ASSESSING OPPORTUNITIES AND CHALLENGES OF OPERATING CBE- BIRR MOBILE MONEY

BY:

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ADDIS ABABA, ETHIOPIA

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Student's Declaration

I, undersigned, hereby declare that this senior essay is my original work prepared under the guidance of Zemenu Aynadis (Asst.Prof). All sources of materials used for this paper have been duly acknowledged and this senior essay is not presented by any other party for any purpose.

Name: Sofonias Eshetu

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Advisor's Declaration

This paper has been submitted for examination, by Student Sofonias Eshetu with my proper advice and approval thereof.

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Date: _____

ACKNOWLEDGMENTS

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LIST of ACRONYM / ABBREVIATION

EAAD --- East Addis Ababa District

SPSS ---.statistical package for social science

CBE----Commercial Bank of Ethiopia

CBE – BIRR: Commercial Bank of Ethiopia Mobile money service

TAM -------Technological Acceptance Model

ICT----Information and Communication

MMT ----mobile money transfer services

ETATS ------Ethiopian Automated Transfer System

POS ---Point-of-Sale terminal

ATM -----Automated Tellers Machine

TSP -------Technology Service Providers

IDT------ Diffusion of Innovation

UTAUT --Unified Theory of Acceptance and Use of Technology

ABSTRACT

The objective of this study is to assess the opportunities and challenges of operating CBE –
BIRR Mobile money service. *The research has been analyzed through both descriptive and
explanatory form of research design to provide solutions to the research problems.
Stratified sampling method is used to draw the sampled branches and then a convenience
sampling method is used to distribute the questionnaire to the respondents. This study used
quantitative research approach and also both primary and secondary data sources are
used for this study and then both descriptive and inferential statistics have been used to find
mean, standard deviation, regression and correlation. The data are analyzed by using SPSS
version25package using this the correlation analysis results shows that all the four
dimensions of CBE Birr mobile money service have a strong positive relationship with
behavioral intention from this the highest relationship is found between perceived ease of
use and behavioral intention and the lowest relationship exists between perceived
usefulness and behavioral intention. The findings of multiple regressions identify the
relative contribution of each variable and determine the best predictor variables among a
set of variables. Finally, the means value for overall respondents' behavioral intention to
use CBE Birr mobile money is low which shows that there is a big gap between what it
should be and what it actually is. Based on the findings, the study recommends that the
CBE management should investigate the main reason of unsatisfied customers and
intentioned customers to use CBE Birr mobile money and also should be taken corrective
measure accordingly.*

Key words: CBE Birr mobile money, behavioral intention

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Today competition is getting intense than before so that companies need to start paying special attention to their E- service quality, competitors and development of new technological aspects ever after. Information technology is highly affecting human activities and their ways of life. Advancement in Information technology is changing every sector's working practice. Banking is one of the sectors which are rapidly evolving through information technology (Ferdous, Al Mosharrafa, & Farzana, 2015).

In the last two decades mobile technology has flourished throughout the developing world faster than any other technology in history. According to the International Telecommunication Union, mobile phone subscribers currently constitute 5.9 billion, the global penetration reaches a staggering 94% in general and 79% in the developing world (ITU, 2017). With that growth comes an equally impressive surge of messaging services, providing not just a broadly used means of personal communications, but also a number of valuable information services, from agricultural data reports to healthcare reminders. The latest phenomenon initiated by mobile technology is mobile money.

Mobile money is a subset of electronic money which refers to financial services and transactions made on a mobile phone. It is not always that the cases of these services are directly tied to a personal bank account. Mobile-money have different service some of them are person-to-person payments and mobile money transfer services which are experiencing rapid adoption in many markets, in response to steady growth in remittances and the worldwide distribution of cell phones and also the need for an electronic person to person payment alternative to paper-based mechanisms like cash and checks

Like all other business entities financial institutions in Ethiopia are being constantly expanding with technological innovations because of stiff competition in the industry. For instance, till recently bank customers were used to stand in line to get financial services, but

now because of the multi-channel service outlets they can perform it from anywhere at any time. Funds are transferred electronically between financial institutions and individual accounts, and between individual accounts using e-banking system like CBE Birr mobile banking. Mobile and Agent Banking means the conduct of banking business on behalf of a financial institution through an agent using various service delivery channels; so as to conduct various banking activities which primarily consists of opening and maintaining mobile/regular accounts and accepting deposits; performing fund transfer or cash in and cash out services using mobile devices.

CBE-BIRR is an agent banking 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. Commercial Bank of Ethiopia has more than 1,600 branches in Ethiopia and CBE-BIRR is taking advantage of this huge number of networked branches to recruit new agents and customers. Currently commercial bank of Ethiopia had 3,211 CBE-BIRR agents, 589,071 CBE-BIRR customers and mobilized 2.5 million birr (CBE annual report, June 2018).

There are different researches done in different institutions on the adoption, challenges, opportunities and factors that affects agent banking business in Ethiopia. However, any of the studies didn't include   opportunities   and challenges of operating CBE-BIRR mobile money because this service is launched recently by CBE (it is only around 2 years in practice) so this research tries to close the gap.

1.2 Statement of the Problem

Commercial Bank of Ethiopia is one of the top financial institutions in the country. CBE as a government bank has the responsibility to provide the modern bank service to unbanked society. Among different mechanisms one of the important service delivery system is called E Banking. Unlike the developed country, electronic banking systems are rare in developing countries like Ethiopia where cash are a highly used as a medium of exchange in the economy.

In order to encourage further CBE Birr Mobile money service in developing countries, a better understanding of the barriers and drivers impacting Mobile money service adoption is critical (Zhao. 2008). By gaining an in-depth understanding of the challenges and opportunities of Mobile money service and factors that influence its operation process so as developing countries like Ethiopia be able to fully operate and realize its benefit. 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 .So this research strives to identify challenges, opportunities and factors that influence its operations of CBE – BIRR mobile money services in Ethiopia.

The opportunities of electronic business appears to businesses is obvious and the trust on E banking service are increasing by many organization. Among the E banking service CBE birr mobile money is the recent product launched by CBE in 2017. This is used to minimize the cash involvement as a medium of the exchange in the economy and have a friendly package to users. This is an opportunity that CBE Birr brought. Since the implementation of CBE Birr mobile money as a payment instrument by the commercial bank of Ethiopia about three years ago.

There are lots of challenges of operating CBE Birr mobile money some of them are, regarding to the acceptance of the CBE birr mobile money service by the customers, inadequate awareness of the customers about CBE birr Mobile money services, luck of reliability of the CBE birr Mobile money services and infrastructure problem like network failure and power interruptions to use the CBE birr Mobile money services. (Source: Preliminary observation and informal interview with customers)

Thus, the researcher strives to identify and investigate these gaps in CBE by assessing the opportunities and challenges of operation of CBE – BIRR Mobile money service and will give an insight for the management about it. Because the customer needs, wants and attitude on mobile money are changing from time to time. There is a need to measure and

find the recent gaps with respect to opportunities and challenges of operations on CBE – BIRR Mobile money service.

1.3. Research Questions

Based on the statement of the problem, the study is addressed the following questions

1   What are the challenges of operating CBE – BIRR Mobile money service?
2   What are the opportunities of operating CBE – BIRR Mobile money service?
3   What factors influence customers' intention to use CBE – BIRR Mobile money service?

1.4. Objectives of the Study

1.4.1. General Objective

The general objective of this study is to assess the opportunities and challenges of operating CBE – BIRR Mobile money service in the case CBE Eastern District of Addis Ababa branches.

1.4.2. Specific Objectives

- To investigate the various challenges of operating   CBE – BIRR Mobile money service in Commercial Bank of Ethiopia.
- To identify the various opportunities of operating   CBE – BIRR Mobile money service in Commercial Bank of Ethiopia.
- To explore the factors that influence customers' intention to use CBE – BIRR Mobile money service Commercial Bank of Ethiopia.

1.5. Significance of the Study

The findings of this study are   expected to provide the empirical information on the opportunities and challenges of operating CBE – BIRR Mobile money service in Commercial Bank of Ethiopia and it will be useful to management of the Commercial Bank of Ethiopia. The researcher expects to get a practical knowledge about research project work and it can be used as a base point for other interested researchers for further investigation in the related issues.

1.6. Scope of the Study and Limitation of the Study

The research would be more fruitful if it has been conducted on a wider scale of the country. But due to time and financial constraints, the study is not in all branches of the CBE. Therefore, the generalization of the findings and the conclusions is limited to some selected CBE branches under East district Addis Ababa.

1.6.1. Scope of the Study

1.6.1.1. Geographical scope

This study is focused on the opportunities and challenges of operating CBE – BIRR Mobile money service in CBE under East District Addis Ababa on four branches. The branches are selected from all grade level categories of CBE. Thus, the researcher believes that taking sample branches from different grade level categories helps to get relevant and appropriate data from customers'

1.6.1.2. Conceptual scope

The study examines the opportunities and challenges of operating CBE – BIRR Mobile money service from customers' perspectives and the researcher has applied standardized TAM model variables questionnaires for the study by adding perceived risk and perceived trust variables in to this model.

1.6.1.3. Methodological scope

The research has been analyzed through both descriptive and explanatory form of research design to provide solutions to the research problems and stratified sampling method is used to draw the sampled branches and then a convenience sampling method is used to distribute the questionnaire to 375 respondents. This study used quantitative research approach and also both primary and secondary data sources are used for this study.

1.7. Organization of the Study

This paper is organized into five chapters. The first chapter contains background of the study, statement of the problem, basic research questions, objective of the study, significance of the study, scope of the study, limitation of the study and organization of the paper. And the second chapter deals with the review of related literature. The third chapter deals with the methodology and the fourth chapter presents data analysis, interpretation. The fifth chapter presents the summary of findings, conclusion and recommendation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Theoretical Literature

2.1.1. Definition of Mobile Money

Mobile money (mobile payment) is a payment service operated under the financial regulatory framework and performed from or via a mobile device. In mobile banking, there is the opening and maintenance of 'mobile account' at financial institution whereas in mobile money it is a stored-value prepaid payment mechanism. Compared to other African nations, Ethiopian financial institutions were very late to introduce the mobile banking services. In bank-led mobile banking, banks and microfinance make use of mobile phones to reach many customers as an extension of their services and products. With mobile banking, a customer can access banking services from any corner of the country at any time using his/her mobile phone. The available mobile banking services include balance inquiry, transaction details, payment of utility bills, bank statement, intra-account transfers, inter-account transfers and alerts for withdrawal on a customer account. The government-owned giant bank, CBE, launched mobile banking service on December 11, 2017, after it has passed the pilot period provided in the Regulation of Mobile and Agent Banking Service Directive. Using the mobile banking service of the CBE, a customer can deposit, withdraw, transfer money, make payments, buy mobile airtime and pay the bill in a very simple and convenient way. Currently, ten banks are offering mobile banking services.

Mobile money can serve as a gateway to financial inclusion, enhancing the impact of international remittances on development .The characteristics of mobile money are convenience; privacy and reach make it a particularly attractive remittance channel for rural households. World Remit 10.3 data shows that mobile money is the preferred way for their customers to send money to rural areas. Mobile money can play a critical role in formalizing international remittances. Leading mobile money providers and international remittance are working together to ensure international transfers conducted through mobile money in a safe and secure manner.

2.1.2. Mobile Money Payment

Mobile Money payments are evolving to the next generation of electronic payments, the mobile channel. Advances in technology have enabled alternative functionalities for mobile handsets beyond the original visions of the designers of handsets or wireless communication architectures to supporting a new and viable channel for mobile financial services, including bill payment and account transfers, domestic and international Person to Person transfers, proximity payments at the point of sale, and remote payments to purchase goods and services (Merritt, 2010)

Mobile-money service have different service among them are person-to-person payments, or mobile money transfer services (MMT), are experiencing rapid adoption in many markets, in response to steady growth in remittances, the worldwide distribution of cell phones, and the need for an electronic Person to person payment alternative to paper-based mechanisms like cash and checks. More than a billion people worldwide lack access to traditional financial services, particularly in emerging countries, although they have mobile phones (Pickens, 2009). As of 2009, 68 percent of the world's population had mobile cellular subscriptions (ITU, 2009)

2.1.3. Mobile Money Adoptions

Mobile Money is now available in 90 countries; it has become the leading payment platform for a digital economy in emerging markets. Sub-Saharan Africa has long been the epicenter of mobile money, and growth in this region shows no sign of slowing. In 2017, for the first time, most industry growth came from outside Africa. South Asia saw the highest year-on-year growth in accounts of any region (47 per cent) and now represents 34 per cent of registered accounts globally. The spread of mobile money beyond traditional footholds is also happening within Sub-Saharan Africa. In 2017, Western and Middle Africa were the fastest growing areas of Sub-Saharan Africa, led by tremendous growth in registered accounts in countries like Ghana, Côte d'Ivoire and Cameroon.

The approach to adopting mobile financial services differs throughout the world due to a variety of factors, including the regulatory and legal environments, access to supporting technologies, and economic constraints, as well as experience with antecedent products and services. Consumer need and experience represent key

components of each of these variables and the ultimate determinants of adoption. The vast diffusion of cellular networks allows telecom firms to extend services to broad geographic areas unreachable by traditional financial service providers dependent upon landline networks (Chatain, Hemandez-Coss, Borowik and Zerzan, (2008). In many emerging markets the rapid adoption of mobile payments has led to the unanticipated utility of prepaid airtime as an alternative currency. Expanded airtime distribution channels can accommodate a large customer market increasingly agnostic of geographic borders. Bilateral and multilateral partnerships between carriers expand the wireless network reach to facilitate the distribution of mobile payments services to a greater number of available users.

2.1.4. Mobile money usage globally

The industry continued to experience high growth in transactions. Total transaction values grew by 21 per cent from $26 billion in December 2016 to over $31.5 billion in December 2017. On average, an active customer moved $188 per month, primarily cashing in and out and sending person-to-person (P2P) transfers. Increasingly, customers are also paying bills; topping up airtime and conducting other transactions through their mobile money accounts saw the beginning of a potentially significant shift for mobile money to serve as a tool for saving money and earning interest.

2.1.5. Structure of Typical Mobile Money Service

The mobile money services I analyzed have many similarities in the approach taken to service delivery. In case of Ethiopia, mobile money service is introduced by different financial institution some of the mobile money service are M-birr, Hello cash and also CBE birr. Those mobile money services have the same futures as well they have differences. So generally in this section, I covered the standard structure of these mobile money services, in order to provide context for the rest of the paper. This descriptions below are not intended to comprehensively encompass all existing mobile money services, but to be broadly representative of all those I have seen, and to the best of my knowledge, broadly representative of the majority of existing services.

Owner / Operator: Mobile money services are typically owned and operated by either a Mobile Network Operator (MNO) or a financial institution (typically a bank). Each

type of organization has its pros and cons, MNOs have the benefit of owning the cellular network, providing and having access to consumers' mobile phones, and frequently have a physical presence in the relevant communities, but typically do not have experience in developing or distributing financial services, nor the regulatory ability to do so. This kind of mobile money service provider does not exist in our country. In turn, banks have the benefit of already offering similar services to the banked population, but must partner with an MNO to access consumers' phones, and must often develop new business models to succeed in lower income Populations (Ishan and Sachdev, 2015). In general, the question of which type of company deploys mobile money services is decided by regulators – in those countries in which MNOs are allowed to deploy their own mobile money services, they have tended to be the first movers, whereas in countries like Ethiopia where they are prevented from doing so, banks have tended to be the first movers.

Bank Account Operator: Money flowing through a mobile money service must typically be held in a regulated account of some sort. In many situations, even when the service is operated by a nonbank, a regulated bank is used as a back- end provider to actually hold customer funds as a custodian. These funds typically cannot be intermediated by the bank or the mobile money operator, and are also remote from the bankruptcy of the mobile money operator; however, the applicability of deposit insurance protections varies from country to country. In addition, any interest accruing on such funds typically can't be passed through to account holders. Convert it into electronic form, which they can then use to make payments or transfers directly through their phone (Ishan and Sachdev, 2015). Services delivered over the counter (OTC) require the customer to physically visit a representative of the mobile money operator, where the customer provides cash for transactions to the representative, who then uses his / her own mobile phone and mobile money account to effect the transaction and takes the cash. Many services offer customers both options.

Distribution Network: Mobile money operators typically leverage an "Agent Network" to distribute their services to customers. Agents are typically either a) retail locations directly owned by the Operator, b) existing merchants, generally small independent stores or sometimes chains, which have been signed up by the Operator, or c) a mix of both (Ishan and Sachdev, 2015). To reach scale, however, most mobile money

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services must eventually leverage outside merchants. In many cases, there is a hierarchy of agents, with larger agents having responsibility for managing a pool of smaller agents. Agents are typically located in close proximity to the customers they are serving, and provide services including account registration, cash-in/cash-out, and OTC transactions, in addition to potentially helping market the service and educate customers. Thus, agents are the primary way in which customers interact with the system.

Customers Served and Fee Structure: Mobile money operators typically require at least one party in a transaction to be a customer of the service (i.e. they must have an account with the operator), however services differ in whether they require both parties to be customers (e.g. whether a customer can send a Person to Person transfer to a non-customer). Whereas, the different fee structure are employed by many mobile money services, however they are typically all a) transaction-based (i.e. fees charged on a per-transaction basis), and b) involve fees charged to consumers. Transactions can include both transfers to others (e.g. Person to Person transfers), or cash-in / cash-out. Services typically set fees in order to encourage different behaviors they believe will be beneficial to their service – i.e. charging higher fees for cash-out vs. cash-in, to encourage customers to put money into the system, or charging higher fees to individuals who are not registered users, to encourage them to become customers (Ishan and Sachdev, 2015).

Service Delivery Method: Mobile money services are typically delivered in one of two ways –either directly through a customer's mobile phone or Over-the-counter (OTC). Services delivered directly through a customer's phone require the customer to put cash into their mobile account Mobile money services are being deployed rapidly across emerging markets as a key tool to further the goal of financial inclusion. Financial inclusion, the development of novel methods to enable individuals at the base of the pyramid to access formal financial services and become part of the formal financial system, is considered a key pre-requisite for lifting these populations out of poverty and for driving economic growth (Ishan and Sachdev, 2015).

2.1.6. Key Competencies of Successful Mobile Money Service Competencies

Building an Effective Working Relationship with Regulators: Regulatory oversight, or the lack thereof, is an important aspect of any mobile money service, as frequently there are no pre-existing regulations which directly address mobile money services. [Note that there can be multiple regulators involved in the regulation of mobile money, the most common being financial and telecommunications regulators. however, we will use "regulator" to mean financial regulators, as they typically have primary oversight responsibility for mobile money services.] (Ishan and Sachdev, 2015). Why is this critical? Any company which wants to operate a mobile money service will need to build a relationship with the relevant regulators in order to ensure that it can operate a mobile money service without breaking any existing laws, and that regulations which are subsequently developed actually facilitate, vs. hinder, the development of mobile money services. This is particularly important in situations where the mobile money operator is a non-bank, as these organizations typically don't have pre-existing relationships with financial regulators. Regulators also have a bias to keep any new financial transactions within institutions over which they have oversight, so, left to their own devices, will often favor systems in which banks play a key role as they are the primary covered institutions in every country.

Building 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. (Ishan and Sachdev, 2015).Why is this critical? Customer trust is a critical pre-requisite as a) mobile money services, and financial services more broadly, are new to the customer segments being served, and the idea of moving from holding physical funds to electronic is a significant behavioral shift, b) in many of the markets in question, there are frequent scam operators who purport to offer various financial services but ultimately abscond with customers' funds, creating a general mistrust in these types of financial offerings, c) mobile money services require handing funds to individuals not personally known to

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customers (e.g. Agents), and d) even small disruptions in a customer's financial life from problems with the service can have significant ripple effects due to the lack of savings / financial cushion in these populations (for example, significant medical incidents can often require more funds than individuals have saved, and, if they can't be obtained from friends / relatives via a Person to Person transfer, predatory money lenders might need to be used). In addition, trust, once lost, is very difficult to rebuild.

Safekeeping of Customer Funds: Safekeeping of customer funds refers to ensuring that funds which customers put into the system are stored such that they are not vulnerable to theft, to being used as funding for the mobile money operator or for third party lending (and therefore vulnerable to being lost if that company goes bankrupt or has other internal problems), or to the corporate failure of any entity involved in the mobile money service. (Ishan and Sachdev, 2015). Why is this critical? This is critical because of a) the challenges relating to customer trust noted above and b) the fact that in many emerging markets, a system similar to the Federal Deposit Insurance Corporation (FDIC) does not exist, or if it does, it often does not cover mobile money accounts, particularly if the service is not operated by a regulated financial institution.

Facilitating Cash-In / Cash-Out: Facilitating cash-in / cash-out refers to the ability of customers to easily put funds into a mobile money service (i.e. convert their physical cash into electronic funds) and to withdraw funds from the service (i.e. convert their electronic funds into physical cash), at a location and at a time convenient to them (Rajiv Lal Ishan and Sachdev, 2015). Why is this critical? These are essential components of a mobile money service, much more so than might be expected, because a) only a small percentage of customers use their accounts as savings vehicles, and b) much of the economy in which customers exist is still a cash economy, requiring them to have physical access to funds to transact. In addition, research has shown that usage of mobile money services drops if there are not cash-in / cash-out locations in close physical proximity to customers, and if agents are not accessible at times when customers are free to visit them.

Mitigating Fraud: Fraud can refer to fraud by agents (e.g. taking cash-in or money meant for over the counter (OTC) transactions, but remitting it to their own personal

account) or by merchants (e.g. overcharging for transactions or not delivering services promised) (Habane, 2012) Why is this critical? Aside from the direct loss to those customers affected, it's also part of building and maintaining trust among the broader customer base. Fraud plays directly into the pre-existing mistrust of financial services noted earlier, and because incidents of fraud have been significant issues in many mobile money deployments. Thus, even a limited number of incidents of fraud can have a ripple effect on impacting customers' trust in the service and their willingness to use it.

Effective Customer Support: Customer Support refers to the options available to help customers with questions about the service, problems with transactions, or other concerns. This could include interaction via phone, SMS, or in-person (such as visiting an agent or operator retail location). Effective support is support that is a) available whenever a customer has a problem, b) accessible from wherever a customer might be at that moment, and c) resolves the problem in a reasonable amount of time (Ishan and Sachdev, 2015). Why is this critical? As both formal and electronic financial services are often very new to mobile money customers, they will typically have a large number of questions and / or problems as they get used to the service. Problems relating to financial transactions are also of the highest concern to consumers, particularly for those who are cash-constrained, so any delays in resolving even a small problem can cause a customer to stop using the service and / or create negative word-of-mouth sentiment. Simply being able to speak with a representative can give customers confidence that their issue is being handled, and can go a long way in building goodwill for the service as a whole. This level of customer support is not always the norm for companies / industries serving these customer segments, so it's important to take a different approach for mobile money services.

2.1.7. CBE Mobile Money Service

According to the annual report of CBE 2014/15, recent advancement in information technology towards service industry has brought about vast opportunities. The effort of CBE to tap these opportunities has been encouraging and crucial to transform the bank. The recent performance of CBE shows that the total cost of investment on IT hardware

and software reached around Birr 754 million in June 2015. This balance was around Birr 573 million in 2013/14. So CBE Birr is one of the crucial technologies to transfer the bank.

Commercial Bank of Ethiopia (CBE) officially launched its mobile money services dubbed CBE Birr on December 11, 2017 after successfully testing its functionality for six months. It is a mobile based banking whereby the bank selects, trains and authorizes agents to provide banking services on behalf of the bank through a mobile phone. It is deployed as a means of extending financial services to the unbanked segment of the public. Customers may no longer need to travel long distances to visit CBE branch as they can get the service from the nearest CBE agents through CBE Birr. A CBE Birr customer can deposit, withdraw, transfer money, make payments, buy mobile airtime and pay bill using a mobile phone in a very simple and convenient way (www.combanketh.et/CBE

Commercial bank of Ethiopia has found the mobile money service as a vital to enhance resource mobilization. Essentially, the CBE Birr services have agent banking, mobile payment and mobile transfer; through which it can reach potential new and unbanked customers. CBE has started the CBE birr service by creating branches as a top organization & branches are given a mandate to create agents and customers. Agents on the other hand, are entitled to recruit customers according to assessment of CBE Birr (2017).

Those parties have their own responsibilities to achieve the objective of the bank regarding to CBE birr. CBE Birr (Mobile Money) service is the best option for CBE to contribute for the financial inclusion strategy. In this regard, CBE in its role in the country would use the branchless option to be accessible to the society. So according to the assessment of CBE Birr (2017), CBE has a financial target to mobilize resource 1.8 billion at the end of this fiscal year, expand financial coverage and service accessibility, & a potential source of foreign currency through integration with third party international remittance agencies and also non-financial target to recruit customers, agents and merchants more than 1.5 million, 1,500 and 3,000 respectively by the end of 2018 and to introduce value added service (electronic payment services).

2.1.8. Evaluation of CBE Birr Process

The CBE birr team was organized under the branch operation process with the aim to focus on business and operation aspects of the Mobile Money services operationalization. In business and operations, the team had been assigned and engaged in the requirement development, third party integration management, support for contact center and as well maintenance of the transaction and reconciliation activities. On the other hand, the agent and merchant team were organized to focus on activities of Top Agent/ Merchant recruitment, Agent quality management, agent and merchant network management and support services. Furthermore, these teams were engaged in marketing activities (participate in events and concept development on advertisement and promotional materials), and provide training for branches, agents, and merchants.

Thus, the CBE Birr team has been engaged in the following activities; Transaction monitoring, transaction settlement and reconciliation, support for contact center and district offices, requirement development for third parties and CBE birr business needs , agent and merchant quality and network management ,support in customer recruitment ,partnership with third party fetch company and other organization (NGO , private and Government organizations and top agent and merchant recruitments and others

2.1.9. Opportunities of Operating CBE- Birr Mobile Money Service

These were to enable the bank to offer the functionalities of Mobile payments, Mobile transfer, and   these helps to create an innovative financial delivery channel to deepen financial services accessibility to the wider section of the population at large and in particular to the low income people. Consequently, the bank has found the following significant motives from CBE Birr (Mobile Money) services to attain its strategic objectives:

- To mobilize resources;
- To contribute to the financial inclusion strategy of the country;
- To meet the demand for financial service that has been continually rising as the economies grow in various areas;
- To bring proximity of banking services to the lower part of the population;

- To provide banking services via agents where the Bank branches are not able to provide the service. There are some geographic areas where opening the Bank Branch is not feasible at all.
- To increase customer base and market share
- Agency banking is a significant opportunity to reduce transaction costs
- Enhanced accessibility to banking services so it creates wider market coverage and customer loyalty
- Play an important role in enhancing cross-selling and price differentiation
- Dramatically reduce printing, mailing, and financial handling costs associated with processing transaction.

- Enhance payment security by minimizing theft or loss.
- Reduce undeliverable payments via electronic delivery to the card account.
- Prevent fraud through automated controls
- Increase customer satisfaction and enhance service to constituents.
- Ensure continuity of service to cardholders in emergency or disaster situations
- Improve operational efficiency and profitability of the issuing banks.(source :Commercial Bank of Ethiopia CBE Birr division)

2.1.10. Challenges of Operating CBE-Birr Mobile Money Service

CBE faces numerous challenges to fully adopt and operate CBE-Birr Mobile Money Service .some of them are:

- High cost of advertisement to create customer awareness about CBE-Birr Mobile Money Service like Fear of risk and inadequate knowledge about it.
- Lack of awareness on the benefits of new technologies and untrusted relationship with the Agents
- Establishing effective agent with well-trained manpower; trusted by customers; strategically and conveniently located; and properly incentivized to follow procedures, keep sufficient float on hand, and serve customers.
- Product Image in the Society due to Agent inappropriate act.
- Managing the Risk like Technological related risks, Infrastructure and Software Application Risks, IT operational risks

- Low level of internet penetration and poorly developed telecommunication infrastructure: Lack of infrastructures.
- For telecommunications, Internet and online payments impede smooth development and improvements in e-commerce in Ethiopia. Most rural areas of the country, where the majority of small and medium businesses are concentrated, have no Internet facilities and thus are unable to engage in e-commerce activities.
- Lack of suitable legal and regulatory framework for e-commerce and e-payment: Ethiopian current laws do not accommodate electronic contracts and signatures. Ethiopia has not yet enacted legislation that deals with e-commerce concerns including enforceability of the validity of electronic contracts, digital signatures and intellectual copyright and restrict the use of encryption technologies
- Political instabilities in neighboring countries: Political and economic instabilities in Somalia, Southern Sudan, and Eritrea are threatening traits that do not provide a very conducive environment for e-banking in Ethiopia. Political instabilities inevitably disturb smooth operations of business and free flow of goods and services
- Political instabilities in neighboring countries: Political and economic instabilities in Somalia, Southern Sudan, and Eritrea are threatening traits that do not provide a very conducive environment for e-banking in Ethiopia. Political instabilities inevitably disturb smooth operations of business and free flow of goods and services.
- High rates of illiteracy: Low literacy rate is a serious impediment for the adoption of E-Banking in Ethiopia as it hinders the accessibility of banking services. For citizens to fully enjoy the benefits of E-Banking, they should not only know how to read
- High cost of Internet: The cost of Internet access relative to per capita income is a critical factor. Compared to the developed countries, there are higher costs of entry into the e-commerce market in Ethiopia. These include high start-up investment costs, high costs of computers and telecommunication and licensing requirements
- Absence of financial networks that links different banks (Banks are not yet automated): Most of the banking-transactions currently taking place use credit and debit cards supplied by Visa and MasterCard. For conducting e-banking, the use of

credit or debit cards is mandatory thus requiring the need for specialized systems which are not currently available

- Frequent power interruption: Lack of reliable power supply is a key challenge for smoothly running
- Resistance to changes in technology among customers and staff due to:
- Lack of trained personnel in key organizations and tendency to be content with the existing structures and also People may be resistant to new payment mechanisms
    - Cyber security issues: Cyber security is a global challenge that requires global and multi-dimensional response with respect to policy, socio-economic, legal and techno Lack of awareness on the benefits of new technological aspects. Mobile banking applications represent a security challenge as they highly depend on critical ICT systems that create vulnerabilities in financial institutions, businesses and potentially harm banking customers. It is imperative for banks to understand and address security concerns in order to leverage the potentials of ICTs in delivering E-banking applications. In the deployment of mobile banking application, attention should be drawn to the prevention of cybercrime (i.e. the use of ICTs by individuals to commit fraud and other crimes. .(source :Commercial Bank of Ethiopia CBE Birr division)

2.1.11. M-Birr mobile Money

M-Birr Limited provides mobile money services. It offers M-Birr service, software as a service platform that provides mobile money services to financial institutions. In addition to the financial services, it provides business, marketing, and strategic consulting services. The company serves residential and business customers; and banks and microfinance institutions in Ethiopia. M-Birr Limited was incorporated in 2001 and is based in Dublin, Ireland (https://www.mbirr.com.et, 2018). And service is partner with and provided by the 5 largest Micro Finance Institutions in Ethiopia

2.1.12 .Hello Cash Mobile Money

Hello Cash is a mobile service provided initially by Lion International Bank S.C, Cooperative bank of Oromia and Somalia micro finance institutions. Now it is available at

LIB, Wegagen bank, Oromiya international bank ,Somali Micro Finance Institution (SMFI) and the Cooperative Bank of Oromia (CBO). The transaction volume from these institutions is 65pc in the Somali State and 35pc in Addis Abeba. SMFI has 1,197 agents. Hello Cash users can access their accounts using a mobile phone through channels USSD, SMS and online web portal as a complementary channel. The service is available in 5 languages [Amharic, Oromifa, Tigrigna, Somali and English] allowing a localized and convenient user experience

2.1.13. Some Models and Theories

2.1.13.1. Technological Acceptance Model (TAM)

TAM is an adaptation of Fishbein and Ajzen's Theory of Reasoned Action (TRA) that proposes that behavior is a direct consequence of behavioral intention, Koenig-Lewis et al. (2010). Most literatures on mobile services show that TAM is the most widely used, validated and replicated theoretical model in the prediction of future consumer behavior (Legris et al, 2003). Davis argues that the intention to use a particular technology is based on a person's behavioral intention which is determined by two beliefs; perceived ease of use and perceived usefulness (Sangle & Awasthi, 2011). Many authors have established that the TAM constructs are insufficient in examining a user's acceptance of mobile money services and have employed different extended versions of the model (Davis, 2000). Figure 2.1 Technology Acceptance Model (TAM)
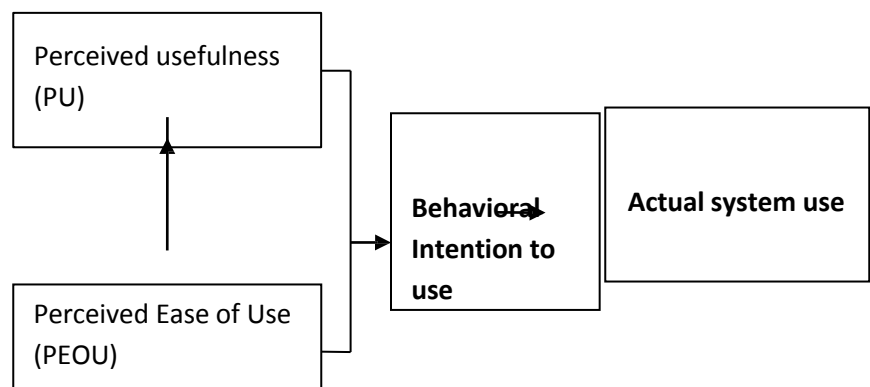
The constructs are explained as follows:

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Perceived Ease of Use - The perceived ease of use construct refers to the degree to which an individual expects that using a particular system would be free of effort (Liu & Li, 2009).Perceived ease of use on the other hand, relates to whether mobile financial services is easy to learn and use (Aldas-Manzano et al, 2012).

Perceived Usefulness - Perceived usefulness refers to the degree to which an individual perceives that using a particular system would enhance his/her job performance (Liu and Li, 2009). Aldas-manzano et al., (2012) assert that perceived usefulness refers to the advantages that financial transactions offers and whether using a mobile phone is useful for performing financial transactions.

2.1.13.2. Diffusion of Innovation (IDT)

The other widely used theory is IDT, 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‖ (Rogers, 2003). 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 observability (Rogers, 2003) as the key characteristics that enable an innovation to be taken up by a population. Some of the main construct of the theory are;

Relative advantage Rogers (2003) defines relative advantage as the degree to which an innovation is perceived as better than the idea it supersedes. It refers to whether the innovation is perceived to be superior to the product or service from which it evolves (Laukkanen & Kiviniemi, 2010).

Complexity Rogers (2002) describes complexity as the degree to which an innovation is perceived as relatively difficult to understand and use. Complexity is similar to the perceive ease of use component of TAM and is a significant predictor of the intention to use and adopt an innovation as the more complex an innovation is the slower its rate of adoption will be (Liu & Li , 2009).

Compatibility Rogers (2003) defines compatibility as the degree to which an innovation is perceived to be consistent with existing values, past experiences and the need of potential users. In the context of mobile money, compatibility refers to the extent

to which m-money is consistent with consumers' lifestyle and current needs (Kleijnen et al., 2004)

Observability Rogers (2002) argues that observability is the degree to which the results of an innovation are visible and tangible to others. Cruz et al., (2010) affirm that probability of adopting an innovation increases when the benefits and usage of innovation can be easily observed.

Trialability is defined as the degree to which an innovation can be tried on a limited basis (Rogers 2002). For financial services, however, Aldas-Manzano et al (2009) assert that customers are unable to try them before adoption.

2.1.13.3. 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 Venkatesh et al., (2003). Zhou (2011) 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 (Venkatesh et. al., 2003).

2.2. Empirical Literature

The researcher tried to review related researches works pertaining to the topic in order to demonstrate through understanding of the research topic. Based on the objectives and main findings of each research works under consideration, the review tries to make a link between the theoretical and empirical reviews in light of the underlying themes towards the provision of CBE Birr mobile money services; such as the various challenges and opportunities . There are many research works done related with these issues in different place. Some of them are listed below.

Mosoti and Mwaura. (2014) "An Investigation on Slow Adoption of Agent Banking Services in Kenya as Strategic Response by Commercial Banks" The objective of the study was to investigate on the factors influencing slow adoption of agent banking services by customers as a financial inclusion tool by commercial banks in Kenya. The

study has found that costs charged due to use of Agent Banking services were high this is because they were much higher compared to normal bank charges such as ATM charges. Transport is also an issue for those areas where there is no wide network coverage, trustworthiness, security of transacting, infrastructure challenges such as system and power failure and liquidity concern were some of the challenges that contributed to the slow adoption of Agent Banking. The study also found out that other competing services offered by banks which are far much convenient, reliable, guarantees confidentiality and which operate for 24 hours such as ATMs, Internet Banking and Mobile Banking creates slow adoption of the Agent banking business.

Masinge (2010) studied the factors influencing the adoption of mobile banking services at the bottom of the Pyramid in South Africa. Masinge finds that with the convergence of banking services and mobile technologies, users are able to conduct banking services at any place and at any time through mobile banking. This Study examined the factors influencing the adoption of mobile banking by the Bottom of the Pyramid (BOP) in South Africa, with a special focus on trust, perceived cost and perceived risk including the facets of perceived risks: performance risk, security/privacy risk, time risk, social risk and financial risk. The research model includes the original variables of extended technology acceptance model (TAM). Erickson (2010) did study mobile money: cell phone banking in developing countries. He established that transfer either local currency or mobile minutes. Mobile money can increase access to financial services. Microfinance institutions in particular can benefit from the use of mobile money. Unfortunately, regulatory and initial investment barriers can prevent widespread adoption of mobile money. He demonstrates that mobile money can serve as a poverty reduction tool by increasing savings rates, creating jobs, and increasing access to financial products offered by microfinance institutions. Based on the potential benefits of mobile money, he recommended that governments subsidize the development of local mobile money infrastructure and adopt policies that enable the formation of a decentralized network of trusted mobile money agents.

Wolela, (2014) "Prospects and Challenges on the Implementation of Mobile and Agent Banking in Ethiopia" The objective of the study was to investigate prospect and challenges of Mobile and Agent banking in Ethiopia based on structural, organizational, infrastructural, economic, social and legal aspects. It was exploratory type of research design and data was collected through conducting interviews with key informants from different stakeholders such as selected Financial Institutions, Technology providers, NBE and Ethio Telecom. Data were discussed with narrative method of qualitative data analysis. The researcher found out that the challenges revolve around on: having competitive price with the traditional banking offerings, improper articulation of organizational structure, infrastructure issues like Telecom, Power and road, failure to realize interoperability among financial institutions and financial literacy level of the society. Moreover, the research identified that the strangest regulatory framework drafted by NBE has missing and ambiguous articles which casted shadow on the provision of Mobile and Agent Banking in Ethiopia. The research recommended the Mixed Model approach for Agent Banking business in Ethiopia and the requirement of experience sharing with countries following similar model with Ethiopia for the successful implementation of Mobile and Agent Banking.

On the other hand the descriptive study conducted by 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 agent 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. The benefits were also classified as Perceived Ease of Use and Perceived Usefulness. In the conclusion The study recommended banks to consider technology based competition focusing on customer base expansion, cost reduction, awareness creation, credibility, security, ease of use, and availability to exploit the benefit of agency banking while the government should support banking sector by facilitating sufficient ICT infrastructure development and issue workable legal frameworks to ease the adoption of agency banking system.

2.3. Research Framework

The measurements of customers' intention to use commercial bank of Ethiopia CBE – BIRR mobile money service is carried out with the aid of TAM model. But the researcher make some adjustments instead of using copy of the TAM model by adding perceived risk and perceived trust variables in to TAM model variables.

Figure 2.2 Conceptual Framework
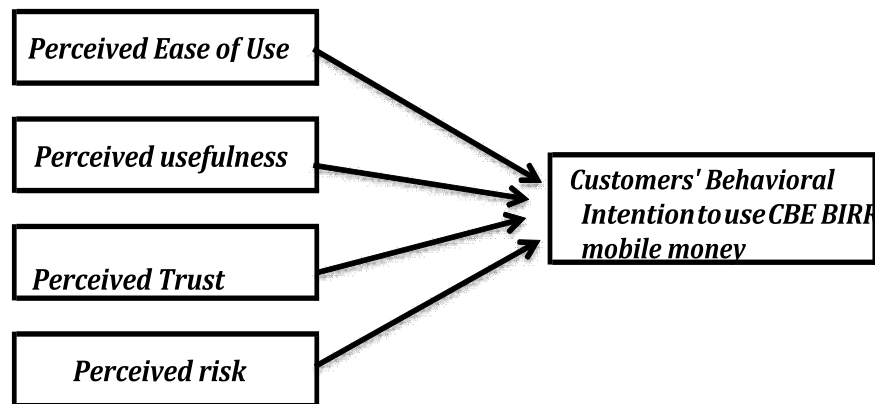
Behavioral Intention: - Consistent to all models drawing from psychological theories which argue that individual behavior is predictable and influenced by individual intention. Given that the ultimate goal of businesses (i.e., banks) is to attract consumers to adopt their services rather than the intention to adopt services, extensive research has examined the relation between behavioral intention and actual use (Sripalawat et al. 2011). This thesis tried to examine the relationship between CBE- BIRR mobile money customer behavioral intention and actual behavior.

Perceived ease of use (PEOU): - Perceived ease of use is one of the characteristics of innovation adoption most widely used in ICT context (Wan et al., 2005; Hernandez and Mazzon, 2006). A new system is likely to be adopted if it requires fewer maneuvers to operate. Hence, when a system is complex its use takes a while to be adopted (Rogers, 2002; Eriksson et al., 2008). The determinants of perceived ease of use advanced in the literature include knowledge of

Mobile money services, self- efficacy, innovativeness, facilitating conditions, and accessibility. It is important that a mobile money service is less complex for use by

all, making it easy for all customers to adapt to it especially in emerging markets. (Eriksson et al. (2008) Literatures confirm that Perceived ease of use had a significant influence to customers' adoption.

H1: Perceived Ease of Use has a positive and significant relationship with behavioral intention to use to CBE- BIRR mobile money service.

Perceived Usefulness (PU): - PU in the adoption of mobile money services is defined in a broader context to include how well consumers believe mobile money services can be integrated into their daily activities (Kleijnen et al, 2004). When this belief increases, the consumer's intention to use the mobile money services will also increase the adoption rate is likely to be higher. (Luarn & Lin, 2005) Ultimately, mobile money service must be viewed as useful to experience adoption success.

H2: Perceived usefulness has a positive and significant relationship with behavioral intention to use CBE- BIRR mobile money service.

Perceived Trust (PT): - Mobile Money environment, like all business transactions require an element of trust. To become a viable unit of doing business mobile money service should overcome user distrust (Siau et al, 2003). And for the purpose of this study, perceived trust is defined as a measure of consumer's level of assurance that the service will be provided with minimum possible hindrance. Consumers need to have a belief that the network is reliable. Previous studies have found perceived trust as a significant determinant influencing consumers' behavioral intention towards conduct electronic commerce transactions (Mallat, 2007; Zhou, 2011).

H3: Perceived Trust has a positive and significant relationship with behavioral intention to use CBE- BIRR mobile money service.

Perceived Risk (PR): - Tobbin (2011) defined risk as a consumer's belief about a potential uncertain negative outcome from the use of the service. Consumers would want to take minimal risk with their choices. Every consumer is faced with two types of risk in the purchasing decision, uncertainty and eventual negative

consequence of the purchase (Chemingui &Lallouna, 2013). According to Koenig-Lewis et al., 2010, there are six different types of risk, performance, financial, physical, social, psychological and time risk and various literature asserts that risk has a direct relationship with behavioral intention (Luarn and Lin, 2005; Kim et al., 2009). Koenig-lewis et al. (2010) conducted a study and found perceived risk to contribute to adoption of a service. For a service to be adopted, providers of the service must take into consideration the security and privacy of the service.

H4: Perceived risk has a positive and significant relationship with behavioral intention to use CBE- BIRR mobile money service.

CHAPTER THREE

RESEARCH METHODOLOGY

This part deals with methodology which includes the research design, research approach, and study population, sample size, sampling method and data analysis procedures which are applied in this study and process of dealing with identifying the problem, collecting facts or data, analyzing these at the end it includes validity and reliability.

Research method is the data and reaching at a certain conclusion either in the form of sol unions towards the problem concerned or certain generalization for some theoretical formulation. Moreover, research method describes the methods employed to gather the data and analyzed it by accompanying the research design, sampling technique, measurement and instrumentation, data collection, conceptual framework and information analysis. It also comprises of a number of alternative approaches and interrelated and frequently overlapping procedures and practices. Since there are many aspects of research method, the line of action has to be chosen from a variety of alternatives. The choice of suitable method can be arrived at through assessment of the objectives and comparison of various alternatives.

3.1. Research Approach

According to Creswell (2009), quantitative, qualitative, and mixed research are the three business and social sciences research approaches .The quantitative approach involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion. This approach can be further sub-classified into inferential, experimental and simulation approach to research. Qualitative approach is concerned with subjective assessment of attitudes, opinions and behavior .This study is applied quantitative research approach.

3.2. Research Design

According to Malhotra and Birks (2007), a research design is a frame work or blueprint for conducting a research and it details all the necessary information needed to structure and solve the research problems and also it is the foundation on which the research project is built and it is the program that guides the researcher in the process of collecting, analyzing

and interpreting the data .A good research design seeks to ensure that the research project is conducted effectively and efficiently .From different types of research designs descriptive and explanatory type of research design is employed as a main research design for this study to the realization of intended objectives. The reason behind using descriptive research design is because the researcher is interested in describing the existing situation under study. Creswell (2009) stated that the descriptive method of research is a technique of gathering information about the present existing condition and it is a research which describes existing phenomena and it is used to identify and obtain information on the characteristics of a particular problem or issue. And also the objective of descriptive research is to portray an accurate profile of persons, events or situations (Saunders, 2009). This research design is a fact finding study with adequate and accurate interpretation of findings. According to Malhotra (2005), descriptive research is based on large, representative samples and the data obtained are subjected to quantitative analysis. This study is used explanatory research design to explaining, understanding, predicting and controlling the relationship between variables. By taking cross-section of the population relevant data is collected at one point in time. So the researcher is used both descriptive and explanatory research types.

3.3. Target Population

CBE has 1600 branches and 15 districts that are distributed across the country. Currently it has more than 25 million customers in Ethiopia. As per the information from Management Information system department of the bank, to make the study manageable and because of resource and time constraints, this study has selected four branches from 115 branches that found under East district of Addis Ababa branches .So the target populations of this study are customers which are found in Addis Ababa branches under East Addis Ababa District (EAAD). This district is selected from other districts in Addis Ababa city due to convenient geographical location, the cost and time for the researcher.

3.4. Sampling Technique and Sample Size

3.4.1. Sampling Technique

Sampling Techniques are methods used to select a sample from the population by reducing it to a more manageable size (Saunders, Lewis and Thornhill, 2007). Sample is the segment

of the population that is selected for investigation (Bryman and Bell, 2003).Sample size is actually the total number of units which are to be selected for the analysis in the research study. However, it is not possible for researcher to get in touch with a big number of samples, as the sample size is critical question in practice. The decision about the size and the sample needs to consider time and cost, the need of precision, and a variety of further considerations (Bryman and Bell, 2003). In conducting a study, it is not possible, practical and sometimes expensive to gather data by considering entire population. Therefore smaller chunks of a unit sample are chosen to represent the relevant attributes of the whole of the units (Graziano and Raulin, 1997).The eventual sample size is usually a compromise between what is desirable and what is feasible.

Stratified sampling first requires dividing the heterogeneous population into homogeneous strata that are mutually exclusive and comprehensive, and thereafter a sample of elements is drawn independently from each stratum. Malhotra (2010) cautions that the elements within a stratum should be as homogeneous as possible with the elements of each stratum as heterogeneous are possible. This author adds that the stratification variables should be closely related to the characteristic of interest. Parasuraman(2007), note that this sampling technique compels the sample to contain elements of each of the strata of the population and the distinguishing feature of a proportional sampling is that guidelines are set to ensure that the sample represents certain characteristics in proportion to their prevalence in the population.

In convenience sampling, the sample is drawn from a section of the population that is readily accessible or available to the researcher (Wiid & Diggines, 2009). The sample is accordingly drawn at the convenience of the researcher, often as the study is conducted. According to Malhotra (2007), this method allows for obtaining a sample in a quick and inexpensive manner. Many author further states that with convenience sampling, the sampling elements are easy to measure and are also cooperative. It is best used explanatory research. For the purpose of this study, a stratified probability sampling method is used to draw the sampled branches from the target population and then a convenience non-probability sampling method is used to distribute the questionnaire.

3.4.2. Sample Size

Based on stratified sampling technique, branches of CBE are categorized under four strata: which is Grade one, two, three, and four. From these categories; the researcher selected one from each grade categories. Thus four branches are selected as a sample by using simple random and stratified sampling technique for this study. Because , the researcher believe that taking those different grade level categories of the branches as a sample helps to get relevant data from the customers   from those branches. Finally, after determining the sample group the researcher is employed convenience sampling technique to distribute questionnaire for the respondents. The rationale behind employing convenience sampling method is because all customers are not available in the bank at the same time and it is not possible to contact everyone who may be sampled and also it is the best for explanatory research. The branches are Mecca branch, Gerji Giorgis branch, Imperial Akababi branch and Bole branch. In total 6,060 customers are there in selected branches. In order to determine sample size; the researcher used formula for calculating the required sample size in four sampled branches of CBE Birr customers from different grade level categories. The formula was developed by Taro Yamane (1967)

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

Assumptions: 95% confidence level, and e $= \pm$5%

This study has: n- Desired sample size, the research use

N - Designates total number of CBE Birr customers in the selected branches

e $-$ Designates maximum variability or margin of error 5% (0.05).

1 $-$ Designates the probability of the event occurring

$$n=\frac{6,060}{1+6,060(0.05)^2} =375.23 \text{ (375)}$$

Hence; the total sample size is 375.

The numbers of people in each sample branches are not the same so this needs to proportionate for each branch and calculate using the following formula.

$n=\frac{nN1}{N}$ where; n is total number of sample

N is total number of population (CBE birr customers)

N1 is total number of population in each branch (CBE birr customers)

- Mecca branch $=\frac{375*45}{6,060}=3$

- Gerji Giorgis $=\frac{375*2440}{6,060}=151$

- Imperial Akababi $=\frac{375*182}{6,060}=11$

- Bole $=\frac{375*3393}{6,060}=210$

Table 3.1 Lists of sampled branches

Branch Grade Categories	Sampled Branches' Name	Total number of CBE Birr Customers	Total number of Sampled Respondents
1	Mecca	45	3
2	Gerji Giorgis	2,440	151
3	Imperial Akababi	182	11
4	Bole	3,393	210
Total		6,060	375

Source: Management Information system department and CBE managers, (May, 2020)

3.5. Data Type, sources and Collection Instrument

There are several methodological approaches available to gather data and for the proper Achievement of the objectives of the study .According to Saunders (2009), the use of two or more independent sources of data or data collection methods helps to confirm findings in the study .Primary data is a data source which has not been subjected to processing or any other manipulation which are collected by the investigator conducting the research. Therefore, primary sources of data are collected through questionnaire.

Secondary data is obtained from different documents of the bank like service strategy documents, CBE reports, published thesis works, unpublished thesis works, websites and research articles from journals. For this study the researcher is used primary and secondary data sources.

3.6. Data Analysis

Kothari (1990), defined the term analysis as the computation of certain measures along with searching for pattern of relationship or differences that exist among data groups. After collecting the data, the data is analyzed using a descriptive data analysis technique which is presented by tables, frequency distributions and percentages to give a condensed picture of the data. This is achieved through summary of simple statistics, which includes the mean and standard deviation values which is computed for each variable in this study. Inferential statistics is used to analyze the existing relationship between the two variables. The researcher will be used Statistical Package for Social Sciences (SPSS) version 25 software which helps to process and analyze the correlation analysis and multiple regression analysis. Correlation analysisis used to explore the relationship between service quality dimensions and customer satisfaction. Where as, a multiple regrassion analysis is used to test the hypothesis and to find out the effects of independent variables on the dependant variable.

3.7. Reliability

According to Saunders, Lewis and Thornhill,(2007) reliability is an indication of how consistent the findings are based on the method of data collection and analysis.According to George and Mallery (2003) Cronbach's alpha is a tool for assessing reliability scale which normally ranges between 0 and 1.Cronbach's alpha coefficient greater than 0.9 implies excellent, greater than 0.8 is good, greater than 0.7 is acceptable, greater than 0.6 is questionable, greater than 0.5 is poor, and less than 0.5 is unacceptable".Accordingly, the Accordingly, the reliablity test of each dimension is described as here under

Table 3.2 Reliablity test of CBE Birr mobile money dimensions and Behavioral intention to use CBE Birr

CBE Birr mobile money dimensions and Behavioral intention to use CBE Birr	Number of items	Cronbach's Alpha Based on Standardized Items
Perceived Ease of Use	5	0.985
Perceived Usefulness	4	0.931
Perceived Trust	3	0.989
Perceived Risk	4	0.989
Behavioral intention to use CBE Birr	3	0.981
Overall items used	19	0.995

Source: own survey result,2020

Table 3.2 above indicates that the cronbach alpha of each CBE BIRR dimensions is between 0.931 and 0.995, which is the above 0.7.Thus the study is reliable.

3.8. Validity

According to Saunder (2003), Validity is defined as the extent to which data collection method or methods accurately measure what they are intended to measure.

Validity is concerned with the extent that the scale accurately represents the construct of interest. In order to assure the validity of the data the study is conducted based on the literally accepted conceptual framework that clearly indicate the theoretical construct and associated data valid to assess the relationship between CBE Birr mobile money (dependent variable) and opportunities and challenges of operation (independent variable). Where possible this should be supported by past research and consideration given to practical things that affect the research (Dereje, 2014 cited Greenfild, 2002).30 questions was distributed as a pilot to check the validity of questions to further data collection process. As per the comments and the discussion with CBE employees and customers the questions is prepared to primary data collection for the research objective to found validity of the questionnaires by the researcher.

3.9. Ethical Considerations

The study has taken necessary ethical issues into consideration. When collecting questionnaires from customers and employees of CBE , their permission and mutual consent is asked and the purpose is thoroughly explained. Name of the respondents and details are not be asked to write in order to increase the confidentiality of the information they give and also the questionnaire is explain that the purpose of research is for academicpurpose. Finally, the respondents are included based on their willingness. So this study is conducted in the appropriate and ethical manner taking all ethical issues into consideration.

CHAPTER FOUR

DATA PRESENTATION ANALYSIS AND INTERPRETATION

This chapter consists of several analyses including demographic information of respondents presented in the form of tables to give an overview of respondents' profile. Descriptive analysis is used to find out the frequency of respondents by calculating mean and standard deviation. Inferential analyses describe the crucial tests of getting final result which included correlation analysis, and multiple regression analysis. SPSS version 25 statistical software is used.

In order to get a representative data 375 questionnaires were prepared and distributed to the users of CBE Birr Mobile money. Out of these 375 questionnaires distributed to customers and employees, 360 questionnaires were collected back. Thus, the analysis is based on the 360 questionnaires response from customers and employees.

Table 4.1 Response Rate of Questionnaires Administered

Measurement	Correctly filled and Returner	Not Correctly filled	Not returned	Total
Number	360	6	9	375
Percentage	96	1.6	2.4	100

Source: own survey results, 2020

This implies that the respondents were smart and the researcher has given serious follow up.

4.1 Demographic Characteristics of Respondents

The demographic characteristics of the respondents include gender, age, level of education, frequency of visiting the branches, customers' relationship with the branches, time taken to get the service and CBE customers' response on the recommendation of others. This aspect of the data analysis deals with the analysis of personal data on the respondents of the questionnaires given to them. The tables below show the details of background information of the respondents and their percentage.

Table 4.2 .Demographic Characteristics of Respondents

	Variables	Frequency	Percent	Valid percent
Gender	Male	201	55.83	55.83
	Female	159	44.17	44.17
	Total	**360**	**100.0**	**100.0**
Age group	18-24	60	16.67	16.67
	25-34	108	30	30
	35-44	129	35.83	35.83
	45-64	63	17.5	17.5
	Above 64	0	0	0
	Total	**360**	**100.0**	**100.0**
Level of education	High School and below	81	22.5	22.5
	Certificate	48	13.33	13.33
	Diploma	96	26.67	26.67
	Degree	78	21.67	21.67
	Masters	57	15.83	15.83
	Above masters	0	0	0
	Total	**360**	**100.0**	**100.0**
How long you use CBE – BIRR mobile	Below six month	42	11.67	11.67
	6 month to 1 year	93	25.83	25.83
	Above 1 year	225	62.5	62.5
	Total	**360**	**100.0**	**100.0**
Frequency of CBE – BIRR	Daily	33	9.17	9.17
	Weekly	89	24.82	24.82
	Once in a month	101	28.06	28.06
	Never (only registered)	137	38.05	38.05
	Total	**360**	**100.0**	**100.0**

Source: own survey results, 2020

Findings indicate that the majority respondents are male 26.67 %(201) and the rest 44.17% (159) are female. This gender proportion indicates that the CBE Birr mobile money service users are mostly male. This information can, therefore, be used for designing promotional and attractive service potential users.

Regarding to age of respondents 35.83%(129) of the respondents are in the age range category of 35 to 44 years, 30% (108) of the respondents are in the age rang category of 25

to 34 years, 17.5% (63) of them in the age rang category of 45 to 64years and the 16.67% (60) respondents are in the age rang category of 18 to24 and there is no CBE Birr mobile money users in the age rang category of above 64 years old. Therefore, the result shows that majority of this service users are within the age range of 25-44years. This reflects that the majority of CBE Birr mobile money service user which is provided by CBE in Addis Ababa selected branches are adults. This seems to be good as the young will have longer relationship with the Bank than the rest of the respondents. Besides, there is a need for creating a retention mechanism for the young users as the youth is the future of the economy.

With regard to educational level of respondents, the majority of the respondents are grouped under the educational level of diploma covering 26.67% (96) of the total respondents. The rest of the respondents are categorized under the educational level of high school and below 22.5% (81), Certificate 13.33% (48), Degree 21.67 %(78) and masters 15.83% (57). This indicates that the majority respondents are literate. This means, they have some concepts about CBE Birr mobile money service and they can easily understand the importance of CBE Birr mobile money. Thus the bank should give appropriate CBE Birr mobile money service for these potential users by talking their comments as an input.

With respect to respondents' relationship with (Duration of time) with the CBE – BIRR mobile money service, 62.5% (225) of the respondents have stayed using CBE Birr mobile money for above 1 year, 25.83%(93) of the respondents are for 6 month to 1 year and the remaining11.67%(42) of the respondents were for less than 6 month relationship with the CBE Birr mobile money. Since there is tough competition in the market the bank needs to devise strategy to retain this group as it is expected to be the newly emerging economic power in the economy.

With regard to respondents' frequency of using (visiting)the CBE – BIRR mobile money service28.06% (101)of CBE customers visit their CBE – BIRR mobile money service once in a month, 24.82%(89) of CBE customers visit their CBE – BIRR mobile money service weekly, a little over 9.17% (33)of CBE's customers visit their CBE – BIRR mobile money service daily , 38.05% (137)of CBE customers are not using CBE –

BIRR mobile money just ,they only registered .This shows that the majority respondents 38.05% (137)are not considered as the proper users of CBE – BIRR mobile money service . This could also indicate that these customers have some constraints and weakness to use CBE – BIRR mobile money service.so this can be an input for the bank to give attention and create awareness about this service.

4.2. Descriptive Analysis of Challenges and Opportunities

The questionnaires were designed using Likert Scale where almost all the statements were measured on a five point scale with 1 = strongly disagree   ;   2 =   disagree; 3 = neither agree nor disagree (neutral); 4 = Agree; and, 5 = strongly agree. The information obtained from the questionnaire are summarized and discussed in the tables.

Descriptive statistics (mean and standard deviations) of the respondent scores were computed. Analysis has been done by comparing these mean scores and deviations among respondents. The reason for using descriptive statistics is to compare the different factors that affect the level of behavioral Intention to use CBE – BIRR mobile money on the selected commercial bank of Ethiopia   by using the means and standard deviations values.

The mean value represents the average of all respondents response on certain dimensions while, standard deviation shows how diverse the responses of the respondents. When the standard deviation is smaller number, it indicates that the response of the respondents shows close opinions and when the standard deviation is high, it indicates that the response of the respondents shows high variation (Zaidatol & Bagheri, 2009).

Based on the survey result, challenges and opportunities of implementing and operating CBE – BIRR mobile money service by commercial bank of Ethiopia are identified and discussed as follows.

2.4.1. Analysis of Opportunities of CBE Birr

Table 4.3 Opportunities of Operating CBE– Birr

N O	Opportunities	Percentage (%)					M ea n	SD
		1	2	3	4	5		
1	CBE – BIRR has improve in the banking habit	7.5	13.	35	26.	16.	3.3	1.1
2	CBE – BIRR creates the late adopter	5.6	10.	20	34.	29.	3.7	1.1
3	Government commitment to s t r e n g t h e n banking industry	7.5	13. 1	27 .8	22. 5	29. 2	3.5 3	1.2 44
4	government commitment to expansion of ICT infrastructure	5.0	6.7	18 3	41. 1	28. 9	3.8 2	1.0 77
5	existence of high demand of CBE	6.7	10.	11	38.	33.	3.8	1.2
6	CBE – BIRR increase an educated customer	1.4	6.1	17	40.	34.	4.0	.94

Source: own survey results, 2020

As shown in the above table 4.3, the average mean for "CBE – BIRR mobile money   has improve in the banking habit of the society" is 3.33 with the standard deviation of 1.129 which is average .This shows that the most respondents believe or agree about   this service which has improve in the banking habit of the society and also this service creates the late adopter opportunities. The third   and the fourth aspect of opportunities questions are in moderate level of mean value which shows most respondents agree on the commitment of the government makes to the s t r e n g t h e n of the banking industry and   government has importance to facilitate the expansion of ICT infrastructure and also majority of the respondents agree that the existence of high demand CBE – BIRR mobile money service. The last aspect from the opportunity questions   says that   "CBE – BIRR mobile money has increase an educated potential customer" this   is   in high class which means that the most respondents agreed that this service has increase an educated potential customers and make them the users of such latest technology.

The next open ended question is about opportunities of implementation and operating of CBE – BIRR mobile money service in commercial bank of Ethiopia accordingly the respondents answer listed as follows. It increase service excellence ,it saves resources like time, finance, human resource   ,government forces bill payment to banks like water, electricity, ethio-telecom prepaid payments   ,bank mobilize additional resources through

CBE Birr products ,creates job opportunities for agents, they earn commission for each service

2.4.2. Analysis of Challenges of CBE– Birr

Table 4.4 Challenges of Operating CBE–Birr

No.	Challenges	1	2	3	4	5	Mean	SD
1	limitation in building effective agent network	5.0	6.1	17.2	36.4		3.91	1.102
2	Limitations in availability and quality of infrastructure	2.5	3.9	8.9	47.5	37.2	4.13	.909
3	Lack of customer awareness about CBE – BIRR	3.3	3.3	19.7	40.6	33.1	3.97	.981
4	resistance to changes in technology	7.5	12.2	34.2	29.2	16.9	3.36	1.126
5	Lack of reliable customer to support CBE – BIRR	2.2	5.6	14.2	43.1	35.0	4.03	.957
6	Customer lack of confidence with the security aspects of CBE – BIRR mobile money service	6.9	11.7	21.1	31.4	28.9	3.64	1.210
7	unavailability of appropriate Agent	7.5	12.2	28.9	26.4	25.0	3.49	1.203

Source: own survey results, 2020

As can be seen on the above table4.4, 84.7% of the respondents have responded their agreement on the limitations in availability and quality of infrastructure (telecommunication, electricity). With mean value 4.13 and standard deviation 0.909. In addition the majority of the respondents (73.7%) agreed that on the Lack of customer awareness about CBE – BIRR mobile money service with the mean value 3.97 which is high and standard deviation is 0.981.On the other aspects of challenges, the respondents believed that, on limitation in building effective agent network, unavailability of appropriate Agent Banking channels, resistance to changes in technology by the society , Customer lack of confidence with the security aspects of CBE – BIRR mobile money service and lack of reliable customer to support CBE – BIRR mobile money service in commercial bank of Ethiopia, in which mean score are founded 3.91, 3.49, 3.36, 3.64 and 4.01 respectively.

From this one can understand that most respondents have agreed on all aspects of challenges with moderate and high mean value which means that the CBE – BIRR mobile

money service has   not fully aware to the users and the respondents are not supported properly by professionals about this service. This implies, it is necessary to check and take an action or improvement by creating good to the users in regarding to the CBE – BIRR mobile money service.

The next open ended question is about challenges of implementation and expansion of CBE – BIRR mobile money service in commercial bank of Ethiopia accordingly the respondents answer listed as follows. High cost of advertisement to create customer awareness , establish trusted relationship with the agent, product image in the society due to agent in appropriate act and managing the risks, infrastructure , software application risk and IT operation risk

4.3 Analysis of Factors that Affect Customers' Behavioral Intention

4.3.1   Perceived Ease of Use Dimension

This section shows that the respondents perception of the first Perceived Ease of Use on CBE

Table 4.5 Perceived Ease of Use

Perceived Ease of Use Aspects	Percentage (%)					Mean	SD
	1	2	3	4	5		
I find CBE - BIRR easy to use	7.5	14.2	33.6	28.1	28.1	3.32	1.135
Registration procedures easy for me	9.7	21.1	31.7	23.1	14.4	3.11	1.183
CBE - BIRR is user friendly	13.1	13.4	18.1	25.6	29.8	3.46	1.379
It is easy for me	16.9	17.5	19.2	21.1	25.3	3.20	1.428
CBE - BIRR process is easy to remember	10.6	17.2	20.8	27.5	23.9	3.37	1.301
Cumulative mean	11.56	16.68	24.68	25.08	24.3	3.29	1.285

Source: own survey results, 2020

Regarding   the Perceived Ease of Use Aspects 11.56% of respondents   are strongly disagree on the perceived ease of use of CBE Birr service of CBE, 16.68% respondents are

disagree on this statement and 24.68% have shown neutral ideas on it. The remaining 49.38% splits in to Agree and strongly agree 25.08% and 24.3% respectively. This indicates that the majority of the users are agreed with the majority aspects of perceived ease of use the CBE Bier mobile money .And also mean value for Perceived Ease of Use Aspects shows relatively good value compared with the following others aspects. The cumulative mean value is 3.29which has moderate mean value.

From this one can understand that most respondents have agreed on the CBE - BIRR mobile money service easy to use, registration procedures are easy and become skillful at using CBE - BIRR mobile money service. This implies, it is necessary to check and take an action or improvement regarding to this aspect.

4.3.2 Perceived Usefulness of Use

This section shows that the respondents perception of the Usefulness dimension

Table 4.6 Perceived Usefulness

Perceived Usefulness Aspects	Percentage (%)					Mean	SD
	1	2	3	4	5		
CBE-BIRR useful for making payment	23.9	19.2	30.8	15.6	10.6	2.70	1.280
CBE - BIRR service helps save time	27.2	22.2	23.1	17.8	9.7	2.61	1.314
CBE-BIRR convenient and accessible.	22.2	23.3	26.1	12.2	16.1	2.77	1.356
CBE -BIRR outweigh the disadvantages	10.0	20.8	16.9	22.5	29.7	3.41	1.363
Cumulative mean	20.8	21.4	24.2	17.0	16.5	2.87	1.328

Source : own survey results, 2020

As can be seen on the above table4.6, 42.2% of the respondents have responded their disagreement on the Perceived Usefulness Aspects of CBE Birr service of CBE. However 33.5% of respondents expressed their agreement on the Perceived Usefulness Aspects of CBE Birr service of CBE. The remaining 24.2% have shown neutral ideas on it.

As can be seen on above table 4.6, the mean value for Perceived Usefulness Aspects are all classified in low level mean value category. This shows that the respondents have a lack

of understanding or awareness about the usefulness of the CBE Birr mobile money service and also can be inferred that the bank has a weakness on the creation of awareness on this service

4.3.3. Perceived Trust

This section shows that the respondents perception of the trust dimension

Table 4.7 Perception of the trust

Perceived Trust Aspects	Percentage (%)					Mean	SD
	1	2	3	4	5		
CBE-BIRR transactions are secured;	15.8	16.7	18.6	24.4	24.4	3.25	1.402
CBE - BIRR privacy is secured;	13.3	20.6	14.2	23.6	28.3	3.33	1.416
CBE-BIRR is confidential	15.8	16.9	16.4	26.7	24.2	3.26	1.404
Cumulative mean	15.0	17.9	16.4	24.9	25.6	3.28	1.407

Source   : own survey results, 2020

 As mentioned in the above table 4.7, Perceived Trust Aspects 15.0% of respondents   are strongly disagree on the Perceived Trust of CBE Birr service of CBE, 17.9% respondents are disagree on this statement and 16.4% have shown neutral ideas on it. The remaining 50.5% splits in to Agree and strongly agree 24.9% and 25.6% respectively. This indicates that the majority of the users are agreed with the majority aspects of Perceived Trust the CBE Bier mobile money .And also mean value for Perceived Trust Aspects shows relatively good value compared with the others aspects. The cumulative mean value is 3.28which   has moderate mean value. From this one can understand that most respondents have   agreed on the perceive trust aspects of CBE - BIRR mobile money service. This implies the bank has secured their information, privacy and transaction.

4.3.4. Perceived Risk

This section shows that the respondents perception of the risk dimension

Table 4.8 Perceived Risk

Perceived Risk Aspects	Percentage (%)					Mean	SD
	1	2	3	4	5		
If I lose my mobile phone, I will not lose my money as well	16.9	17.5	21.1	26.4	18.1	3.11	1.353
If there is a network problem, my transactions will be affected	16.9	17.5	16.9	27.2	21.4	3.19	1.397
my money to be stolen if using CBE - BIRR	8.1	15.0	26.4	26.1	24.4	3.44	1.234
low risk of other people tampering with my personal information during transaction	11.4	18.6	23.3	22.2	24.4	3.30	1.326
Cumulative mean	13.3	17.2	21.9	25.5	22.1		1.326

Source   : own survey results, 2020

As mentioned above table 4.8, the majority respondents are expressed their agreements on the Perceived Risk dimension shows that 13.3%, 17.2%, 21.9%, 25.5% and 22.1% on strongly disagree, disagree, neutral, agree and strongly agree respectively. The Cumulative mean of assurance shows that 30.5 %(majority) of respondents   agreed but 47.6% respondents disagree on it. The remaining 21.9% are neutral on the statements. The cumulative mean value is 3.26 which   have moderate mean value.

4.4. Behavioral Intention to Use CBE – BIRR

This shows that the overall behavioral Intention to use CBE – BIRR mobile money service of employees and customers in CBE.

Table 4.9 CBE Birr users Intention statement

CBE Birr users Intention statement	Percentage (%)					Mean	SD
	1	2	3	4	5		
I intend to continue to use CBE	18.6	19.7	16.7	23.9	21.1	3.09	1.422
I recommend CBE-BIRR to others	10.0	20.8	16.4	22.5	30.3	3.42	1.368
I enjoy using all available CBE – BIRR	12.5	17.8	22.8	20.6	26.4	3.31	1.360
cumulative mean	13.7	19.4	18.6	22.3	26.0	3.27	1.383

Own survey results, 2020

As mentioned above table 4.9, the majority (48.3%) respondents are behaviorally Intended to use CBE – BIRR mobile money service or satisfied with this service however 33.1% of respondents are not behaviorally intended to use CBE – BIRR mobile money service or not satisfied with this service. The remaining 18.6% are neutral on the statements which means that there is some problem or difficulties in their mind about CBE – BIRR mobile money service

Generally, the mean value for CBE birr mobile money users satisfaction is **3.27** with a standard deviation of **1.383**. The mean value for overall respondents' satisfaction to use CBE Birr mobile money is low which shows there is a big gap between what it should be and what it actually is. From this it can be concluded that the bank has not provided adequate CBE Birr mobile money service for its customers and the respondents are not satisfied with this service of CBE.

4.4 Inferential Analysis

Inferential analyses describe the crucial tests of getting final result which included Spearman's correlation analysis and multiple regression analysis.

4.4. 1. Correlation Analysis

According to Saunders et al. (2009), a correlation analysis used to identify the direction and relationship between the variables. Correlation coefficient enables to quantify the strength of the linear relationship between two variables. Correlation refers to synonym for association or the relationship between variables and it measures the degree to which two sets of data are related. Higher correlation value indicates stronger relationship between both sets of data. When the correlation is 1 or-1, a perfectly linear positive or negative relationship exists; when the correlation is 0, there is no statistical relationship between the two sets of data (Vignaswaran, 2005). A low correlation coefficient; 0.1 - 0.29 suggests that the relationship between two items is weak or non-existent. If r is between 0.3 and 0.49 the relationship is moderate. A high correlation coefficient i.e. >0.5 indicates a strong relationship between variables.

The direction of the dependent variable change depends on the sign of the coefficient. If the coefficient is a positive number ,then the dependent variable moves the same direction ;if the coefficient is negative then the dependent variable move the opposite direction of the independent variable .Hence in this direction both the direction and the level relationship between behavioral Intention and use CBE – BIRR mobile money service are conducted using correlation coefficient .As shown in the objective and conceptual framework of this study, to test the relationship between behavioral Intention and use CBE – BIRR mobile money service, the following correlation analysis is performance.

Table 4.10 Correlation Analysis

Spearman's rho	CBE Birr mobile money service aspects		Behavioral Intention
	Perceived Ease of Use	Correlation Coefficient	.989**
		Sig. (2-tailed)	.000
		N	360
	Perceived Usefulness	Correlation Coefficient	.962**
		Sig. (2-tailed)	.000
		N	360
	Perceived Trust	Correlation Coefficient	.986**
		Sig. (2-tailed)	.000
		N	360
	Perceived Risk	Correlation Coefficient	.986**
		Sig. (2-tailed)	.000
		N	360

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

Own survey result, 2020

As shown in the above table 4.10, all the CBE Birr mobile money service aspects have a significant positive relationship with behavioral Intention. The results indicate that, there is positive and strong relationship between perceived ease of use and behavioral intention ($r = 0.989.**$, $p < 0.01$), perceived usefulness and behavioral intention ($r = 0.962**$, $P < 0.01$), perceived trust and behavioral intention ($r = 0.986**$, $p < 0.01$), and finally the correlation between perceived risk and behavioral intention ($r = 0.986**$, $P < 0.01$). This shows that all the independent variables are positively and significantly correlated with the dependent variable i.e. behavioral intention at 99 percent confidence level ($p<0.01$).

Therefore, the overall analysis shows that there is positive and significant relationship between perceived ease of use, perceived usefulness, perceived trust and perceived risk with behavioral intention. The findings further indicate that the highest relationship is found between perceived ease of use and behavioral intention and the lowest relationship comparing to others exists between perceived usefulness and behavioral intention.

4.4. 2. Multiple Regression Analysis

Multiple regressions are the most common and widely used to analyze the relationship between a single continues dependent variable and multiple continues on categorical independent variable (George et al, 2003).Regression model was applied to test how far CBE Birr mobile money service aspects had impact on behavioral intention. Coefficient of determination-R2 is the measure of proportion of the variance of dependent variable about its mean that is explained by the independent or predictor variables (Hair et.al, 1998). Higher value of R2 represents greater explanatory power of the regression equation. But before regression analysis is formulated we have test the assumptions like multicolinarity, check the VIF (variance inflation factor) and degree of tolerance, linearity test, Normality.

4.4.2.1. Assumption Testing for Regression Analysis

Meeting the assumptions of regression analysis is necessary to confirm that the obtained data truly represented the sample and that researcher has obtained the best results (Hair et al., 1998). Three assumptions for regression analysis used in this study were discussed for the individual variables: multicollinearity, linearity and Normality. In the following paragraphs, each assumption is explained.

- **Multi Collinearity**

Hill et al., (2003) explain that economic variables may move together in systematic ways when the data are the result of an uncontrolled experiment. Such variables are believed to have problems with collinearity or multi-collinearity rises, it will complicate the interpretation of the variables because it is more difficult to confirm the effect of any single variable, owing to their interrelationship (Hair et al., 1996).To meet multiple regression assumptions it need tolerance score above 0.1 and VIF scores below 10.

 So with regards to multi-collinearity statistics this study has shown below table, the Tolerance and Variance Inflation Factors (VIF) showed that there was no multi-collinearity because VIF of all variables were less than 10, and tolerance scores above 0.1.

Table 4.11:Multi-Collinearity Test of VIF and Tolerance.

Dimensions		Collinearity Statistics	
		Tolerance	VIF
	Perceived Ease of Use	.193	9.224
	Perceived Usefulness	.712	7.834
	Perceived Trust	.717	7.227
	Perceived Risk	.513	8.709

Source   : own survey results, 2019

- **Linearity**

The linearity of the relationship between the dependent and independent variable represented the degree to which the change in the dependent variable is associated with the independent variable (Hair et al., 1998).Linearity refers to the degree to which the change in the dependent variable is related to the change in the independent variables. To determine whether the relationship between the dependent variable (behavioral intention) and the independent variables (perceived ease of use, perceived usefulness, perceived trust and perceived risk); the plots of the regression residuals through SPSS software had been used. The linearity graph is attached in the appendix

- **Normality of the Distribution**

In terms of this assumption, a check for normality of the error term is conducted by a visual examination of the normal probability plots of the residuals. Malhotra et al. (2007) propose that normal probability plots are often conducted as an informal means of assessing the non-normality of a set of data. According to Hair et al. (1998), the plots are different from residuals plots in that the standardized residuals are compared with the normal distribution .The distribution of the findings can be regarded as normal if it displays a skewness of less than an absolute value of 2.00, and a kurtosis of the distribution of less than 7.00 (West, Finch & Curran 1995).There are some residuals (e.g., those occurring around 0) that are relatively far away from the curve, many of the residuals are fairly close. Moreover the histogram is bell shaped which lead to infer that the residual (disturbance or errors) are normally distributed. Thus, no violation   of the assumption normally distributed error term. So with regards to normality distribution this study has been checked through SPSS software. The normality distribution graph is attached in the appendix.

4.4.3. Model Summary CBE Birr

In this study multiple regression analysis was employed to examine the effect of CBE Birr mobile money service aspects on the behavioral intention

The following table presents the results of multiple regressions analysis. Here the squared multiple correlation coefficients (R2) which tells the level of variance in the dependent variable that is explained by the model.

Table 4.12 Model Summary CBE Birr mobile money service aspects and behavioral intention

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	. .991^a	. .981	. .981	. .81771

Predictors: (Constant), perceived ease of use, perceived usefulness, perceived trust perceived risk   Dependent Variable: behavioral intention

In overall, the results revealed that on one hand, the independent variable accounted for 64.7percent of the variance in dependent variable (R2 = . .981). Thus, 98.1percent of the variation in behavioral intention can be explained by the four aspects of CBE Birr mobile money**.**

4.4.4. Multiple Regression Coefficients for CBE Birr

To investigate the effect of CBE Birr mobile money service aspects on behavioral intention, a multiple linear regression model is applied by taking each CBE Birr mobile money service aspects as an independent variables and overall behavioral intention to be as a dependent variable. The beta coefficients indicated that, how and to what extent CBE Birr mobile money service aspects such as perceived ease of use, perceived usefulness, perceived trust and perceived risk influence user's behavioral intention in CBE.

Table 4.13 Multiple Regression Coefficient for CBE Birr mobile money service aspects as behavioral intention

Model		Unstandardized Coefficients		Standardize Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.101	.030		-3.364	.001
	Perceived Ease of Use	.666	.056	.630	11.849	.000
	Perceived Usefulness	-.019	.030	-.017	-.637	.524
	Perceived Trust	.377	.056	.381	6.727	.000
	Perceived Risk	.000	.066	.000	-.005	.996

Dependent Variable: customer Satisfaction

Table 4.13, shows the standardize beta coefficient, which describe the unique contribution of each factor to the model. A high beta value and a small p value (<.05) indicate the predictor variable has made a significance statistical contribution to the model. On the other hand, a small beta value and a high p value (p >.05) indicate the predictor variable has little or no significant contribution to the model. (Ggorge et al., (2003)

Hypothesis testing is based on standardized coefficients beta with 95% confidence level to test whether the hypotheses are supported or not.

The result of table 4.13, showed that, the standardized coefficient beta and p-value of perceived ease of use is positive and has significant effect on behavioral intention with (Beta =.630 , p<0.01) .This shows that one percent increase in perceived ease of use results in 63.0 percent increase in behavioral intention. So that the researcher supported that perceived ease of use has positive and significant effect on behavioral intention

As shown in the table 4.13 above, p-value is not significant (p > 0.01), and the beta value of perceived usefulness is (beta = -.017).This shows that the bank has not given value for care and individual attention to its CBE Birr user .This also means that has insignificant and negative contribution to behavioral intention in this study .For this reason the researcher reject the directional hypothesis and perceived usefulness has insignificant effect. Therefore CBE has to work hard to improve the perceived usefulness aspects.

The results of table 4.13 revealed that, the standardized coefficient beta and p-value of perceived trust is positive and has significant effect on behavioral intention with (beta =.381,p<0.01) .This shows that one percent increase in perceived trust results in 38.1 percent increase in behavioral intention Therefore the researcher accepted that perceived trust has positive and significant effect on behavioral intention.

The outcome of multiple regression coefficient as presented in the table 4.13 above, 4.13 above, p-value is insignificant (p >0.01), and the beta value of perceived risk is zero (beta = .000).This shows that the bank has not given value for care and individual attention to its users of CBE mobile money. This also means that perceived risk has insignificant and no contribution to behavioral intention.in this study .For this reason the researcher rejected the hypothesis.

Moreover, from the findings of this study, the researcher found out that not all of the CBE Birr mobile money service aspects have positive effect on behavioral intention. Out of the five CBE Birr mobile money service aspects two dimensions (perceived ease of use and perceived trust) have positive and significant impact on behavioral intention. On the other hand, perceived usefulness has a negligible negative and insignificant effect on behavioral intention besides perceived risk has zero and insignificant effect on behavioral intention.

The findings of this study also indicate that perceived ease of use is the most important factor to have positive and significant effect on behavioral intention, followed by perceived trust. The result also helps us to understand which variables among the four independent variables and dependent variables are statistically significant and mostly determinant in explaining the variance in customers' behavioral intention to use CBE Birr mobile money.

Table 4.14 Summary of Hypothesis Testing Results

Hypot hesis	Statement of the hypothesis	Method of Analysis Used	Result of this study Supported / Rejected
H1	Perceived Ease of Use has a positive and significant 'effect with behavioral intention to use CBE- BIRR mobile money service.	Multiple Regression	Supported /positive
H2	Perceived usefulness has a positive and significant effect with behavioral intention to use CBE- BIRR mobile money service	Multiple Regression	Null/Rejected
H3	Perceived Trust has a positive and significant effect with behavioral intention to use CBE- BIRR mobile money service.	Multiple Regression	Supported /positive
H4	Perceived risk has a positive and significant effect with behavioral intention to use CBE- BIRR mobile money service	Multiple Regression	Null/Rejected

Source: own survey results, 2019

Regressions fit a predictive model to data and use that model to predict the values of dependent variable from one or more independent variables (Andy, 2005).

In multiple regressions the researcher use an equation of

$Y=B0+B1X1+B2X2+B3X3+B4X4+e$ perceived ease of use, perceived usefulness, perceived trust and perceived risk with behavioral intention, Where Y= behavioral intention (the dependent variable)B0= the constant ,B1-B4= the Beta coefficients for their respective dependent variables (predictors), X1-X4= the independent variables (perceived ease of use, perceived usefulness, perceived trust and perceived risk "Not all CBE Birr mobile money service aspects have a strong positive impact on behavioral intention." The equation can be as follows:

Behavioral intention =.101+.630 **(**perceived ease of use**)** -.017(perceived usefulness**)** + .381perceived trust)+ 000 **(**perceived risk)+**e**

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with the summary of major findings, conclusions drawn from the findings and the recommendations forwarded for improvement in CBE Birr mobile money services delivery process of the CBE branches. The recommendations cover the importance of improving on those aspects or dimensions in which the banks got inferior score and also to keep working on the superior scored dimensions. And at end the implication for further research would forward.

5.1. Summary of Findings

The main objective of the study is to assess the opportunities and challenges of operating CBE – BIRR Mobile money service in selected four CBE branches found under East district Addis Ababa. To achieve this objective of the study the researcher collected data using questionnaire from customers of CBE. Accordingly, the following findings from the analysis are stated here under.

The results of background information of respondents indicate that majority of the total respondents are male and aged in the range of 25-44 years. This means that most respondents are young.

The results of background information of respondents' shows that majority of the total respondents are diploma and degree holders. This means that, most respondents are literate which means they can easily understand the CBE Birr mobile money service.

With regard to respondents' frequency of using (visiting) the CBE – BIRR mobile money service shows that the majority respondents 38.05% (137) are not considered as the proper users of CBE – BIRR mobile money service.

The majority respondents have agreed on all aspects of challenges with moderate and high mean value which means that the CBE – BIRR mobile money service has not fully aware to the users and the respondents are not supported properly by professionals about this service

The majority respondents have   agreed on the CBE - BIRR mobile money service easy to use, registration procedures are easy and become skillful at using CBE - BIRR mobile money service.

 The majority respondents forwarded that   they have a lack of understanding or awareness about the usefulness of the CBE Birr mobile money service and also can be inferred that the bank has a weakness on the creation of awareness on this service

As most respondents agreed that the bank has secured their information, privacy and transaction.

Generally, the mean value for CBE birr mobile money users satisfaction is 3.27with a standard deviation of 1.383.The means value for overall respondents' satisfaction and behavioral intention to use CBE Birr mobile money   is low which shows there is a big gap between what it should be and what it actually is.

Majority respondents forwarded there is infrastructure problem like network failure and power interruptions to use the CBE birr Mobile money services.

The findings of the correlation analysis, indicates that all the independent variables are positively and significantly correlated with the dependent variable. The findings of correlation analysis also indicate that the highest relationship is found between perceived ease of use and behavioral intention and the lowest relationship exists between perceived usefulness and behavioral intention.

The findings of multiple regressions identify the relative contribution of each variable and determine the best predictor variables among a set of variables. Perceived ease of use has the highest contribution to behavioral intention among the independents variables (β = .630, p<0.01).

Findings of this study, the researcher found out that not all of the CBE Birr mobile money service aspects have positive effect on behavioral intention. Out of the five CBE Birr mobile money service aspects two dimensions (perceived ease of use and perceived trust) have positive and significant impact on behavioral intention. On the other hand, perceived usefulness has a negligible negative and insignificant effect on behavioral intention besides

perceived risk has zero and insignificant effect on behavioral intention. Not all CBE Birr mobile money service aspects have a strong positive impact on behavioral intention.

5.2. Conclusions

Based on the analysis of the study in chapter four the following conclusions are stated.This study has undertaken to assess the opportunities and challenges of operating CBE – BIRR Mobile money service in the case of CBE under east district   selected four Addis Ababa branches. The measurements of customers' intention to use commercial bank of Ethiopia CBE – BIRR mobile money service is carried out with the aid of TAM model. But the researcher make some adjustments instead of using copy of the TAM model by adding perceived risk and perceived trust variables in to TAM model variables.

The researcher is used both descriptive and explanatory research types. The target populations of this study are customers which are found in Addis Ababa branches under East Addis Ababa District (EAAD). This district is selected from other districts in Addis Ababa city due to convenient geographical location, the cost and time for the researcher.

 CBE Birr mobile money service is low which shows there is a big gap between what it should be and what it actually is. In addition CBE Birr service did not meet their expectation. The perceived ease of use is the most important factor to have positive and significant effect on behavioral intention, followed by perceived trust. The result also helps us to understand which variables among the four   independent variables and dependent variables are statistically significant and mostly determinant in explaining the variance in customers' behavioral intention to use CBE Birr mobile money.

5.3. Recommendations

Based on the findings and conclusions of the study and also based on a few open ended questions the following recommendations are forwarded which help to CBE management to improve CBE Birr mobile service and   to create good intention to use CBE Birr mobile service.

- With regard to   respondents'   frequency of using (visiting) the   CBE – BIRR mobile money service shows that the majority respondents are not considered as the proper users of CBE – BIRR mobile money service so the bank should identify this

problem and take an action or improvement by creating reward incentives for frequent users.

- The majority respondents forwarded that   they have a lack of understanding or awareness about the usefulness of the CBE Birr mobile money service and also can be inferred that the bank has a weakness on the creation of awareness on this service. So the bank should create awareness to the users of CBE Birr mobile money by using all forms of media like brochures, web site, mobile text...

- Banks should launch campaigns to create direct awareness to potential users issues such as fear of the lack of privacy, security, personal information during the transaction   and intention of money when their mobile lost and also other relative advantages   by giving short training about CBE Birr and giving important documents about CBE Birr mobile money service.

- The bank better continuously 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.

- Perceived ease of use has the highest contribution to behavioral intention among the independents variables .Thus, CBE should see and manage the items of behavioral intention dimension by creating additional convenient Software with additional services.

- All the four CBE Birr mobile money service dimensions are positively correlated with behavioral intention .Thus, CBE should see the behaviour of each dimension to one another while making a strategic decision as each of them is strongly correlated

- Majority respondents forwarded there is infrastructure problem like network failure and power interruptions to use the CBE birr Mobile money services. Actually this is country problem but the bank is better to find options.

- The means value for overall respondents' satisfaction and behavioral intention to use CBE Birr mobile money   is low which shows there is a big gap between what it should be and what it actually is.   Therefore the bank should exert it maximum effort to change this result for customers as they are the key drivers of its performance by preparing complaint handling mechanisms, open discussion with the CBE Birr users   though each and every activity and taking the feedbacks of CBE Birr users   and should incorporate the changes desired by the CBE Birr users in their feedbacks because the majority CBE Birr users are educated

5.4 Implication for further research

This research only focuses commercial bank of Ethiopia in Addis Ababa East district. Because of this, the possibility of drawing generalization from the findings of this study is limited. So that anyone who is interested to take a study in this area, it would be better to collect data from various places though out the country.

This study used TAM model; there could be some other relevant factors that may be vital for the behavioral intention to use CBE Birr. Future researches, therefore, may consider more factors which can influence the behavioral intention to use CBE Birr. The survey method employed in this study was through Likert scale, respondents rating their perception for each question. While if other methods like interview applied, respondents would be able to give more detailed response. This in return would help researchers to identify real problem areas as well as areas that are doing exceedingly well

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APPENDIXES

ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
QUESTIONNAIRE TO BE FILLED BY CBE CUSTOMERS

Dear Respondent,

I am currently a student of St. Mary's University, and I am doing my MBA thesis. On "**The Opportunities and Challenges of Operating CBE- Birr Mobile Money in the case of commercial bank of Ethiopia Eastern district Addis Ababa branches**. The purpose of this questionnaire is to gather data regarding the Opportunities and Challenges of Operating CBE- Birr Mobile Money in the case of CBE. The study is purely for academic purpose and thus does not affect you in any case. All of your response to the given question would be used for the research and will be kept confidential. Your timely and frank response is vital for the success of the study. Therefore, I kindly request you to respond to each question carefully. Thank you in advance for your cooperation and timely response!

Direction 1. No need of writing your name

2. Please put a check mark (√) on the appropriate box:

3. Please return the completed questionnaire

PART I. PERSONAL INFORMATION

1.1 **Gender**   Male ☐   Female ☐

1.2 **Age**   18-24 years ☐   25-34 years ☐   35-44 years ☐

45-64 years ☐   Older than 64 years ☐

1.3 Educational level High school and below ☐ Certificate ☐

Diploma ☐ Degree ☐ Masters ☐ above Masters ☐

PART II QUESTIONS RELATED TO TOPIC

1. For how long have you been using CBE – BIRR mobile money service?

Below 6 months ☐   6 month – 1 year ☐   above1 year ☐

2. How frequently do you use CBE – BIRR mobile money service?

Daily ☐   Weekly ☐   Once in a month ☐   Never (only registered) ☐

3. Please specify the activities that you perform by CBE – BIRR mobile money service?

PART III Please indicate the extent you agree or disagree of the opportunities of implementing and operating CBE – BIRR mobile money service.

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

NO. Opportunities	1	2	3	4	5
1	CBE – BIRR mobile money has improve in the banking habit of the society					
2	CBE – BIRR mobile money creates the late adopter opportunities					
3	The commitment of the government makes to the strengthen of the banking industry					
4	The commitment of the government has importance to facilitate the expansion of ICT infrastructure					
5	There is an existence of high demand					
6	CBE – BIRR mobile money has increase an educated potential customer					

7. If any, please mention some opportunities of implementing and operating CBE – BIRR mobile money service?--

PART IV – QUESTIONS RELATED TO CHALLENGES AND OPPORTUNITIES OF IMPLEMENTING AND OPERATING CBE – BIRR MOBILE MONEY SERVICE.

Please indicate the extent you agree or disagree of the Potential challenges of implementing and operating CBE – BIRR mobile money service.

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

No.	Challenges	1	2	3	4	5
1	There is a limitation in building effective agent network					
2	There are limitations in availability and quality of infrastructure (telecommunication, electricity, software					
3	Lack of customer awareness about CBE – BIRR mobile money					
4	There is a resistance to changes in technology by the society					
5	Lack of reliable customer support CBE – BIRR mobile money service					
6	Customer lack of confidence with the security aspects of CBE – BIRR mobile money service					
7	There is unavailability of appropriate Agent Banking channels					

8. If any, please mention some Potential challenges of implementing and operating
C B E – BIRR mobile money service?   --
-------- --

PART V 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 that affect customers' intention to use CBE – BIRR mobile money service.

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

No.	Variables	1	2	3	4	5
	Perceived Ease of Use					
1	I find CBE - BIRR mobile money service easy to use					
2	The registration procedures are easy for me					
3	The interface with CBE - BIRR mobile money is user friendly					
4	It is easy for me to become skillful at using CBE - BIRR mobile money service					
5	CBE - BIRR Mobile money process is easy to remember					
	Perceived Usefulness					
6	I find CBE - BIRR mobile money a useful way of making payment					

7	CBE - BIRR Mobile money service helps save time					
8	I find CBE - BIRR Mobile money service is more convenient and accessible.					
9	I believe the advantages of CBE - BIRR mobile money service would outweigh the disadvantages					
	Perceived Trust					
10	Using CBE - BIRR Mobile money service, I believe my transactions are secured;					
11	Using CBE - BIRR Mobile money service, I believe my					
12	Using CBE - BIRR Mobile money service, I believe my information is kept confidential					
	Perceived Risk					
13	If I lose my mobile phone, I will not lose my money as well					
14	If there is a network problem, my transactions will be affected					
15	It is difficult for my money to be stolen if using CBE - BIRR mobile money service					
16	There is a low risk of other people tampering with my personal information during the transaction					
	Behavioral Intention to Use CBE – BIRR mobile money service					
17	I intend to continue to use CBE – BIRR mobile money service					
18	I intend recommending CBE – BIRR mobile money service to others					
19	I enjoy using all available CBE – BIRR mobile money services.					

I thank you for the time and effort taken in fulfilling this questionnaire.

ቅድስት ማርያም ዩኒቨርሲቲ

የድህረ-ምረቃ ፕሮግራም

ለደንበኞች የተዘጋጀ መጠይቅ

ዉድ ደንበኞች

እኔ በአሁኑ ሰዓት በቅድስት ማርያም ዩኒቨርስቲ የድህረምረቃ (Master of Business Administration-MBA) ተማሪ ስሆን የመመረቂያ ጥናቴንም በኢትዮጵያ ንግድ ባንክ አዲስ አበባ ዲስትሪክት ስር ባለ ቅርንጫፎች ላይ የCBE Birr የሞባይል የገንዘብ ዝውውር ሲተገበር የሚገጥሙትን ችግሮች/ተግዳሮቶች (challenges) እና ያሉት ምቹ ሁኔታዎችን (Opportunities/Benefits) መዳሰስ በሚል ርዕስ ጥናቴን አያሰራሁ አገኛለሁ፡፡ ይህንንም አሳካ ዘንድ የእርሶዎ ትብብር በጣም ያስፈልገኛል፡፡ ስለዚህ መጠይቁ መልስዎን ይሠጡኝ ዘንድ በአክብሮት እጠይቃለሁ፡፡ ለመጠይቁ የሚሰጡት ምላሽ ለጥናት ብቻ የሚውል ሲሆን መልስዎትም በሚስጥር ይያዛል፡፡ ለትብብርዎ በቅድሚያ በጣም አመሰግናለሁ!

<u>ማስታወሻ</u>፡ -   ስም መጥቀስ አያስፈልግም፡፡

- ትክክል አማራጭ ፊት ለፊት የራይት (√) ምልክት ያድርጉ

ክፍል አንድ፡ የግል ሁኔታ

1.1   ፆታ   ወንድ [   ]   ሴት   [   ]

1.2   ዕድሜ   18-28 ዓመት [   ]   29-39ዓመት [   ]

40-49 ዓመት [   ]   49ዓመትበላይ [   ]

1.3   የትምህርት ደረጃ ሁለተኛ ደረጃ እና በታች [   ] ሰርተፍኬት [   ] ዲፕሎማ [   ]

የመጀመሪያ ድግሪ [   ] ሁለተኛ ድግሪ [   ] ከሁለተኛ ድግሪ በላይ [   ]

ክፍል �ለት፡ ከርዕሱ ጋር የሚዛመዱ ጥያቄዎች፡፡

1. የኢትዮጵያ ንግድ ባንክ CBE Birr የሞባይል የገንዘብ ዝውውር አገልግሎት ለምን ያህል ጊዜ ተጠቅመዋል?

ከ 6 ወር በታች [   ]   ከ 6 ወር -1 ዓመት [   ]   ከ 1 ዓመት በላይ [   ]

2. የኢትዮጵያ ንግድ ባንክ CBE Birr የሞባይል የገንዘብ ዝውውር አገልግሎትን በየ ስንት ጊዜ ይጠቀማሉ ?

በየቀኑ ☐ በሳምንት ☐ በወር አንድ ጊዜ ☐ አልጠቀምም ☐

3.በዚህ መጠይቅ ያልተካተቱ ተጨማሪ ስለ የሞባይል የገንዘብ ዝውውር አገልግሎት አስተያየቶች/ሐሳቦች ካልዎት ያስፍሩ

ክፍልሦስት ፡ ቀጥሎ ለተዘረዘሩት ጥያቄዎች የሚከተሉትን ደረጃዎች መሠረት በማድረግ ይመልሱ፡፡1= በጣም እስማማለሁ   2= እስማማለሁ 3= ገለልተኛ ነኝ

4= አልስማማም   5= በጣም አልስማማም

ተ.ቁ	ምቹ ሁኔታዎች	1	2	3	4	5
1	ባንኩ CBE – BIRR የሞባይል ገንዘብ ዝውውር አገልግሎት መጀመሩ ለደንበኞች ምቾትን ይፈጥራል					
2	CBE – BIRR የሞባይል ገንዘብ ዝውውር አገልግሎት ለባንኩ ዉጤታማነት ጥሩ አጋጣሚ ነዉ.					
3	የመንግስት እገዛ እና ጥረት ባንኩን ዉጤታማ ያደርገዋል					
4	የመንግስት እገዛ እና ጥረት ለአይሲቲ ዝርጋታ እና መስፋፋት ትልቅ ጥቅም አለዉ.					
5	የ CBE – BIRR የሞባይል ገንዘብ ዝውውር አገልግሎት ተጠቃሚ እየጨመረ ነዉ.					
6	CBE – BIRR የሞባይል ገንዘብ ዝውውር አገልግሎት የተማረ ተጠቃሚ ይፈልጋል					

7.ተጨማሪ CBE Birr የሞባይል የገንዘብ ዝውውር በመተግበር የሚገኙ ምቹ ሁኔታዎች (Opportunities) ካሉ ይጥቀሱ፡፡--- --------------------

ክፍል አራት ፡ የኢትዮጵያ ንግድ ባንክ CBE Birr የሞባይል የገንዘብ ዝውውር ለመተግበር የሚገጥሙ ችግሮች/ተግዳሮቶች (challenges) እና ያሉት ምቹ ሁኔታዎች (Opportunities/Benefits) .መመሪያ:- ቀጥሎ ለተዘረዘሩት ጥያቄዎች የሚከተሉትን ደረጃዎች መሠረት በማድረግ ይመልሱ፡፡1= በጣም እስማማለሁ

2 =እስማማለሁ3= ገለልተኛ ነኝ 4= አልስማማም 5 = በጣም አልስማማም

ተ.ቁ	ችግሮች/ተግዳሮቶች(Challenges)	1	2	3	4	5
1	ለባንክ ወኪሎች መስሪያ የህንጻ እጥረት አለ					
2	የኔቶርክ እና የመብራት የጥራት ችግር አለ					
3	ደንበኞች ስለ CBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎት ግንዛቤ እጥረት አለባቸዉ.					
4	አዳዲስ ቴክኖሎጂዎችን ለመቀበል ይከብዳኛል					

5	ስለ CBE Birr የሞባይል የገንዘብ ዝውውር አገልግሎትን በታማኝነት የሚያገዝ ደንበኛ					
6	ስለ CBE Birr የሞባይል የገንዘብ ዝውውር አገልግሎትን በመጠቀሜ ለገንዘቤ ስጋት					
7	የ CBE Birr የሞባይል የገንዘብ ዝውውር ወኪሎች አቅርቦት እጥረት አለ					

8. **ተጨማሪ የኢትዮጵያ ንግድ ባንክ CBE Birr የሞባይል የገንዘብ ዝውውር** ለመተግበር የሚገጥሙ ችግሮች/ተግዳሮቶች (challenges ካሉ ይጥቀሱ፡፡--

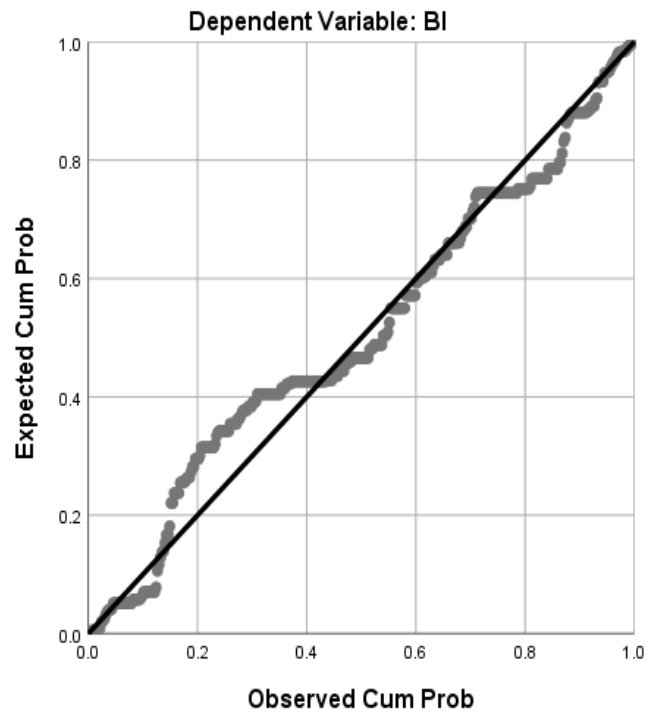---- --

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ክፍል አምስት ፡ ደንበኞች የCBE – BIRR MOBILE MONEY ለመጠቀም ባህሪያዊ ግፊት ከሚፈጥሩባቸዉ ተጽዕኖ ጋር የሚዛመዱ ጥያቄዎች ፡፡ *መመሪያ፡- ቀጥሎ ለተዘረዘሩት ጥያቄዎች የሚከተሉትን ደረጃዎች መሠረት በማድረግ ይመልሱ፡፡1= በጣም እስማማለሁ 2= እስማማለሁ 3= ገለልተኛ ነኝ 4= አልስማማም 5= በጣም አልስማማም*

ተ.ቁ	መመዘኛዎች (Variables)	1	2	3	4	5
የCBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎት አጠቃቀም አመቺነት/ቀላልነት ግንዛቤ						
1	CBE Birr የሞባይል የገንዘብ ዝውውር አገልግሎቱን ለመጠቀም ቀላል ነው					
2	CBE Birr የሞባይል የገንዘብ ዝውውር የ ምዝገባዉ ሂደት ቀላል ነው					
3	የCBE Birr የሞባይል ገንዘብ ዝውውርን ያለምንም እገዛ ችዬዋለሁ					
4	የCBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎቱን በቀላሉ ችዬዋለሁ					
5	CBE Birr የሞባይል የገንዘብ ዝውውር ሂደቱን ለማስታዎስ ቀላል ነው					
የCBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎት አጠቃቀም አስፈላጊነት/ጠቀሜታ/ግንዛቤ						
6	በCBE Birr የሞባይል ገንዘብ ዝውውር በቀላሉ ከፍያ እፈጽምበታለሁ					
7	CBE Birr የሞባይል ገንዘብ ዝውውር ጊዜን ይቆጥብልኛል					
8	CBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎት አመቺ ነዉ					
9	CBE Birr የሞባይል ገንዘብ ዝውውር መጠቀም ከጉዳቱ ጥቅሞቹ ያመዝናሉ ብዬ አምናለሁ					
የCBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎት ታዓማኒነቱ ግንዛቤ						
10	በ CBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎት ላይ ምንም ስጋት የለኝም					
11	በ CBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎት ላይ የግል ሚስጥሬ ይጠበቃል					

12	በ CBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎት ላይ ያሉ መረጃዎች ይጠበቃሉ					
የCBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎት ስጋት/አደጋ/ ግንዛቤ						
13	ሞባይሌ ቢጠፉ በዛዉ ገንዘቤንም አጣለሁ					
14	የኔቶርክ ችግር ቢፈጠር እኔም ግብይት አልፈጽምም					
15	ሞባይሌ ቢሰረቅ CBE Birr የሞባይል ገንዘብ ዝውውር ለመጠቀም አስቸጋሪ ነዉ.					
16	በምጠቀምበት ጊዜ የኔን የግል መረጃ ሌሎች ቢያዩት ምንም ችግር የለዉም					
የCBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎት ለመጠቀም ባህሪያዊ ግፊት(Behavioral Intention)						
17	የCBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎትን በቀጣይነት እጠቀማለሁ					
18	የCBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎትን እንዲጠቀሙ ለሌሎችም እመክራለሁ					
19	የCBE Birr የሞባይል ገንዘብ ዝውውር አገልግሎትን በመጠቀሜ ደስተኛ ነኝ					

ይህንን መጠይቅ ለመሙላት ለሰጡኝ ጊዜ እና ላደረጉት ጥረት ምስጋናዬን አቀርባለሁ::

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: BI

Histogram

Dependent Variable: BI

Mean = 1.76E-14
Std. Dev. = 0.996
N = 360