher made some changes by incorporating perceived risk, and technical awareness into the model's components. The adoption of tele birr mobile money service, which are perceived usefulness, perceived ease of use, technology awareness, perceived risk as independent variables, and adoption of tele birr mobile money service as a dependent variable, make up the study framework, which is based on the literature review. The framework is made up of four variables that are thought to influence the adoption of the tele birr mobile money service. The conceptual framework also shows the relationship between the independent factors (perceived utility, perceived ease of use, technical awareness, and perceived risk) and the dependent variable (adoption of tele birr mobile money service).

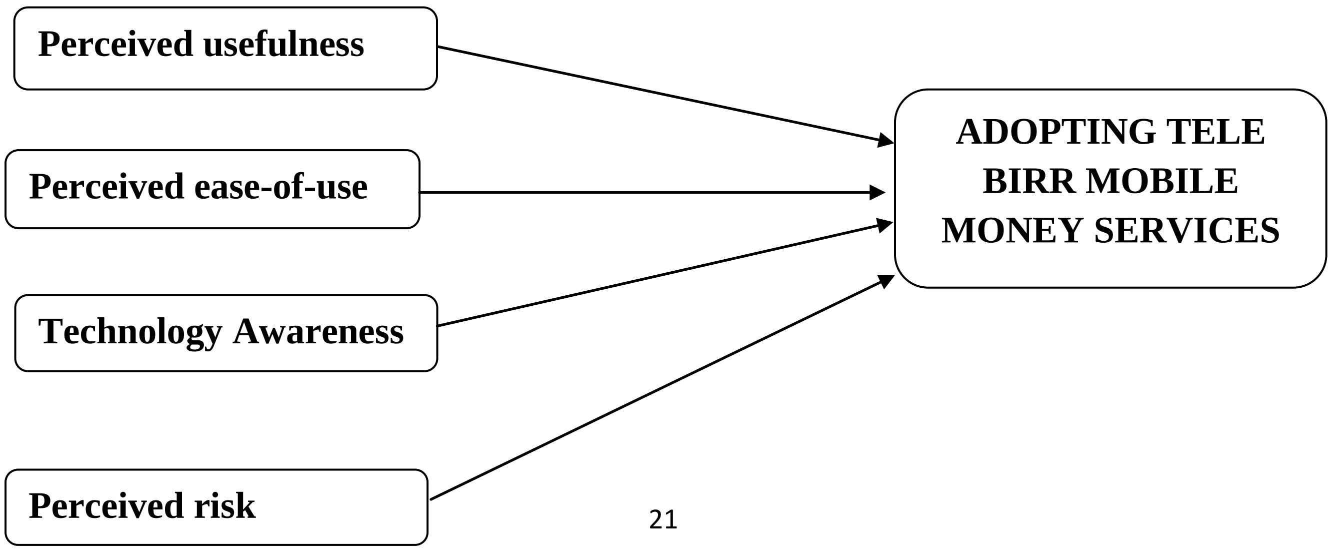


Figure 2.2 Conceptual Framework

Perceived usefulness (PU)

According to Fred Davis, this is "the level of a person's belief that using a particular system would enhance their ability to perform their job." It refers to a person's perception of the technology's utility for their intended use. The degree to which a person thinks employing a specific technology would be advantageous is known as perceived usefulness. A person's intentions to use a specific technology improve along with their perception of how valuable it is. As a result, this study suggests that:

Hypothesis H1. Perceived usefulness has a positive significant influence on the adoption of tele birr mobile money services.

Perceived ease-of-use (PEOU)

This was described by Davis as "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989a). An individual's intention to use a given technology improves along with their perception of how simple it is to use. However, no one has a favorable opinion of the technology because it is difficult to operate and has a confusing user interface. As a result, the following theory is put out in this study:

Hypothesis H2. Perceived Ease of Use has a positive significant influence on the adoption of tele birr mobile money services.

Technology Awareness

According to (Dinev & Hu, 2007), awareness is the extent to which a target audience is aware of an invention and has a general idea of what it entails. According to (Lema, 2017), awareness is "awareness knowledge," which emphasizes having a foundational understanding of philosophy and inspires one to seek out practical and ethical knowledge. Awareness-knowledge is the initial phase that serves as the foundation for subsequent innovation at the choice stage. Additionally, awareness has a crucial role in affecting attitude and intention before moving on with adoption (Murniati & and others, 2023). On the basis of this premise, the following theories are presented:

Hypothesis H3**.** Technology awareness has a positive significant influence on the adoption of tele birr mobile money services.

Perceived risk

Perceived risk is one of the main obstacles and barriers affecting consumers' intention and adoption in using financial transactions through mobile technology (Nguyen & Tpt, 2020).

According to (Featherman & Pavlou, 2003), perceived risk is the perception of losses linked to the employment of a technology. Due to the virtual nature of interactions, most technologies come with inherent hazards (Ariff et al., 2014). Similar to this, there is a chance of losing money when using MB services. Financial risk, security or privacy risk, social risk, time risk, and performance risk are only a few examples of perceived risk (M.-C. Lee, 2009). The use of mobile money services is said to raise concerns about potential financial losses, password security, network issues, hacking, and loss of personal information. Therefore, it is claimed that adoption of mobile money is negatively impacted by perceived danger.

Hypothesis H4. Perceived risk has a negative and significant influence on the adoption of tele birr mobile money services

Limited research explores the full picture of mobile money services in Ethiopia. Existing studies often focus on the banking sector or solely address challenges, neglecting opportunities. (Tilahun, 2022) work exemplifies this, concentrating solely on adoption difficulties. Consequently, a gap exists in the literature regarding the opportunities and challenges influencing the use of Tele Birr, a new mobile money platform in Ethiopia. This research aims to address this gap by exploring these key aspects of Tele Birr adoption in Ethiopia.

2.6 Research Gap

According to the past research studies reviewed, it is evident that not much research has been carried out in Ethiopia more so regarding factors affecting the adoption of mobile money service specifically on the adoption of tele birr mobile money service.

The studies that have been done on mobile payments in Ethiopia either have concentrated on those that pertain to the banking industry or failed to explore both the challenges and opportunities of mobile money service in Tele birr. For instance Tilahun (2022),conducted a study on the tele birr mobile money service which the study exclusively concentrates only on the difficulties. As a result, there is little written about the opportunities and challenges of employing tele birr mobile money service. This means that there is scanty literature in the area of the study because of tele birr is a new mobile money service platform in Ethiopia. Therefore, there is a need to carry out this research to help financial and non-financial institutions like the telecom sector that participate in digital money services understand the factors affecting the adoption of mobile money services and hence package the mobile money service into a form acceptable to customers. Hence this would mitigate the research gap in this regard.

Chapter Three

Methodology

In this chapter the researcher outlines the research approach and design. And also discuss strategies and procedures for data sampling; gathering, processing, and analysis are described in detail.

3.1 Research Approach

In this study, a Quantitative research approach was used. Quantitative research helps to analyse the cause and effect relationship of the variable numerically. The study aims to know the extent to which the independent variable influences the dependent one. The purpose of the study was to examine factors affecting the adoption of telebirr mobile money services and the hypotheses was tested.

3.2 Research Design

Plans and procedures for conducting research are known as research designs, and they cover everything from general hypotheses to specific techniques for gathering and analyzing data. This strategy involves a number of choices, and they are not have to be made in the order that they are presented here or in the order that makes sense to me (Creswell, 2008). A descriptive and explanatory research design was used in this study. By doing this, the study aims to identifying such factors that affect the adoption of telebirr mobile money service.

Creswell (2008), asserts that a descriptive study seeks to understand the what, where, and how of a phenomenon. Descriptive research style is chosen because it gives a thorough image of the current situation and a thorough description of the findings, allowing the researcher to generalize the findings to a larger population. Generating hypotheses and identifying variable of interest is another application of explanatory research.

3.3 Target Population

According to Mugenda & Mugenda (2008), the term "target population" refers to a collection of people, things, or things from which samples are taken for measurement. The target population is the particular group about which data is sought. The purpose of sampling is to make an approximation of the features of a broader population that are pertinent to the research issue. To draw conclusions about the greater population, researchers need a representative sample. All residents of Addis Ababa City who are aware of Tele Birr, including both current users who actively utilize the service and non-users who have not yet adopted it are our target population for this study.

3.4 Sample Design and Sampling Technique

An established strategy for drawing a sample from a certain population is known as a sample design. It alludes to the method or process the researcher would use while choosing the items for the sample. The sample's size, or the number of objects that will be included in the sample, may also be specified in the sample design. Prior to collecting data, the sample design is chosen(Kothari, 2004).

According to Mugenda & Mugenda (2008), a sample is a subset or portion of the target population, and sampling is the act of choosing subjects or cases to be examined as representatives of the target population. Convenience sampling techniques, a non-probability sampling method, will be used to choose the respondents. With this sampling technique, specific universe units are purposefully or consciously chosen to form a sample that is representative of the entire universe. Convenience sampling refers to the practice of choosing population components for inclusion in the sample based on their accessibility (Kothari, 2004).

The respondents in this study exclusively include all residents of Addis Ababa City who are aware of Tele Birr, including both current users who actively utilize the service and non-users who have not yet adopted it. Therefore, convenience sampling approach is a suitable sampling instrument to distinguish them during the data collection and to choose the appropriate representative samples from them.

We used the following formula to calculate the sample size:

$$n = \frac{Z^2pq}{e^2}$$

Where:-

p = sample proportion, q = 1 – p;

z = the value of the standard variate at a given confidence level and to be worked out from table showing area under Normal Curve;

e= margin of error

n = size of sample.

Therefore, based on the above formula by assuming:

e = .05 (since the estimate should be within 5% of the true value);

z = 1.96 (as per table of area under normal curve for the given confidence level of 95%).

As we want the most conservative sample size we shall take the value of *p* = .691 and *q* = .309. Using all this information, we can determine the sample size as under:

e = 0.05

P = 0.691

q = 0.309= 1-p

$$n = \frac{1.96^2 * 0.691(1-0.691)}{(0.05)^2}$$

= 328

Therefore, 328 is the required sample size that can be used for this investigation. As a result, data have been gathered using a questionnaire from a sample of 328 respondents who will be chosen as a sample from Addis Ababa who are aware of Tele Birr, including both current users who actively utilize the service and non-users who have not yet adopted it using convenience sampling procedures.

3.5 Research Instruments and data collection procedures

Data collection tools are the devices that are used to gather the information required to support or substantiate certain claims (Mugenda & Mugenda, 2008). Both primary and secondary sources of information were used in this study. While secondary data was consulted through document analysis from books, journals, and articles on mobile money services and other related studies have been reviewed and the sources are only used for literature purpose in chapter one, two and for discussion purpose in chapter four , primary data was collected using questionnaire from all sampled residents of Addis Ababa who are aware of Tele Birr, including both current users who actively utilize the service and non-users who have not yet adopted it through a structured questionnaire directly by the researcher. Both English and Amharic versions of the questionnaire documents were created. Additionally, the survey was composed of closed-ended questions with a Likert scale of 1 to 5 for each of the following statements: strongly agree (SA) = 5, agree (A) = 4, neutral (N) = 3, disagree (D) = 2, and strongly disagree (SD) = 1. The purpose of the Likert scale is to make it simpler for respondents to provide straightforward answers.

To estimate the reliability of questionnaires is this study a pilot test was undertaken on 10% of the sample population. 33 questionnaires were randomly distributed to the respondents who have lived in Addis Ababa city and Cronbach's alpha computed through SPSS software program version-26. The reliability of questionnaires was tested by using Cronbach's alpha having the value of 0.76 which is generally considered acceptable for a reliable measurement tool

3.6 Data analysis techniques

The information obtained through fieldwork and document analysis was tallied, arranged, and clearly presented. Therefore, different statistical procedures, such as descriptive analysis and inferential statistics through multiple regression analysis, were utilized based on the type of questions and data obtained. The results were presented using tables and charts that use descriptive statistics. The percentage of respondents' various demographic variables was used for analysis. We also utilized the arithmetic mean and standard deviation to get the average values of each response provided by respondents.

The data was further subjected to multiple regression analysis in order to identify factors and opportunities with the adoption of telebirr mobile money services and to further compare the variables under examination. The statistical package for social sciences (SPSS) computer software program was used to do all of these calculations.

According to Sykes (1993), On the basis of the independent factors, regression analysis was performed to forecast the value of the dependent variable.

In order to estimate and/or predict the population mean, regression analysis looks at how one variable the dependent variable relates to one or more other factors—the explanatory variables. Equation for multiple regressions:

$$\mathbf{Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon_i}$$

Where;

Y= dependent variable = Adopting telebirr

$\beta 0$ = coefficient (for constant)/ the minimum change in Y when the rest of the variables are held at a constant zero

βi = ($\beta 1$, $\beta 2$, $\beta 3$, and $\beta 4$) are constant regression coefficients representing the condition of the independent variables to the dependent variables.

Xi = (X1, X2, X3, and X4) are the independent variables

ε = Error term/Erroneous variables

Specifically, the model for this study will be expressed as follows;

Adtb = β_0 + + β_1 PU + β_2 PEOU + β_3 TA + β_4 PR + εi.

Where;

Adtb = Adopting telebirr

PU = Perceived Usefulness

PEOU = Perceived Ease of Use

TA = Technology Awareness

PR = Perceived Risk

3.7 Ethical Considerations

A set of rules that direct your study designs and procedures are known as ethical considerations in research. There are some ethical issues that must be taken into account given the nature of this research. All participants were first be given due respect and consideration. The research was used a "informed consent" approach, in which all participants made aware of the purpose and research design. Individual responders' confidentiality and anonymity was guaranteed. Finally, researchers translated the study materials or questionnaire into participants' native tongues for those with very little English competence.

Chapter Four

Results and Discussion

4.1 Introduction

In this chapter, we have provided both descriptive and inferential statistics based on respondents characteristics of interest. The response rate of respondent in this study was 100%. That means all 328 sampled respondents, residents of Addis Ababa City who are aware of Tele Birr, including both current users who actively utilize the service and non-users who have not yet adopted it, returned all filled self-administered questionnaires.

4.2 Demographic and socio-economic factors of Respondent

In this study, we were considered the factors gender, age, academic level, occupation and monthly income (in birr) as demographic and socio-economic factors of respondents. Hence, the table 4.1 provides the descriptive statistics of respondents based on these factors.

Table 4.1: Descriptive statistics of respondents based on demographic and socio-economic factors

Variables	Categories	Frequency	Percentage
Gender	Male	214	65.2
	Female	114	34.8
Age	18-35	182	55.5
	36-45	88	26.8
	46-60	49	14.9
	Above 60	9	2.7
Academic Level	High school	60	18.3

	Diploma	78	23.8
	Bachelor’s Degree	120	36.6
	Masters	64	19.5
	PhD	6	1.8
Occupation	Driver	97	29.6
	NGO	27	8.2
	Private	98	29.9
	Self-Business	56	17.1
	Students	10	3.0
	Government Employee	40	12.2
Monthly Income	Below 5,000	41	12.5
	5,000-10,000	59	18
	10,001-15,000	73	22.3
	15,001-25,000	76	23.2
	Above 25,000	79	24.1

Source: own survey, 2024

Out of 328 respondents (residents of Addis Ababa City who are aware of Tele Birr, including both current users who actively utilize the service and non-users who have not yet adopted it) 214 are males while the remaining 114 are females. That means 65.2% of respondents were males, whereas 34.8% were females. This implies that male respondents were higher than females. Most respondents in this study belong to age category 18-35 years, whereas the least number of respondents belongs to age category of above 60 years. Moreover, the percentage of respondents who’s aged between 18-35 years is 55.5%, whereas the percentage of respondents who’s aged above 60 years is 2.7%. The second highest number of respondents aged between 36-45 years, who are 88 in numbers and accounted for 26.8% of the respondents. 14.9% of respondent were aged between 46-60 years, they are 49 in numbers. Concerning to academic level, most respondents were bachelor degree holder, who are 120 in numbers and accounted for 36.6% of the total respondents. The least number of respondents were PhD holders, who are 6 in numbers and 1.8% of the total respondents. The number of respondents (the percentage in bracket) who holds a High school certificate, Diploma certificate and Master’s degree are 60(18.3%), 78(23.8) and 64(19.5%) respectively. Most respondents were private workers and drivers. Private workers accounted for 29.9% of the total respondents and who are 98 in numbers, whereas drivers consist of 29.6% of all sampled respondents and are 97 in numbers. The least were students who are 10 in numbers and constituent only 3% of the total respondents. Out of 328 sampled respondents, 8.2% were NGO employee, 17.1% were self-Business man and 12.2% were government Employee. Respectively, they are 27, 56 and 40 in numbers.

Regards to monthly income, most respondents have an income of above 25,000 Ethiopian birr. They consist of 24.1% of all the sampled respondents and are 79 in numbers. The least respondents were those who having an income below 5,000 Ethiopian birr. They are 40 in numbers and accounted for 12.5% of the total respondents. Respondents who having monthly income between15,001-25,000 Ethiopian Birr takes the second place in numbers next to those who having a monthly income of above 25,000 Ethiopian Birr. They possess 23.2% of all sampled respondents. Out of all sampled respondents, 18% were respondents who having a monthly income between 5,000-10,000 Ethiopian birr and 22.3% were respondents who having a monthly income between the interval, 10,001-15,000 Ethiopian birr. Respectively, they are 59 and 73 in numbers.

From this result, telebirr service is highly preferred and used by the young generation in academic level bachelor degree holder. And also the result indicated the majority of respondents were working in private workers and drivers. Furthermore the customer's economic condition may influence their adoption behaviour towards telebirr mobile money service.

4.3 The adopt of Tele birr mobile money service from the user perspectives

In this section, we have provided the descriptive statistics for adopt of tele birr mobile money service across the perspectives of users.

Table 4.2: Descriptive statistics for adopt of tele birr mobile money service across the perspectives of users

Questionnaire	Questionnaire Choice	Frequency	Percentage
Where are you registering to use tele birr?	From Ethio telecom	110	53.4
	From Agent	65	31.6
	self-registered	31	15.0
How often do you use tele birr service?	Once a month	51	24.8
	Once a week	65	31.6
	Every day	66	32.0
	stop use it	24	11.7
Most of a time for which purpose do you use tele birr service?	Buy Airtime/Package	83	40.3
	Pay bills	63	30.6
	Send money	20	9.7
	Receiving money	28	13.6
	Deposit or withdraw cash	12	5.8
How did you hear about Tele-birr?	Through billboard	39	18.9
	Through TV/Radio	91	44.2
	Through Friends	28	13.6

	Through internet platform	48	23.3

Source: own survey, 2024

Out of 328 sampled respondents, residents of Addis Ababa City who are aware of Tele Birr, including both current users who actively utilize the service and non-users who have not yet adopted it, 206 are residents of Addis Ababa City who are aware of Tele Birr and current users who actively utilize the service. Therefore, in this section, we tried to interpret the descriptive statistics results of these respondents.

Most tele birr mobile money service users in Addis Ababa city were registered from Ethio telecom, while the least were self-registered. Moreover, 53.4% of the users were registered from Ethio telecom, 31.6% of the users were registered from Agent and the remaining 15% were self-registered in order to use tele birr mobile money service. Respectively, they are 110, 65 and 31 in numbers.

Most tele birr mobile money service users in Addis Ababa city were used tele birr mobile money service every day, while the least were those who are currently stopped to use it. Moreover, 24.8% of the users were used tele birr mobile money service once a month, 31.6% of the users were used tele birr mobile money service once a week, 32% of the users were used tele birr mobile money service every day and the remaining 11.7% were those who are currently stopped to use it. Respectively, they are 51, 65, 66 and 24 in numbers.

Most tele birr mobile money service users in Addis Ababa city used most of their time for the purpose of buying Airtime/Package, while the least were used most of their time for the purpose of depositing or withdrawing cash. Moreover, 40.3% of the users were used most of their time for the purpose of buying Airtime/Package, 30.6% of the users were used most of their time for the purpose of paying bills, 9.7% of the users were used most of their time for the purpose of sending money, 13.6% of the users were used most of their time for the purpose of receiving money and the remaining 5.8% were used most of their time for the purpose of depositing or withdrawing cash. Respectively, they are 83, 63, 20, 28 and 12 in numbers.

Most tele birr mobile money service users in Addis Ababa city were heard about Tele-birr through TV/Radio, while the least were heard about Tele-birr through Friends. Moreover, 18.9% of the users were heard about Tele-birr through billboard, 44.2% of the users were heard about Tele-birr through TV/Radio, 13.6% of the users were heard about Tele-birr through Friends and the remaining 23.3% were users who were heard about Tele-birr through internet platform. Respectively, they are 39, 91, 28 and 48 in numbers.

4.4 Opportunities of adopting Tele birr mobile money service

The results from the table 4.3 indicates that enhanced payment service platform through Tele birr to make payments easily and improved cashless society through Tele birr are the highly important prevailing opportunities improving the adopting Tele birr mobile money service among all sampled respondents, residents of Addis Ababa City who are aware of Tele Birr, including both current users who actively utilize the service and non-users who have not yet adopted it. These respondents also agreed that the presence of high demand for the usage of telebirr and current ICT infrastructure development for different systems are also another existing opportunities for adopting tele birr mobile money service. The response variation of all respondents at each opportunities of adopting tele birr mobile money service is relatively small, specifically, it is below 1.17 in standard deviation. This implies the relative homogeneity of agreements on these various opportunities of adopting tele birr mobile money service.

In summary, all sampled respondents at each opportunities of adopting tele birr mobile money service have above 3 average response score. That means all respondents agreed on all above opportunities as they fostering the adoption of tele birr mobile money service.

Table 4.3: Opportunities of adopting Tele birr mobile money service

No.	Opportunities	Frequency (Percentage) for the level of agreement of respondents						
		SA	A	N	DA	SDA	Mean	Std. devi
1	Tele birr is used to enhance	189(57.6)	110(33.5)	29(8.8)	0(0)	0(0)	4.49	0.65

	payment service platform to make payments easily.							
2	Tele birr is used to improve cashless society	150(45.7)	133(40.5)	37(11.3)	8(2.4)	0(0)	4.30	0.76
3	There is a high demand for the usage of Telebirr.	99(30.2)	102(31.1)	84(25.6)	36(11)	7(2.1)	3.76	1.07
4	Currently, there is ICT infrastructure development for different systems.	95(29)	100(30.5)	81(24.7)	32(9.8)	20(6.1)	3.66	1.17

Source: This study: Survey 2024

4.5 Challenges of adopting Tele birr mobile money service

The results from the table 4.4 reveals that the mean score of most challenges for the adopting Tele birr mobile money service are above an average score of 3. This implies the respondents agreed as these challenges negatively impact the adoption of Tele birr mobile money service. Specifically, respondents set their inaccessibility of smartphone or mobile device required for using Tele Birr, availability of limited Tele Birr agents or service points in their area, the high cost of Tele Birr transaction fees and concern about the security of their transactions when using Tele Birr as the main challenges in adopting Tele birr mobile money service. The average score of respondents in these challenges respectively are 4.41, 4.22, 4.10 and 3.98. In contrary, they are not agreed upon the difficult of understanding how Tele birr works and their unawareness about the benefits or advantages of using Tele Birr as challenges in adopting Tele birr mobile money service. The average score of respondents in these challenges respectively are 2.17 and 2.11 which both are below 3.

Table 4.4: Challenges of adopting tele birr mobile money service

No.	Challenges	Frequency (Percentage) for the level of agreement of respondents						
		SA	A	N	DA	SDA	Mean	Std. devi
1	It is difficult to understand how Tele Birr works.	6(1.5)	24(7.3)	100(30.5)	87(26.5)	112(34.1)	2.17	1.03
2	I am concerned about the security of my transactions when using Tele Birr.	121(36.9)	122(37.2)	52(15.9)	24(7.3)	9(2.7)	3.98	1.03
3	I do not have access to a smartphone or mobile device required for using Tele Birr.	167(50.9)	134(40.9)	22(6.7)	3(0.9)	2(0.6)	4.41	0.71
4	There are limited Tele Birr agents or service points in my area.	146(44.5)	134(40.9)	34(10.4)	3(0.9)	11(3.4)	4.22	0.92
5	I am not aware of the benefits or advantages of using Tele Birr.	7(2.1)	19(5.8)	88(26.8)	102(31.1)	112(34.1)	2.11	1.01
6	Tele Birr transaction fees are too high.	131(39.9)	122(37.2)	59(18)	10(3)	6(1.8)	4.10	0.93

Source: This study: Survey 2024

4.6 Adoption of Tele birr mobile money service and its determinants

The overall mean score of respondents upon the independent variables Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness are 3.2, 3.26, 3.76 and 3.48

respectively. They all are above 3. This indicates that most respondents agreed in these variables influence on the adoption of Tele birr mobile money service. The overall mean score of respondents upon the adoption of tele birr mobile money service is 3.92, indicates that relatively their level of agreements are high in their adoption of tele birr mobile money service. The standard deviation column in the table 4.5 also reveals that relatively as there is homogenous response on each a 5-point Likert scale score of dependent and independent variables. They all are below 1.01. The overall mean score of respondents upon; Perceived Ease of Use takes the first rank, Technology Awareness takes the second rank, Perceived Usefulness takes the third rank and Perceived Risk takes the fourth rank. This implies their respective level of influence on the adoption of tele birr mobile money service.

Table 4.5: Descriptive statistics of respondents based on adoption of tele birr mobile money service and its determinants.

Variables	Mean	Std. devi
Perceived Risk	3.20	1.00
Perceived Usefulness	3.26	0.97
Perceived Ease of Use	3.76	0.89
Technology Awareness	3.48	0.97
Adoption of tele birr mobile money service	3.92	0.46

Source: This study: Survey 2024

4.7 Checking the assumptions of multiple linear regression model

Before we fit a multiple linear regression model for the dataset, we have to check the six main assumptions underlying a multiple linear regression model.

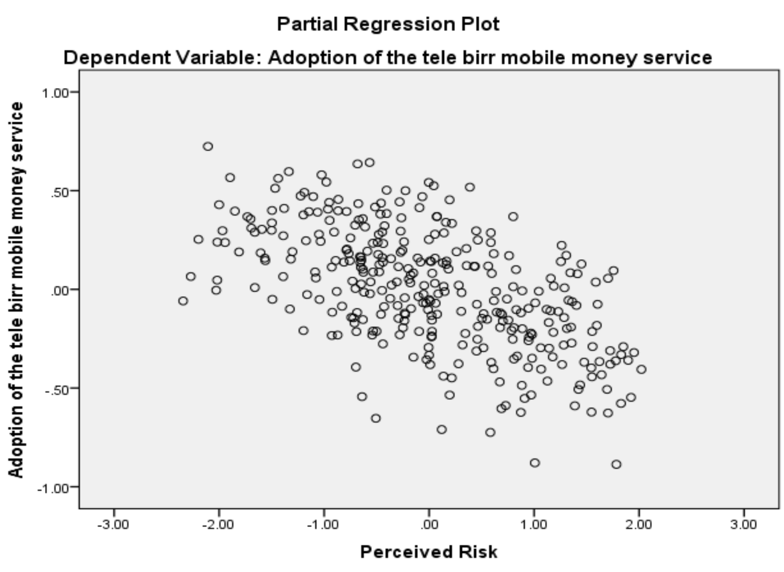
1. **Linearity Assumption:**

This assumption states that the relationship between the independent variables and the dependent variable is linear. In simpler terms, there should be a straight-line relationship between each independent variable and the dependent variable, meaning changes in the independent variable result in consistent, proportional changes in the dependent variable.

We used Partial Regression Plot (also known as a Component-plus-Residual Plot) or a Partial Residual Plot to check this assumption. These plots help visualize the relationship between each predictor variable and the response variable while holding all other predictors constant. This is verified by visually inspect the plot for any non-linear patterns like curves, bends, or U-shapes.

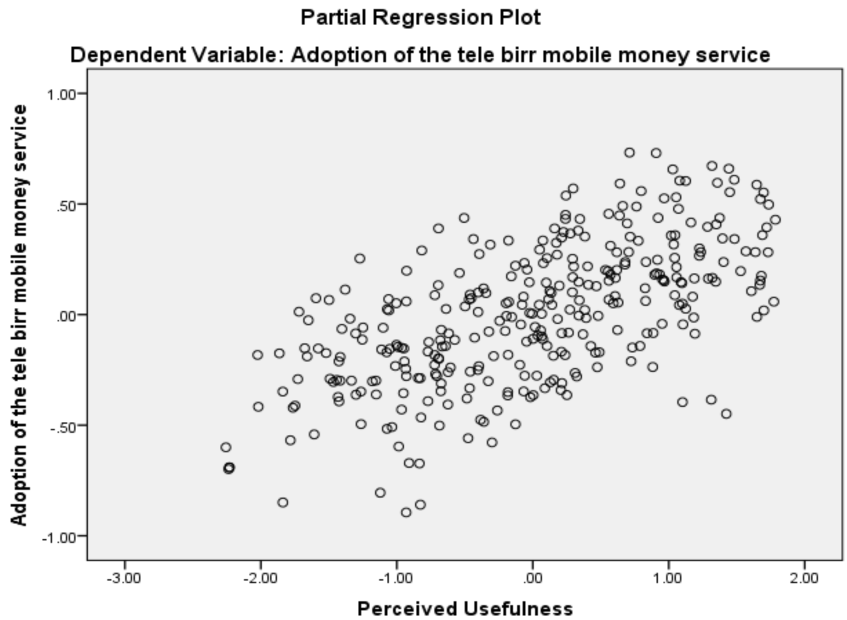
The figure 4.1-4.4 shows that the partial regression plots for Adoption of the tele birr mobile money service against each predictors (i.e Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness). However, in this figure, all plots show the linear relationship between each predictors and Adoption of the tele birr mobile money service. Moreover, Perceived Risk negatively and linearly related with Adoption of the tele birr mobile money service. But, other predictors positively and linearly related with Adoption of the tele birr mobile money service.

Figure 4.1: Partial regression plot of adoption of the tele birr mobile money VS Perceived Risk.



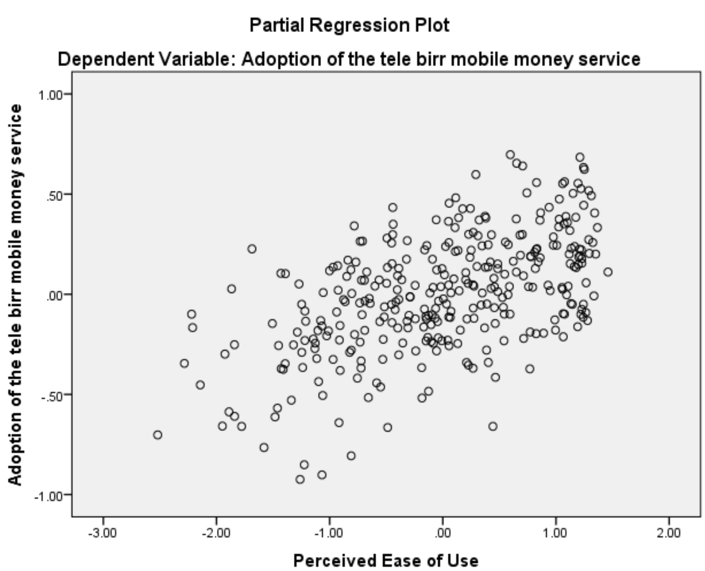
Source: SPSS Output, 2024, V-26

Figure 4.2: Partial regression plot of adoption of the tele birr mobile money VS Perceived Usefulness.



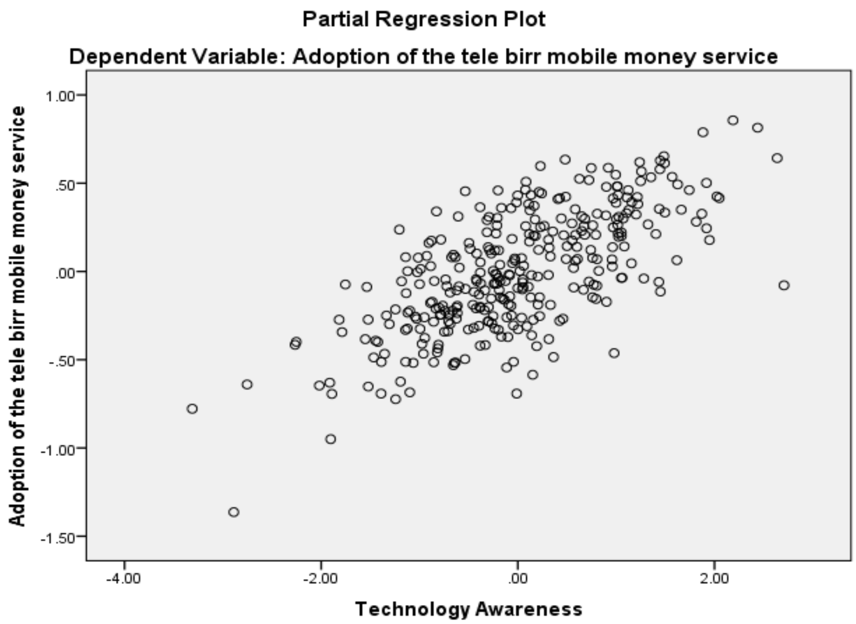
Source: SPSS Output, 2024, V-26

Figure 4.3: Partial regression plot of adoption of the tele birr mobile money VS Perceived Ease of Use.



Source: SPSS Output, 2024, V-26

Figure 4.4: Partial regression plot of adoption of the tele birr mobile money VS Technology Awareness.



Source: SPSS Output, 2024, V-26

2. **Multicollinearity Assumption**

When we look at the values under the "VIF" column, all values are below 10 generally indicated as there is no multicollinearity Problems. Alternatively, we can look the values under the “Tolerance” column; all values are above 0.10 generally implied as there is no multicollinearity among the predictor variables (Table 4.6).

Table 4.6: Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
Perceived Risk (PR)	0.979	1.021
Perceived Usefulness (PU)	0.992	1.008
Perceived Ease of Use (PEU)	0.986	1.014

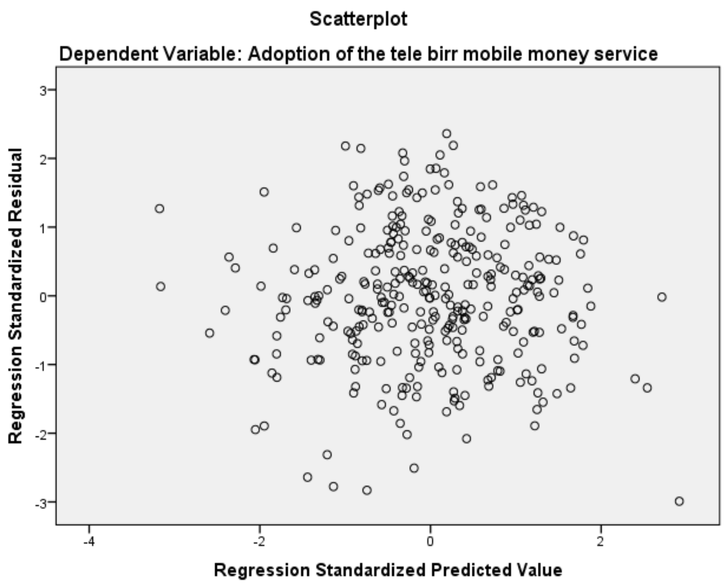
Technology Awareness (TA)	0.972	1.029

Source: SPSS Output, 2024, V-26

3. **Homoscedasticity**

The figure 4.5 is the scatterplot of standardized residuals vs. Standardized predicted values. This plot doesn't show any systematic patterns like fanning out or clustering. Therefore, we can say that the variance of the residuals (errors) is approximately constant across all levels of the predictor variables. In other words, the spread of the residuals does not systematically change as the values of the predictor variables change. In other way, we can say that the variability of the response variable is consistent across different levels of the predictor variables. This indicates that the model's predictions are equally reliable across the range of predictor variable values.

Figure 4.5: The scatterplot of standardized residuals vs. Standardized predicted values



Source: SPSS Output, 2024, V-26

4. **Independence of Errors Assumption:**

The Durbin-Watson statistic from output table 4.7 indicates that 1.984 which is between 1.5 and 2.5. Therefore, all errors distributed independently.

Table 4.7: The Durbin-Watson statistic

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.841[a]	.708	.704	.24821	1.984

a. Predictors: (constant), PR, PU, PEU, TA

b. Dependent variable: Adoption of the tele birr mobile money service

Source: SPSS Output, 2024, V-26

5. **Normality of errors Assumption**

Here, we have provided both Q-Q plots and Shapiro-Wilk test to check the normality assumption of the error terms. The output from the Shapiro-Wilk test shows that the P-value for studentized residual is 0.243 which is greater than 0.05. Hence, at 5% level of significance, we can conclude that the residual values are normally distributed. Similarly, the Q-Q Plot of studentized residual follows a diagonal line which is also implies the satisfaction of normality assumption for the error terms.

Table 4.8: Normality Test

Tests of Normality

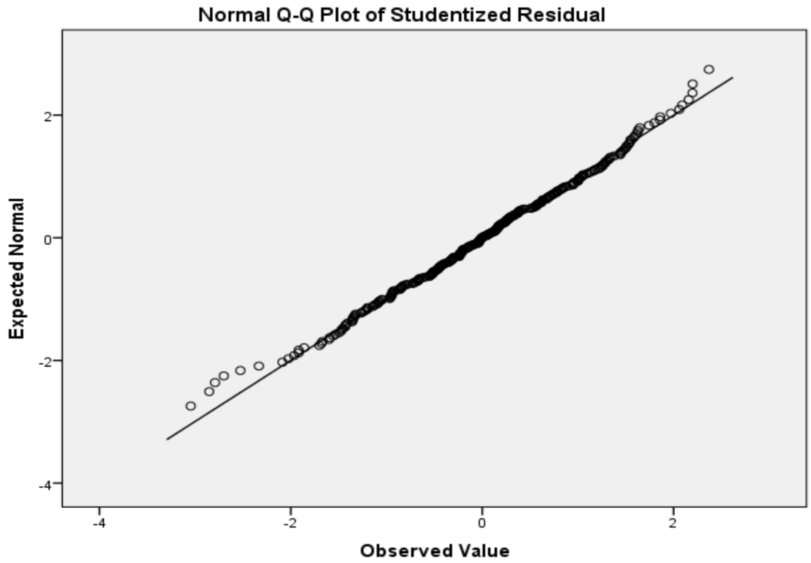
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Studentized Residual	.029	328	.200*	.994	328	.243

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: SPSS Output, 2024, V-26

Figure 4.6: The normal Q-Q Plot of studentized residual

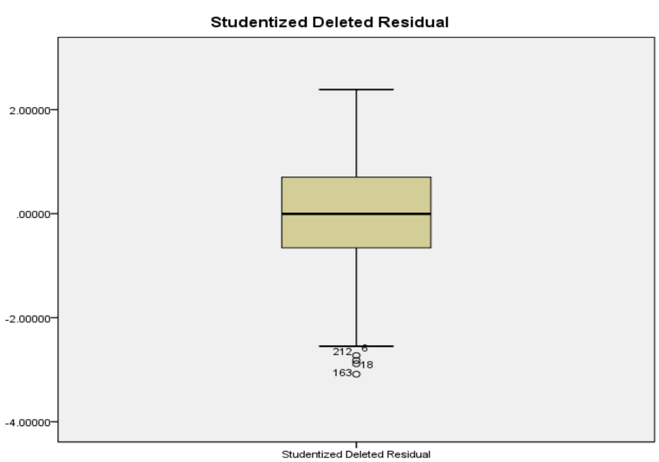


Source: SPSS Output, 2024, V-26

6. Assumption for Un-presence of significant outlier

We used Box plot to check whether there is a significant outliers or not. The figure 4.7 shows that the observations at the case number 18, 163 and 212 are outliers. Therefore, these cases should be omitted before proceeding to make a multiple linear regression analysis.

Figure 4.7: The box plot of studentized deleted residual



Source: SPSS Output, 2024, V-26

Except the sixth assumption, all above assumptions of multiple regression analyses are satisfied. As a remedial action, all observations at the case number 18, 163 and 212 should be omitted to satisfy the assumption for Un-presence of significant outlier.

4.8 Output from Regression Analysis

The outputs from Table 4.9-4.11 have been determined by fitting a multiple linear regression model for the dataset after omitted potential outliers who are described earlier.

4.8.1 Model summary

This section typically provides the summary of the overall fit of the model. In this fit, we have considered Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness as independent variables Adoption of the tele birr mobile money service as dependent variable. The R-squared and adjusted R-squared value for this model is 0.708 and 0.704 respectively. The R-squared value 0.708 implies that approximately 70.8% of the variation in Adoption of the tele birr mobile money service among individuals who are actively using Tele Birr mobile money service and aware of Tele Birr in Addis Ababa City is explained by the combined effect of Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness. An adjusted R-squared value of 0.704 in our study indicates that approximately 70.4% of the variation in the Adoption of the tele birr mobile money service among individuals who are actively using Tele Birr mobile money service and aware of Tele Birr in Addis Ababa City is explained by the combined effect of Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness, taking into account the model's complexity. This interpretation is slightly different from the interpretation of R-squared due to the adjustment made. Adjusted R-squared penalizes for model complexity: Unlike R-squared, which can increase simply by adding more variables to the model, the adjusted R-squared value penalizes the model for having more predictors. This adjustment aims to avoid overfitting, which occurs when a model becomes too complex and fits the training data too closely, potentially losing its ability to generalize to unseen data. This value is slightly lower than the R-squared value (0.708) indicates either adding more variables might not have substantially improved the explanatory power (variance explained) while potentially increasing the risk of overfitting or the model complexity might be appropriate, and the slight decrease is an expected consequence of the adjustment for the number of predictors.

The standard error of the estimate (SEE) in a regression model, with a value of 0.24821 in this model summary table, provides information about the average difference between the predicted values from the model and the actual observed values of the Adoption of the tele birr mobile money service. This value is relatively low, implies a better fit for the model, as it suggests that the model's predictions are, on average, closer to the actual values.

Overall, an adjusted R-squared of 0.704 suggests a moderately strong fit for your model, with the adjustment indicating that the model complexity has been taken into account.

Table 4.9: Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.841[a]	.708	.704	.24821	1.984

a. Predictors: (constant), PR, PU, PEU, TA

b. Dependent variable: Adoption of the tele birr mobile money service

Source: SPSS Output, 2024, V-26

4.8.2 ANOVA

Typically, we used ANOVA to tests the model's overall significance. This test is used to assess whether the model as a whole statistically explains a significant portion of the variation in the Adoption of the tele birr mobile money service compared to a model with only the intercept (a constant term). In the table 4.10, we have a significant F-statistic (195.50) and lower p-value (0.000) indicates that the model, with its included predictor variables (Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness), explains a statistically significant portion of the variation in the Adoption of the tele birr mobile money service compared to the intercept-only model.

Table 4.10: ANOVA

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48.178	4	12.045	195.500	.000[b]
	Residual	19.900	323	.062		
	Total	68.078	327			

a. Dependent variable: Adoption of the tele birr mobile money service

b. Predictors: (constant), PR, PU, PEU, TA

Source: SPSS Output, 2024, V-26

4.8.3 Multiple Linear Regression Model

The P-values for independent variables Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness in this study are all below 0.001 which are less than 0.05. Therefore, at 5% level of significance, we can conclude that all independent variables have a significant effect on Adoption of the tele birr mobile money service (Table 4.11).

Table 4.11: Output from Multiple Linear Regression Model

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	2.250	.095		23.717	.000	2.064	2.437		
	PR	-.175	.014	-.384	-12.635	.000	-.203	-.148	.979	1.021
	PU	.206	.014	.439	14.540	.000	.178	.234	.992	1.008
	PEU	.187	.016	.364	12.024	.000	.156	.217	.986	1.014
	TA	.245	.014	.523	17.147	.000	.217	.273	.972	1.029

a. Dependent Variable: Adoption of the tele birr mobile money service

Source: SPSS Output, 2024, V-26

The output from the table 4.11 provides both unstandardized coefficient and standardized coefficient with their standard error.

Even though, the unstandardized coefficient provides information about the direction and relative strength of the relationship between the independent and dependent variables (positive or negative), it's not directly interpretable in terms of the magnitude of the effect due to the units. Therefore, to gain a better understanding of the magnitude and practical significance of the effects, we have only considered the standardized coefficient of each predictor of the study. In other way, we used these coefficients to interpret the results of this model.

A -0.384 standardized coefficient of Perceived Risk represents the expected change in the standard deviation of Adoption of the tele birr mobile money service for a one-unit change in the standard deviation of the Perceived Risk a five point likert scale score, holding all other independent variables constant.

A 0.439 standardized coefficient of Perceived Usefulness represents the expected change in the standard deviation of Adoption of the tele birr mobile money service for a one-unit change in the standard deviation of the Perceived Usefulness a five point likert scale score, holding all other independent variables constant.

A 0.364 standardized coefficient of Perceived Ease of Use represents the expected change in the standard deviation of Adoption of the tele birr mobile money service for a one-unit change in the standard deviation of the Perceived Ease of Use a five point likert scale score, holding all other independent variables constant.

A 0.523 standardized coefficient of Technology Awareness represents the expected change in the standard deviation of Adoption of the tele birr mobile money service for a one-unit change in the standard deviation of the Technology Awareness a five point likert scale score, holding all other independent variables constant.

The absolute value of the standardized coefficient also used to indicate the strength of the relationship between these independent variables and Adoption of the tele birr mobile money service. Cohen (1988), defined a moderate effect as the absolute value of standardized coefficients falling between 0.3 and 0.5 and a strong effect as values exceeding 0.5. Hence, the absolute value of the above standardized coefficient lies either in the interval 0.3 - 0.5: Moderate effect or > 0.5: Strong effect. With standardized coefficients of 0.439 and 0.364, respectively, perceived usefulness and perceived ease of use have a positive and moderate impact on the adoption of the Tele Birr mobile money service. This implies that users' likelihood of adopting the service increases somewhat as they find it more helpful and user-friendly. These results are in line with the Technology Acceptance Model (Davis, 1989a), which suggests that perceived utility and usability are important factors in determining whether or not technology is adopted.

With a standardized coefficient of 0.523, technology awareness, on the other hand, demonstrated a positive and significant effect on the adoption of Tele Birr mobile money service. Users who are more aware of the technology are much more likely to adopt it, as this strong relationship highlights the significance of awareness in fostering adoption. This result is consistent with the Diffusion of Innovations theory developed by E M Rogers (2003), which highlights the importance of awareness in the adoption process.

Conversely, perceived risk, with a standardized coefficient of -0.364, had a moderately negative impact on the adoption of the Tele Birr mobile money service. This suggests that the likelihood of adoption is moderately decreased by higher perceived risk. This result is in line with the findings of Pavlou (2003), who discovered that consumers' willingness to adopt new technologies is negatively impacted by perceived risk. Furthermore, it is consistent with the findings of Liébana-Cabanillas et al. (2018), who found a comparable inverse relationship between perceived risk and the uptake of mobile payments.

Perceived risk is a barrier to adoption, but perceived usefulness, ease of use, and technology awareness positively influence adoption, according to the direction of the relationships, as indicated by the sign of the coefficients. To be more precise, an increase of one standard deviation in the mean 5-point Likert scale scores for perceived usefulness, perceived ease of use, and technology awareness results in an expected change in the adoption of Tele Birr mobile money service of 0.439, 0.364, and 0.523 standard deviations, respectively. On the other hand, adoption declines by 0.384 standard deviations for every standard deviation that perceived risk raises.

The ramifications of these findings are significant for those involved in promoting the use of the Tele Birr mobile money service. Prioritizing efforts should be given to enhancing technology awareness and perceived usefulness and ease of use. Adoption should be less negatively impacted by perceived risks by putting strategies to mitigate them into practice at the same time.

4.9 Hypotheses test and Discussion of Results

We have developed the following research hypothesis in this study.

H01: Adoption of the tele birr mobile money service is not positively and significantly impacted by perceived usefulness.

H11: Adoption of the tele birr mobile money service is positively and significantly impacted by perceived usefulness.

H02: The adoption of tele birr mobile money service is not positively and significantly impacted by perceived ease of use.

H12: The adoption of tele birr mobile money service is positively and significantly impacted by perceived ease of use.

H03: The adoption of tele birr mobile money service is not positively and significantly impacted by technology awareness.

H13: The adoption of tele birr mobile money service is positively and significantly impacted by technology awareness.

H04: Perceived risk has not negative and significant impact on the adoption of tele birr mobile money service.

H14: Perceived risk has a negative and significant impact on the adoption of tele birr mobile money service

Hence, the above test results easily found from the significant effect of each predictor (Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness) on Adoption of tele birr mobile money service in the table 4.8. The result from this table indicates that the coefficients for Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness are -0.384, 0.439, 0.364 and 0.523 respectively. Since, their P-values are all less than

0.05, these predictors are significant at 5% level of significance. The above all information implies that all predictors except Perceived Risk have positive significant impacts on Adoption of the tele birr mobile money service. Based on these results, we conclude the following hypothesis test results.

1) The first null hypothesis is rejected. The fact that this null hypothesis was rejected suggests that perceived usefulness has a positive and significant impact on the adoption of the Tele Birr mobile money service. This result is consistent with earlier studies (A. Smith & Johnson, 2019b, 2019a), which found a positive correlation between the adoption of mobile payment systems and perceived usefulness. The discussion does point out that different studies have yielded different findings, demonstrating the intricate and multidimensional nature of the adoption of mobile payment systems technology. For example, C. Jones et al., (2020) & K. Jones et al. (2020), discovered that although perceived usefulness plays a role, perceived ease of use had a greater influence on the adoption of mobile payment systems technology. This disparity implies that the relative weights assigned to various factors may differ based on the particular situation or the attributes of the user base. The study by H. Chen et al. (2018) adds to the complexity by finding no evidence of a significant influence of perceived usefulness on the adoption of mobile payments. This finding may be the result of variations in the sample demographics or regional contexts. The technological infrastructure, regulatory frameworks, and cultural aspects are important variables that can affect these results. The actual implication of these findings is that, although perceived utility is typically a key component in the adoption of technology for mobile payment systems, other factors like ease of use, cultural norms, or the particular technological ecosystem can override or mitigate its influence.

   In order to encourage the use of mobile payment systems, policymakers and practitioners should take these subtleties into account and modify their approaches to better suit the larger context in which their intended users live. Comparing results from various studies is helpful in order to give a more thorough understanding. For instance Davis (1989a, 1989b), first proposed that perceived utility and perceived ease of use are essential factors in predicting the adoption of technology in the Technology Acceptance Model (TAM). This model was further developed by Venkatesh & Davis (2000) Venkatesh and Davis (2000), who emphasized that although perceived usefulness may vary in relative importance, it is still a powerful predictor of adoption behaviors in a variety of contexts.

2) The second null hypothesis is rejected. Based on the rejection of this null hypothesis, perceived ease of use has a positive and significant impact on the adoption of the Tele Birr mobile money service. This result emphasizes how crucial user-friendly interfaces are to promoting the uptake of new technologies. Perceived ease of use is a key component in technology adoption, and the outcome is consistent with Davis (1989b) Technology Acceptance Model (TAM). Similar to this, Venkatesh et al. (2003), offered factual data in support of the hypothesis that, in the context of information systems, perceived ease of use and technology acceptance are related. The results of this study, however, also make one think about the subtleties in the larger body of literature. For instance Li & Wang (2017) found that perceived ease of use did not significantly predict the adoption of mobile payments among Chinese consumers. This implies that depending on the cultural and commercial context, perceived ease of use may have varying effects. These results can be influenced by differences in the metrics used to measure ease of use, cultural perspectives on technology, and the unique features of the mobile payment industry. Furthermore, more research by D. J. Kim et al. (2018) & Zhou (2011), offers more information. According to (Zhou, 2011), seamless and intuitive design can greatly increase user acceptance. It also highlights the importance of interface design and user experience in influencing perceived ease of use. According to D. J. Kim et al. (2018), perceptions of security and trust, along with usability, are important factors in the adoption of technology for mobile money services. The actual implication of these results is that, while having an intuitive user interface is important, it is not enough for mobile money services such as Tele Birr. To encourage adoption, service providers must also take into account cultural variations, the maturity of the market, and additional elements like security and trust. With a more thorough approach, potential users' varied needs and preferences can be more effectively met, resulting in more successful technology adoption for mobile money services.
3) The third null hypothesis is rejected. This suggests that technology awareness has a positive and significant impact on the uptake of the Tele Birr mobile money service. This research emphasizes how important it is to have knowledge about technology in order to encourage

its adoption. As people must be aware of a technology before they can assess its value and choose to adopt it, technological awareness has a substantial impact on the adoption process, according to Rogers' 2003 Diffusion of Innovations theory(E M Rogers, 2003). Similarly, an empirical relationship between technology awareness and the uptake of mobile payments was discovered by J. Zhang et al. (2019) & X. Zhang et al. (2019), supporting the notion that awareness is an important precondition for adoption. But there are also some contradictions in the literature. For example, Wang & Liao (2018) found that although technology awareness had an impact on the adoption of mobile payments, it was not as large as other factors such as perceived utility. There are a few possible explanations for this discrepancy, including variations in study methodologies, technological environments, or sample demographics. For instance, awareness of technology may naturally be higher in environments where it is pervasive, which reduces its relative impact in relation to other factors like perceived usefulness or ease of use.

Additional studies by Ahmed et al. (2017) J. Lee & Song (2020) shed more light on these dynamics. J. Lee & Song (2020) stress the value of ongoing outreach and education in raising technology awareness for mobile money services and contend that awareness campaigns can greatly increase adoption rates. Ahmed et al. (2017) emphasize how media exposure and social influence shape technology awareness and adoption, pointing out that external information sources frequently serve as a catalyst for awareness.

These findings really mean that raising technology awareness is critical to the uptake of services like Tele Birr. To that end, service providers should concentrate on extensive awareness campaigns that inform prospective customers about the features and advantages of mobile money services. But, they should also understand that raising awareness is not enough; a comprehensive strategy that enhances perceived utility and ease of use and makes use of social influence is required to maximize adoption.

4) The fourth null hypothesis is rejected. This suggests that the adoption of the Tele Birr mobile money service is significantly impacted negatively by perceived risk. This result is consistent with past studies that have demonstrated that increased perceived risk deters the adoption of new technologies. For instance, in her research on online consumer behavior, Pavlou (2003) discovered that consumers' perceived risk had a negative impact on their

willingness to adopt new technologies. Liébana-Cabanillas et al. (2018) offered empirical data that corroborated the notion that perceived risk is negatively correlated with the uptake of mobile payments.

Even with this consistency, there are some contradicting findings in the literature. S. Kim & Prabhakar (2020) Y Kim & Prabhakar (2020), for example, found that although consumer attitudes toward the adoption of mobile payments were influenced by perceived risk, the effect was not statistically significant. These discrepancies could be ascribed to differences in sample characteristics, contextual factors specific to each study, or variances in the way perceived risk is measured.

Additional viewpoints on this matter are provided by Featherman & Pavlou (2003) Martins et al. (2014) research. According to Martins et al. (2014), there are a number of factors that go into perceived risk, such as financial, security, and privacy risks, all of which have different effects on adoption decisions. Featherman & Pavlou (2003) pointed out that the influence of perceived risk could change based on how accustomed a consumer is to the technology and how they have used digital services in the past.

The real implication of these findings is that perceived risks need to be addressed and mitigated in order for services like Tele Birr to be widely adopted. To lower perceived risks, service providers should concentrate on improving security features, providing strong privacy protections, and informing customers about these measures. Furthermore, by recognizing that various risks may influence consumer decisions in different ways, strategies can be tailored to address particular concerns and increase adoption rates.

Chapter Five

Conclusion and Recommendation

5.1 Conclusion

Mobile money service currently not only in a developed countries but also in developing countries including our country Ethiopia becomes a basic transaction to save our time, cost, and energy and to create a cashless society. Telebirr is the first telecommunication mobile money service in Ethiopia to Ethio telecom customers.

The main objective of this study was to explore the factors that affect the adoption of telebirr mobile money services in Addis Ababa. Based on the findings from a sample of 328 residents, who were both current users and non-users aware of Tele Birr, we can draw several key conclusions.

According to the respondents' demographic profile, young, male, bachelor's degree-holder, private employees make up the majority and earn comparatively high monthly incomes. In particular, 34.8% of respondents were women and 65.2% of respondents were men. Just 2.7% of respondents were older than 60, but a substantial 55.5% of respondents were between the ages of 18 and 35. PhD holders were the least represented, making up 1.8% of the total respondents, compared to 36.6% of those with a bachelor's degree. Students made up the least represented group among the respondents, at 3%, while private workers made up 29.9% of the total. Respondents with incomes over 25,000 Ethiopian Birr made up the majority (24.1%) of the sample, while those with incomes under 5,000 Ethiopian Birr made up 12.5%.

From the user perspective, most Tele Birr mobile money service users in Addis Ababa registered through Ethio telecom, with self-registrations being the least common. The service was predominantly used daily, with very few respondents having stopped using it. The most frequent use of Tele Birr was for buying airtime/packages, while depositing or withdrawing cash was less common. The majority of users first heard about Tele Birr through TV/Radio, while friends were the least common source of information.

The study identified several prevailing opportunities associated with the adoption of Tele Birr. These include an enhanced payment service platform facilitating easier payments, the promotion of a cashless society, high demand for Tele Birr usage, and the current ICT infrastructure development supporting various systems. These opportunities reflect a conducive environment for the growth of mobile money services in Addis Ababa.

Conversely, the study also highlighted significant challenges hindering the adoption of Tele Birr. Key challenges include the inaccessibility of smartphones or mobile devices required for using Tele Birr, limited availability of Tele Birr agents or service points, high transaction fees, and concerns about transaction security. Notably, respondents did not perceive difficulties in understanding how Tele Birr works or a lack of awareness about its benefits as significant challenges.

These key findings align with the specific objectives of the study. The exploration of challenges revealed crucial barriers to adoption, such as technology accessibility and cost concerns. The investigation of opportunities demonstrated the existing positive factors, such as infrastructure and demand that support Tele Birr's growth. User perspectives provided insights into daily usage patterns and sources of information, highlighting both positive and negative aspects of the user experience.

All assumptions of multiple regression model were satisfied and analysis were done based on this model. As a result, the independent variables Perceived Risk, Perceived Usefulness, Perceived Ease of Use and Technology Awareness have a significant effect on Adoption of the tele birr mobile money service. The variable Perceived Risk have a negative impacts on Adoption of the tele birr mobile money service, whereas the others have a positive influences on Adoption of the tele birr mobile money service.

In summary, while the adoption of Tele Birr mobile money service in Addis Ababa is driven by significant opportunities, it is also hindered by notable challenges. Addressing these challenges and leveraging the identified opportunities will be crucial for the broader adoption and development of Tele Birr in Addis Ababa.

5.2 Recommendations

We provide the following thorough recommendations for stakeholders, including Ethio-telecom, policymakers, customers and government bodies, based on the study's findings and conclusions.

1. **Reduce the perception of risk**: Addressing and lowering perceived risks related to Tele Birr mobile money service uses is essential to increasing its uptake. Strong security measures should be put in place by Ethiopian telecom to safeguard user information and transactions. This covers frequent security audits, multi-factor authentication, and end-to-end encryption. Furthermore, users' concerns can be reduced by providing clear information about these security measures through educational campaigns. Building trust and lowering perceived risks can also be achieved by offering guarantees or insurance for transactions.

2. **Improve Technology Awareness, Perceived Usefulness, and Perceived Ease of Use**: Tele Birr's perceived usefulness and usability should be improved. In order to make the user interface more intuitive and user-friendly, Ethiopian Telecom should continuously improve it. Offering thorough guides and customer service can make it easier for users to use the service. Adoption can also be accelerated by raising technology awareness through focused marketing campaigns that emphasize Tele Birr's advantages and useful applications. Working with educational institutions to implement digital literacy initiatives can help raise potential users' awareness of technology.

3. Improve Accessibility and Affordability: It is imperative to guarantee increased accessibility to the devices required for Tele Birr mobile money service usage. Together, Ethiopian telecom and the government should provide reasonably priced smartphones and other mobile devices, perhaps through grants or other funding sources. The service will be more widely available if Tele Birr agents and service locations are expanded, particularly in underprivileged areas. Furthermore, examining and lowering transaction costs can increase users' attraction to Tele Birr. Lowering costs for small transactions through the implementation of a tiered fee structure based on transaction amounts could promote wider usage.

4. **Enhance and Leverage Current Opportunities**: The study's identified current opportunities ought to be consistently leveraged and improved. Bill payment, remittances, and e-commerce integrations are just a few of the new features and services that Ethiopian telecom should roll out

to meet the growing demand for mobile money services. To support these new services, the current development of the ICT infrastructure should be preserved and extended. Furthermore, public campaigns that highlight the advantages of a cashless society can strengthen the case for using Tele Birr mobile money services.

5. Promote Stakeholder Collaboration: For the Tele Birr mobile money service to be developed and adopted consistently, stakeholder collaboration is essential. Government organizations, financial institutions, and Ethiopian telecom providers ought to collaborate to build an environment that is favorable to mobile money services. Legislators ought to think about establishing supportive regulatory environments that safeguard consumers and promote innovation. Initiatives for community engagement can also be put into place to get input from users and keep the service improving.

Ethio-telecom and other stakeholders can address the issues raised by this study, take advantage of current opportunities, and greatly improve the uptake and user experience of the Tele Birr mobile money service in Addis Ababa by putting these recommendations into practice.

5.3 Direction for Further Studies

Several directions for additional research are proposed, building on the conclusions and insights from this study on the adoption of Tele Birr mobile money services in Addis Ababa:

1. Adoption Trends: Longitudinal Studies

Longitudinal studies should be explored in future research to monitor changes in Tele Birr adoption and usage patterns over time. This would provide light on how user attitudes and behaviors change as they become more accustomed to and exposed to the service.

2. **Comparative Analysis across Regions**: To get a better understanding of how demographic and geographic factors affect the adoption of mobile money services, a comparative study between urban and rural areas in Ethiopia or between different regions of the country could be conducted. Such studies could draw attention to regional differences and provide specific recommendations for improving adoption in underprivileged areas.

3. **Development of Technological Infrastructure and Ecosystems**: Future studies could look into the larger ecosystem and infrastructure required to enable the growth of mobile money services. This entails investigating how partnerships with financial institutions, regulatory frameworks, and telecommunications infrastructure contribute to the expansion of services like Tele Birr mobile money services.
4. **Privacy and Security Concerns**: More research should be done on security and privacy issues in light of the substantial influence that perceived risk has on adoption. Study may concentrate on identifying the particular security features that consumers value most and the kinds of privacy guarantees that would boost their comfort level when utilizing mobile money services.

Researchers can contribute to a more thorough understanding of the factors influencing the adoption and development of mobile money services, such as Tele Birr mobile money services, by pursuing these avenues for additional research. This will ultimately support more effective strategies to improve financial inclusion and digital transformation in Ethiopia.

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Appendix-1

ADDIS ABABA UNIVESITY

FACULTY OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING AND FINANCE

Research questionnaire (English Version)

Dear participant,

I am a Master of Science in Accounting and Finance at faculty of business and economics, Addis Ababa University. Currently, I am conducting research to fulfil the thesis. The research title is to study ***"FACTORS AFFECTIN ADOPTION OF MOBILE MONEY SERVICES IN ADDIS ABABA: THE CASE OF TELE BIRR."*** Thus, I am inviting you to participate in this research by completing the following survey. The questionnaire will require approximately 10-15 minutes completing. Your participation in the survey will assist me to complete this research successfully. I assure you that the collected data will be confidential and used solely for academic purpose. For any enquiries related to this questionnaire, please call +251913417373.

I thank you so much indeed for devoting your invaluable time to complete this research survey.

Sincerely,

Hizibayen Legesse

Part I - General Information

1. Gender; Male ☐ Female ☐
2. Age; 18-35 ☐ 36-45 ☐ 46-60 ☐ Above 60 ☐
   1. Academic Level; High School ☐ Diploma ☐ Bachelor's Degree ☐ Masters ☐ PhD ☐
2. Occupation; Government employee ☐ Private ☐ Driver ☐ NGO ☐ Student ☐ Merchant ☐
3. Monthly income (in Birr); Below 5000 ☐ 5000-10000 ☐ 10001-15000 ☐ 15001- 25000 ☐ Above 25000 ☐

Part II: opportunities of adopting tele birr mobile money service

To what extent do you agree with the following statement relating to opportunities of adopting tele birr service? (**5 -Strongly agree, 4-Agree, 3- Neutral**

2- Disagree, and 1- Strongly disagree)

NO.	**Opportunities**	Strongly Agree **5**	Agree **4**	Neutral **3**	Disagree **2**	Strongly Disagree **1**
1.	Tele birr to enhance payment service platform to make payments easily.					
2.	Tele birr is used to improve cashless society					
3.	There is a high demand for the usage of Telebirr.					

4.	Currently, there is ICT infrastructure development for different systems.					

Part III: challenges of adopting tele birr mobile money service

To what extent do you agree with the following statement relating to challenges of adopting tele birr service? (**5 -Strongly agree, 4-Agree, 3- Neutral**

2- Disagree, and 1- Strongly disagree)

NO.	**challenges**	Strongly Agree **5**	Agree **4**	Neutral **3**	Disagree **2**	Strongly Disagree **1**
1.	It is difficult to understand how Tele Birr works.					
2.	I am concerned about the security of my transactions when using Tele Birr or if I used Tele Birr.					
3.	I do not have access to a smartphone or mobile device required for using Tele Birr.					
4.	There are limited Tele Birr agents or service points in my area.					
5	Tele Birr transaction fees are too high.					

Part IV: Factors that may influence adoption of the tele birr mobile money service

NO.	**Variables**	Strongly Agree **5**	Agree **4**	Neutral **3**	Disagree **2**	Strongly Disagree **1**
Perceived Usefulness						

1.	Using tele birr would enable me to accomplish my tasks more quickly					
2.	Tele birr is convenient, in terms of 7 days a week and 24 hours					
3.	Using tele birr will decrease my cost					
4.	I find tele birr useful for money exchange					
5.	Overall using tele birr is advantageous					
Perceived Ease of Use						
1.	Tele birr is easy to use					
2.	I can use tele birr without anyone helping me.					
3.	Tele birr facilities is consider simple to use on my mobile device					
Technology Awareness						
1.	I think my **technology awareness** help me how to use tele birr					
2.	Ethio telecom educates or sensitize customers about tele birr Service technology					
3	Ethio telecom advertisements on tele birr is interesting enough to encourage customers to sign up					
4.	My general knowledge in tele birr is excellent					
5.	I had a good experience how to use new technology					
Perceived Risk						
1.	Tele birr may not perform well with the					

	absence of Network.					
2.	I′m not confident with the security aspects of tele birr					
3.	I'm worried about using tele birr because other People may be able to access my tele birr account.					
Adoption of tele birr service						
1.	I intended to use tele birr					
2.	Tele birr is more accessible than other mobile money services					
3.	Using tele birr makes my lifestyle more convenient					
4.	Utilization of tele birr indicates a part of civilization					
5.	Generally, tele birr service adoption is necessary to ethio telecom					

Part V: Questions related to Adopting tele birr service for only Tele birr users.

1. Where are you registering to use tele birr?

   From Ethio telecom ☐ From Agent ☐ self-registered ☐

2. How often do you use tele birr service

   Once a month ☐ Once a week ☐ Every day ☐ stop use it ☐

3. Most of a time for which purpose do you use tele birr service? Buy Airtime/Package ☐ Pay bills ☐ Send money ☐ Receiving money ☐ Deposit or withdraw cash ☐

4. How did you hear about Tele-birr? Through billboard ☐ through TV/Radio ☐ Through Friends ☐ through internet platform ☐

Thank you!!

Appendix-2

አዲስ አበባ ዩኒቨርሲቲ

የንግድ እና ኢኮኖሚክስ ፋኩልቲ

የሂሳብ እና የፋይናንስ ክፍል

የጥናት መጠይቅ (የአማርኛ ቅጂ)

ውድ ተሳታፊዎች፤

በአዲስ አበባ ዩኒቨርሲቲ በቢዝነስና ኢኮኖሚክስ ፋኩልቲ በአካውንቲንግ እና ፋይናንስ የሳይንስ ድሕረ-ምረቃ ተማሪ ነኝ። በአሁኑ ጊዜ ጥናቴን ለማሟላት ምርምር እያደረግሁ ነው። የምርምር ርዕሱ "የሞባይል ገንዘብ አገልግሎትን የመጠቀምና ያለመጠቀም ሁኔታቸዉን የሚወስኑ ምክንያቶችን ለመተንተን ነዉ"። ስለዚህም የሚከተለውን ዳሰሳ በማጠናቀቅ በዚህ ጥናት ላይ እንድትሳተፉ እጋብዛችኋለሁ። መጠይቁ ለማጠናቀቅ ከ10-15 ደቂቃ ያህል ይወስዳል። በዳሰሳ ጥናቱ ውስጥ ያለዎት ተሳትፎ ይህንን ጥናት በተሳካ ሁኔታ ለማጠናቀቅ ይረዳኛል። አረጋግጥላችኋለሁ የተሰበሰበው መረጃ ሚስጥራዊ እና ለአካዳሚክ ዓላማ ብቻ ጥቅም ላይ ይውላል። ከዚህ መጠይቅ ጋር ለተያያዙ ማናቸውም ጥያቄዎች፣ እባክዎን +251913417373 ይደውሉ። ይህንን የምርምር ዳሰሳ ለማጠናቀቅ በጣም ጠቃሚ ጊዜዎን ስላጠፉ በእውነት በጣም አመሰግናለሁ።

ከሰላምታ ጋር

ህዝባዬን ለገሰ

ክፍል I - አጠቃላይ መረጃ

1. ጾታ ወንድ ☐ ሴት ☐
2. ዕድሜ ከ18-35 ☐ ከ36-45 ☐ ከ46-60 ☐ ከ60 በላይ ☐
3. የትምህርት ደረጃ የሁለተኛ ደረጃ ☐ ዲፕሎማ ☐ የባችለር ዲግሪ ☐ ማስተርስ ☐ ፒኤችዲ ☐
4. ሥራ; የመንግስት ሰራተኛ ☐ የግል ሹፌር ☐ መንግሥታዊ ያልሆነ ድርጅት ☐ የተማሪ ☐ ነጋዴ ☐
5. ወርሃዊ ገቢ (በብር) ከ5000 በታች ☐ ከ5000-10000 ☐ ከ10001-15000 ☐ ከ15001-25000 ☐ ከ25000 በላይ ☐

ክፍል ሁለት፡ የቴሌ ብር የሞባይል ገንዘብ አገልግሎት የመቀበል እድሎች

የቴሌ ብር አገልግሎትን የመቀበል እድሎችን በሚመለከት በሚከተለው መግለጫ ምን ያህል ይስማማሉ? (5 - በጣም እስማማለሁ፣ 4- እስማማለሁ፣ 3- ገለልተኛ፣ 2 - አልስማማም እና 1 - በጣም አልስማማም)

ተ.ቁ	እድሎች	በጣም እስማማለሁ 5	እስማማለሁ 4	ገለልተኛ 3	አልስማማም 2	በጣም አልስማማም 1
1.	ቴሌ ብር ክፍያን በቀላሉ ለመፈጸም የክፍያ አገልግሎት መድረክን ከፍ ያደርጋል::					
2.	ቴሌ ብር ጥሬ ገንዘብ የሌለውን ማህበረሰብ ለማሻሻል ይጠቅማል::					
3.	ቴሌቢርን ለመጠቀም ከፍተኛ ፍላጎት አለ::					
4.	በአሁኑ ጊዜ ለተለያዩ ስርዓቶች የአይሲቲ መሠረተ ልማት ዝርጋታ					

	አለ፡፡					

ክፍል ሶስት፡ የቴሌ ብር የሞባይል ገንዘብ አገልግሎት የመቀበል ተግዳሮቶች

የቴሌ ብር አገልግሎትን የመቀበል ተግዳሮቶችን በሚመለከት በሚከተለው መግለጫ ምን ያህል ይስማማሉ? (5 - በጣም እስማማለሁ፣ 4- እስማማለሁ፣ 3- ገለልተኛ፣ 2- አልስማማም፣ እና 1- በጣም አልስማማም)

ተ.ቁ	ተግዳሮቶች	በጣም እስማማለሁ 5	እስማማለሁ 4	ገለልተኛ 3	አልስማማም 2	በጣም አልስማማም 1
1.	ቴሌ ብር እንዴት እንደሚሰራ ለመረዳት አስቸጋሪ ነው፡፡					
2.	ቴሌ ብር ስጠቀም የግብይቴ ደህንነት ያሳስበኛል፡፡					
3.	ቴሌ ብር ለመጠቀም የሚያስፈልገኝ ስማርት ፎን ወይም ተንቀሳቃሽ መሳሪያ የለኝም፡፡					
4.	በእኔ አካባቢ የተወሰነ የቴሌ ብር ወኪሎች ወይም የአገልግሎት መስጫ ቦታዎች አሉ፡፡					
5	የቴሌ ብር የግብይት ክፍያ በጣም ከፍተኛ ነው፡፡					

ክፍል አራት፡ የቴሌ ብር የሞባይል ገንዘብ አገልግሎት ላይ ተጽእኖ ሊያሳድሩ የሚችሉ ምክንያቶች

ተ.ቁ	ተለዋዋጮች	በጣም እስማማለሁ 5	እስማማለሁ 4	ገለልተኛ 3	አልስማማም 2	በጣም አልስማማም 1
የጠቃሚነት ግንዛቤ						
1.	ቴሌ ብር መጠቀም ተግባሮቼን በፍጥነት የበለጠ እንድፈጽም ያስችለኛል፡፡					
2.	ቴሌ ብር በሳምንት 7 ቀን ከ24 ሰአት አንፃር ምቹ ነው፡፡					
3.	ቴሌ ብር መጠቀሜ ወጪዬን ይቀንሳል፡፡					
4.	ቴሌ ብር ለገንዘብ ልውውጥ ጠቃሚ ሆኖ አግኝቼዋለሁ፡፡					
5.	በአጠቃላይ ቴሌ ብር መጠቀሙ ጠቃሚ ነው፡፡					

የአጠቃቀም ቀላልነት ግንዛቤ						
1.	ቴሌ ብር ለመጠቀም ቀላል ነው::					
2.	ማንም ሳይረዳኝ ቴሌ ብር መጠቀም እችላለሁ::					
3.	የቴሌ ብር መገልገያዎች በሞባይል ስልኬ ለመጠቀም ቀላል ናቸው ተብሎ ይታሰባል::					
የቴክኖሎጂ ግንዛቤ						
1.	የቴክኖሎጂ ግንዛቤዬ ይመስለኛል ቴሌ ብር እንዴት እንደምጠቀም እርዳኝ::					
2.	ኢትዮ ቴሌኮም ደንበኞችን ስለ ቴሌ ብር የአገልግሎት ቴክኖሎጂ ያስተምራል ወይም ያስተዋውቃል::					
3	የኢትዮ ቴሌኮም የቴሌ ብር ማስታወቂያዎች ደንበኞች እንዲመዘገቡ የሚያበረታታ ነው::					
4.	የቴሌ ብር አጠቃላይ እውቀቴ በጣም ጥሩ ነው::					
5.	አዲስ ቴክኖሎጂን እንዴት መጠቀም እንደምችል ጥሩ ልምድ ነበረኝ::					
ከቴሌብር ጋር ተያያዥነት ያሊቸዉ ስጋቶች						
1.	ቴሌብር የኔትዎርክ ችግር ሲኖር በተገቢዉ መንገዱ ሊያገለግሉ ይችላሉ					
2.	ቴሌብር ከስጋት ነጻ አገሌግልት ስለመሆኑ እርግጠኛ አይደለሁም					
3.	ቴሌብር መጠቀም ስጋት ፈጥሮብኛሌ ምክንያቱም ሂሳቤ በሌሎች ሰዎች ሊወሰዴ ይችላል::					
የቴሌብር የስርፀት ደረጃ (መላመዴ)						
1.	ቴላብርን ለመጠቀም ሞክሪያለሁ					
2.	ቴላ ብር ከሌሎች የገንዘብ አገሌግልቶች በተሻለ ሁኔታ በቀላሉ ተደራሽ ነዉ::					
3.	ቴሌብር መጠቀሜ ህይዎቴን የበሀጠ ቀሊሌና ምቹ እንዱሆን አዴርጎሌኛሌ					
4.	ቴሌብር መጠቀም የስሌጣኔ አንዱ መገለጫ ነዉ					
5.	በአጠቃሊይ የቴሌብር አገሌግልት ስርፀት (መላመዴ) ለኢትዮ ቴላኮም አስፈላጊ ነዉ::					

ክፍል አምስት፡ የቴሌ ብር አገልግሎት ከመቀበል ጋር የተያያዙ ጥያቄዎች ለቴሌ ብር ተጠቃሚዎች ብቻ

1. ቴሌ ብር ለመጠቀም የት ነው የምትመዘገበው?

   ከኢትዮ ቴሌኮም ☐ ከወኪል ☐ በራሱ የተመዘገበ ☐

2. የቴሌ ብር አገልግሎት ምን ያህል ጊዜ ይጠቀማሉ?

በወር አንድ ጊዜ ☐ በሳምንት አንድ ጊዜ ☐ በየቀኑ ☐ መጠቀም አቁሚያለሁ ☐

3. ብዙ ጊዜ የቴሌ ብር አገልግሎት የሚጠቀሙት ለየትኛው ዓላማ ነው?

   የአየር ጊዜ/ጥቅል ይግዙ ☐ ክፍያ ሂሳቦች ☐ ገንዘብ ይላኩ ☐

   ገንዘብ በመቀበል ላይ ☐ ገንዘብ ለማስገባት ወይም ለማውጣት ☐

4. ስለ ቴሌ-ብር እንዴት ሰሙ?

   በቢልቦርድ ☐ በቲቪ/ራዲዮ በጓደኞች በኩል ☐ በኢንተርኔት መድረክ በኩል ☐

ስለሰጡኝ ምላሽ በጣም አመሰግናለሁ !!