DETERMINANTS OF CBE BIRR MOBILE MONEY SERVICE ADAPTION: THE CASE OF COMMERCIAL BANK OF ETHIOPIA ARADA DISTRICT
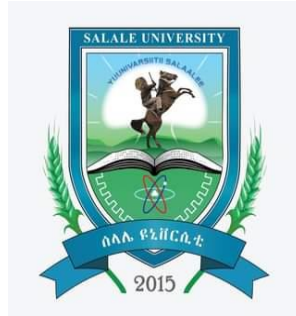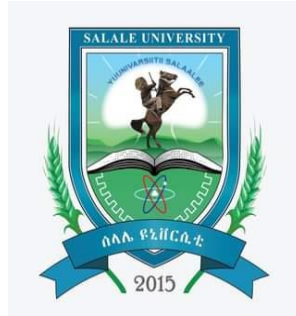

A thesis Submitted to Department of Management, College of Business and Economics, Salale University for the Partial Fulfillment of the Requirements for the Award of Masters of Science in Business Administration.

By:

Solomon Zeleke Dires

July, 2022

Fitche, Ethiopia

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SALALE UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF MANAGEMENT
MBA PROGRAM

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By:

Solomon Zeleke Dires

Advisor:

Didha Bacha (Ph.D.)

Co-advisor:

Muluwork Wuletaw (MA)

July, 2022

Fitche, Ethiopia

DECLARATION

I, Solomon Zeleke Dires, ID. No.WM0129/13, do hereby declare that this thesis entitled "Determinants of CBE Birr Mobile Money Services Adaption: in Case of Commercial Bank of Ethiopia Arada District" is my original work and that it has not been submitted partially or in full by any other person for an award of degree or publication in any other university/institution.

Submitted by:

Full Name……………………….. Signature……………………….. Date …………

CERTIFICATE

This is to certify that the proposal entitled "**Determinants of CBE Birr Mobile Money Services Adaption: in Case of Commercial Bank of Ethiopia Arada District**" submitted to Department of Management College of Business and Economics, Salale University by Solomon Zeleke for the degree of Masters of Business Administration, is original work done by the candidate under my supervision. I further certify that the entire thesis represents the independent work of Solomon Zeleke and all the research works were undertaken by the candidate under my supervision and guidance.

This thesis has been submitted for examination with my approval.

Name of main advisor   _Didha Bacha (Ph.D.)_   Signature…………. Date ………

Name of co-advisor   Muluwork Wuletaw (MA)   Signature…………….. Date………..

II

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DEPARTMENT OF MANAGEMENT

BOARD OF EXAMINERS THESIS APPROVAL SHEET

The undersigned certify that I have read and hereby recommend Department of Management, Salale University, to accept the research proposal entitled "**Determinants of CBE Birr Mobile Money Services Adaption: in Case of Commercial Bank of Ethiopia Arada District**" which had been submitted by Solomon Zeleke Dires in partial fulfillment of the requirements for the award of a Master Degree in Business Administration.

Submitted by:

Solomon Zeleke   Signature…………….Date ……………

Approved by:

Name of the Main advisor   Signature   Date

Didha Bacha (Ph.D.)   _____   _____

Name of Co-advisor   Signature   Date

Muluwork Wuletaw(MA)   _____   _____

Name of External Examine   Signature   Date

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Name of Internal Examiner   Signature   Date

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Name of Chairperson   Signature   Date

_____   _____   _____

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ACRONYMS AND/OR ABBREVIATIONS

CBE   Commercial Bank of Ethiopia

NBE   National Bank of Ethiopia

SWIFT   Society for worldwide Inter Financial Telecommunication

M-PESA   Kenya Mobile money service

CCK   Communication Commission of Kenya

CBE Birr Commercial Bank of Ethiopia Mobile money service

KYC   Know Your Customer

TAM   Technology Acceptance Model

IDT   Innovation Diffusion Theory

UTAUT   Unified Theory of Acceptance and Use of Technology

PEOU   Perceived Ease of Use

ATU   Attitude towards Use

PU   Perceived Usefulness

PC   Perceived Cost

MN   Mobile Network

PS   Perceived Safety

PT   Perceived Trust

DI   Diffusion of Innovation

GSMA   Global System for Mobile Communications

MNO   Mobile Network Operator

OTC   Over-the-Counter

SPSS   Statistical Package for Social Science

P2P   Person-to-Person

P2B   Person-to-Business

G2P   Government-to-Person

ABSTRACT

This study aimed to examine the determinants of CBE Birr mobile money service adoption at Commercial Bank of Ethiopia Arada District. CBE Birr mobile money service has a significant contribution to macro and micro economy of Ethiopia. Therefore, it is expected to do more in its adoption. In examining the determinants of CBE Birr service adoption, this study used a quantitative approach. The target population for this study (33,962) has incorporated CBE Birr user (customers), who were registered and have had active account of the service, specifically at ten selected branches of Commercial Bank of Ethiopia in Arada District outline branches. The sources of data for this study were both primary and secondary. The Primary data was collected from active mobile phone account holder of customers of CBE Birr at those selected CBE Arada District outline branches. The instrument used for collection of primary data was questionnaire survey. The secondary data was collected through the internet-enabled devices and library items. The purposive sampling technique was used for the selection of the sample respondents among ten selected branches. Accordingly, 396questionnaires were distributed to all selected CBE Birr mobile money users and 353 responses were received. To fit its main and specific objectives, this study used frequency, correlation and regression model and the analysis was conducted. This study result shows, being other variables constant, perceived usefulness and perceived safety have got positive association and significant large effect on CBE Birr adoption, the remaining explanatory variables, reliable mobile network, perceived trust and perceived cost have positive association and significant influence on mobile money CBE Birr adoption by having a different exponent of beta values. Giving aggressive awareness creation and advertisement on usefulness of CBE Birr mobile money service to the public, review and upgrade the existing CBE Birr system of security, build public confidence on the system, upgrade the mobile network capacity and develop policies and strategies on mobile money service are the recommendations provided in case of this study.

Key words: *Mobile money, CBE-Birr, Adaption, Perceived usefulness, Perceived safety, Perceived Trust*

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Mobile money services have been deployed in developing countries as a means of extending financial services to the unbanked, but more robust research is needed on the direct link between the use of mobile money services and easier access to financial services. The World Bank estimates that in many countries, over half of the population, "the unbanked", has never had a bank account. The poor tend to be terrified of banks, since they are often humiliated or ignored when they try to enter them. That means they cannot leave their savings anywhere safe, pay a bill without walking with the cash to the office or prove that they are credit worthy (Global findex database, 2017)

Globally, 1.7 billion adults remain unbanked, yet two-thirds of them own a mobile phone that could help them access financial services. Digital technology could take advantage of existing cash transactions to bring people into the financial system, the report finds. For example, paying government wages, pensions, and social benefits directly into accounts could bring formal financial services to up to 100 million more adults globally, including 95 million in developing economies. There are other opportunities to increase account ownership and use through digital payments: more than 200 million unbanked adults who work in the private sector are paid in cash only, as are more than 200 million who receive agricultural payments. (World Bank, 2018)

The Group of Twenty (G20) recognizes that financial inclusion is a key enabler in the fight against poverty. Reliable data covering the major components of sustainable financial inclusion development is critical to inform these policies and to monitor the effect of initiatives. Data also provides a starting point on which to base ambitious financial inclusion targets. According to G20 Financial Inclusion (2020) report, mobile money continues to grow in all regions, especially in West Africa. In low-income economies, there are twice as many mobile money accounts than bank accounts per 1,000 adults. People over 60 are joining the digital age. Two-thirds of older adults in developing countries, and 85% in wealthier economies, own a mobile phone. They are

half as likely as younger adults to make a payment using a mobile phone or the internet (Group of 20, 2020).

When the COVID-19 pandemic took hold in early 2020, it quickly became clear that mobile technology and mobile money in particular, would have an outsized role to play in keeping people connected, delivering vital financial support and providing safe, no-contact ways to pay for food, electricity and other life essentials. With more than $2 billion being transacted in every day, mobile money became a part of a new daily routine for millions around the world. (Simon K and Andersson-Manjang, 2021)

In Sub-Saharan Africa, mobile money drove financial inclusion. While the share of adults with a financial institution account remained flat, the share with a mobile money account almost doubled, to 21 percent. Since 2014, mobile money accounts have spread from East Africa to West Africa and beyond. The region is home to all eight economies where 20 percent or more of adults use only a mobile money account: Burkina Faso, Côte d'Ivoire, Gabon, Kenya, Senegal, Tanzania, Uganda, and Zimbabwe. Opportunities abound to increase account ownership: up to 95 million unbanked adults in the region receive cash payments for agricultural products, and roughly 65 million save using semiformal methods. (World Bank, 2018)

The global leader in mobile money is Kenya, where mobile network operator Safaricom launched M-Pesa in 2007. Less than five years after launch, there are approximately 16 million users of mobile money in Kenya, conducting over 2 million transactions every day. M-Pesa is not only being used for standard money transfers and airtime purchase, but also to pay salaries, utility and other bills, and to buy goods and services at both online and physical merchants. Today, Kenya, where the M-Pesa mobile money transfer has been successful stands as a world leader in the provision of mobile money services with about 19.5 million service users and an annual transaction volume of about KES 672.3 billion (US$ 8 billion) or 24 percent of Kenyan Gross Domestic Product (GDP) (CCK Report, 2012).

The history of the Commercial Bank of Ethiopia (CBE) dated back to the establishment of the State Bank of Ethiopia in 1942. CBE was legally established as a share company in 1963. In 1974, CBE merged with the privately owned Addis Ababa Bank. Since then, it has been playing significant roles in the development of the country. Currently CBE has more than 35 million account holders (customers), 5.2 million mobile banking users, 5.4 million CBE Birr customers and 6.7 million ATM card users. CBE combines a wide capital base with more than 38,000 talented and committed permanent employees. It has strong correspondent relationship with more than 50 renowned foreign banks like Commerz Bank A.G., Royal Bank of Canada, City

Bank, HSBC Bank. It has a SWIFT bilateral arrangement with more than 700 others banks across the world for foreign remittance worldwide. (www.combanketh.com, October 31, 2021)

Commercial Bank of Ethiopia (CBE) has a vision to become a world class commercial bank by the year 2025. It has set a strategy of exceeding customers and stakeholder's expectations through service excellence and business growth supporting the development efforts in the country. To achieve this vision the bank expands its branch throughout the country and recruiting state of the art banking technologies. From these banking technologies CBE Birr mobile money and agent banking service is one of them expected to address a large portion of the population. CBE has more than 1,700 branches in Ethiopia and CBE Birr is taking advantage of this huge number of networked branches to recruit new agents, merchants, and customers. CBE Birr is a mobile money service introduced by Commercial Bank of Ethiopia in accordance with NBE directive number FIS/01/2012. It was in testing phase from June 2017 to December 2017 and became live in December 12, 2017. Like other agent banking service providers, CBE Birr customers can transfer money to subscribed or unsubscribed users, deposit and withdraw cash from agents, buy airtime directly without scratching mobile cards, pay for goods and services. Currently, Commercial Bank of Ethiopia had more than 5.4 million active CBE Birr customers, over 25,300 agents and over 38,400 merchants that mobilized 3.5 million birr (CBE report, October 31, 2021). These show that mobile based banking system has significantly played a role in boosting access to financial services in Ethiopia. Therefore, this study was focused on the determinants of CBE Birr Mobile money service adoption in Commercial Bank of Ethiopia (CBE) Arada district

1.2 Statement of the Problem

Nowadays there are large numbers of commercial banks in Africa, but most of commercial bank branches are located in cities, in search of well-built infrastructure and market. According to World Bank (2017), 61.73% of Sub-Sahara African population lives in rural areas with lower level of infrastructure development. However, traditional branch based banking discriminates this significant number of population from accessing modern banking services (Atandi, 2013).

The mobile money adoption significant indicators are the registered mobile money customer base and the active customer base. (Lashitew et al, 2019). As the second highest populous nation in Africa, Ethiopia has the lowest financial inclusion rate (banked population) as compared to Sub-Saharan African Countries and yet having alarmingly increasing mobile penetration rate which can be used as a tool for financial inclusion. Access to financial and payment services,

including savings, credit, and social welfare transfers that facilitates better financial inclusion is mostly a foregone conclusion in developed and developing countries often remains sporadic or at best informal for those at the base of the pyramid (Jenik et al., 2017).

M-PESA ("M" for mobile and "PESA" for money in Swahili) represents the most successful mobile-money platform in Kenya to day. Originally envisioned as a mobile-based micro-financing application to extend financial access to the unbanked in East Africa, M-PESA was retooled as a mobile money platform when it was found that users were using the application more for general money transfers rather than for microloans. Today, M-PESA has captured roughly 70% of households in Kenya, and over 50% of lower income households, demonstrating its contribution to financial inclusion. M-PESA has transformed the everyday lives of most Kenyans, disrupting the traditional banking system and capturing the previously unbanked market (M-PESA Wikipedia, 2021). From this we can say that, as compared to M-PESA in Kenya, CBE Birr in Ethiopia is not effective and it can be another reason why we study this issue.

Ethiopian population has reached more than one hundred million and 80.5% of them live in rural areas with poor level of infrastructure (UN, 2016). According to NBE, 2019, financial institutions distributed unfairly across the country, about 34.1percent of the bank branches were located in Addis Ababa. In Ethiopia, there are 54.3 million mobile subscribers, which is near to 50% of the total population and 25 million data and internet users (subscribers).(www.ethiotelecom.et). So, to extract this advantage and to play key role in the development of the country by mobilizing money and by increase living standard, CBE Birr Mobile money service comes up as a remedial solution since it allows offering financial service outside the traditional bank premises to directly make cash transfer to beneficiaries through their mobile, deposit and withdraw cash from agents, buy airtime directly without scratching mobile cards and pay for goods and services.

Telebirr mobile money service is launched on May 11, 2021 by Ethio-telecom. By now, there are 3.8 million Telebirr subscribers and over 160 million birr has been circulating using Telebirr mobile money service during less than a year (www.ethiotelecom.et). On the other hand, CBE Birr has been introduced more than 4 years and it has 5.4 million active users in CBE (CBE, October 31, 2021). This shows that CBE Birr growth or acceptance by users is not rapid as Telebirr. This can be one reason for this study, why CBE Birr is not grown quickly or not accepted by large numbers of people within short period of time. Because CBE Birr and Telebirr mobile money services are almost the same but they were launched by different organizations.

Some studies have been conducted concerning mobile money service adoption in Ethiopia, relating to having the aims to find out the challenges of Mobile money service adaption. For example, Lemma & Science, (2018) has incorporated some of the factors that affecting mobile money service adoption. Afewerk (2015) also studded on "assessment of agency banking innovation in Ethiopia: barriers and derivers". The author used a quantitative research approach sent out to respondents which is from the selected four banks. The finding of the study revealed that the main factors influencing the adoption of agency banking in Ethiopia are the prospects of cost reduction, availing services beyond restriction of space and time through established third party with the application of technology.

E.Demeke et al., (2019) Studied, factors affecting the intention to use CBE Birr service: his finding indicates that, experience of using mobile phone, perceived ease of use, perceived usefulness, perceived trust and perceived risk (Of et al., 2020). Although, the previous studies have used some variables, but they didn't consider the factors like perceived cost, reliable mobile network, perceived safety in their studies. So, this study try to fulfill the identified gaps by deploying the independent variables listed above in addition to the other variables that have been taken from previous studies. Perceived trust and perceived usefulness factors are not new in case of this study due to these two independent variables were used and examined by previous researchers.

There are a number of determinants of mobile money adoption. But, this study was prioritize the top five determinants (Perceived Cost, perceived usefulness, mobile network, perceived safety and perceived trust). Because according to GSMA, 2017 these are significant determinants of mobile money service adaption. Therefore, this study was focused on the assessment of the relationship between the independent variables listed with CBE-Birr mobile money services. Furthermore, how those variables determine the adoption of the Mobile money service by users among CBE branches located in Arada District outline branches.

1.3 Research Questions

The main research questions that will be addressed in this study are:

1. To what extent perceived cost does affect CBE Birr mobile money service adoption?

2. What is the effect of perceived usefulness on the adoption of CBE Birr service?

3. How mobile network does influence the adoption of CBE Birr service?

4. How perceived risk does impact the adoption of CBE Birr service?

5. To what extent perceived trust does affect the adoption of CBE Birr service system?

1.4 Objectives of the Study

1.4.1 General Objective

The general objective of the study is to investigate the determinants of CBE Birr mobile money service adaption in Commercial Bank of Ethiopia Arada District.

1.4.2 Specific Objectives

The specific objectives of this study were:

1 To examine the effect of perceived cost on CBE Birr adoption at CBE in Arada Distict.

2. To look at the role of perceived usefulness in CBE Birr service adoption.

3. To scrutinize the effect of mobile network on CBE Birr service adoption.

4. To investigate the influence of perceived risk on CBE Birr service adoption.

5. To examine the effect of perceived trust on mobile money CBE Birr service adoption.

1.5 Scope of the study

The major focus of this study was to identify the determinants of CBE Birr mobile money service adaption by users (customers). Therefore, the study focused on mobile money services adoption determinant factors such as perceived usefulness, perceived network, perceived trust, perceived risk and perceived cost.

This study was centered on 10 selected branches in Arada District of commercial bank of Ethiopia which is found out of Addis Ababa namely Legedima, Sululta, Chancho, Muketuri, Debre Tsige, Tulu Selale, Fitche, Degem, Gebre Guracha and Gohatsion.

The study is a cross-sectional study. Hence, study data was collected from April 20/2022 up to May 30/2022 via questionnaire.

1.6 Significance of the Study

This study was trying to add on the existing literature concerning challenges regarding the CBE Birr Mobile money service adaption in the Commercial Bank of Ethiopia(CBE) context so that

CBE and other banks in Ethiopia may use this research as an indicator for what they should do to expand agency banking services to banked and unbanked societies. Furthermore the research will also assist top level managements and policy makers of the banking industry in understanding about the determinants of CBE Birr and other mobile money service in Commercial Bank of Ethiopia and other banks that are found in the country.

1.7 Operational Definition of Key Variables

Mobile money is referred to as the use of a mobile phone in order to transfer funds between banks or accounts, deposit or withdraw funds, or pay bills. (Business Dictionary, 2014)

CBE Birr account is a type of pre-paid account in which a user can store his/her money for any future transaction. (CBE Birr Procedure, 2017)

Adaption is the act of changing something for a purpose or the result of something that has been changed. (www.yourdictionary.com)

Trust in Service: Trust in a mobile money service refers to a) trust in the brand itself, as one with which customers will be comfortable entrusting their funds, b) trust that the service's technology (e.g. mobile network connectivity) will function as promised, c) trust that Agents will do what they are supposed to with customer funds and transactions, and d) trust that individual transactions will be fulfilled as expected.

Mobile Network: A reliable mobile network is a critical component of a mobile payment service, as customers have much less patience for transmission problems when they impact financial transactions. Therefore, access to a reliable network, either an organization's own or a partner's is critical, particularly as reliability among mobile networks in emerging markets can vary considerably**.**

Perceived usefulness- is defined as the degree to which a person believes that using particular system would enhance his or her job performance. Davis argues that the intention to adopt technology is based on behavioral intention which is determined by two beliefs: perceived usefulness and perceived ease of use.

Perceived risk- Identified as a barrier to the usage of any system and was hypothesized to impact the intention to use mobile money negatively (Mallat, 2007). There are six types of perceived risk: financial, privacy, physical, performance, social, and time-loss (Jacoby &

Kaplan, 1972). Further, dimensions of perceived risk may vary by product (or service) class (Featherman & Pavlou, 2003).

Perceived cost - refers to the extent to which a person believes that using mobile financial services will cost a certain amount of money. Perception about cost was especially important for consumers in developing countries because services may be perceived as useful but the cost might act as a prohibitive factor to adopt the services (Mukherjee, 2015).

1.8 Organization of the Study

This study has been organized under five chapters. The first chapter contains introductory part that bears background information, Statement of the problem, objectives of the study, significance of the study, scope of the study presents. The second chapter deals with review of related literature and the proposed model based on the literature review. The third chapter presents methodology that used to conduct this study. The fourth chapter presents the data presentation and analysis section that contain findings from the respondents where the data gathered are analyzed and interpreted and covers the statistical analysis methods and details the results of this research that include demographic statistics, correlation and regression analysis for testing the direction was presented in this chapter as well. Finally, the last chapter attempt to summarize or conclude and recommend possible solutions to the problems.

CHAPTER TWO

RELATED LITERATURE REVIEW

2.1 Theoretical Literature Review

Mobile money is not mobile banking: it is a distinct product. Mobile money systems, therefore, lie outside the formal banking system and have often been referred to as shadow banking systems (Li, T. 2014). From the point of view of the consumer, the mobile money system is a payment account that sits on their mobile phone. It operates through a menu on their SIM card and allows them to engage in a variety of financial transactions (Hughes &Lonie, 2007). In the initial stages of mobile money, the focus was largely on allowing consumers to make person-to-person (P2P) payments digitally without needing a bank account or a wire transfer. As mobile money expanded its purview, consumers were able to use it to pay their bills, to store and save money, to make person-to-business (P2B) payments, to receive payments from businesses (wages), and to receive government-to-person (G2P) payments.

Mobile money works very simply: On the consumer side, the consumer first shows up at a mobile money agent to register, the equivalent of Know Your Customer (KYC) banking rules. They register for the service with a government-issued ID (in some countries this is the ID used for voting (Suri, 2017). To be able to make any payments from their account, a consumer must deposit cash into it at any mobile money agent in the country. They give the agent the cash and immediately get a notification that cash has been deposited in their account. From there, they can use the menu on their mobile phone to transfer that money to anyone else in the country with a cell phone via their phone number.

The consumer side is, therefore, quite simple: a mobile money account is superficially very similar to a bank account, allowing deposits, withdrawals (a number of banks in the developing world impose withdrawal fees, especially for low-balance accounts), holding money, and making transfers to other individuals(Suri, 2017). However, there is no interest paid on deposits and withdrawals are done through an agent for the mobile money service and not a bank branch. Other standard bank services, such as loans or standing order payments, are generally not available through mobile money. The money in a mobile money account is called e-money and always trades one for one with cash (minus the transaction costs for the particular transaction

being conducted). When a consumer deposits money in their mobile money account, they are in fact purchasing the equivalent value in e-money from the agent (Maurer et al., 2013)

2.1.1 Technology Acceptance Theories and Models

The main models advanced in information and communication studies literature include the Technology Acceptance Model (TAM), the Innovation Diffusion Theory (IDT) (Cheng & Cho, 2011) and the Unified Theory of Acceptance and Use of Technology (UTAUT), (Dwivedi et al., 2011).

2.1.1.1 Technological Acceptance Model (TAM)

TAM is one of the most extensively used models in information systems research, partly because of its simplicity and understandability (King & He, 2006). It examines the impact of technology on human behavior. The model was originally proposed by Davis (1989) and has its roots in cognitive psychology. It was adapted from a psychological theory, a theory of reasoned action that explains human behavior in accepting an information system (Wadie, 2012). The perceived ease of use (PEOU), attitude towards use (ATU) and perceived usefulness (PU) explain the intention of a user to use the system. PU and PEOU are defined as "the degree to which a person believes that using a particular system would enhance his or her performance" and "the degree to which a person believes that using a particular system would be free of effort", respectively. The adoption of information systems and services has been extensively explained by using TAM and its new, advanced extensions, such as the TAM2 and TAM3 (AlMaroof&Salloum, 2021) .As a result, the framework is taken in case of this study.

2.1.1.2 Diffusion of Innovation

The other widely used theory is (DI), which helps to understand customer's behavior in the adoption or non-adoption of an innovation. In the theory, diffusion is defined as the process by which an innovation is communicated through certain channels over time among the members of a social system (Sahin, 2006). The theory highlights five perceived characteristics that influence the adoption and non-adoption of an innovation which are: relative advantage, perceived compatibility, simplicity or complexity of use, trialability and observe ability as the key characteristics that enable an innovation to be taken up by a population (Ghobakhloo& Tang, 2013).

2.1.5 Unified Theory of Acceptance and Use of Technology (UTAUT)

A broad, powerful and robust theory that consolidates TAM, IDT and other models is the Unified Theory of Acceptance and Use of Technology (UTAUT) model, developed by (Chiemeke & Evwiekpaefe, 2011), who asserts that it is robust than other theories of technological adoption. The UTAUT aims to explain user intentions to use an Information Systems (IS) and subsequent usage behavior. The theory holds that four key constructs (performance expectancy, effort expectancy, social influence, and facilitating conditions) are direct determinants of usage intention and behavior (Raman & Don, 2013).

2.1.2 Models of Mobile Payment

There exist two main business models of mobile money service in Ghana. They are the bank led and the telecom-led model. The models can be executed using different types of service providers, regulatory agents, and facilitators. However, the way in which a model is implemented is largely dependent on a country regulatory regime, culture and population size (Owusu&Owusu, 2017).

Bank-Led: In this model, the banks control customer relationships and offer mobile services and distribution channels primarily with the intention of offering an additional medium to the existing service (Ivatury& Mas, 2008). The model offers banks the opportunity to increase its use of service and reach out to the unbanked population. The bank-led business model has several sub-models. These include one-to-one model, one-to-many model, and many-to-many model.

The one-to-one model is one most commonly used bank-led models employed in the world. In this model, a bank is the only institution permitted to offer mobile banking services to the customers of a specific Mobile Money Operators (MNO). The one-to-many model is however very similar the one-to-one model, except for the fact that a bank is permitted to provide mobile banking services to multiple MNOs. The many-to-many model explicitly prohibits one-to one and one-to-many models. Exclusive partnerships are not allowed. The many-to-many model is expected to collaborate with one another to take advantage of economies of scale, increasing customer bases, and available network infrastructure.(Ivatury& Mas, 2008)

Telecom-Led: In this model the telecom service providers dominate the mobile money transfer service and handle customer relationships. They are also responsible for providing a network of agents for settlement and payment functions. The banks do not actively participate in mobile services. They rather act as a facilitator in the operation of the telecom model that is payment

delivery and settlement. In other words, they operate as back-office component holding the aggregate deposit collected by the MNOs. The model offers mobile services primarily as an alternative infrastructure for financial services particularly with the intention of providing financial service for the unbanked population thereby creating financial inclusion for the group as well as increase market share and the volume of subscribers (Owusu&Owusu, 2017).

2.2 Empirical Literature Review

This part has empirically established factors that influence the awareness and adoption of mobile money services. Accordingly, this study was focused on examining the challenges of mobile money service adoption. Several studies have been conducted to examine the relationship between Mobile money service adoption and its challenges in developed and developing countries. With regard to empirical model, researchers in the past have been widely considered the approach of evaluating the adoption of technologies using contingent valuation models. Given the amount of empirical literature available on the topic of this research, it would have been quite difficult to present the results of all the studies. According to Aregahegne, (2015), cost of using banks is one determining factor for agent banking performance in Ethiopia. He stated that there are many people in rural areas of Ethiopia who receives regular remittance from their families in urban areas. As a result, the senders might encourage his/her beneficiaries to use mobile money service which in return increases the number of agent banking customers. According to Beltramo-Martin et al., (2018), another determining factor is actual benefit. Agent banking technology is capable to ease lives of many people living in rural areas without access to formal financial institutions. However, benefits of agent banking could be recognized only when its services are actually available.

Determinants of behavioral intension to mobile money using TAM (Technology Acceptance Model) results showed that behavior is a strong indicator for the use of mobile money (Aboelmaged&Gebba, 2013). Perceived lack of safety and Lack of reliable mobile network had an effect on behavioral intension and trust was based on "structural assurances" that led to an increase in its perceived use. Awareness is one of the factors that affect customers' perception towards agent banking service. Since agent banking service requires customers to be literate. At least reading, writing skill is mandatory to use this service. Agents of both service providers claim that awareness has a big impact on customer recruitment.

The challenges and opportunities of electronic money in Ethiopia in the case of Dashen and Nib International Banks was examined (ADBIB, 2013). The study was conducted based on data

collected from staff and customers of the four banks through questionnaires and interviews. (Tesfaye, 2019), conducted a research on "opportunities and challenges of CBE Birr in Ethiopia". His study used Technology Acceptance Model (TAM) and Innovation Diffusion Theory (IDT) by integrating Perceived Ease of Use, Perceived usefulness, Perceived Trust and Perceived risk into the established models. The study was conducted based on the data gathered from customers of Commercial Bank of Ethiopia and United Bank in Addis Ababa and the survey was conducted using questionnaire.

The research results found that, relative advantage, compatibility, perceived trust, perceived usefulness, and perceived risk as major influencing factors for mobile money adoption whereas perceived ease of use and awareness were found to have insignificant effect on mobile money adoption for bank customers located in Addis Ababa. The study had recommended that, banks to consider investing in campaigns and arranging information sessions to demonstrate the features of mobile money services, and its benefits over traditional channels. In financial business trust is another factor and the biggest concern of both customers and service providers. Trust in mobile money services can be seen from three perspectives: 1) trust to the bank 2) trust to the agent 3) trust to the technology (P. Tobbin&Kuwornu, 2011).

2.2.1 Determinants of mobile money adoption

2.2.1.1 Perceived Cost

There are many tariffs employed by mobile money services, however they are typically all either transaction-based or involve fees charged to customers. The tariffs are chosen in order to encourage customers' different behaviors to use the services and to encourage them to put money into the system, such as charging higher fees to individuals who are not registered users, to encourage them to become customers (Gault& von Hippel, 2009). In addition, the Mobile Money fees include transaction cost, registration fee, or cost of a new device if one is needed to use the service. The transactional cost influences the customer to use the MM services (Mahmoud, 2019). The charges of the services vary according to type of transactions and generally increase with the amount. The fees are fixed, and often for free. They are usually displayed at the retail shops. Fees are charged from the user's account, deduced from the e-money that is being transacted (Mahmoud, 2019). The cost of mobile money services is generally cheaper than the alternatives Cash but inhibits risks of theft. All services carry high alternative costs in terms of travel time and waiting time, generally due to lack of accessibility and geographic reach (Jensen Alnes, 2017).

2.2.1.2 Perceived Usefulness

Perceived usefulness is said to be the degree to which a person thinks that, using a particular system will enhance his or her performance (Van der Heijden, 2004). Whereas the initial definition stated was about the usefulness in performing a job function, PU in the adoption of mobile money services is defined in a broader context to include how well consumers believes mobile services can be integrated into their daily activities (P. E. Tobbin, 2010). And in a mobile payment context it can also be defined as the degree to which the consumer believes that the mobile money transfer will enhance his transaction (P. Tobbin&Kuwornu, 2011). When this belief increases, the consumer's intention to use the mobile money transfer services will also increase.

2.2.1.3 Mobile Network

Mobile money services face a critical challenge of improving service quality to attract and retain customers through the efficiency and the cleanliness of the agents (Musiime&Alinda, 2016). Beside the mobile money operator's outlets availability, scaling the agent network is a mandatory to distribute the mobile network operation services to customers. Agents are typically located in close proximity to the customers they will serve, and provide services including account registration, cash-in/cash-out, and OTC (Over-the-Counter) transactions, in addition to potentially helping market the service and educate customers. The most important factors to increase the mobile money adoption is through the agent network, Firstly, facilitate cash-in/-out to enhance the ability of putting cash into a mobile money service (i.e., convert their physical cash into e-money) and to withdrawing cash from the service (i.e., convert their e-money into physical cash), with a convenient way anytime and anywhere. Secondly, ensuring that the agents are responsible for having enough physical cash and e-money to facilitate the customer transactions, they need to perform (Mahmoud, 2019).

2.2.1.4 Perceived Safety

Lack of safety plays a significant role in influencing customers to use the mobile money services instead of having cash all the time (Baganzi& Lau, 2017). In addition, Safekeeping of customer cash refers to ensuring the cash that customers put into the mobile money system are stored successfully and more secure (Lal&Sachdev, 2015).For customers, mobile money provides a safer, more efficient and more convenient payment option than cash, saving travel time and costs and reducing the risk of theft (Gencer, 2011).

2.1.1.5 Perceived Trust

Trust is the degree to which a person believes that others will live up to his expectations and will not take undue advantage of the situation, is one of the most frequently discussed external factor that hinders adoption of technology (Mazhar Fatima et al 2014). Most of the customers informed about how during their first visit to the shop and banks, they were given a walkthrough tutorial on how to use mobile money and do not explore the rest of the mobile money application. Lack of customer support to help customers with questions about the service, problems with transactions, or other concerns leads to lack of trust in the mobile money services (Lal&Sachdev, 2015).

2.3 Summary of Related Literature Review

The adoption of mobile money has been gradually increasing with the rapid increase in the use of mobile or wireless handsets in the recent past. The study conducted by Rosen et al., (2000) showed that European countries including Scandinavian countries, France, UK, Ireland and Germany, alongside Canada and Japan were among the leaders in mobile money. In some Asian countries (Singapore and Malaysia) mobile money penetration was on the increase whereas Australia and New Zealand were among the slow adopters (Wong, 2003).

As it was mentioned previously, a little research was conducted in our country in relation with CBE-Birr adoption. The fact that the service system is contributing its vital role in the economy of neighboring country, which indicate that it is expected from our country Ethiopia, to do more in the aspect of banking industry specifically in adoption of mobile money service. It was to improve our countries macro and micro economic aspect. Therefore, in this study the researcher will assess the factors that determine mobile money adoption by deploying the independent variables (perceived cost, perceived usefulness, reliable network, perceived safety and perceived trust) in the light of the existing reality in our country. This study was also contributing the recommendations which fulfill the gaps identified in relation to the explanatory variables and their influence on mobile money services adoption of CBE branches in Addis Ababa.

2.4Conceptual Framework

The evaluation of the CBE-Birr service adoption activity of customers will be carried out by using the combination of both Technology Acceptance Model (TAM) and Unified Theory of Acceptance & Use of Technology (UTAUT) framework with some modifications. Both models used for more precise understanding on the determinant factors in the adoption of mobile money

service at CBE in Arada district. The reason of using this framework is just to decide the challenging factors are perceived price, perceived usefulness, mobile network, perceived safety and perceived trust. But instead of not using copy of the TAM and UTAUT model in this research, some adjustment was done by adding other factors listed above except perceived usefulness and perceived trust. The conceptual frame work is presented as follows.

Figure 1 Proposed Conceptual Framework of the Study
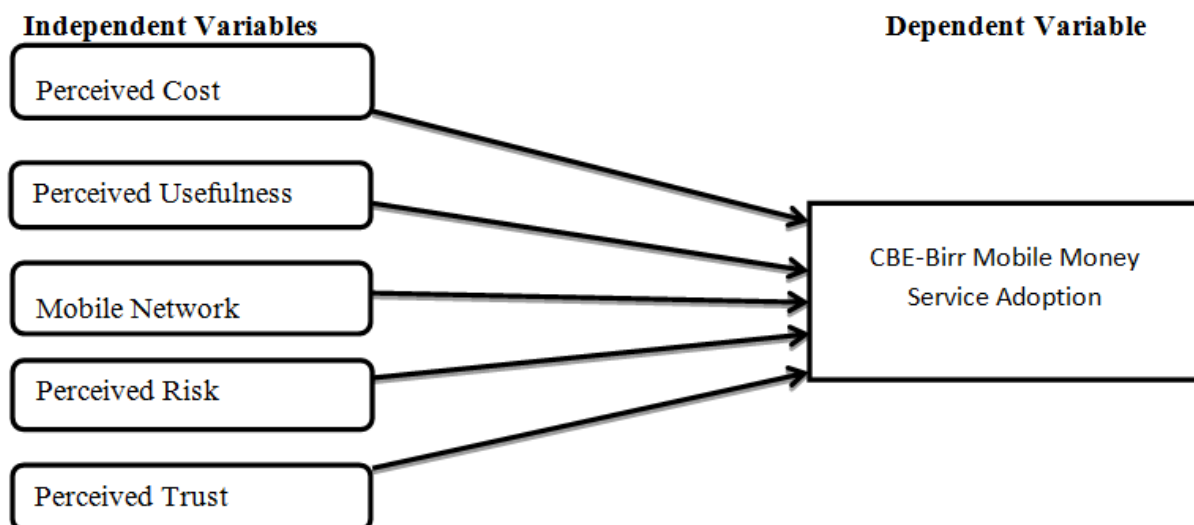
Source: Mahmoud 2019; Zeinab(2019);Tobbin(2010);Gencer(2011)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Description of the Study Area

Now days, CBE has 3 regions (Central, North East and South West) and these regions are subdivided in to 30 districts. This study was conducted in one of those districts in Central Region, Arada District, on selected outline branches (Legedima, Sululta, Chancho, Muketuri, Debre Tsige, Tulu Selale, Fitche, Degem, Gebre Guracha and Gohatsion) located in out of Addis Ababa. From Arada District out line branches, most CBE Birr customers who use the service actively are located in this area and the researcher prefers this area in order to identify the determinants of CBE Birr mobile money service adaption by users (CBE Annual Report,2021).

3.2 Research Design and Approach

According to Kothari (2004), causal research also called explanatory research is conducted in order to identify the extent and nature of cause and effect relationships and Qualitative research approach involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion.

So, explanatory research design was applied to explain the determinant factors of CBE Birr mobile money service adaption. Since this research is quantitative in nature, so the quantitative research approaches was also applied to analyze survey data and to identify the challenges faced to CBE Birr customers when they use CBE Birr Mobile money service in order to achieve financial inclusion in Ethiopia.

3.3. Type and Source of Data

This study used both primary and secondary sources of data. In this study, primary data was collected through a structured questionnaire. The data was collected by the researcher and the questionnaire was arranged in to close ended questions. The secondary data was collected from publications including annual reports, articles, researches and various materials that have relevance to this study and the sources is used for literature review purpose in chapter two.

Quantitative data type was used to identify the determinants of CBE Birr mobile money service. It makes measuring various parameters controllable due to the ease of mathematical derivations

they come with. Quantitative data is usually collected for statistical analysis using surveys, polls and questionnaires sent across to a specific section of a population.

3.4 Methods of Data Collection

In order to attain the objectives of the study, questionnaire data was used as a method of data collection technique. To conduct this study, questionnaires in the form of close ended questions were prepared and distributed to CBE Birr users (customers). According to Kothari (2004), questionnaire is quite popular particularly in the case of big enquiries. It consists of a number of questions printed or typed in a definite order on a form or set of forms. Five-point Likert scale was used to capture answers of the respondents on a scale from 1 to 5 (1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5=Strongly Agree).

3.5 Study Population and Sampling

3.5.1 Description of the Study Population

The target population for this study was customers who are registered for CBE – Birr Mobile money service users specifically found in Commercial Bank of Ethiopia Arada District. From Arada District the researcher was selected seven branches i.e. Legedima, Sululta, Chancho, Muketuri, Debre Tsige, Tulu Selale, Fitche, Degem, Gebre Guracha and Gohatsion. As October 31, 2021 report of CBE, Arada District has 260,690 CBE-Birr active customers and from this 33,962CBE Birr customers (14,122 recruited by bank branch and 19,840 recruited by agents), were found in the above selected ten branches so these branches active CBE Birr customers were the target population for the study. The selection criteria of seven branches are due to their huge and active CBE Birr customers in Arada District so that the researcher was able to get sufficient respondents.

3.5.2 Sampling Size and Sampling Methods

For this study, non-probability sampling technique was used where the sample branches were selected by using convenience sampling technique, which means the selection of the respondents were made in a way to get sufficient data regarding the research topic.

Determining the number of representative sample size is a pivotal concern of every researcher to a given population. The following sample size determination formula, by Yamane (1967) formula developed for sampling size, using 95% confidence level with 5% margin error, target population was be 33,962 CBE- Birr customers located on the above selected seven branches.

$$n = \frac{N}{1 + N\,(e)^2}$$
Where   n is the sample size,   N is the population size, and   e is the sampling error (0.05)

$$n = \frac{33{,}962}{1 + 33{,}962\,(0.05)2} = 395.343 \approx 396$$

Hence, the total sample size will be 396. Since the number of customers in each branch is not the same, the number of samples for each branch was calculated by the following formula:

$$n1 = \frac{nN1}{N}$$

Where   n= total number of samples

N= total number of population

N1= total number of population in each branch and   n1=number of samples each branch

Table 1: Number of Customers and Proportion of Samples Taken from Each Branch

Sample Branches	No. of CBE Birr Customers	Sample size
Legedima	3,321	39
Sululta	6,086	71
Chancho	4,079	48
Muketuri	1,413	16
Debre Tsige	1,305	15
Tulu Selale	5,555	65
Fitche	4,332	51
Degem	2,418	28
Gebre Guracha	3,365	39
Gohatsion	2,088	24
Total	**33,962**	**396**

Source: CBE Monthly Report, October 31, 2021

This study was used convenience sampling technique to select the respondents. Convenience sampling technique involves selection of the respondents was made in a way to get sufficient data regarding the research topic.

3.6 Methods of Data Analysis

To accomplish the study objective and to answer the stated research question, descriptive and inferential statistics methods have been employed. Descriptive statistics such as frequency, percentage, mean and standard deviation were used. Inferential statistics like correlation analysis to examine direction and significance of the correlation of the variables considered under this study and regression analysis to measure the effects of independent variables on dependent variables. In order to accomplish all the above requirements, the researcher used software to analyze the data. As a result, SPSS V23 has been applied to analyze the collected data.

3.7 Validity and Reliability Test

Reliability is one of the characteristics and quality of measure of constructs. According to Ellen A.Drost, (2011), Reliability is the extent to which measurements are repeatable when different persons perform the measurements on different occasions, under different conditions, with supposedly alternative instruments which measure the same thing. Cools et al., (2014) also defined reliability as the consistency of measure and test is considered reliable if the tester gets the same on repeated trails. As a rule of thumb requirement, a reliability of 0.70 or higher obtained on a substantial sample before they use an instrument. In case of this study, the inter item consistency (Cronbach's alpha) was used, to justify reliability and internal consistency of the questionnaire.

Table 2: Cronbach's alpha reliability coefficients

Factors	Cronbach's Alpha	Number of Items
Perceived cost	.816	4
Perceived usefulness	.727	4
Mobile network	.914	4
Perceived safety	.708	4
Perceived trust	.804	4
Total		20

Source: Survey result (May 2022)

Table 2: indicates that, the Cronbach's alpha value computed for 20 questionnaire items relating to each independent factors is > 0.70 which have insured the inter item consistency assumption.

As a result, the reliability test for this study has fitted the requirement, to be an instrument for this study. Thus, the Cronbach's alpha result of this study showed, the respondents who tended to select high scores for one item tended to select high scores for the others. For the same condition, respondents who selected low scores for one item tended to select low scores for the other items.

3.8 Ethical Consideration

According to Cottler et al., (2013), the researcher has a responsibility to ensure that research participants are protected. Thus, Participants had provided with brief information relating to outline of the research. All personal data have had kept strictly confidential. Lastly, the questionnaires were distributed only to voluntary participants. Concerning this study, participants were not harmed physically or emotionally.

CHAPTER FOUR

DATA ANALYSIS

4.1 Introduction

This chapter presents a description of the results from the data gathered from customers whose registrations of CBE Birr mobile money service were active at Commercial Banks of Ethiopia, in ten selected branches of Arada District located in Oromia Region North Shewa Zone. Data analysis was conducted based on the collected primary data through questionnaire. The returned responses (353) were appropriately used for analysis and the activity was executed via SPSS V23. The survey response rate of 50% or higher should be considered excellent in most circumstances (www.researchgate.net). Accordingly, since the response rate of this research is above 50%, it is an acceptable level for further analysis.

Table 3: Response Rates

No.	Respondent category	No. of questionnaires	Percentage
1	Responded	353	89
2	Didn't respond	43	11
3	Sample size	396	100

 Source: Own computation

A total of 396 questionnaires were developed and distributed. Then 353 (89%) questionnaires were filled and collected. The remaining 43 (11%) questionnaires were not returned back. The total of 353 filled and received questionnaires was used for the data analysis activity.

4.2 Results of Descriptive Statics Analysis

4.2.1 Demographic Characteristics of Respondents

Demographic characteristics of respondents with regard to this study include gender, age, level of education, monthly income in birr, registration period of time and initiation of respondents to be a user of CBE Birr mobile money service.

A. Gender of respondents

Table 4 Gender distribution of the respondents

Gender of respondents		Frequency	Percent
	Male	281	79.6
Valid	Female	72	20.4
	Total	353	100.0

Source: Survey result (May 2022)

Table 4 above indicates that, out of the total, 353(100%) the majority of gender of respondents were males 281(79.6%) whereas the remaining respondents gender analysis shows that females 72(20.4%). This reflects, most of the users of CBE Birr at this study area were males. The number of females, using CBE Birr mobile money service was dominated by males, which can be defined as there is gender inequality regarding to CBE Birr mobile money service adoption at CBE Arada District outline branches which is located in Oromia Region North Shewa Zone. Thus, the gender gap as a one determinant factor of CBE Birr adoption could be an interesting for further study.

B. CBE-Birr Customers types of the Respondents

Table 5: Customers types of the Respondents

CBE-Birr Customers types of the Respondents		Frequency	Percent
	Individual	313	88.7
Valid	Organization	40	11.3
	Total	353	100.0

Source: Survey result (May 2022)

Relating to the customer type, as shown in table 5 above, almost 313(88.7%) of the individual respondents were registered and used CBE Birr service and also, 40(11.3%) of the respondents were used the CBE Birr mobile money service for organizational purpose. This shows that very small number of originations have been using the service system. It is advisable that, if CBE, is work on registering and initiating the business organizations so, as to become a user's and take part in adoption of the CBE Birr service.

C. Where do you open your CBE Birr Account?

Table 6: CBE Birr account opening place

Where do you open your CBE Birr Account?		Frequency	Percent
Valid	At CBE Branch	305	86.4
	At Agent Shop	48	13.6
	Total	353	100.0

Source: Survey result (May 2022)

As shown on the above Table 6, out of the total respondents 353, the majority of the respondents 305(86.4%) open their CBE Birr account at CBE Arada district Branches and 48(13.6%) were open their CBE Birr account at agent shop. These indicate that CBE Arada district do not work a lot and motivate the agents to recruit CBE Birr customers in order to use the system.

D. Age of the Respondents

Table 7: Respondents Age distribution

Age of the Respondents		Frequency	Percent
Valid	18-30	189	53.5
	31-40	115	32.6
	41-50	29	8.2
	Greater than 51	20	5.7
	Total	353	100.0

Source: Survey result (May 2022)

As shown on the above Table 7, out of the total respondents 353, above half of them found between the age group 18-30 years (53.5%) then followed by the age group 31- 40 (32.6%), 41-50 (8.2) % and >51(5.7%) respectively. This shows that the majority users of CBE Birr mobile money service among CBE Arada District outline branches were younger and followed by the 2nd majority, adult age group. This means in the future, there is an opportunity to extend the adoption of CBE Birr mobile money service at CBE Arada District city and outline branches located in Oromia Region North Shewa Zone.

E. Respondent's Educational level

Table 8: Education level of the respondents

Respondent's Educational level		Frequency	Percent
Valid	non formal education	3	0.8
	primary school completed	14	4.0
	high school completed	21	5.9
	certificate	16	4.5
	Diploma	42	11.9
	Degree	218	61.8
	Masters and above	39	11.0
	Total	353	100.0

Source: Survey result (May 2022)

As shown on table 8, the finding for respondents' level of education reveals, the majority of the respondents were graduates of first degree comprising 218 (61.8%), graduates of diploma 42 (11.9%), masters and above 39 (11.0%), high school complete 21(5.9%), certificate 16 (4.5%), primary school complete 14(4.0%) and the least number of respondents 3(0.8%) have no formal education. This implies that, the majority of respondents comprised: holder of degree, then followed by diploma, masters and above, high school complete, certificate, primary school complete respectively, but the respondents having non formal education level relatively comprised the least percentage. This means that the adoption of CBE Birr service almost have a positive relationship with the educational level of customers. Its implication for CBE is that, this business organization is required to simplify the system of using the CBE Birr service and make available the down load ability of CBE Birr application software. Also, the service requesting code number which is functional without internet should have to be workable everywhere and time by considering the illiterate societies.

F. Respondents' Monthly income in (birr)

Table 9: monthly income of the respondents

Respondents' Monthly income in (birr)		Frequency	Percent
Valid	1-1650	5	1.4
	1651-3200	8	2.3
	3201-5250	28	7.9
	5251-7800	132	37.4
	7801-10900	102	28.9
	Greater than 10900	78	22.1
	Total	353	100.0

Source: Survey result (May 2022)

The above table 9, monthly income level of respondents show that, most of the respondents 132(37.4%) generate monthly income 5251_7800, 7801_10900 birr 102(28.9%), greater than 10,900 78(22.1%), 3201_5250 birr 28(7.9%), 1651_3200 birr 8(2.3%) and 1_1650 birr 5(1.4%) respectively. This can be summarized as, the majority of CBE Birr mobile money service users at CBE Arada district were the those who generate monthly income between 5251_7800 birr which comprises 132 frequency and 37.4 percentage then, followed by 7801_10900 birr comprising 102 frequency and 28.9% of the respondents. So, most of users of CBE Birr service at CBE Arada District were getting relatively moderate monthly income.

Figure 2: How long have you been using CBE Birr mobile money service?
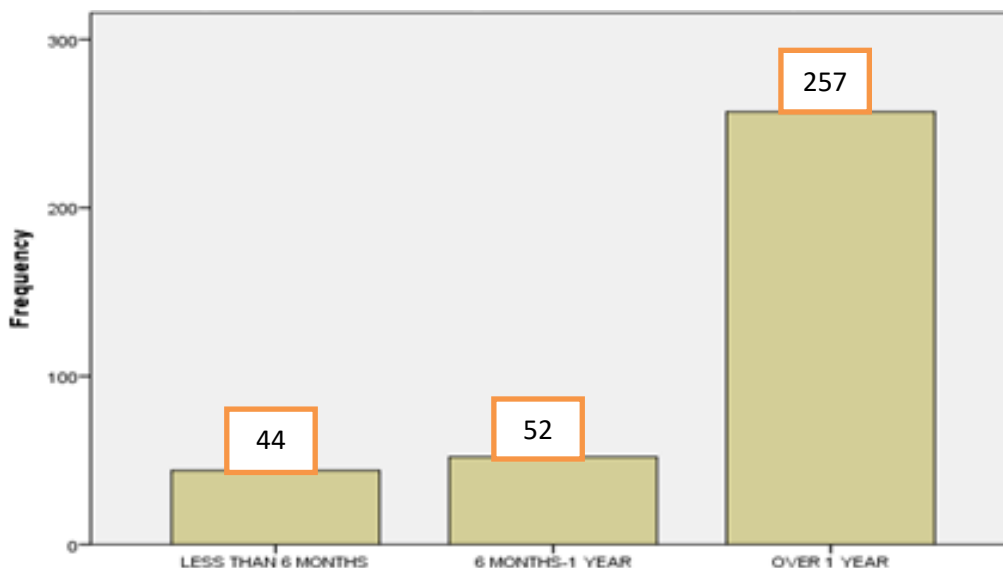
Source: Survey result (May 2022)

When we see from the above figure 2, the majority, 257 (72.8%) of the respondents have been using CBE Birr mobile money for over 1 year, 52 (14.7%) of the respondents have been using mobile money from 6 month to 1 year and 44 (12.5%) of respondents were the user of CBE Birr service for <6 months. The result showed that the majority of the respondents were registered using of the CBE Birr mobile money service over 1 year since filling of the questionnaire and followed by the respondents who were used service from 6 month to 1 year and less than 6 months before the gathering of this data. The result shows that significant numbers of respondents use CBE Birr service over a year on CBE Arada District branches because this research focused on active users of CBE Birr mobile money service.

Figure 3: How often you intend to use CBE Birr for the future?
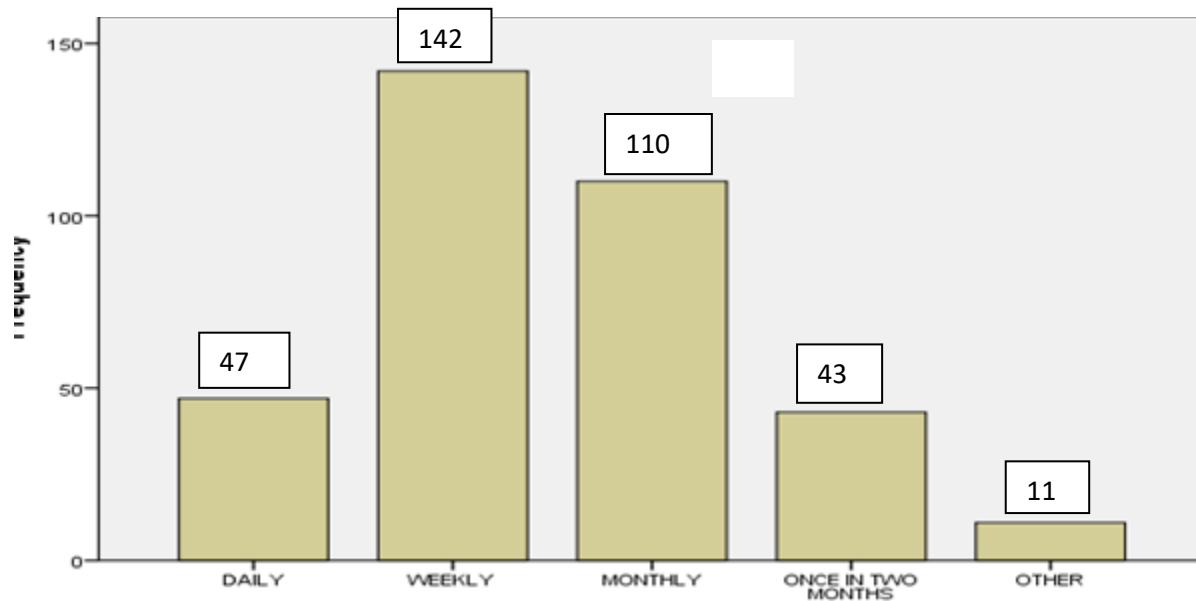
Source: Survey result (May 2022)

As a result, from the above figure 3, the sample respondents' feedback shows that most of them have intended to use the CBE Birr mobile money service as, weekly 142(40.2%), monthly 110(31.2%), daily 47(13.3%), once in two month 43(12.2%), and 11(3.1%) select other than above time to use CBE Birr mobile money service.. This means, the greatest number of CBE Birr customers in Arada District branches have the interest of using the service but the gaps created by determinant factors that, discussed in this study require the attention and follow up of CBE for the properly implementation of the adoption.

Table 10: Active and Non active CBE Birr users

Is your mobile money registration active to use?		Frequency	Percent
	Yes	353	100
Valid	No	0	0
	Total	353	100.0

Source: Survey result (May 2022)

The findings of table 10 provided whether the respondent's registration were active or not. Accordingly, respondents were supplied their answer which tells that, all respondents 353(100%), CBE Birr customer's registration was active to use mobile money service. Because the sample respondents size for this study were proposed and distributed only for active CBE Birr customers.

CBE Birr Mobile Money Service Purpose

Table 11: Purpose of CBE Birr Mobile money service

Most of a time for which purpose do you use CBE Birr service?		Frequency	Percent
	To Check Balance	25	7.1
	Money Transfer	40	11.3
Valid	Money Payment	55	15.6
	Top up air time	219	62.0
	Others	14	4.0
	Total	353	100.0

Source: Survey result (May 2022)

From table 11, the users of CBE Birr at CBE Arada District were replied for the question that, most of the time for which purpose do you use the service? Accordingly, most of them 219 (62.0%) said to buy air time, the 2nd majority to money payment 55 (15.6%), to money transfer 40(11.3%), to check balance 25 (7.1%) and 14(4.0%) for other purposes. So, the interpretation for the result of data analysis regarding respondents answer for the question asked reveals that, the air time recharge was most accustomed than other services given by the CBE Birr system. The 2nd more used CBE Birr service type, among the users was for the purpose of money payment followed by money transfer. The respondent's data also shows that by using the service, checking balance was moderately implemented.

CBE Birr Mobile Money Service Initiatives

Table 12: Initiative for user of CBE Birr mobile money service

What initiates you to be user of mobile money/ CBE Birr service?		Frequency	Percent
Valid	Bank's Advice	180	51.0
	Benefit from the service	76	21.5
	Family/Friends	84	23.8
	Other	13	3.7
	Total	353	100.0

Source: Survey result (May 2022)

Based on results table 12 above, the response frequency of mobile money user indicates that, the CBE Birr users of CBE at Arada District branches were mostly initiated by banks advice, which comprise the frequency 180 (51.0%), then followed by family/friends 84(23.8%), Benefit of the service 76 (21.5%) respectively and other reason for the respondents to become a user of CBE Birr service held the frequency of 13 (3.7%) of the sample respondents. This means most of the sample respondents were motivated mainly by bank advices and some of them by understanding the benefit of the CBE Birr service. So, the customers are still seeking for further awareness creation about CBE Birr mobile money service from CBE.

Advantage of CBE Birr with compare to Bank branch, ATM, Internet banking

Table 13: Relative advantage of CBE Birr mobile money service

Advantage of CBE Birr with compare to (Bank branch, ATM, Internet banking)		Frequency	Percent
Valid	High	133	37.7
	Medium	180	51.0
	Low	40	11.3
	Total	353	100.0

Source: Survey result (May 2022)

The analysis result for Table 13 above, regarding to advantage of CBE Birr service for the respondents, when compared to other banking services, was replied as, frequency of medium, 180(51.0%), high 133(37.7%) and low 40(11.3%). Majority of the respondents said advantage of

CBE Birr service is medium. This insures that the advantage of CBE Birr mobile money service is moderate as compared to other digital banking services.

Table 14**:** Respondents' opinion on Perceived Cost in CBE Birr adaption

1	Perceived Cost(PC)	Scales					Total	Mean	S.D
	Questions	SD	D	N	A	SA			
1.1	I find the cost of CBE - Birr mobile money is fair	83	51	15	144	60	353	3.13	1.470
		23.5%	14.5%	4.2%	40.8%	17.0%	100%		
1.2	I perceive the cost of CBE - Birr mobile money is not costly	81	53	14	161	44	353	3.10	1.421
		22.9%	15.0%	4.0%	45.6%	12.5%	100%		
1.3	It is costly conduct payment, withdrawal and transaction using CBE- Birr mobile money service	101	172	18	38	24	353	2.18	1.162
		28.6%	48.7%	5.1%	10.8%	6.8%	100%		
1.4	Mobile money/CBE - Birr processing may expose to further expense	134	151	18	35	15	353	2.00	1.101
		38.0%	42.8%	5.1%	9.9%	4.2%	100%		
Average perceived cost(AVPC)								**2.6027**	**.49598**

SD=Strongly Disagree, **D**=Disagree, **N**=Neutral, **A**=Agree, **SA**= Strongly Agree, **SD**=Standard Deviation

Source: Survey data 2022, SPSS V.23

On the table 14 above, respondents were asked about their view on the cost incurred on CBE Birr mobile money service adaption. The average mean score of perceived cost (PC) is 2.6027 as seen in the above table. According to the average mean interval, PC mean score is found 1.81-2.60.As a result, perceived cost has low effect on CBE Birr mobile money service adaption.

Table 15 Respondents' opinion on Perceived Usefulness in CBE Birr adaption

2	Perceived Usefulness (PU) Questions	Scales					Total	Mean	SD
		SD	D	N	A	SA			
2.1	CBE-Birr mobile money is useful way of making payment	62	75	30	152	34	353	3.06	1.316
		17.6%	21.2%	8.5%	43.1%	9.6%	100%		
2.2	CBE - Birr mobile money service helps save time	62	88	20	151	32	353	3.01	1.322
		17.6%	24.9%	5.7%	42.8%	9.0%	100%		
2.3	CBE-Birr is more convenient and accessible	68	103	38	130	14	353	2.77	1.241
		19.3%	29.2%	10.7%	36.8%	4.0%	100%		
2.4	CBE - Birr mobile money service would outweigh the disadvantages	62	110	34	139	8	353	2.78	1.205
		17.6%	31.2%	9.6%	39.4%	2.2%	100%		
Average perceived Usefulness(AVPU)								**2.9037**	**.47963**

SD=Strongly Disagree, **D**=Disagree, **N**=Neutral, **A**=Agree, **SA**= Strongly Agree, **SD**=Standard Deviation
Source: Survey data 2022, SPSS V.23

On the table 15 above, respondents were asked about their view on the usefulness (advantage) of CBE Birr mobile money service. The average mean score of perceived usefulness (PU) is 2.9037 as seen in the above table. According to the average mean interval, PU mean score is found 2.61-3.40. As a result, perceived usefulness has moderate effect (influence) on CBE Birr mobile money service adaption. The result implies that, participants did know the usefulness of CBE Birr mobile money service.

Table 16: Respondents' opinion on Mobile Network in CBE Birr adaption

3	Mobile Network (MN) Questions	Scales					Total	Mean	SD
		SD	D	N	A	SA			
3.1	I couldn't continue to use mobile money service because of mobile network	58	173	31	73	18	353	2.49	1.141
		16.4%	49.0%	8.8%	20.7%	5.1%	100%		
3.2	I believe my mobile network is not capable of running the CBE-Birr transaction service consistently	76	187	24	49	17	353	2.27	1.095
		21.5%	53.0%	6.8%	13.9%	4.8%	100%		
3.3	I will continue using of CBE-Birr service if there, accessible network	43	55	29	180	46	353	3.37	1.241
		12.2%	15.6%	8.2%	51.0%	13.0%	100%		
3.4	I suffered from the lack of	55	91	29	150	28	353		

		15.6%	25.8%	8.2%	42.5%	7.9%	100%	3.01	1.276
mobile network to use CBE-Birr service									
Average Mobile Network(AVMN)								**2.7875**	**.44455**

SD=Strongly Disagree, **D**=Disagree, **N**=Neutral, **A**=Agree, **SA**= Strongly Agree, **SD**=Standard Deviation

Source: Survey data 2022, SPSS V.23

On the table 15 above, respondents were asked about their view on the effect of mobile network on CBE Birr mobile money service adaption. The average mean score of mobile network (MN) is 2.7875 as seen in the above table. According to the average mean interval, mobile network mean score is found 2.61-3.40. As a result, it has moderate effect (influence) on CBE Birr mobile money service adaption.

Table 17: Respondents' opinion on Perceived Safety in CBE Birr adaption

4	Perceived Safety(PS) Questions	Scales					Total	Mean	SD
		SD	D	N	A	SA			
4.1	If I lose my mobile phone, I will not lose my money as well	63	80	32	151	27	353	3.00	1.296
		17.8%	22.7%	9.1%	42.8%	7.6%	100%		
4.2	If there is a network problem, my transactions will be affected	77	92	36	108	40	353	2.84	1.368
		21.8%	26.1%	10.2%	30.6%	11.3%	100%		
4.3	Using CBE-Birr, it is possible to save Money from theft	65	102	24	137	25	353	2.87	1.298
		18.4%	28.9%	6.8%	38.8%	7.1%	100%		
4.4	There is a low risk of other people tampering with my personal information during the transaction	52	97	37	149	18	353	2.95	1.222
		14.7%	27.5%	10.5%	42.2%	5.1%	100%		
Average perceived Safety(AVPS)								**2.9150**	**.49342**

SD=Strongly Disagree, **D**=Disagree, **N**=Neutral, **A**=Agree, **SA**= Strongly Agree, **SD**=Standard Deviation

Source: Survey data 2022, SPSS V.23

As observed in table 17, respondents were asked about their view about safety while using CBE Birr mobile money service for monetary transactions. The average mean score of Perceived Safety (PS) is 2.9150 as seen in the above table. According to the average mean interval, Perceived Safety mean score is found 2.61-3.40. As a result, it has moderate effect (influence) on CBE Birr mobile money service adaption and this implies that, participants have confidence on the system.

Table 18: Respondents' opinion on Perceived Trust in CBE Birr adaption

5	Perceived Trust(PT)	Scales					Total	Mean	SD
	Questions	SD	D	N	A	SA			
5.1	I don't believe that it is possible to transfer money using my mobile	57	186	34	50	26	353	2.44	1.139
		16.1%	52.7%	9.6%	14.2%	7.4%	100%		
5.2	I suspect to use mobile to execute payment to other	64	175	20	78	16	353	2.45	1.152
		18.1%	49.6%	5.7%	22.1%	4.50%	100%		
5.3	I trust that, using CBE-Birr mobile money doesn't expose to risk	49	43	23	183	55	353	3.43	1.280
		13.9%	12.2%	6.5%	51.8%	15.6%	100%		
5.4	For I don't know how to use the CBE-Birr service, I afraid to be served with mobile money service	71	189	24	50	19	353	2.31	1.107
		20.1%	53.5%	6.8%	14.2%	5.4%	100%		
Average perceived Trust(AVPT)								**2.6586**	**.39749**

SD=Strongly Disagree, **D**=Disagree, **N**=Neutral, **A**=Agree, **SA**= Strongly Agree, **SD**=Standard Deviation

Source: Survey data 2022, SPSS V.23

As shown on table 18, respondents were asked their trust about CBE Birr mobile money service. The average mean score of Perceived Trust (PT) is 2.6586 as seen in the above table. According to the average mean interval, Perceived Trust mean score is found 2.61-3.40. As a result, it has moderate effect (influence) on CBE Birr mobile money service adaption. This indicates that customers are yet to embrace and did not have full trust about CBE Birr mobile money service.

Chong et. al., 2010 who mentioned that when it comes to electronic banking; trust is found to be crucial and complex as customers should trust the online transaction of the bank to complete the usage transaction. Warwick and Goode (2010) found that trust in the website is greatly influencing the purchasing intention to purchase online. Additionally, many previous researches that considered the drivers of adoption to e-banking have appointed trust to play a major role in determining the intention towards using e-banking (Juwaheer et. al., 2012).

Table 19: Opinion of Respondents on dependent variables (CBE Birr adaption)

1	Dependent Variable Questions	Mean	S.D	Total
1.1	How often do you use mobile money service?	2.22	.805	353
1.2	Most of the time for which purpose do you use mobile money service?	3.44	.990	353
1,3	With whom you are interested to use mobile money service?	1.80	.926	353
1.4	Advantage of CBE Birr Mobile money service with compare to another banking channel (Bank branch, ATM, Mobile Banking, Internet banking)	1.74	.650	353
	Average Dependent Variables(AVDV)	**2.3003**	**.41302**	**353**

SD=Standard Deviation

Source: Survey data 2022, SPSS V.23

As shown on table 19, respondents were asked their view about CBE Birr mobile money service advantage and the time frequency they used this service. The average mean score of independent variables (CBE Birr adaption) is 2.003 as seen in the above table. According to the average mean interval, CBE Birr adaption mean score is found 2.61-3.40. As a result, it is moderately affected (influenced) by independent variables (Perceived Cost, Perceived Usefulness, Mobile Network, Perceived Safety and Perceived Trust).

4.3 The Results of Inferential Statics Analysis

Inferential method of data analysis was used to identify the relationship between dependent and independent variables and to examine direction and significance of the correlation of the variables incorporated under this study.

4.3.1 Correlation Analysis

The Pearson Correlation coefficient was used to measure an association between the variables. Pearson correlation values of ±0.1 represent a small effect, ±0.3 represent a medium effect, and ±0.5 is a large effect (Field 2009).

Table 20: Correlations analysis result

		AVPC	AVPU	AVMN	AVPS	AVPT	AVDV
AVPC	Pearson Correlation	1	.572**	.524**	.508**	.480**	**.493****
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	353	353	353	353	353	353
AVPU	Pearson Correlation	.572**	1	.732**	.756**	.619**	**.683****
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	353	353	353	353	353	353
AVMN	Pearson Correlation	.524**	.732**	1	.727**	.662**	**.626****
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	353	353	353	353	353	353
AVPS	Pearson Correlation	.508**	.756**	.727**	1	.647**	**.644****
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	353	353	353	353	353	353
AVPT	Pearson Correlation	.480**	.619**	.662**	.647**	1	**.593****
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	353	353	353	353	353	353
AVDV	Pearson Correlation	.493**	.683**	.626**	.644**	.593**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	353	353	353	353	353	353

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

AVPC= Average Perceived Cost, **AVPU**= Average Perceived Usefulness, **AMN**=Average Mobile Network, **AVPS**= Average Perceived Safety, **AVPT**= Average Perceived Trust

Source: Survey data 2022 of, SPSS V.23

As shown in the correlation coefficient table 20 above, all independent variables (perceived cost, perceived usefulness, perceived safety, mobile network and perceived trust factors were positively correlated with CBE Birr adoption. That means perceived usefulness has high correlation with CBE Birr adaption followed by perceived safety, mobile network, perceived trust and perceived cost holds the next rank.

The output of perceived usefulness (r= .683** P<0.01). This indicated that, perceived usefulness has high positive association with CBE-Birr adoption having a significant large effect, which means, if the usefulness of the CBE Birr mobile money service is high, customers were highly initiated to use the system.

Thus, perceived Safety (PS) value of correlation is (r=.644** P<0.01). This means perceived safety has positive association with CBE Birr adoption having large effect. The mobile network (MN) analysis value shows, (r=.626**, P<0.01). This implies that mobile network has positive correlation with CBE Birr adoption, having large effect. This means, if the mobile network exists, customers were initiated to use the CBE Birr service. In case of perceived safety, the analysis value indicated, when customers perceive that using the CBE Birr service is safe, and then its adoption is also increasing.

Perceived trust (PT) analysis value is, (r=.593**, P<0.01). The output shows when the trust of customer on CBE Birr service increases, the adoption of CBE Birr also increases. Accordingly, there is positive correlation between trust and CBE Birr adoption. Perceived cost (PT) analysis value is (r=.493, r<0.01).

The highest correlation shown on the above table 20 is 0.683**, which is the analysis value of perceived usefulness that, have with adoption followed by perceived safety (0.644). Correlation coefficient should have to be less than 0.8 to avoid multi-collinearity. Thus, multi-collinearity is not occurred in this study.

4.3.2 Regression Analysis

4.3.2.1 Regression Assumptions Tests
Normality Test

This assumption can be tested by looking at the P-P-plot for the model. The closer the dots lie to the diagonal line, the closer to normal the residuals are distributed. This means the values of the residuals are normally distributed.

Figure 4 Normality P-P plots
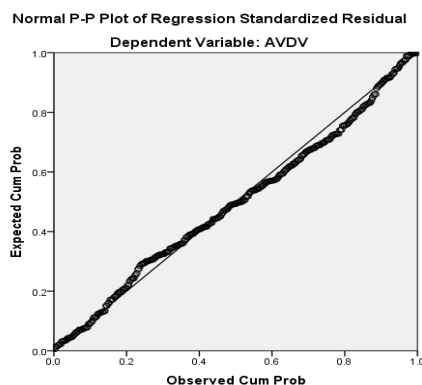
Source: SPSS output, 2022

As seen in the above figure 4, the points on the plot were roughly forming a straight diagonal line and the normality assumption is met.

Linearity Test

First, linear regression needs the relationship between the independent variables and dependent variables to be linear. It is also important to check for outliers since linear regression is sensitive to outlier's effects. The linearity assumption can best be tested with scatter plots. The scatter plots graph shows that this assumption has been met.

Figure 5: Scatter plots showing linearity assumption
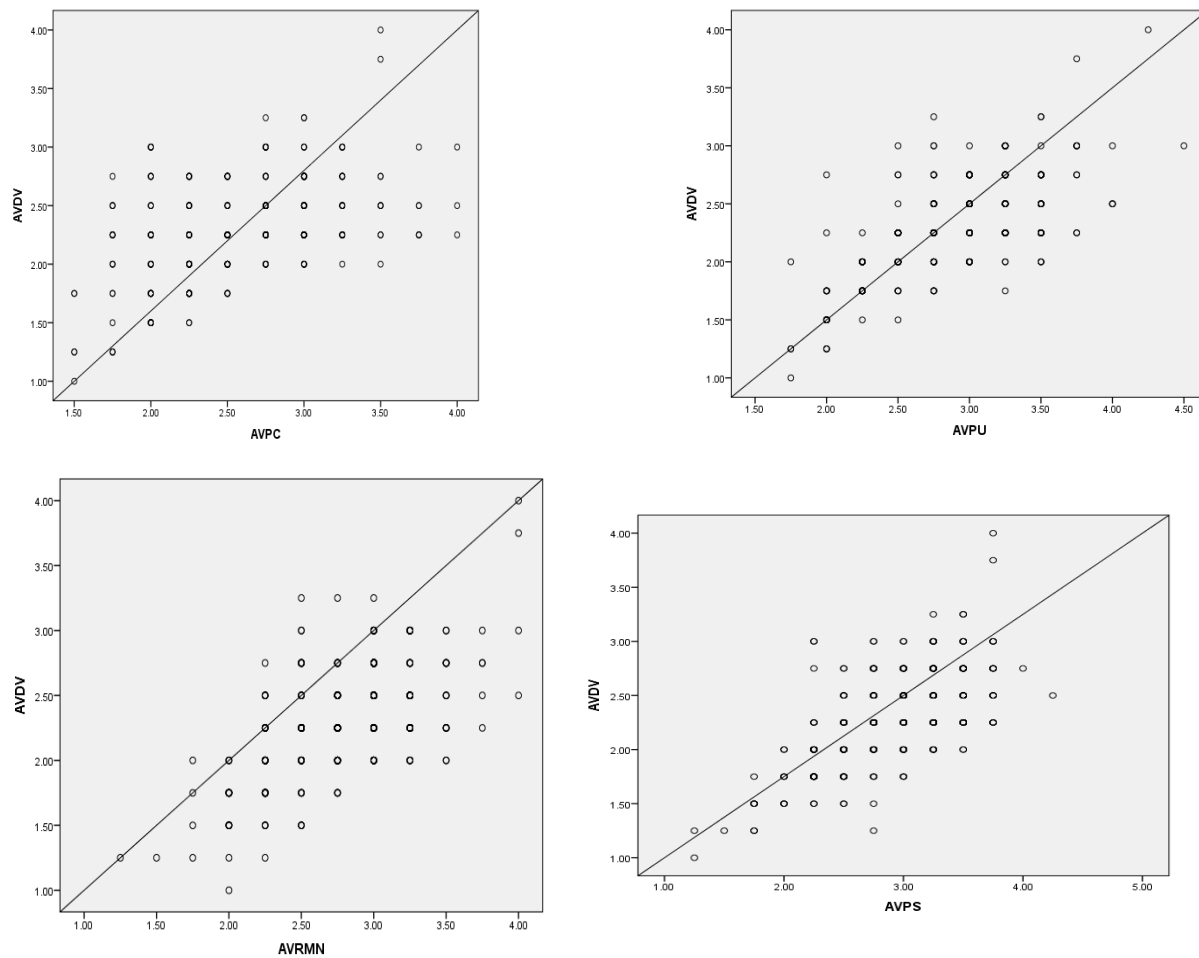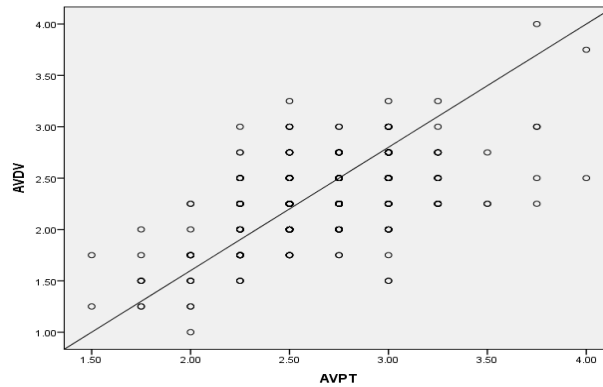
Source: SPSS output, 2022

In the above figure 5, the scatter plots shows the residuals of independent variables (Average Perceived Cost (AVPC), Average Perceived Usefulness (AVPU), Average Mobile Network (AVMN), Average Perceived Safety (AVPS) and Average Perceived Trust(PT)) have a straight line relationship with predicted CBE Birr adaption(Average Dependent Variable (AVDV)) scores. This shows that as independent variables increases dependent variable also increase.

Collinearity Test (Multicollinearity problem test)

The problem occurs when the independent variables are highly correlated to each other. A tolerance value below 0.1 indicates serious collinearity problem and a tolerance value less than 0.2 indicates a potential collinearity problem. Values of VIF (Variance Inflation Factor) exceeding 10 are often regarded as indicating multicollinearity.

Table 21 Assessment of Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	**VIF**
1 (Constant)		
Perceived Cost(PC)	.296	3.381
Perceived Usefulness(PU)	.312	3.207
Mobile Network(MN)	.330	3.026
Perceived Trust(PS)	.331	3.019
Perceived Trust(PT)	.471	2.121

 a. Dependent Variable: AVDV
Source: Survey data 2022 of, SPSS V.23

The multicollinearity detection analysis in the above table 21 shows that, the value for tolerance of all variable are greater than 0.2 and the value of variance inflation factor (VIF) for all variables are not exceeding 10, As result, it is justified as, there is no serious multicollinearity problem among the variables used in case of this study.

ANOVA Analysis

Analysis of variance (ANOVA) is a collection of statistical models and their associated estimation procedures used to analysis the difference among means. It is a type of statistical test used to determine if there is statistically significance difference between two or more categorical groups by testing for differences of means using variance. Simply it tells if there is any statistical difference between the means of two or more independent groups.

Table 22: ANOVA Analysis

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	32.414	5	6.483	81.415	.000[b]
	Residual	27.631	347	.080		
	Total	60.045	352			

a. Dependent Variable: AVDV
b. Predictors: (Constant), AVPT, AVPC, AVPS, AVMN, AVPU

ANOVA results are given in table 22 above; according to Samontaray (2010) the model that has a large regression sum of squares (32.414) in comparison to the residual sum of squares (27.631) shows that most of the variation in the dependent variable is considered in the model. When the significant value of the F statistic is less than 0.05 then the independent variables explain dependent variables in an excellent way.

The most important part of table 22 is the F-ratio, which is a test of the null hypothesis that the regression coefficients are all equal to zero. Put in another way, this F statistic tests whether the R2 proportion of variance in the dependent variable accounted for by the predictors is zero and the table also shows the associated significance value of that F-ratio (Field, 2009). For this data, F is 81.415, which is significant at $p<0.05$ (because the value in the column labeled Sig. is less than 0.05). This result tells us that there is less than a 0.05% chance that an F-ratio this large would happen, if the null hypothesis proposed about F-ratio were true. Therefore, we can

conclude that our regression model results is significantly better prediction of respondent intention to use CBE Birr and that the regression model overall predicts significantly well

Model Summary

This model extends the techniques of linear regression analysis in which the outcome variable is categorical. It is used to understand how changes in the independent variables (perceived cost, perceived usefulness, reliable mobile network, perceived safety and perceived trust) are associated with changes in the probability of an event occurring.

Table 23: Regression analysis result

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.735[a]	.540	.533	.28218

a. Predictors: (Constant), AVPT, AVPC, AVPS, AVRMN, AVPU
b. Dependent Variable: AVDV
Source: Survey data 2022 of, SPSS V.23

The correlation coefficient R is a statistical technique which shows whether strongly pairs of variables are related to each other or not. The correlation coefficient R of this study presented on model summary have assessed for all independent variables (perceived cost, perceived usefulness, reliable network, perceived safety and perceived trust) and the result indicated on the above table 23. This has the implication that, the five independent variables have about 0.540 (54%) contribution to CBE Birr mobile money adoption at the CBE Arada District located in Oromia Region North Shewa Zone. Other variables that were not included in this study contribute about 46% (which is, open for further study).

4.3.2.2 Coefficients of Regression model

The regression coefficient represents the amount of change in the dependent variable for one unit change in independent variable (Meng et al., 2019).

Table 24 Regression Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	.145	.112		1.295	.196
Perceived cost(PC)	.069	.038	**.083**	1.825	.069
Perceived usefulness(PU)	.277	.055	**.322**	5.080	.000
Mobile network(MN)	.105	.057	**.113**	1.854	.065
Perceived Safety(PS)	.138	.052	**.165**	2.649	.008
Perceived Trust (PT)	.179	.054	**.172**	3.299	.001

a. Dependent Variable: AVDV

Source: Survey data of 2022, SPSS V.22

Therefore, the final regression model equation for this study was presented as:

$$y_i = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots \beta_i x_i$$

$$MMA = \beta_0 + \beta_1 (PC) + (PU) + (RN) + (PS) + (PT)$$

$$MMA = 0.145 + 0.069PC + 0.277PU + 0.105RN + 0.138PS + 0.179PT$$

Where: **y_i = MMA** = Mobile money Adaption (Dependent variable)

x**'s** are Independent variables,

β**'s** are the Regression Coefficients and β_0 is the constant

PC= Perceived Cost, **PU**= Perceived Usefulness, **MN**=Mobile Network,

PS= Perceived Safety and **PT**= Perceived Trust

The magnitude of the relationship is shown using the beta values in the above table 24. Based on the result, Perceived Usefulness (PU) is the most significant with a beta value of 0.322 to influence the level of respondent intention to use CBE Birr mobile money service followed by Perceived Trust which has significant relationship with beta value of 0.172 since its p-value (0.001) is less than 0.05. Next, Perceived Safety have significant relationship with a beta value of 0.165 and p-value(0.008) and mobile network is significant influence on respondents intension to use CBE Birr service at a beta value of 0.113 which is greater than 0.05 but it is significant at 0.1. Perceived cost has less significant effect on respondent's intention to use CBE Birr mobile money service at a beta value of 0.083

Effect of perceived Usefulness on CBE Birr Adaption

According to this study, perceived usefulness is the extent to which the users of mobile money at CBE perceive the advantage they got from continuously using of CBE Birr service. The output of table 24 indicates that, the coefficient of beta value for perceived usefulness is ($\beta= 0.322$). Which means due to most of the respondents have awareness about the usefulness of the service; as a result they have positively associated perceived usefulness with adoption of CBE Birr mobile money service. The p-value ($P<0.05$) shows, the variable has statistically significant large effect. So, the customers can consistently use this technology to check their balance, transfer money, buy air time, money payment. This study result for perceived usefulness effect on the CBE Birr adoption is consistence with past study of (Van der Heijden, 2004). Thus, his study result indicates that, "the Perceived usefulness positively influence the performance".

Role of perceived Trust on CBE Birr Adaption

Table 24 also shows that, the coefficient of beta value for independent variable, Perceived trust reveals, ($\beta=0.172, P < 0.05$). Thus, when compared to other explanatory variables, perceived trust has the highest positive of association value next to perceived usefulness with dependent variable (CBE Birr adoption). Similarly, holding the other variables constant, perceived trust has statistically a significant effect on the adoption of CBE Birr. Since, their study result showed that, perceived trust has a positive effect on mobile money adoption (Tobbin, 2010, Mazhar Fatima et al 2014) and this study is consistent with previous study.

Influence of perceived Safety on CBE Birr Adaption

The analysis result for the explanatory variable, perceived safety in the above table 24 indicates that, the adoption of CBE Birr mobile money service increases with the increase of perceived safety for using the service system. Accordingly perceived safety has found the coefficient of beta and p-value ($\beta=0.165, P< 0.05$) respectively. That means holding other explanatory variables constant, perceived safety has positive association and statistically significant effect on the adoption of CBE Birr mobile money system in CBE Arada District. So, providing a series protection relating to tampering of others in activity of customers CBE Birr service transactions has a positive influence on the adoption technology. Since the result for the analysis of perceived safety has got positive effect on the CBE Birr adoption in case of this study, it is parallel with Gencer, (2011) research result. In which, his study indicated that, mobile money provides a

safely service, more efficient and convenient payment option than cash service for the users. It also saves travel time, costs and reduces the risk of theft.

Effect of Mobile Network on CBE Birr Adaption

In Ethiopia, mobile network is caused by lack of efficient network distribution; as a result it determines the adoption of the CBE Birr system. In the above table 24, the linear regression analysis output for a reliable network revealed that, the coefficient of beta value is ($\beta=0.113$). This implies that, holding other variables constant, reliable network has got positive association with CBE Birr adoption. The result of $p > 0.05$, shows the variable has statistically significant effect at 0.1 on the adoption of CBE Birr system. Thus, output of this study is consistent with a research of Musiime &Alinda, (2016). Their study result indicated that, "Scaling an agent network is a mandatory to distribute the MNOs services" which have a positive impact on the adoption.

Impact of perceived Cost on CBE Birr Adaption

An output on the table 24 shows that, the intention of customers, hindered them, not to continuously use CBE Birr mobile money in CBE Arada District was in way that, consumers assumed, using the service exposed them to costly price of using CBE Birr services. That means, customers have been associating the perception of fair cost with using of CBE Birr mobile money. Accordingly, the coefficient of beta and p-value of perceived cost is ($\beta = 0.083$, $P > 0.05$) respectively. This implies that, holding other explanatory variables constant, the independent variable, perceived cost was less associated with CBE Birr adoption and significant at 0.1. Therefore, it can be an evidence for CBE to plan, lower tariff to keep the consistency of CBE Birr services provision in order to get good acceptance among consumer. This study is in line with past studies of (P. Tobbin, John K 2011and Mahmoud, 2019). In which their studies result shows that, "transactional cost positively impacts the customer to use the mobile money services".

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Summary of Major Findings

The general objective of this study was to investigate the determinants of CBE Birr mobile money service adaption in Commercial Bank of Ethiopia Arada District.

As indicated on the above descriptive statistics table shows that Perceived safety (2.9150) is the major factor, which is followed by the second major factor perceived usefulness (2.9037) in affecting the adoption of CBE-Birr mobile money at the study area. The remaining mobile network (2.7875), perceived trust (2.6586) and perceived cost (2.6027) factors comes next, according to their average mean scores and they respectively influence the adoption of CBE Birr. In case of this study, the respondents' data shows, perceived cost has the least effect.

As shown in the correlation coefficient table 20 above, all dependent variables (perceived cost, perceived usefulness, perceived safety, mobile network and perceived trust factors have positively correlated with CBE Birr adaption. That means perceived usefulness(r=0.683) has high correlation with CBE Birr adaption followed by perceived safety(r=0.644), mobile network(r=0.626), perceived trust(r=0.593) and perceived cost (0.493) holds the next rank.

When we see the regression analysis on the output of table 24 indicates that, the coefficient of beta value for perceived usefulness is (β= 0.322). Which means due to most of the respondents have awareness about the usefulness of the service; as a result perceived usefulness has positively associated and statistically significant large effect(P<0.05)on adoption of CBE Birr mobile money service.

Table 24 also shows that, the coefficient of beta value for independent variable, Perceived trust reveals, (β=0.172, P < 0.05). Thus, when compared to other explanatory variables, perceived trust has the highest positive of association value next to perceived usefulness with dependent variable (CBE Birr adoption) and it has statistically a significant effect on the adoption of CBE Birr.

The analysis result for the explanatory variable, perceived safety in the above table 24 indicates that, the adoption of CBE Birr mobile money service increases with the increase of perceived

safety for using the service system. Accordingly perceived safety has found the coefficient of beta and p-value (β=0.165, P< 0.05) respectively. That means holding other explanatory variables constant, perceived safety has positive association and statistically significant effect on the adoption of CBE Birr mobile money service in CBE Arada District.

In Ethiopia, mobile network is caused by lack of efficient network distribution; as a result it determines the adoption of the CBE Birr system. In the above table 24, the linear regression analysis output for a reliable network revealed that, the coefficient of beta value is (β=0.113). This implies that, holding other variables constant, reliable network has got positive association with CBE Birr adoption. The result of p >0.05, shows the variable has statistically significant effect at 0.1 on the adoption of CBE Birr system.

An output on the table 24 shows that, the intention of customers, hindered them, not to continuously use CBE Birr mobile money in CBE Arada District was in way that, consumers assumed, using the service exposed them to costly price of using CBE Birr services. That means, customers have been associating the perception of fair cost with using of CBE Birr mobile money. Accordingly, the coefficient of beta and p-value of perceived cost is (β = 0.083, P>0.05) respectively. This implies that, holding other explanatory variables constant, the independent variable, perceived cost was less associated with CBE Birr adoption and significant at 0.1.

5.2 Conclusion

In Ethiopia, CBE have been playing significant roles in the development efforts of the country. Mobile money is the latest service system used by financial institutions (Mas &Morawczynski, 2012). The general objective of this study is, to find out the determinant factors of CBE Birr mobile money service adoption and to assess the extent to which, explanatory variables affect the adoption of CBE Birr by contributing ideas which fulfill the gaps found. As a result of demographic profile analysis conducted by descriptive statics for, gender of respondent shows, most of the CBE Birr service users at CBE Arada District out line branches were males when compared with females. The greater percentage of mobile money service users were also youngers, degree holders, medium monthly income which fails between 5251_7800(birr), the respondents response emphasizes that, they used the technology for individual account transactions than organizational issue, most of the respondents have started using the service over 1 year from the date of data gathering. For the case of this study, almost all of the CBE Birr

user respondents' registration, at CBE Arada district outline branches were active which were located in Oromia Region North Shewa Zone.

So, the result of inferential statics data analysis, by using SPSS V-23 from the respondent's response at CBE Arada District, reveals that, the five independent variables identified in this study contribution to CBE Birr mobile money service adoption at CBE Arada District out line branches were held (54%). The contribution of other variables that were not included in this study will be only 46%. The most important determinant factor which has a greater contribution to CBE-Birr adoption is perceived usefulness and followed by perceived safety.

Thus, the finding shows that Perceived safety (2.9150) is the major factor, which is followed by the second major factor perceived usefulness (2.9037) in affecting the adoption of CBE-Birr mobile money at the study area. The remaining mobile network (2.7875), perceived trust (2.6586)and perceived cost (2.6027) factors comes next, according to their average mean scores and they respectively influence the adoption of CBE Birr. In case of this study, the respondents' data shows, perceived cost has the least effect

The output of regression analysis with regarding to perceived usefulness indicates that, the coefficient of beta value (0.322) which means that, most of the respondents have awareness about the usefulness of the service. As a result, they positively associated the perceived usefulness with adoption and the p-value ($P<0.05$) shows the variable has statistically significant effect.

As the output shows, the regression coefficient beta and p-value for the variable, perceived trust reveals $\beta=0.172$ and $P< 0.05$ respectively. That means there is a positive relationship between the Perceived trust and adoption of CBE-Birr service and also the variable is statistically significant. Generally, perceived usefulness and perceived safety explanatory variables have the highest effect on the adoption of CBE Birr mobile money at CBE Arada District out line branches.

We can also understand from the output in relation to perceived safety, the coefficient beta value ($\beta = 0.165$) implies, the variable has positive association and is statistically significant having p-value ($P< 0.05$) respectively.

With regard to mobile network, the output reveals, it has positive association with and it has statistically significant effect on the adoption of CBE Birr having a beta value 0.113 and $p < 0.05$).

As anyone can see from the result of regression analysis conducted for this study, the coefficient of beta and p-value for Perceived cost is (β = 0.083 and $P<0.05$) respectively. This shows the variable is statistically significant and less positively associated with CBE Birr adoption. In other words, most of the respondents perceive that, using CBE Birr mobile money might expose them to fair cost.

5.3 Recommendations

To fulfill the gaps identified in the analysis of data from the respondent's response, the researcher suggested the following recommendation points for CBE that can help to increase CBE Birr mobile money service adoption.

❖ The analysis result for demographic profile of respondents shows that, with compared to males, the smaller number of users of CBE Birr mobile money service at CBE Arada District were females, non-formal and primary level educated and elders (>51). Also, the least percentage of respondents uses the service for organizational rather than personal activities. Most of the users of the service were registered recently within 6 months to 1year ago and the respondents having lower monthly income have not used the service consistently, when compared with medium and higher income level. So, to improve the gender, income and age-related mismatch in using practice of CBE Birr system among customers of CBE Arada Distrct out line branches, it is advisable that if the management body of CBE prepares and implements the strategic plan of integrated marketing communication in order to create awareness and induce new customers to become a user and simplifying the steps on manuals to be followed while using the service.

Generally, specific recommendations were given to both the policy makers and the bank (CBE) as follows:

5.3.1 For Policy Makers
  ➢ The study recommends that network service providers need to sensitize their public education activities on how mobile money technology operates and its usefulness rather than focusing on improving access to it. The study also commends that mobile network operators make more investments to improve the service rendered to their subscribers. Some subscribers indicated that from time to time they face network challenges which prevent them from accessing their money and using the mobile money service. This presents a great inconvenience to them. A system upgrade would ensure that their mobile

money system is reliable for subscribers and make using the system convenient. Through this approach, many people will be financially included.

➢ In the macroeconomic level front, "electronic (money) credit generated by the mobile money technology should not be overlooked by policy makers when making monetary policies as it also influences individual user's spending. It is about time policy makers strategize on how to manage economic shocks that could emanate from the use of the technology."

➢ Government (Ethio-telecom) need to advance mobile network infrastructure to enhance service quality of electronic banking from its side to provide reliable network to CBE as the customers perceive the mobile network risky to adopt mobile banking.

➢ Gaps relating to absence of reliable network and lack of trust on the adoption of the CBE Birr service were another gap identified by this assessment. As a researcher belief, the government should give consideration to the financial sectors and enough budgets should be allocated that helps for upgrading the mobile network capacity of CBE Birr service users. Finally, the extension of CBE Birr mobile money technology, improving its consistency and follow up of the services practice among CBE that can improve the trust of the users on the adoption of CBE Birr service.

5.3.2 For Commercial Bank of Ethiopia (CBE)

➢ In the finding, it is emphasized that customers have been associated the perception of fair tariff with using the technology and the result for association of perceived usefulness with CBE Birr adoption shows that, respondents have awareness about the usefulness of the service. The CBE should do aggressive awareness creation on usefulness of CBE Birr mobile money service by give more advice and advertisement to get more customers than now.

➢ Banks (CBE) and other financial institutions in their own way should embark on educational campaigns to increase the public awareness about the benefits of E - payment. This will help to create a cashless society, reduce risk of being lost or stolen, and mitigate long queues in transacting business among others.

➢ According to the output of data analysis result for this study, the perceived safety has positive association with adoption of the CBE Birr mobile money. This means, if the user's confidence on the safety of the service increase, the customers continuously use CBE Birr service. So, to improve the adoption of mobile money the banks specially, CBE should have to increase the number of CBE Birr Agents and merchants for the

service accessible at everywhere and time by giving sufficient commission and care for personal information of the users.

➤ The bank advised to collaboration with Ethio-Telecom to develop alternative network lines rather solely relaying on telecommunication networks which have frequent failure.

➤ The bank (CBE) advised to review and upgrade the existing system of security to the levels that minimize risk and let the customers know the status for their decision and confidence in adoption of new innovation.

➤ More information and awareness should be put in public to build confidence and trust in agency banking as a secure, efficient and modern way of banking.

➤ CBE in general and its Arada district branches in particular need to promote CBE Birr mobile money service to its customers using various media options to the target market so that it can enhance the awareness and build positive attitude of customers about the technology's relative advantage, trust as well as its risk.

➤ CBE need to produce user guide for CBE Birr mobile money services using various means such as booklets and in electronic means such as social Medias to make use of CBE Birr easier for existing and potential customers.

5.4 Directions for Future Researchers

Customers are not compelled to physically go to the branch while using of CBE Birr mobile money service. Thus, the technology can save the transportation cost and time of the users. As a result, mobile money has a significant contribution to individual and country level economic contribution. The usefulness of CBE Birr adoption is not in question, therefore it is advisable, to carry out further researches relating to this title. The result of regression analysis from the respondent's information shows, the effect of five independent variables (perceived cost, perceived usefulness, mobile network, perceived safety and perceived trust) on the adoption of the CBE Birr system was (54%). Other researchers can focus the remaining independent variables (46%) that have effect on the adaption of CBE Birr mobile money service. Because, even though they can be determinant factors, those variables are not assessed in this study. For the future, further research can be conducted by using demographic variables (gender, educational level, income, age and government policy) have the effect on mobile money adoption. Additionally, this study is limited to geographical area of CBE Arada district. It is possible that, in the future everybody can conduct on the determinants of mobile money service adoption out of this study geographical area by employing other additional determinant variables.

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Appendix-I

Salale University
College of Business and Economics
Department of Management
MBA Program

Questionnaires on: **Determinants of CBE Birr Mobile Money Services Adaption: in case of Commercial Bank of Ethiopia Arada District**

Dear respondents,

The intention of this research questionnaire is to collect data from the respondents in order to assess the intermediating determinant factors that influence customers' behavior to use CBE-Birr Mobile money service. The quality of the result for this research will be based on the accuracy of the information you will provide. Eventually, I promise you, the information you will provide me is going to be reported and communicated in aggregate and utmost care will be taken for its confidentiality. I would like to thank you for your cooperation and allowing me to take a few minutes of your valuable time.

 Note: -   No need of writing your name. Your confidentiality maintained sincerely.

-   CBE-Birr is the subscription name of 'Mobile money' among CBE.

Part I – General Information

Demographic profile of respondents

 Please circle the number for your choice

1. Gender: A. Male   B. Female

2. Customer type: A. Individual   B. Organization

3. Where do you open your CBE Birr Account?   A. At CBE Branch   B. At Agent Shop

4. Age: A, Between 18 - 30   B. Between 31- 40   C. Between 41- 50   D. Greater than 51

5. Education Level: A. Non-formal education   B. Primary school completed   C. High school completed   D. Certificate   E. Diploma   F. Degree   G. Masters and above

6. Income (Birr) within a month: A. 0 -1650   B.   1,651- 3,200   C. 3,201 - 5,250

D. 5,251 - 7,800   E.   7,801 -10,900   F.> 10,900

7. How long have you been using CBE - Birr mobile money service?

A. Less than 6 months   B. 6 months -1 year   C. Over 1 year

8. How often you intend to use CBE-Birr?   A. Daily   B.   Weekly   C. Monthly

D. Once in two Months   E.   Other (specify)…………………..……

9. Is your mobile money registration active to use now?   A.   Yes   B.   No

Part II: Questions related to Adoption.

10. How often do you use mobile money service?   A. Every day

B. Once a week   C. Once a month   D. Other (specify)……………………

11. Most of the time for which purpose do you use mobile money service?

A. To check balance   B. For Money transfer   C. For Money Payment

D. For Top-up air time   E. Other (specify) …………………………..

12. With whom you are interested to use mobile money service?   A. Bank's advice

B. Benefit from the service   C. Family/friends   D. Other (specify…………………….

13. Advantage of CBE Birr Mobile money service with compare to another banking channel (Bank branch, ATM, Mobile Banking, Internet banking)

A. High   B. Medium   C. Low

Part III - Questions related to factors that affect customers' behavioral intention to use CBE – Birr mobile money service

Please indicate the extent you agree or disagree of the factors (Perceived cost, perceived usefulness, Lack of reliable mobile network, perceived safety, and perceived trust) that affect customers' intention to use CBE - Birr service mobile money.

1= Strongly Disagree,   2= Disagree,   3= Neutral,   4= Agree   and   5= Strongly Agree

Factors that may affect customer intention of CBE-Birr adoption

No.	Variables	1	2	3	4	5
1	**Perceived cost**	**1**	**2**	**3**	**4**	**5**
1.1	I find the cost of CBE - Birr mobile money is fair					
1.2	I perceive the cost of CBE - Birr mobile money is not costly					
1.3	It is costly conduct payment, withdrawal and transaction using CBE- Birr/mobile-money-service					
1.4	Mobile money/CBE - Birr processing may expose to further expense					
2	**Perceived Usefulness**	**1**	**2**	**3**	**4**	**5**
2.1	CBE-Birr mobile money is useful way of making payment					
2.2	CBE - Birr Mobile money service helps save time					
2.3	CBE-Birr is more convenient and accessible					
2.4	CBE - Birr mobile money service would outweigh the disadvantages					
3	**Reliable Mobile Network**	**1**	**2**	**3**	**4**	**5**
3.1	I couldn't continue to use mobile money service because of mobile network					
3.2	I believe my mobile network is not capable of running the CBE-Birr transaction service consistently					
3.3	I will continue using of CBE-Birr service if there, accessible network					
3.4	I suffered from the lack of mobile network to use CBE-Birr service					
4	**Perceived Safety**	**1**	**2**	**3**	**4**	**5**
4.1	If I lose my mobile phone, I will not lose my money as well					
4.2	If there is a network problem, my transactions will be affected					
4.3	Using CBE-Birr, it is possible to save Money from theft					
4.4	There is a low risk of other people tampering with my personal information during the transaction					

5	**Perceived Trust**	1	2	3	4	5
5.1	I don't believe that it is possible to transfer money using my mobile					
5.2	I suspect to use mobile to execute payment to other					
5.3	I trust that, using CBE-Birr mobile money doesn't expose to risk					
5.4	For I don't know how to use the CBE-Birr service, I afraid to be served with mobile money service					

Thank you for your cooperation in advance!!!

Appendix-II
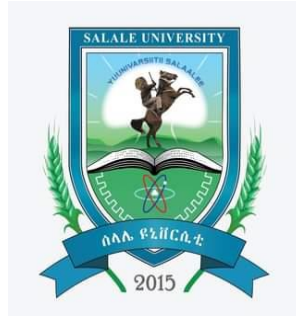
ሰላሌ ዩኒቨርስቲ

ቢዝንስና ኢኮኖሚክስ ኮሌጅ

ሜጅመጓት ትምህርት ክፍል ማስተርስ ፕሮግራም

ማጠይቅ

የጥናቱ ርዕስ፤ DETERMINANTS OF CBE-BIRR MOBILE MONEY SERVICE ADOPTION: THE CASE OF COMMERCIAL BANK OF ETHIOPIA, ARADA DISTRICT

ለወድ ሚጃ ሰጪዎች፡ -

የዚህ ጥናት ዋና አላማ በተጠቀሰዉ የጥናቱ ርዕስ ዙሪያ ከተጠቃሟዎች ሚጃን ለማስባሰብ ሲሆን፤ የ CBE-Birr ተጠቃሚ የሆኑትን ደንበኞች፣ አገልግሎቱን የማጠቀምና ያለማጠቀም ሁኔታዉን የሚወስን ምክንያቶች ለመሙንተን ነዉ፡ የእርስዎ ትክክለኛ ሚጃ ማስጡት የምርምሩ ዓላማግቡን እንዲሟ ይረዳል፡ በሟጭፊ ሻምፄ የሚስጡኝ ሚጃ በምስጡር የሚሟዝ ሲሆን ለዚህ ምርምሩ አገልግሎት ብቻ ይዉላል፡ ስለ ትብብርዎ በቅድሟዉ እናመስግናለን፡

➢ስምሟ ፍ አያስፈልግም

ክፍል I - የሟ\!ስ ሰጪዎች ማጎነ ት ጡቅላላ ሚጃ

እባከዎ ለሚጡት ምኣሽ ፈድሉን ያክብቡ

1. **ፆታ** ሀ) ወንድ ለ) ሴት

2. **የ ደንበኛነ ት ሁኔ ታ** ሀ) ግለሰብ ለ) ተቋም

3. የ ‹‹CBE-Birr›› ሂሳብ የከፈቱት የት ነዉ   ሀ)በባንኩ ቅርንጫፍ   ለ)በወኪል ሱቅ

4. እድሜ   ሀ) ከ 18-30   ለ) ከ 31-40   ሐ) ከ 41-50   ማ ከ 51 በላይ

5. የትምህርት ደረጃ   ሀ) የመጀመሪያ ደረጃ ትምህርት ያላገኘ   ለ) የመጀመሪያ ደረጃ ትምህርት የተማሪ

                    ሐ) የሁለተኛ ደረጃ ትምህርት የተማሪ   ማ) በሰርተፊኬት የተማሪ ቀ

                    ሠ) ዲፕሎማ   ረ) ዲግሪ   ስ) ማስተርስና ከዛ በላይ

6. የ ወር ገቢ በብር   ሀ) ከ 0-1650   ለ) ከ 1,651 - 3,200   ሐ) ከ 3,201 - 5,250

ሠ) ከ 5,251 - 7,800   ረ) ከ 7,801 - 10,900   ስ) ከ 10,900 በላይ

7. የ ‹‹CBE-Birr›› አገልግሎት ለምን ያክል ጊዜ ተጠቅመዋል?   ሀ) ከ 6 ወር በታች   ለ)ከ 6 ወር – 1 አመት

                                ሐ) ከ 1 አመት በላይ

8. የ ‹‹mobile money/‹‹CBE-Birr››› አገልግሎት ስንት ጊዜ ደጋግመዉ ተጠቅመል?   ሀ) በየቀኑ

ለ) በየሳምንቱ   ሐ) በ ወር እንድግዜ   ማ) ምንም አልተጠቀምኩም

9. የ እርስዎ CBE-Birr ሂሳብ ቁጥር ፤ አሁን እየሰራነ ዉብለ ውያስባሉ?   ሀ) አዎ   ለ) አይ

10. የ ‹‹CBE-Birr››አገልግሎት ለስንት ጊዜ ተጠቅሜዉ ያዉቃሉ?

ሀ) በሳምንት አንድ ጊዜ   ለ) በ ወር አንድ ጊዜ   ሐ) ሁል ጊዜ

11. ብዙ ጊዜ የ ‹‹CBE-Birr›› አገልግሎትን ለምን ስራ ይጠቀሟሉ?   ሀ) የሂሳብ ባላንስ ለማወት   ለ) ብር ለማስተላለፍ /ለማሳክ   ሐ) የ ብር ክፍያን ለማ𝜃ም   ማ)ብር አካዉንት ላይ ለማስገባት   ሰ)ለሌላ አገልግሎት..........................

12.የ አገልግሎቱ ተጠቃሚ እንዲሆኑ ምን አነ ሳሳዎት?   ሀ) የ CBE ባንክ ማስታወቂያ   ለ) ከ ‹‹CBE-Birr›› አገልግሎት የ ማገ ኘዉጥቅምበሚዳት   ሐ) ቤተሰብ/ጓደኛ ገፋፍቶኝ   ማ ሌላ ምክንያት...................................

13. የ ‹‹ mobile money›› **አገልግሎት ማጠቀሚያ መንገድ ከሌሎች (ከባንክ ቅርንጫፍ፣ ከATM ማሽን፣ ከሞባይል ባንኪንግ፣ ከኢንተርኔት ባንኪንግ አገልግሎት) ጋር ሲነፃፀር:-**

ሀ) ከፍያለ   **ለ)** ማከለኛ   **ሐ)** ዝቅተኛ

ክፍል II፣ የ ‹‹CBE-Birr›› አገልግሎት እንዳይጠቀሙጭፍ የሚጤጥሩ ከደንበኛ እይታ ጋር፣ የተያያዙ ጥያቄዎች ፡፡ ስለ ‹‹CBE-Birr›› አገልግሎት የደንበኛዉን እይታ ሊወስኑ የሚችሉ ተለዋዋጭ ምክንያቶች፣ ለአገልግሎቱ ተጠቃሚት የሚቆረጥ ቀረጥ፣ ስለአገልግሎቱ ጥቅም የደንበኛዉእይታ፣ አስተማማኝ የሆነ የሞባይል ኔትወርክ አለመኖር፣ የአገልግሎቱ ደህንነት ጋር የተያያዘ የደንበኛ እይታ፣ ስለ አገልግሎቱ የግንዛቤማስ ምክንያት እምነት ማካት፡፡

መሟያ: -እባከዎ፣ የ ‹‹mobile money CBE-Birr›› አገልግሎት እንዳይጠቀሙየሚያደርገዎትን እይታ/ ስለአገልግሎቱ የሚስማሟትን ሁኔታ፣ የአገልግሎቱ ተጠቃሚነ ዎትን ላይ ጫፍ እንዳለዉ ማስማሟት ወይንምአለማስማሟትን ያሳዩ፡፡   1= በጣም እቃወማለ ሁ,   2=እቃወማለ ሁ,   3= እርግጠኛ አይደለሁም 4=እስማማለ ሁ እና 5=በጣምእስማማለ ሁ

ተ. ቁ.	ተለዋዋጮች	1	2	3	4	5
1.	**የ ተገነ ዘበ ዋጋ**					
1.1	ለ ‹‹CBE-Birr›› አገልግሎት የ ማቆረጥ ቀረጥ/ዋጋ ጥሩ ነ ዉብዮ አስባለሁ፡፡					
1.2	ለ ‹‹CBE-Birr›› አገልግሎት የ ማቆረጥ ቀረጥ/ዋጋ ዉድ ነ ዉብዮ አላስ ብም፡፡					
1.3	ለ ‹‹CBE- Birr›› አገልግሎት የ ማቆረጥ ቀረጥ/ዋጋ ዉድ ነ ዉብዮ አስባለሁ፡፡					
1.4	የ ‹‹CBE- Birr›› አገልግሎት አጠቃቀም ለአላስፈላጊ ወጪ ያጋልጣል፡፡					
2.	**የ ተገነ ዘበ ጠቀሜታ**	**1**	**2**	**3**	**4**	**5**
2.1	የ ‹‹CBE- Birr›› አገልግሎት፣ ጠቃሚየሆነ የክፍያ ሚፀፃሚ					

	መንገድነዉ::					
2.2	የ ‹‹ Mobile money/CBE-Birr›› አገልግሎት ጊዜ ለማቆጠብ ይጠቅማል::					
2.3	የ ‹‹ Mobile money/CBE-Birr›› አገልግሎት ምቹና በቀላሉ የማግኝ ነዉ:					
2.4	የ ‹‹CBE-Birr››አገልግሎት፣ ከጉዳቱ ጥቅሙ ያመዛናል ብዬ አስባለሁ::					
3.	**የ ሞባይል አወታረ ሚብ**	1	2	3	4	5
3.1	በሞባይል ኔትወርክ ምክንያት ተጠቃሚ ሆኜ መቀጠል አልቻልኩም:					
3.2	የ ኔ ሞባይልኔትወርክየ ‹‹CBE-Birr››አገልግሎት፣ ያስቀጥላኛል ብዬ አላምንም:					
3.3	በቂ የ ሞባል ኔትወርክ ቢኖረኝ የ ‹‹CBE-Birr›› አገልግሎት፣ ማጠቀምን እቀጥላለሁ::					
3.4	በኔትወርክ እጥረት ምክንያት ‹‹CBE-Birr›› ለማጠቀም ተቸግሬሀለሁኝ::					
4	**የ ተገነዘበ ደህንነት**	1	2	3	4	5
4.1	ስልኬቢጠፋ፣ ብሬን ይዞ አይጠፋምብዬ አስባለሁ::					
4.2	የ ሞባይል ኔትወርክ ችግር ሞኖር የ ብር ማክተለለፍ ችግርን ሊያስከትል ይችላል::					
4.3	የ ‹‹ CBE-Birr ›› አገልግሎት በማጠቀሜብሬን ከስርቆት ማዳን እችላለሁ::					
4.4	በ ‹‹CBE-Birr›› አገልግሎት ክፍያን ሲፈፀም የሌሎች ስለኔ ሚጃ ማዉቅ/ጣልቃገ ብነ ት ዝቅተኛ ነ ዉብዬ አስባለሁ::					
5.	**የ ተገነዘበ እምነት**	1	2	3	4	5

5.1	ስልኬን በማጠቀምብር ማስተላለፍ ይቻላል ብዬ አላምንም፡					
5.2	ሞባይል በማጠቀምብር ለሰዉማስተላለፍ እጥራጥራለሁ፡፡					
5.3	የ ‹‹ CBE-Birr ›› አገልግሎት ማጠቀም ለኪሳራ ያጋልጣል ብዬ አላምንም፡					
5.4	የ ‹‹CBE-Birr ›› አገልግሎት አጠቃቀም ስለማሳ ዉቅ ልገለገልበት እፈራለሁ፡፡					

አ ማ ስ ግ ና ለ ሁ!