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The Challenges and Opportunities of Implementing E-payment Projects. In case of CBE Birr Project.

Research Project Submitted In Partial Fulfillment of the
Requirements for the Award of Master of Arts Degree in
Project Management

By

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June, 2018

DECLARATION

I, the undersigned, declare that this research project is my own work and effort and it has not been submitted anywhere for any award. Where other sources of information have been used, they have been duly acknowledged.

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CERTIFICATION

This is to certify that Sewalem Sisay Abera has carried out his research work on the topic entitled “The Challenges and Opportunities of Implementing E-payment Projects. In case of CBE Birr Project”. The study is submitted for examination for the reward of MA Degree in Project Management.

Advisor: Dr. Worku Mekonnen (PhD):_____

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Approved by the Board of Examiners:

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Abstract

The main objective of this study is to identify the Challenges and Opportunities of Implementing various Electronic-Payment Projects: taking CBE birr mobile payment system as a case study. To this end, the study employed quantitative and qualitative research approach; descriptive design to construct meaning from extracted data collected from primary and second sources through survey and document review. The primary data collected by using judgmental sampling method 20 respondents selected out of 55 targeted CBE Birr officers, 20 respondents selected from 68 CBE Birr agents and merchants, and 20 CBE Birr customers selected judgmentally. The generated data was analyzed using tables, frequency and percentage approaches. Accordingly, the study came up with the findings that the most challenging factor to the implementation of CBE Birr service is ambiguity on duty and responsibility, mal operation practice by agents, lack of employees' technical knowledge on CBE Birr & police clearance for agent recruit. Despite the above-mentioned and other challenges, the study showed that Growing acceptance of CBE Birr, ICT Infrastructure and NBE's policy direction that enforce banks to adopt technological innovation are some of the major opportunities identified by the study. Moreover, the study recommended that CBE should develop procedure and a guideline to eliminate ambiguity on duty and responsibility, to eliminate mal operation practice by agents the bank should improve the system to control the mal operation practice through calculating the commission of agents by percentage of the money transfer, the bank should be organized and established with skilled manpower to give support 24hrs a day and 7 days a week for CBE Birr services, the bank should decentralize creation of electronic money at least at district office, and finally for police clearance requirement of agent creation the bank should facilitate the process for e.g. by taking the Prospect agent thumb print for police clearance.

Keywords: E-payment, CBE Birr, Commercial Bank of Ethiopia

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Acronyms and Abbreviations

ATM	Automated Teller Machine
CBE	Commercial Bank of Ethiopia
CPO	Certified Payment Order
E-Money	Electronic Money
E-Payment	Electronic Payment
ICT	Information Communication Technology
MNO	Mobile Network Operator
M-PESA	M for mobile, Pesa is Swahili for Money
NBE	National bank of Ethiopia
OTC	Over the Counter
POS	Point of Sale
SPSS	Statistical Package for Social Sciences
TAM	Technology Acceptance Model

Chapter One

Introduction

1.1. Background of the Study

The banking industry has changed dramatically for the past 25 years. (Molyneux, and Wilson, 2010). Among those banks Commercial Bank of Ethiopia is the biggest bank in the bank history of Ethiopia. The commercial bank of Ethiopia has changed sensationally over the past twenty years, due in large part to technological change. The improvement of telecommunication in the country has a great effect in the change of bank industry. The improvement of telecommunication and information technology motivates banks to make E banking business on mobile. For the past five years mobile banking service users are growing according to the official website of CBE (www.combanketh.et).

In the last few years, application of information technology in business strategies has become at the very heart of the competitive process. Electronic payment application systems have evolved from a simple system involving cash as a means of exchange to a more sophisticated system involving various institutions and related regulations providing payment instruments and infrastructures allowing for interconnections between various partners or business units in fulfilling their business or social obligations. (Sumanjeet, 2009).

The beginning of electronic payment system (EPS), e-payment services are no longer the exclusive right of financial institutions. Although non-financial institutions now offer e-payment services, banks are in a better position to play this important role in e-commerce. However, if banks are to compete effectively with non-financial institutions and establish themselves as the key player in providing e-payment services, they need to understand customer needs and expectations and be able to achieve customer satisfaction by meeting customer expectations. It is vital, therefore, that banks take up the challenge in order to retain and enhance their relationship with customers and thus sustain their

competitive position in the industry. (Hezlin, H., Balachander, K. G., and Mohan, V. A. (2011))

The Modern era trends indicate that electronic payment systems have become a significant element in all trade and commerce activities globally. The scope of electronic payments extends from under one dollar to Multi-Million dollar transactions. Despite the benefits that electronic payment systems has brought to other economies such as the western developed countries, economies in Africa, which are still in the early stages of applying electronic payment systems are yet to experience its maximum economic and operational impact. (Sumanjeet, 2009).

In spite of the practice of modern payments system in the world with their attendant advantages for both consumers and financial institutions, it has not become mainstream activities in Ethiopia. The monetary authorities also bear the high cost of printing bank notes due to the short life cycle of notes, and the cost of moving large amount of cash from banks to banks and across the country. Over-dependence on cash for transaction also implies that much cash is held outside the banking system, which naturally reduces the capacity of banks to lend to the productive sectors of the economy.

It is for some of these reasons that CBE should seriously think the implementation of the modern payments system, such as debit card, credit card, electronic money, electronic fund transfer, POS terminals, Automated Teller Machine (ATM) and also CBE Birr.

According to the press conference of CBE on December 11, 2017, Commercial Bank of Ethiopia (CBE) officially launched its mobile money services named CBE Birr on December 11, 2017 after successfully testing its functionality for the six months. CBE Birr 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.

The commercial bank of Ethiopia (CBE) has been using e-payment system; however, its challenges and opportunities of implementing has not been

determined particularly in the CBE Birr. To the best of the author's knowledge, there has been no single study conducted to examine the challenges and opportunities of implementing this new payment system. The factors that lead to the stakeholders' satisfaction concerning the CBE Birr payment system have not been established.

1.2. Background of the Organization

CBE is the largest state owned bank in Ethiopia. The history of the Commercial Bank of Ethiopia (CBE) dates back to the establishment of the State Bank of Ethiopia in 1942. CBE was legally established as a share company in 1963. In 1963, the Ethiopian government split the State Bank of Ethiopia into two banks, the National Bank of Ethiopia (the central bank), and the Commercial Bank of Ethiopia. (CBE Informer, 2015)

In 1974, CBE merged with the privately owned Addis Ababa Bank. Since then, it has been playing significant roles in the development of the country. After the Ethiopian-English victory over Fascist Italy, the new government established the State Bank of Ethiopia a proclamation issued in August 1942. State Bank of Ethiopia commenced full operations on 15 April 1943 with two branches and 43 staff. It served both as the Ethiopia's central bank with the power to issue bank notes and coins as the agent of the Ministry of Finance, and as the principal commercial bank in the country. The bank Pioneer to introduce modern banking to the country. Currently, CBE has more than 1160 branches stretched across the country and it is leading African bank with assets of 384.6 billion Birr as on June 30th 2016. CBE plays a catalytic role in the economic progress & development of the country. The first bank in Ethiopia to introduce ATM service for local users. Currently CBE has more than 13.3 million account holders and the number of Mobile and Internet Banking users also reached more than 1,352,000 as of September 30th 2016 (68% active users). Active ATM card holders reached more than 3 million (61% active users). It has strong correspondent relationship with more than 50 renowned foreign banks like Commerz Bank

A.G., Royal Bank of Canada, City Bank, HSBC Bank, CBE has a SWIFT bilateral arrangement with more than 700 others banks across the world. CBE combines a wide capital base with more than 30,000 talented and committed employees. Pioneer to introduce Western Union Money Transfer Services in Ethiopia early 1990s and currently working with other 20 money transfer agents like Money Gram, Atlantic International (Bole), Xpress Money, CBE has opened four branches in South Sudan and has been in the business since June 2009. CBE has reliable and long-standing relationships with many internationally acclaimed banks throughout the world.

1.3. Statement of the Problem

Commercial Bank of Ethiopia is one of the top financial institution in the country. CBE as a government bank, has the responsibility to provide the 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.

Despite the fact, that the opportunities of electronic business appears to be obvious to businesses, the trust on E banking service are increasing by many organization. Among the E banking service CBE birr is the recent product launched by CBE in 2017 according to www.cbe.portal.et. Which expected 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 as a payment instrument by the commercial bank of Ethiopia about a year ago, there has been agents are making mal operation. It is worth mentioning the critical challenge encountering CBE Birr which is intentional and detectable mal-operations and unforeseen mal-operations which are about to expose the bank to a significant financial loss. (Assessment of CBE Birr, 2017). Not only that there is a lot of challenges some of them are, regarding to the acceptance of the service by the society and also

the limitation of amount involved on it. The highest amount one customer deposited through CBE Birr is twenty five thousand only. (CBE Birr procedure, 2017). However, despite the importance of these adoptions and development of CBE Birr; to the extent of the researcher knowledge there is no research undertaken in this regard on CBE.

Commercial bank of Ethiopia (CBE) needs to identify the opportunities of implementing the new mobile money payment service it known as CBE Birr and also identifying the challenges for implementing CBE Birr is important for present implementation as well as for future improvement.

Therefore, I think more studies are still required to assess challenges and opportunities of CBE Birr in the country to improve the service, to mobilize capital in the economy and to reduce the cash involvement as a medium of exchange in the economy. Therefore, the purpose of this research is to identify the challenges and opportunities associated in the implementation of CBE Birr technology in Commercial Bank of Ethiopia.

1.4. Research Question

In this study, the researcher tried to answer the following question

1. What are the major challenges in implementation of CBE mobile money payment/service (CBE Birr)?
2. What are the major opportunities in the implementation of CBE mobile money payment/service (CBE Birr)?

1.5. Objective of the Study

The general objective of this study is to assess the implementing challenges and opportunities of E payment project. In case of CBE mobile money service (CBE Birr).

In line with this, the specific objectives are:

1. To identify the major challenges for the implementation of CBE mobile money payment/service (CBE Birr) application in CBE.
2. To find some of the opportunities realized by CBE in the adoption and practice of CBE mobile money payment/service (CBE Birr).

1.6. Significance of the Study

Commercial Bank of Ethiopia (CBE) as leader bank, to compute and to hold the current market share are highly participating in the introduction of new technologies. Most of them are E payment/banking technology such as Automated Teller Machine (ATM), Internet and Mobile banking, Point of Sell (POS) terminal and different information technology service. These activities of the bank are expected to continue for foreseeable future. The introduction of CBE Birr in 2017 came with a lot of potential business opportunities. One of them helps the bank to attract large number of customer and mobilize resource. However, as far as the knowledge of the researcher since implementing there is no research that concerns on the challenges and opportunities of implementing CBE Birr. This study expected to contribute through informing the stakeholders about CBE Birr implementation challenges and opportunities.

Furthermore, the study also expected to increase awareness of challenges and opportunities of CBE Birr electronic payments and therefore, the outcomes from the study can be helpful to other banks in the country that are in the planning stage of mobile payment system.

1.7. Scope of the Study

To assess and find the challenges and opportunities of implementing CBE mobile money payment/service (CBE Birr) project. This study tried to show the opportunities related with the service and solve the challenges for the better future service but the study might require a very depth one. Due to time and the sensitivity of detail information requires for detail study. The research had the following scope

- ✓ The research limited to the challenges and opportunities of implementing CBE Birr project.
- ✓ The study has covered only the West Addis Ababa districts of the bank.

1.8. Limitation of the Study

This study confronted certain shortcomings either in its scope, novelty of the technology, source of information and also personal analysis. The major limitation of the study was be the unavailability or absence of the empirical study on challenges and opportunities of implementing CBE Birr. The second limitation was the time constraint, the researcher was facing the time challenge in order to collect the relevant data and to conduct the necessary theoretical as well as empirical analysis.

Chapter Two

Literature Review

2.1. Introduction of the Chapter

The banking industry are highly competitive in the world as well as in our country. So banks in our country are pushing to compute in different e-service. Implementing those e-service have different challenges and opportunities but the study only focuses on e-payment services specifically CBE mobile money payment/service (CBE Birr). This chapter reviews the literature on mobile money payment/service. From this review, broad categories derived which helps to understand the mobile money service.

2.2. Theoretical Literature

2.2.1.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)

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, Hernandez-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.

2.2.2. Structure of a 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 are introduced by different financial institution some of the mobile money service are M-birr, Hello cash and also CBE birr. Those mobile money service 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 are 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 (Rajiv Lal 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 (Rajiv Lal 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 (Rajiv Lal Ishan and Sachdev, 2015).

To reach scale, however, most mobile money 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 (Rajiv Lal 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 (Rajiv Lal Ishan and Sachdev, 2015).

2.2.3.Key Competencies of a Successful Mobile Money Service

Competencies Which Can Be Developed

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.] (Rajiv Lal 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. (Rajiv Lal 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 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. (Rajiv Lal 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) (Adano Duba 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 (Rajiv Lal 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.

2.3. Empirical Literature

2.3.1. Mobile Money Service in Africa

Kenya, Uganda and Zimbabwe are the best example as a country in Africa for mobile money service. In Kenya there have been some notable successes, such as Vodafone / Safaricom's M-Pesa in Kenya. Within five years of its launch, M-Pesa had 15 million customers, equivalent to 37.5% of the country's population, and was processing \$10 billion annually (Rajiv Lal 2015). It shows that the mobile banking system has a great potential to attract large number of customer specially who are unbanked society. As well in Uganda according to Eva G. & Tony C. 2014, Uganda is one of the countries with a largest share of the population using mobile phones to pay bills and send or receive money (about 27 percent of total adult population). About half of the users of mobile money services are unbanked. In Zimbabwe EcoCash has been very successful, reaching 2.3Million customer registrations within 18 months of launch (equivalent to 31% of Zimbabwe's adult population), with 1Million of those active,

and annualized transaction volume equivalent to 22% of the country's GDP in 2015 (Rajiv Lal 2015).

In most African countries, the mobile phone operator plays the dominant role in the partnership, contracting a network of agents to interface with customers and operating the telecommunications infrastructure for effecting transactions and storing virtual money. The role of the bank in the partnership is primarily to hold an account (termed variously as a settlement account or escrow account) in which all of the agents of the network hold balances and which are debited/credited when an agent sells/buys mobile money for cash (Eva G. & Tony C. 2014).

In recent years, some mobile money operators are introduced in Ethiopia by bank like M birr and Hello cash, and also some micro financial institutions are introduced the mobile money payment/system. But there is no mobile money system introduced by network operator because of the national bank proclamation to implement the mobile money system. Commercial Bank of Ethiopia (CBE), officially launched its mobile money services named CBE Birr on December 11, 2017.

Mobile money offers great opportunities to the African economies. The continent has seen an exponential increase in the number of mobile money transacting and payment solution. For the majority of Africans, Mobile Money solution have given access to mCommerce, which has in turn, opened up major economic opportunities like mTrade. The challenges and opportunities of implementing mobile money service (CBE Birr) will discuss throughout the study.

Morawczynski, (2009) examined the adoption, usage and outcomes of mobile money services using the case of M-PESA in Kenya. From the study findings, the researcher noted that since being launched in 2007, the service has seen phenomenal growth in Kenya. Over 7.5 million users, or 34% of the adult population, have registered with M-PESA. The analysis was presented from two perspectives. First, the socio-technical systems framework was used to present M-PESA as a complex system rather than an isolated application. This perspective made it clear that M-PESA grew rapidly because it had a dedicated

team of system builders. These individuals took numerous strategies to enroll the elements and maintain the stability of the entire system. They further worked to engineer the social, economic, legal and political environments of the technology. The analysis showed that a whole industry for mobile money developed as a result of M-PESA's success.

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.

Blauw and Franses (2011) studied the impact of mobile telephone use on economic development of households in Uganda. They examined the impact of mobile telephone use on economic development of individual households. Unique cross-sectional data were collected in personal interviews with heads of households in Uganda. Economic development was measured at the household

level by the Progress out of Poverty Index. They found strong support that mobile phone use positively impacts economic development.

Jensen (2007), find that the introduction of mobile phones reduced price dispersion in fish markets in India and grain markets in Niger respectively. In these instances the mobile phone technology has increased information flows, which has resulted in price reductions. In contrast, the development and introduction of M-pesa in Kenya can be viewed as a "disruptive technology" (Bower and Christensen, 1995) or an example of "creative destruction" (Aghion and Howitt, 1992), where M-Pesa revolutionized the money transfer industry. M-Pesa became the dominant money transfer mechanism within 2 years of its inception.

Ethnographic work by Morawczynski (2009) suggests that M-Pesa's popularity has been driven by its speed, safety, reliability, extensive network of outlets, and its price relative to the alternatives. Prior to the introduction of M-Pesa, Kabbucho et al (2003) document that the cost of instantly sending US\$100 through normal channels ranged between US\$12 (Money Gram) and US\$20 (bank wire transfer), while the cost slower formal channels ranged from \$3 (bus companies) to \$6 (postal money order). Compared to these alternatives M-Pesa offered a significantly cheaper method of instantly transferring funds, where the cost of sending US\$100 to a non-registered user by M-pesa was approximately US\$2.50 in early 2008, while the cost of sending to a registered user was even less (Safaricom, 2008).

The dominance of M-pesa can also be observed in the financial statements of the competitors by some researchers. Gikunju (2009) examines the financial statements of the Postal Corporation of Kenya and finds that revenues and profits for its Posta Pay money transfer service declined rapidly after the introduction of M-Pesa and suggests that Western Union's and Money Gram's profits have also declined over the same period. Faced with obsolescence, money transfer companies such as Western Union and Money Gram have responded by cutting prices, even though they are still unable to match M-pesa's superior convenience (Gikunju, 2009).

Morawczynski and Pickens (2009) and Mas and Morawczynski (2009) explored the economic and social impacts of M-Pesa in Kenya. Morawczynski and Pickens (2009) find ethnographic evidence that M-Pesa has changed the savings behavior, the pattern of remittances, and has increased rural livelihoods. While these studies provide suggestive evidence of the impacts of M-Pesa, they are generally unable to quantify the effects of the system and are limited by their small sample sizes.

Jack and Suri's (2010) empirical study shows that M-Pesa improves the ability of households to smooth risks. They contribute to the literature by providing quantitative estimates of the impact of M-Pesa in Kenya on a variety of economic and social outcomes including financial access and usage. They combined the 2006 and 2009 Finances surveys and create a balanced panel of the 190 sub-locations that were surveyed in both rounds in order to examine the economic impact of M-Pesa on various outcomes pertaining to remittances, financial access, and economic livelihood.

2.3.2.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 technology to transfer the bank.

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).

2.4. Conceptual Framework

This study used the technology accepted model which is originally proposed by Fred Devis in 1985. The model has been designed to show how users come to accept and use a technology. Three major factors influence their decision on how and when they will use. The first determinate is its perceived usefulness, the second is perceived ease of use and the third one is attitude towards usage of the technology (Fred Devis, 1985). The study examined the challenges and opportunities of implementing CBE Birr mobile money payment system so I am going to use the Davis (1985), model which is technology accepted model (TAM). It is used as a conceptual framework for the study.

Opportunities

- ✓ ICT Infrastructure Development
- ✓ Growing acceptance of CBE Birr
- ✓ Business growth of the bank
- ✓ NBE policy direction
- ✓ acceptance by customer

Challenges

- ✓ **External Variables**
 - Perceived Usefulness
 - Perceived Ease of Use
 - Attitude toward Using CBE Birr
- ✓ **Organizational Variables**
 - Operational Factors
 - Payment Mode Factors
- ✓ Lack of adequate legal/
Regulatory framework

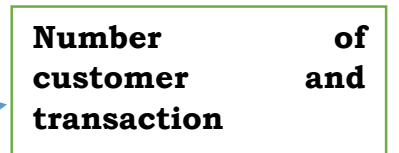
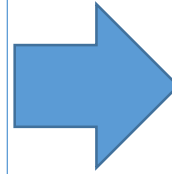


Figure 1. Conceptual Framework (Modified TAM by Author)

Source: - Technology accepted model by Fred Davis (1985)

Chapter Three

Research Methodology

3.1. Introduction

This chapter presents various stages and phases that followed in completing the study. In this stage, most decisions about how research was going to be executed and how data was gathered, towards the completion of research. Precisely, the section covers; research design, study setting, data collection, population and sampling, and data analysis techniques.

3.2. Research Design

The study used descriptive research methodology. Descriptive research includes surveys and fact finding enquiries of different kinds. The major purpose of descriptive research is description of the state of affairs as it exists at present. (C.R. Kothari, 2004). The study design and the population and sample described and also the instruments used to collect data describe. Research methodology is a way to systematically solve the research problem.

Every research for the purpose to solve the problem usually considers the means of obtaining the information, the availability and the skills of the researcher and explanation of the way in which selected means of obtaining information will be organized and the reasoning leading to the selection; the time available for research; and the cost factor relating to research, i.e., the finance available for the purpose. (Kothari, 2004)

The study used both a qualitative and quantitative approach it known as mixed method. Mixed method research is a methodology for conducting, analyzing, and integrating quantitative (e.g. questioner) research and qualitative (e.g. interview) research. This approach to research is used when this integration provides a better understanding of the research problem than either of each alone.

Johnson and Turner (2003) have argued that the fundamental principle of mixed methods research is that multiple kinds of data should be collected with different strategies and methods in ways that reflect complementary strengths and non-

overlapping weaknesses, allowing a mixed methods study to provide insights not possible when only qualitative or quantitative data are collected.

3.3. Study Setting

The study was conducted at Addis Ababa city where the bank CBE Birr office are located and more CBE Birr customer found. Moreover, the E-payment process of the bank is also found in the city.

3.4. Data Collection

3.4.1. Data Source

The study used both primary and secondary data. Primary sources of data include interview with focus group at CBE Birr office and questionnaire, whereas secondary sources of data was generated through a review of relevant documents and official web pages.

3.4.2. Data Collection Technique

The study used both the qualitative and quantitative or mixed research method as stated earlier. Quantitative is predominantly used as a synonym for any data collection technique (such as a questionnaire) that generates or uses numerical data. In contrast, qualitative is used predominantly as a synonym for any data collection technique (such as an interview) that generates or use non-numerical data. Hence, the study adopted both quantitative and qualitative data gathering techniques. This method is called Triangulation.

As per Saunders et al. (2009), triangulation refers to the use of different data collection techniques within one study in order to ensure that the data are telling you what you think they are telling you. For example, qualitative data collected using semi-structured group interviews may be a valuable way of triangulating quantitative data collected by other means such as a questionnaire.

Four questionnaires used to collect the data. One for the Commercial bank of Ethiopia staff who are currently working in the CBE Birr office as the head office

level, the second one for agents who are currently working as an agent for CBE birr, the third one is for merchants who are agree with the bank to work as a seller for their product or service and receive their payment of sales of product or service through CBE Birr and the fourth one is for customer who are use the CBE Birr service. The questionnaires contains mostly of closed-ended questions. The questionnaires for agent, merchants and customers are in both English and Amharic to enable those who do not understand English to complete them in Amharic. Moreover, qualitative data would be obtained through semi-structured interviews some commercial bank of Ethiopia employee who are working as an expert in CBE Birr office.

3.5. Population and Sampling

3.5.1. Target Population

The population for this study, for both the qualitative and quantitative data collection methods: 55 staff at CBE birr department who are CBE Birr management and officers, 68 CBE Birr agents & merchants who are working with CBE Birr at West Addis Ababa district, and 11,365 customer who are using the CBE Birr service recruited by West Addis Ababa District. Before taking the sample, because of the homogeneity of the population, the researcher stratified the population accordingly: - The researcher decided to select the following three sampling units for the study.

- ✓ The CBE Birr management and officers
- ✓ The CBE Birr agents & merchants
- ✓ The CBE Birr customers

3.5.2. Sampling Techniques

For the purpose to answer the research questions and to meet the objectives of the study, this thesis adopted a non-probability sampling called purposive sampling technique.

Purposive or judgmental sampling enables us to use our judgment to select cases that is best enable us to answer our research question(s) and to meet our objectives. Purposive sampling is considered desirable when the universe happens to be small and a known characteristic of it is to be study intensively. Also, there are conditions under which sample designs other than random sampling may be considered better for reasons like convenience and low costs. (Kothari, 2004, Saunders et al, 2009)

3.5.3. Sample Size

According to C.R. Kothari, (2004), non-probability sampling techniques, items for the sample are selected deliberately by the researcher; his/her choice concerning the items remains supreme. In other words, under non probability sampling the organizers of the inquire purposively choice particular units of the universe for constituting a sample on the bases that the sample mass that they select out of a huge one will be typical or representative of the whole.

Therefore, since the objective of this study is to identify the challenges and opportunities of implementing CBE Birr in CBE, the researcher used 20 respondents as a sample from 55 CBE Birr staff which two of them are a manger the remaining are officers, 20 CBE Birr agents & merchants from 68 active agents and merchants, and 20 customers. The sample size determination is based on the purposive sampling techniques. According to Saunders et al, (2009), for all non-probability sampling techniques, other than for quota samples the issue of sample size is ambiguous and, unlike probability sampling, there are no rules. The sample size of CBE Birr staff, and CBE Birr agents & merchants covered 30% of the population. According to Gay & Diehi (1992), number of respondents acceptable for a study depends on type of research but for descriptive studies, the sample should be 10% of the population. Whereas, the customers of CBE Birr sample size determined based on the availability and low cost. According to Kothari, (2004) and Saunders et al, (2009), there are conditions under which sample designs other than random sampling may be considered better for reasons like convenience and low costs.

3.6. Data Analysis Techniques

In order to meet the objectives of the study, the researcher organized and analyzed the collected data based on the nature of the data. Accordingly, the data was collected via questionnaires analyzed with descriptive statistics using Statistical Package for Social Sciences (SPSS) V.20. Moreover, the data that was collect from the interview of focus group and reviews of documents interpreted qualitatively.

Chapter Four

Data Presentation, Analysis and Discussion

4.1. Introduction

Data collected using different techniques were analyzed in this section by using triangulation approach. A total of 60 questionnaires were distributed to clerical staff of CBE Birr, CBE Birr agents and merchants, and to the commercial bank of Ethiopia CBE Birr user found in Addis Ababa. Out of this 60 questionnaires were sent to the sample unit, all the questionnaires responded which means 100% respondents from CBE Birr employee, CBE Birr agents & merchant, and CBE Birr. Generally, those respondents fill the questionnaires' without missing, in other word 100% response rate were obtained. In addition to the survey questionnaire, the researcher conducted an interview with key CBE Birr managers and officers at the mentioned work units and, reviews some available bank documents regarding CBE Birr service.

4.2. Demographic Information of the Respondents

Demographic profiles of the respondents who participated in the study were analyzed using descriptive analysis with the help of SPSS. The result of the survey is shown in Table 4.1 as follows:-

Table 4.1 Frequency Analysis of Respondents' Demographic profile

Variable	Category	Frequency	Percent
Gender (Employees)	Male	14	70
	Female	6	30
	Total	20	100
Gender (from Agent & Merchant)	Male	17	85
	Female	3	15
	Total	20	100

Gender (from CBE Birr customer)	Male	15	75
	Female	5	25
	Total	20	100
Age (Employees)	18 - 30	14	70
	31 - 40	5	25
	41 - 50	1	5
	Above 50		
	Total	20	100
Age (From Agent & Merchants)	18 - 30	7	35
	31 - 40	12	60
	41 - 50	1	5
	Above 50	0	0
	Total	20	100
Age (From CBE Birr customer)	18-30	12	60
	31-40	8	40
	41-50	0	0
	Above 50	0	0
	Total	20	100
Educational level (Employees)	High School	0	0
	Diploma	1	5
	First-degree holder	18	90
	Masters or above	1	5
	Total	20	100
Educational level (From agent & Merchants)	High School	11	55
	Diploma	0	0
	First-degree holder	9	45
	Masters or above	0	0
	Total	20	100
	High School	5	25.0

Educational level (From CBE Birr customer)	Diploma	0	0
	First-degree holder	15	75
	Masters or above	0	0
	Total	20	100
Job position (Employees)	CBE Birr officer	18	90
	Manager	2	10
	Associate IT Officer		
	Other		
	Total	20	100
Service Year (Employees)	1 - 3 years	10	50
	3 - 5 years	2	10
	5 - 7 years	1	5
	More than 7 years	7	35
	Total	20	100

(Source: questionnaires' result, 2018)

The demographic information of respondents who took part in the study, shown in Table 4.1 reveals that 46 (76.67%) were male while 14 (23.33%) were female. Moreover, the demographic information on the respondents' age reveals that 33 respondents representing (55%) have their age fall within 18-30 years of age; 25 (41.67%) respondents have their age fall within the age group of 31-40 years. A total of 2 (3.33%) respondents have their age fall within the age group of 41-50 years.

Regarding the respondents' educational qualification, the results as shown in the above table, indicates that 18 (90%) of the respondent of CBE Birr employees of the bank, 9 (45%) of the CBE Birr agents & merchants, and 15 (75%) of CBE Birr customer hold first degree. 11 (55%) respondents from CBE Birr agents & merchants, and 5 (25%) respondents from CBE Birr customers are holders of High School certificate. 1 (5%) respondents who hold Masters' degree and 1 (5%) respondents hold Diploma from CBE Birr employees of the bank.

On the respondents of CBE Birr employee years of experience, the results indicate that majority (i.e. 10 (50%)) of the employees of the bank have 1-3 years

of working experience. This is followed by 7 (35%) respondents who have more than seven years' experience, their years of working experience between 3-5 and 5-7 years 2 (10%) and 1 (5%) respectively. The demographic profile of the respondents shows that the combination of personnel that the bank has are young, first degree holders, and in average experienced. On the other hand, when we see the job positions of the CBE Birr employees of the bank who participated on the survey, 18(90%) are CBE Birr officers and 2 (10%) are CBE Birr managers.

Table 4.2 Frequency Analysis of Respondents' Towards Payment System

Variable	Category	Frequency	Percent
How did you start using CBE's Birr service in your business? (From CBE Birr agent and merchant)	I requested the bank to work as agent and merchant of CBE Birr services.	0	0
	The bank lodged the request.	20	100
	Total	20	100
Which payment system would you like to prefer for your business (CBE Birr agent, Customer and merchants)	Cash	25	62.50
	Card	6	15
	Cheques	0	0
	CPO	1	2.50
	CBE Birr	8	20
	Other	0	0
	Total	40	100
What kind of E-payment service as a primary you are using (From CBE Birr Customers)	MB	2	10
	IB	0	0
	ATM	11	55
	CBE Birr	7	35
	Other	0	0
	Total	20	100

(Source: questionnaires' result, 2018)

On the response to the question about how the bank recruited the CBE Birr agents and merchants, all the respondents 20 (100%) are said the bank lodged the request. It shows that the bank highly initiating to recruit the CBE Birr agents and merchants.

CBE Birr agents, customers and merchants responses to the question, “Which payment system would you like to prefer for your business?” the largest respondents 25 (62.5) are prefer cash payment system. CBE Birr service preferred by 8 (20%) of the respondents. 6 (15%) respondents prefer card payment system and only 1 (2.5%) of the respondents prefer Certified Payment Order (CPO). Here we can understand that still cash is the best medium exchange in the business. Finally the CBE Birr customers responds the question, “What kind of E-payment service as a primary you are using?” the highest percentage of the participants 11 (55%) using ATM Card. Secondly the participants using CBE Birr 7 (35%) and only 2 (10%) respondents using Mobile Banking. Here 35% respondents are prefer to use CBE Birr it shows the acceptance of CBE Birr is in a very good position.

4.3. Challenges of Implementing CBE Birr

4.3.1. External Variables

Result obtained from survey respondents of CBE Birr customer, agent and merchants, and employees of CBE who are working as CBE Birr officer regarding their perception towards the usefulness of the CBE Birr Mobile payment system using descriptive statistics are depicted below:-

Score Key	
Strongly Agree	1
Agree	2
Neutral	3
Disagree	4
Strongly Disagree	5
Frequency	F

Perceived usefulness

Table 4.3 Perceived Usefulness

Question: for agents, customers and merchants	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
Using CBE Birr reduces costs and time	27 (67.5)	13 (32.5)				40 (100)
Would Improve the quality of business transactions	18 (45)	15 (37.5)	7 (17.5)			40 (100)
Prevents accepting forgery and illegal cash	40 (100)					40 (100)
Reduces frauds relating to cash and other payment instruments such as check	40 (100)					40 (100)
Provides greater convenience and security.		15 (37.5)	15 (37.5)	10 (25)		40 (100)
Question: for CBE Birr Employee	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
CBE Birr agents & Merchants perceive that using CBE Birr would enhance their business performance	11 (55)	7 (35)	2 (10)			20 (100)
Merchants prefer cash over CBE Birr	6 (30)	7 (35)	4 (20)	2 (10)	1 (5)	20 (100)
Implementing CBE Birr payment system improve customer services and creates better relationship between the bank and its clients	15 (75)	5 (25)				20(100)

(Source: Survey result, 2018)

Result obtained from the survey of respondents of CBE Birr agents & merchants, customers and CBE's staff regarding CBE Birr perception towards the usefulness of the existing CBE Birr Mobile payment system using descriptive statistics are showed in table above:-

From those 40 respondents of CBE Birr users as agent, customer and merchant 27 (67.5%) strongly agree that using CBE Birr minimize cost and time. The remaining 13 (32.5) respondents agree CBE Birr can minimize the cost and time of the agents, customers and merchants for their services. 18 (45%) respondents strongly agree that CBE Birr agents, customers & merchants can improve the quality of business transaction, and the remaining 15 (37.5%) and 7 (17.5%) agree and neutral respectively answer for the question “Would Improves the quality of business transactions”.

All the respondents of CBE Birr agents, customers and merchants believe that using CBE Birr would prevent from accepting forgery and illegal cash and reduces frauds relating to cash and other payment instruments such as check. From the 40 respondents of CBE Birr agents, customers and merchants 15 (37.5%) agree that CBE Birr mobile payment service suitable or convenience and safety. The remaining 15 (37.5%) respondents have a doubt on the suitability and safety but the remaining 10 (25%) respondents are disagree on the CBE Birr.

On the other hand 20 CBE Birr staff of CBE response summarize on table 4.2. On the above table show that from CBE Birr staff respondents of 11 (55%) believe using CBE Birr agents & Merchants would enhance their business performance, and also 7 (35%) of respondents agree with it but the reaming 2 (10%) are neutral. 6 (30%) & 7 (35%) of CBE Birr staff respondents strongly agree and agree respectively about merchants prefer cash over CBE Birr but still some respondents prefer CBE Birr mobile service over cash. On the above table showed, the CBE Birr staff of respondents 15 (75%) strongly agree and 5 (25%) respondents agree that implementing CBE Birr mobile service improves customer service and create a better relationship between the bank & the clients.

Generally, the result shows that the respondents perceived that using CBE Birr mobile payment system would enhance their job performance. In terms of cost and time reduction, improving quality of business transaction and provides

greater convince and security, and also CBE Birr service provides the protection from accepting forgery and illegal cash and other payment instruments.

Hence, these perceptions measurement of CBE Birr customers, agents & merchants, and employees of the bank regarding perceived usefulness can be taken as an opportunity, rather than challenge, to enhance the adoption of CBE Birr mobile payment service in CBE.

Perceived Ease of Use

Result obtained from survey respondents of CBE Birr agents & merchants, customers and employees of CBE's CBE Birr office regarding their perception towards the ease of use of the CBE Birr payment system using descriptive statistics are showed below:-

Table 4.4 Perceived Ease of Use

Question: for customers	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
CBE Birr is not sophisticated than cash		10 (50)	5 (25)		5 (25)	20 (100)
Efficient and effective	5 (25)	15 (75)				20 (100)
Provides easy tackling of payment	5 (25)	15 (75)				20 (100)
Network problem make CBE Birr difficult to use	10 (50)	10 (50)				20 (100)
Question: for agents & merchants	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
Is more sophisticated than cash.		15 (75)	5 (25)			20 (100)
Efficient and effective		15 (75)	5 (25)			20 (100)
Is friendly and convenient	5 (25)	15 (75)				20 (100)

Provides easy tackling of payment	3 (15)	17 (85)				20 (100)
Question: for employee	1	2	3	4	5	Total
	F (%)	F (%)	F (%)	F (%)	F (%)	F (%)
The CBE Birr is easy to use	16 (80)	4 (20)				20 (100)
CBE Birr is more sophisticated than cash	8 (40)	6 (30)	1 (5)	4 (20)	1 (5)	20 (100)
CBE Birr depends on prior experience mobile and computer	7 (35)	9 (45)	3 (15)	1 (5)		20 (100)

(Source: Survey result, 2018)

The questionnaires' finding on this research indicated in table above; on CBE Birr effectiveness and efficiency, and also about the easy on tackling of payment the respondents 5 (25%) strongly agree for both case and also the remaining 15 (75%) are agree for both cases. In addition that those respondents believe that CBE Birr does not challenged by network interruption they responded 10 (50%) strongly agree and the remaining 10 (50%) agree. But CBE Birr still has the doubt by customers on the sophistication than cash. The respondents 10 (50%) strongly agree that cash is better than CBE Birr but 5 (25%) disagree that cash is better than CBE Birr. The remaining respondents 5 (25%) are neutral.

The same question were rise to CBE Birr agents and merchants, so based on the respondent's response 15 (75%) are strongly agree that, CBE Birr is more sophisticated than cash. The remaining 5 (25%) respondents also agree that CBE Birr are suitable than cash. About the effectiveness and efficiency of CBE Birr are 15 (75%) are agree but the remaining 5 (25%) are neutral. The respondents also address about the CBE Birr system simplicity or friendly question and they simply indicate that CBE Birr is friendly mobile money system by 100% agree.

16 (80%) of the CBE Birr employee respondents strongly agree that CBE Birr is easy to use by consumer and the remaining 4 (20%) respondents also agree. For the question "Customers, agents and merchants think that using CBE Birr is more sophisticated than cash". The CBE Birr staff respondents 8 (40%) and 6 (30%) strongly agree and agree respectively. But there is still in the staff

respondents has a doubt on the sophistication of the CBE Birr. 7 (35%) and 9 (45%) CBE Birr staff respondents strongly agree and agree respectively that the ease of use for CBE Birr depends on the prior experience related with technology. Cash has still the dominance payment mechanism in the economy. Whereas, CBE Birr has a great potential to be the number one payment mode because this mobile banking system are efficient in terms of time and cost saving and the system are effective. CBE Birr is a friendly system so that convince the users. In general, the results of the study showed that the perception of the majority of sampled CBE Birr customers, agents & merchants, and staff towards perceived usefulness and perceived ease of use variables become positive that can be taken as an opportunity not a challenge for adoption of the CBE Birr service.

Attitude toward Using CBE Birr

The descriptive analysis of CBE Birr agents & merchants, customers and CBE Birr staffs' attitude toward Using CBE Birr is indicated in the table below

Table 4.5 Attitude toward Using CBE Birr service

Question: for agents, customers & merchants	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
CBE Birr transactions are efficient and reliable	11(27.5)	22 (55)	3 (7.5)	4 (10)		40 (100)
Prefer cash over CBE Birr payment because of "tips"	25 (62.5)	5(12.5)	4 (10)	6 (15)		40 (100)
Prefer CBE Birr payment system over cash because it's easier and convenient to use.	1 (2.5)	4 (10)	3 (7.5)	7 (17.5)	25 (62.5)	40 (100)
Confidence & trust cash payments system than CBE Birr service	1 (2.5)	1(2.5)	3 (7.5)	35 (87.5)		40 (100)
Question: for employee	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
Attitude of Tellers is a challenged when business with CBE Birr	2 (10)	9 (45)	6 (30)	3 (15)		20 (100)

Consumers have confidence and trust in the cash payments system than CBE Birr	4 (20)	7 (35)	7 (35)	2 (10)		20 (100)
People resistant to new payment	8 (40)	9 (45)	3 (15)			20 (100)
Lack of Trust	1 (5)	1 (5)	5 (25)	8 (40)	5 (25)	20 (100)
Lack of tip	8 (40)	8 (40)	3 (15)	1 (5)		20 (100)
Fear of risk	2 (10)	6 (30)	8 (40)	4 (20)		20 (100)

(Source: Survey result, 2018)

On the above table shows that from 40 number respondents of CBE Birr agents & merchants, and customers 22 (55%) of the respondents are agree with the statement “CBE Birr transactions are efficient and reliable” and also 11 (27.5%) are strongly agree about the efficient and reliability of the CBE Birr mobile money system. The result indicates that only 3 (7.5%) are neutral and also 4 (10%) are disagree. But from those respondents 25 (62.5%) are prefers cash over CBE Birr because of lack of tip in the CBE Birr. whereas the other 12 (25%) respondents disagree.

Based on the above table the respondents still prefer cash over CBE Birr. 25(62.5%) are again prefer cash over CBE Birr mobile payment in different question. Only 5 respondents are prefer CBE Birr over cash payment system. Even if most respondents prefer cash over CBE Birr, but they don't trust the cash payment system. The respondents' 35 (87.5%) disagree about their confidence and trust cash system than CBE Birr. only 2 (5%) respondents are trust and have confidence on cash payment system than CBE Birr.

Whereas, the CBE Birr staff are responded for Attitude toward Using CBE Birr questions. So based on the 20 respondents 2 (10%) and 9 (45%) strongly agree and agree respectively that teller attitude are challenge to transact business on CBE Birr. 3 (15%) respondents are disagree and they believe that teller are not challenge for CBE Birr business transaction. But 6 (30%) respondents are neutral.

Whereas, the CBE Birr employee 4 (20%) and 7 (35%) of the respondents are strongly agree and agree respectively this is almost the same opinion with the CBE Birr agents and merchants', and customers respondents in consumer confidence and trust in cash payment system over CBE Birr regard. But 7 (35%) respondents are neutral and the remaining 2 (10%) are disagree about the statement that consumer are prefer cash payment system than CBE Birr.

Almost all the employee agree and strongly agree that people are resist for the new technology especially if it is payment mechanism. The respondent employee of CBE Birr 5 (25%) strongly disagree that lack of trust is the problem on the CBE Birr and the other 8 (40%) are also disagree. But 2 respondents believe that CBE Birr have the problem regarding lack of trust. In other point CBE Birr have the risk of fear and lack of tip for sellers and merchants this are strongly agree and agree by more than 50% of respondents.

CBE Birr transaction efficiency and reliability does not put in the question mark. But some users like merchants prefer cash over CBE Birr. Even if, they know CBE Birr is ease and convenient and also they have confidence on the system they prefer cash sales. This is because of the lack of tip on CBE Birr sales. The perceived ease of use and usefulness of CBE Birr are positive so it positively affects the attitude towards CBE Birr users. But the attitude of tellers are a real challenge to transact business in the branch. Lack of trust and fear of risk should not underestimate because that affects the user's attitude towards the CBE Birr.

In general, the results of the study showed that the perception of the majority of sampled CBE Birr customers, agents & merchants, and staff towards attitude of using CBE Birr service become positive that can be taken as an opportunity.

Infrastructures

Table 4.6 Analysis of Infrastructures

Question: for agents & merchants	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
Network failure is one of the challenges we face in using CBE Birr service				5 (25)	15 (75)	20 (100)
Question: for employee	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
Network failure is one of the challenges in using CBE Birr	6 (30)	5 (25)	5 (25)	3 (15)	1 (5)	20 (100)
There is 24/7 support from the Commercial Bank of Ethiopia	8 (40)	8(40)	1 (5)	2 (10)	1 (5)	20 (100)

(Source: Survey result, 2018)

On the above table show that the respondents about the CBE Birr infrastructure for the CBE Birr service. So based on the respondents response 15 (75%) are strongly disagree about the statement “Network failure is one of the challenges we face in using CBE Birr service” and the remaining 5 (25%) also disagree. On this regard CBE Birr employee 6 (30%) and 5 (25%) respondents strongly agree and agree respectively about CBE Birr service challenged by network failure. 5 (5%) respondents of CBE Birr employee neither agree nor disagree and 4 (20%) respondents are disagree. 80% of the CBE Birr employee respondents are strongly agree and agree about the support of Commercial bank of Ethiopia to CBE Birr service 24/7. But 15% of them are not believing the existence of 24/7 support for CBE Birr by the Commercial Bank of Ethiopia.

CBE Birr has the unique potential that does not exist in other mobile phone banking system which is the availability of network and 24/7 support from the bank. Network failure is not the problem for agents, customers and merchant’s users of CBE Birr. But the employee of the CBE are facing network failure in their operation.

4.3.2. Organizational Factors

Operational factors

The descriptive analyses of respondents' towards Operational factors such as customer awareness about employees knowledge to answer customer questions related to CBE Birr service, support and follow up etc. is depicted in table shown below

Table 4.7 Operational factors

Question: for agents, customers & merchants	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
Employees of the bank have the knowledge to answer customer questions related to CBE Birr service		2 (5)	8 (20)	10 (25)	20(50)	40 (100)
Technical support is available 24 hours, 7 days a week	5 (12.5)	10(25)	3 (7.5)	12 (30)	10(25)	40 (100)
Low support and follow up by the bank	10 (25)	15(37.5)	4 (10)	11 (27.5)		40 (100)
A specific legislation on consumer protection related to the usage of CBE Birr services is in place		5(12.5)	25(62.5)	10 (25)		40 (100)
Question: for employee	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
Employees of the bank have the knowledge to answer customer questions related to CBE Birr service.	9 (45)	7 (35)	1 (5)	3 (15)		20 (100)
Low support and follow up	1 (5)	3 (15)	5 (25)	8 (40)	3 (15)	20 (100)
Lack of Coordination and cooperation between	1 (5)	9 (45)	7 (35)	1 (5)	2 (10)	20 (100)

branches, districts and E-payment process						
Limited top management support	1 (5)	7 (35)	7 (35)	4 (20)	1 (5)	20 (100)
Increases cost of the Bank.	5 (25)	4 (20)	4 (20)	5 (25)	2 (10)	20 (100)
A specific legislation on consumer protection related to the usage of CBE Birr service	4 (20)	8 (40)	6 (30)	2 (10)		20 (100)
Lack of immediate responses by the bank in solving problems	3 (15)	5 (25)	5 (25)	5 (25)	2 (10)	20 (100)
Ambiguous roles and responsibilities on CBE Birr related activities (Procedural and guidance gap)	2 (10)	7 (35)	6 (30)	4 (20)	1 (5)	20 (100)

(Source: Survey result, 2018)

As it is shown in the above table, regarding operational factors related to CBE Birr mobile service, only 2(5%) of the CBE Birr agents & merchants, and customers agree that employees of the bank have the knowledge to answer customer questions related to CBE Birr service. but 10 (25%) and 20 (50%) CBE Birr agents & merchants, and customers disagree and strongly disagree respectively that the employee of bank have the knowledge to answer customer question related with CBE Birr service. The remaining 8 (20%) are neutral. Concerning about the bank technical support 24/7 to CBE Birr service, 10(25%) of the respondents of CBE Birr agents & merchants, and customers agreed that there is low technical support of CBE Birr service by the bank but the larger number of the respondents 12 (30%) are disagree (i.e. 5(12.5%) strongly agree, 3(7.5%) neutral and 10 (25%) strongly disagree). Similarly, the largest number of the CBE Birr agents & merchants, and customers respondents 15 (37.5) are agree that there is low support and follow up for CBE Birr service by the bank

and also 10 (25%) respondents are strongly agree. In the other direction 11 (27.5%) respondents are disagree about the low support and follow up for CBE Birr service by the bank. Where among those respondents 4 (10%) are neither agree nor disagree.

From the CBE Birr agents and merchants, and customer response on the above table we can understand that they did not know about the specific legislation on consumer protection related to the usage of CBE Birr services is in place because the largest respondents 25 (62.5%) are neutral and 10 (25%) are disagree. Only 5 (12.5%) are agreed or know the existence of the legal frame for CBE Birr service users.

The CBE Birr employee also responded for the operational factor questions, based on the above table, 9 (45%) and 7 (35%) respondents strongly agree and agree respectively about the Bank employee have a knowledge to answer the customers question about CBE Birr service. only 3 (15%) respondents of CBE Birr employee are disagree. Moreover, the CBE Birr employee 8 (40%) are disagree about the low support and follow up the bank for CBE Birr service and 1 (5%) are strongly agree, (i.e. 3 (15%) are agree, 5 (25%) neutral and 3 (15%) are strongly disagree.

The CBE Birr service are increase the cost of the bank. This statement are strongly agreed by 5 (25%) and agreed by 4 (20%) of the respondents and 4 (20%) respondents are neutral but the remaining 7 (35%) CBE Birr employee of respondents believe that the cost of CBE Birr is reasonable and disagree and strongly disagree about the statement that CBE Birr service increase the cost of the bank.

About the specific legislation on consumer protection related to the usage of CBE Birr service. The largest number of the respondents 8 (40%) agree about the existence of the legal framework for CBE Birr users and those respondents are supported by 4 (20%) strongly agree. But the second largest 6 (30%) respondents are neutral, this means those respondents are do not have the idea of the legal framework for the CBE Birr user. But only 2 (10%) are disagree about the legal framework that protects the CBE Birr service user.

When we see the CBE Birr employee responded about “the lack of immediate responses by the bank in solving problems”. 5 (25%) CBE Birr respondents agree, 5 (25%) neutral and 5 (25%) disagree about the above statements. The remaining 3 (15%) and 2 (10%) are strongly agree and strongly disagree about the lack of immediate responses by the bank in solving problems. The CBE Birr employee of respondents 7 (35%) are believe that there is an ambiguous roles and responsibilities on CBE Birr related activities (Procedural and guidance gap). This is supported by the CBE Birr employee 2 (10%) who are strongly agree about the CBE Birr ambiguous role and responsibility. But 25% of the respondents are not believe that the ambiguous role and responsibilities on CBE Birr related activities.

Because of the novelty of CBE Birr and lack of proper training the employee does not have the knowledge to support CBE Birr agents, customers and merchants. The bank does not have the technical support team for 24/7 a week. This is the real problem that exist. But not only that there is ambiguous responsibilities exist in CBE regarding CBE Birr operation because of the lack of procedural and guidance gap and the top management support are not as expected. The legal protection for CBE Birr are consider as the good condition exist for users.

Payment Mode Factors

The descriptive analyses of respondents' towards payment mode factors is depicted in table shown below

Table 4.8 Payment Mode Factors

Question: for agents, customers & merchants	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
Low awareness about the possibilities, advantages and disadvantages involved with CBE Birr service	23 (57.5)	13(32.5)	3 (7.5)	1 (2.5)		40 (100)
Fear of risk	29 (72.5)	11(27.5)				40 (100)

People are resistant to new payment mechanisms.	6 (15)	30 (75)	4 (10)			40 (100)
Tendency to be content with the existing payment system	10 (25)	20 (50)	5 (12.5)	5 (12.5)		40 (100)
Security of communication over the network	25 (62.5)	13 (32.5)	2 (5)			40 (100)
Question: for employee	1	2	3	4	5	Total
	F (%)	F (%)	F (%)	F (%)	F (%)	F (%)
Security of communication over the network	6 (30)	4 (20)	5 (25)	5 (25)		20 (100)
Double debit of accounts for single transaction		5 (25)	4 (20)	6 (30)	5 (25)	20 (100)
Deduction of customers account for failed transactions	2 (10)	4 (20)	2 (10)	5 (25)	7 (35)	20 (100)

(Source: Survey result, 2018)

As we can see on the above table, CBE Birr agents & merchants, and customers rate their scale on the factor why people prefer cash over CBE Birr payment. So for the first factor, 23 (57.5%) of CBE Birr agents & merchants, and customers respondents strongly agree that people prefer cash over CBE Birr service because of low awareness the possibility advantages and disadvantages regarding the CBE Birr service. 13 (32.5%) respondents also agree that lack of awareness are the major challenge for the CBE Birr service. only 1 (2.5%) respondents are disagree about the low awareness of the CBE Birr service and the other 3 (7.5%) respondents are neutral.

Secondly, fear of risk are believed the major challenge for the CBE Birr service that people to prefer cash over CBE Birr. 29 (72.5%) respondents are strongly agree that fear of risk involved as a challenge and it is supported by the remaining 11 (27.5) agreed respondents. Usually, people are resistance for a change that why the respondents 30 (75%) are agree for the statement “People are resistant to new payment mechanisms”. (i.e. 6 (15%) are strongly agree and 4 (10%) are neutral). When we see the tendency to be content with the existing

payment system, the largest number of respondents 20 (50%) are agree that people prefer the existing payment system and it is supported by 10 (25%) respondents. And the remaining respondents 5 (12.5%) are neutral and disagree. Finally, the CBE Birr agents & merchants, and customer's respondents rate the last factor of payment mode of CBE Birr service. So based on the above table, 25 (62.5%) respondents are strongly agree that security of communication over the network of CBE Birr and it is supported by other 13 (32.5%) respondents. Only 2 (5%) respondents are neutral about the statement "Security of communication over the network".

In other direction the CBE Birr service payment mode factor address the CBE Birr employee why people prefer cash over CBE Birr service. 6 (30%) of respondents of CBE Birr employee are strongly agree that CBE Birr service are secured to protect the users and supported by 4 (20%) agreed respondents. And the remaining 10 respondents are neutral and disagree about the statement "Security of communication over the network".

The other factor are related with the fault of the system regarding double debit of accounts for single transaction. So 5 (25%) are agree that the system are deducted double for a single transaction but 11 (55%) respondents are disagree and strongly disagree about the system fault of CBE Birr service to deduct double from user account for a single transaction. The remaining 4 (20%) are neutral. Finally, the CBE Birr employee address the factor that user of CBE Birr prefer cash payment over CBE Birr. So 30% of respondents are strongly agree and agree about deduction of customers account for failed transactions in CBE Birr service but 60% of respondents of CBE Birr employee are disagree and strongly disagree about the deduction of user account for failed transaction.

Generally, the users of CBE Birr does not really know what advantages and disadvantages they will obtained from CBE Birr. This is because of low promotion works carried out by CBE. Usually, people resist new technology this also in countered as a challenge. Double debit for a single transaction and deduction of customer account for failed transaction exit. This is the most potential challenge exist because it can affect the acceptance of CBE Birr service.

Interviews conducted with focus groups at CBE Birr office with some of the managers and officer together. According to the focus group, the main challenge that the CBE Birr faced are related to actors at all level and system or technical problems. While lack of focus, lack of training, limited knowledge of some support officers of CBE Birr on T-24(Main system of the CBE), delay in delivery of report in order to facilitate follow up and mal-operations practice by agents, the minimum commission of CBE Birr with respect to paper scratch (card scratch), and also SMS rejecting of some type of phones such as Huawei, only center based authorization of E-money creation and withdrawal, none integration of CBE Birr with T-24 (Main system of the CBE), can be categorized under system or technical problems. And also there is different challenges that the interviewee rise those are police clearance to recruit CBE Birr agents, lack of promotion, the National Bank Directive (NBD) on the limit of agent, customer and merchant deposit on CBE Birr and last but not least Bureaucracy of the bank.

As the interviewee mention, it is worth mentioning the critical challenge encountering CBE Birr which is intentional and detectable mal-operations practice by agents and unforeseen mal-operations which are about to expose the bank to a significant financial loss.

4.4. Opportunities of Implementing CBE Birr Service

In spite of the above-mentioned challenges in implementing CBE Birr mobile payment system in the CBE, this project has made effort to review existing opportunities in the bank and/or the country to adopt CBE Birr mobile payment system. So the following table summarizes the survey result of questions related to some existing opportunities related to the adoption of CBE Birr service.

Table 4.9 Respondents' view towards Opportunities of Implementing CBE Birr Mobile service

Question: for agents, customers & merchants	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
Growing acceptance of CBE Birr service by individual	31 (77.5)	6 (15)	3 (7.5)			40 (100)
Affordability /no payment to use the CBE Birr service	40 (100)					40 (100)
Question: for employee	1 F (%)	2 F (%)	3 F (%)	4 F (%)	5 F (%)	Total F (%)
Growing acceptance of CBE Birr service	9 (45)	10(50)	1 (5)			20 (100)
ICT Infrastructure Development	5 (25)	9 (45)	6 (30)			20 (100)
Business growth of the bank	8 (40)	7 (35)	5 (25)			20 (100)
NBE policy direction that enforce banks to adopt technological innovation	8 (40)	6 (30)	5 (25)	1 (5)		20 (100)
Change in the society life style (The ongoing digital & technology revolution)	10 (50)	8 (40)	2 (10)			20 (100)
Acceptance by business holder to work as agent and merchant of CBE Birr.	9 (45)	7 (35)	4 (20)			20 (100)

(Source: Survey result, 2018)

As we can observe from the above table, the response of survey respondents of CBE Birr agents & merchants, customers and employee indicate that growing acceptance of CBE Birr service is one of the existing opportunities for implementing CBE Birr service. Firstly let we see the CBE Birr agents & merchants, and customer's respondents' response. So 31 (77.5%) of those

respondents are strongly agree that the growing acceptance of CBE Birr service by individual and those CBE Birr users are supported by other 6 (15%) agreed respondents. Only 3 (7.5%) are neutral.

All of the CBE Birr agents & merchants, and customer are strongly agree that CBE Birr are affordable for all of the user this is because of the service provide without the service charge. Commercial bank of Ethiopia (CBE) provides the CBE Birr service for everyone who have only a mobile phone and id card.

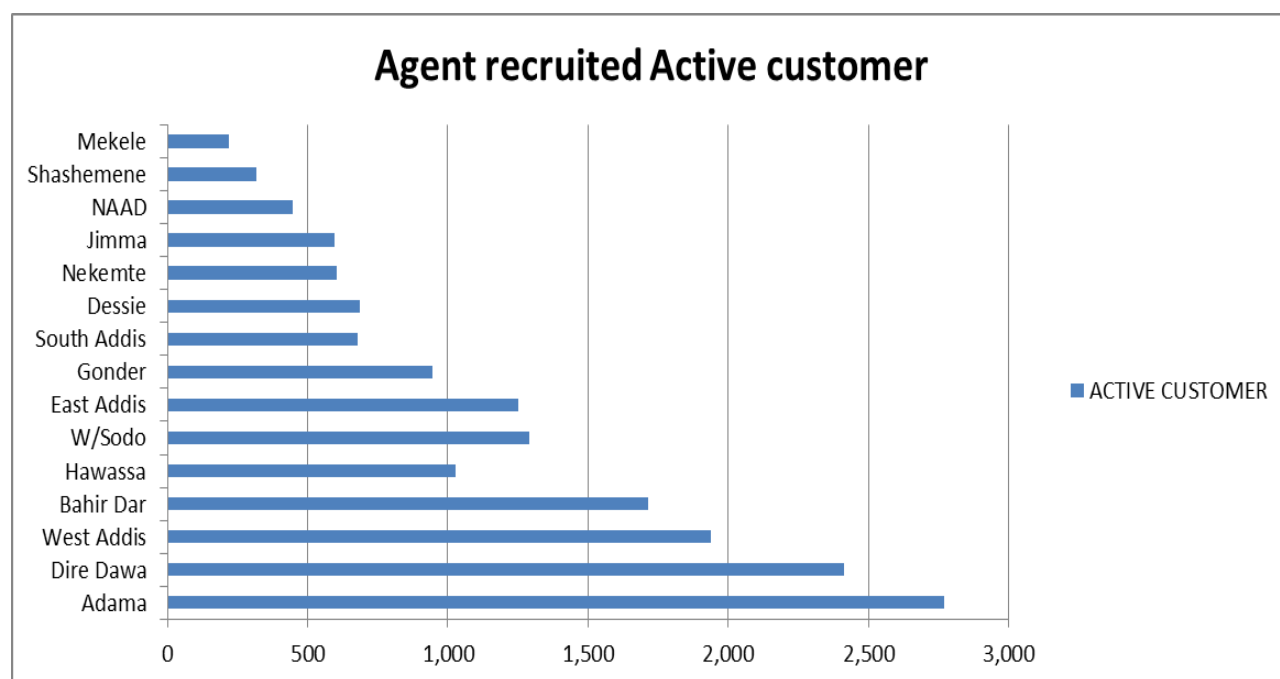
CBE Birr employee also address the question related with CBE Birr opportunities. So 95 % CBE Birr employee of respondents are strongly agree and agree about the growing acceptance of CBE Birr. This is a great opportunity for Commercial Bank of Ethiopia (CBE) to attract large volume of customers and also to mobilize capital. Only 1 (5%) are neutral. The CBE Birr employee also address the ICT infrastructure development. So 70% of respondents are strongly agree and agree about the ICT infrastructure development. The remaining 30% are neither agree nor disagree.

The other points are about the bank business growth. 75% respondents are strongly agree and agree about the business growth of the bank and the remaining 25% are neutral. The CBE Birr employee respondents response for NBE policy direction that enforce banks to adopt technological innovation this are strongly agree and agree by 70% of respondents and only 5 % are disagree. The remaining 25% respondents are neutral.

The CBE Birr employee respondents are response for change in the society life style (The ongoing digital and technology revolution) and acceptance by business holder to work as agent and merchant of CBE Birr. So for both factors 85% respondents response are strongly agree and the remaining respondents are neutral.

In addition to the result obtained from the questionnaire, the data from CBE Birr office shown in the following figures indicate that there is an enhanced acceptance of CBE Birr services.

Figure 2 Total no. of Agent recruited Active customer from 01/07/2017 - Dec 2017



(Source: assessment of CBE Birr's nine months progress report from July 1 - 2017 to March 31-2018)

Not only the growing the acceptance of CBE Birr to recruited customer and also the amount involvement in CBE Birr are growing according to the date that I found in CBE Birr office.

Table 4.10 Branch recruited customer and their balance from 01/07/2017 -Dec 2017

District	Active	Pending	Total	Total balance	Agent	Agent RB	Total	Target	%
NAAD	21,292	2249	23541	931,887.2	527	23,964	24068	31301	76.89
WAAD	11,363	1181	12544	955,257	2513	256131.7	15057	33756	44.61
EAAD	10,436	1579	12015	894,105	1459	146702.9	13474	28846	46.71
SAAD	10,097	2361	12458	547,190.1	851	79076.67	13309	26391	50.43
Adam	9,399	784	10183	769,897.6	3274	276185.5	13457	21788	61.76

Bahir Dar	7,187	1163	8350	462,221	2111	116612.00	10461	24550	42.61
Hawassa	6,296	614	6910	379,028	1581	41869.5	8491	22402	37.9
Shashe m	4,155	699	4854	198,342	401	6262	5255	23936	21.95
DireDaw a	4,124	531	4655	400,854.1	3118	278203.9	7773	27926	27.83
Nekemte	2,496	232	2728	97,098.44	685	36212.35	3413	24243	14.08
Jimma	2,422	230	2652	170,090.3	682	26748	3334	21481	15.52
Gonder	2,239	317	2556	101,692.1	1219	69702	3775	15958	23.66
Mekele	1,941	155	2096	127,616.8	281	77135.64	2377	29460	8.07
Dessie	1,795	277	2072	336,840.3	781	69748	2853	22402	12.74
W/Sodo	1627	376	2003	116687.9	1,578	71343.14	3581	20561	17.42
Total	96,869	12,748	109,617	6,488,807.71	21,061	1,575,897.32	130,678	375,001	34.85

(Source: assessment of CBE Birr's nine months progress report from July 1 -2017 to March 31-2018)

This growing acceptance of CBE Birr service are showing in substituting cash by CBE Birr payment. It shows in the below table.

Table 4.11 CBE Birr recruited customer's transaction.

District name	cash in txn	cash in amount in thousand th	cash out txn	cash out amount in thousand th	send mone y txn	send money amount	buy goods txn	buy goods amt
Adama	5109	1,785.17	818	1,212.53	1401	110.37	53	1,553.05
Bahir Dar	3138	3,570.85	1048	3,262.13	281	16.66	112	1,818.50
Dessie	1918	3,092.90	181	160.08	174	34.49	0	-
Dire Dawa	3153	2,707.25	1549	1,686.20	515	146.20	24	861.00
East Addis	2690	1,129.56	577	648.26	155	16.04	3	20.00
Gonder	1993	523.92	195	289.67	110	15.71	34	554.00

Hawassa	965	169.88	125	47.13	47	2.35	9	252.50
Jimma	800	215.83	160	119.26	60	0.88	4	112.00
Mekele	204	83.05	36	56.04	25	1.98	0	-
Nekemte	814	98.02	29	40.64	12	0.16	1	5.00
NAAD	793	164.05	107	75.52	39	2.53	0	-
Shashem	404	62.01	14	11.05	319	8.70	21	710.00
SAAD	1106	1,129.96	463	963.44	170	31.54	75	1,292.91
WAAD	4496	9,361.95	2582	9,118.41	360	118.90	55	1,334.00
W/Sodo	3731	357.44	97	124.72	1032	41.97	16	544.00
Grand	31314	24,451.84	7981	17,815.05	4700	548.49	407	9,056.96

(Source: assessment of CBE Birr's nine months progress report from July 1 -2017 to March 31-2018)

The interview sessions also confirmed the existence of all the above-mentioned opportunities for the adoption of CBE Birr mobile service. Moreover, the CBE Birr have a great opportunity to Commercial Bank of Ethiopia, Agent, Customer and Merchants. For Commercial Bank of Ethiopia, CBE Birr helps to mobilize resource, to create cashless society, to increase customer base and market share, 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 complement 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 and to meet the demand for financial service that has been continually rising as the economies grow in various areas. For Agent and Merchant, CBE Birr provide a source of income. For customer, it helps through the unbanked society to provide the bank service, to sophisticate the bill payment system of utilities etc...

In general, the findings of this study helps to understand major opportunities at hand that should be maximized and existing challenges in the adoption of the CBE Birr mobile payment system. It also helps to mitigate the root causes of factors that hinder CBE Birr service implementation.

Chapter Five

Summary, Conclusion & Recommendations

5.1. Introduction

The general purpose of this study was to assess Challenges and Opportunities of Implementing various Electronic-Payment Projects: taking CBE Birr mobile payment system as a case study. The study also tried to see the level of commercial bank of Ethiopia performance of CBE Birr deployment. After analysis the interview and questionnaires' in this chapter the researcher tries to make a summary of major finding, conclude and also some recommendation for better implementation of the CBE Birr and finally show some areas for further study.

5.2. Summary of the Major Findings

The study used a mixed research approach for data collection. This mixed method research approach was employed and the research design had the following major features: semi structured interviewees with focus group of CBE Birr managers and CBE Birr officers who were exposed to a number of CBE Birr activities and liker scale questionnaires distributed to 20 CBE Birr agents & merchants, 20 CBE Birr customers and 20 CBE Birr employees of the Commercial bank of Ethiopia.

Commercial bank of Ethiopia (CBE) has been deploying CBE Birr service since the year 2017, the rate at which the technology is being remarkably seems to be growing fast and well accepted. In spite of the various opportunities that mobile electronic payment systems bring to the nation, banks and individuals, it also has its own challenges. The challenges as discussed in the study can be categorized into two main groups' i.e. External factors (such as Perceived Usefulness, Perceived Ease of Use, Attitude toward Using CBE Birr and Infrastructures) and Organizational factors (such as operational factors and payment mode factors.)

- ❖ Growing acceptance and affordability of CBE Birr, ICT Infrastructure Development, Business growth of the bank, NBE policy direction that

enforce banks to adopt technological innovation, Change in the society life style (The ongoing digital and technology revolution) and acceptance by business holder to work as agent and merchant of CBE Birr variables becomes positive this also can be consider as opportunity for the adoption of the service.

- ❖ The other opportunities that the researcher found in the study from the discussion with the focus group at CBE Birr office is. CBE Birr helps to mobilize resource, to create cashless society, to increase customer base and market share, 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 Brach is not feasible at all, to complement 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 and to meet the demand for financial service that has been continually rising as the economies grow in various areas.
- ❖ For Agent and Merchant, CBE Birr provide a source of income.
- ❖ For customer, it helps through the unbanked society to provide the bank service, to sophisticate the bill payment system of utilities etc...

In the other side, this study found some serious challenges and the CBE management should critically consider it for the future development of the CBE Birr service.

- ❖ The study identified that low awareness about the possibilities of advantages and disadvantages involved with CBE Birr service as one of the major challenges in the adoption of CBE Birr payment system.
- ❖ The second major challenges are lack of trust and fear of the risk for the CBE Birr service. On the other hand, because of those challenges CBE Birr users' lack confidence and trust in it.

- ❖ People's resistance to new payment mechanisms are among the factors that make customers, agents and merchants to prefer cash over CBE Birr service.
- ❖ Organizational factors such as network failure in side CBE Birr office, lack of employees' knowledge to answer customers' questions related to CBE Birr service, low support and follow up, lack of immediate response by the bank in solving the problem, lack of coordination and cooperation between different units of the bank and low support by top management are considered as challenges in implementing CBE Birr service.
- ❖ Ambiguous role and responsibilities on CBE Birr related activities and lack of technical support when it needs by the users are among the pointed out challenges by the respondents.

Finally, the respondents from the focus group rise some challenges that the CBE Birr service facing right now. According to the focus group, the main challenge that the CBE Birr faced are related to parties at all level and system problems. While lack of focus, lack of training, limited knowledge of some support officers of CBE Birr on T-24(Main system of the CBE), delay in delivery of report in order to facilitate follow up and mal-operations practice by agents (collecting double commission on a single money transfer) transaction , the minimum commission of CBE Birr with respect to paper scratch (card scratch) can be categorize as a challenges that CBE Birr faced at all level, and also SMS rejecting of some type of phones such as Huawei, only center based authorization of E-money creation and withdrawal, none integration of CBE Birr with T-24 (Main system of the CBE), can be categorized under system or technical problems. And also there is different challenges that the focus group rise those are police clearance to recruit CBE Birr agents, lack of promotion by the bank about CBE Birr, the National Bank Directive (NBD) on the limit of agent, customer and merchant deposit on CBE Birr and last but not least Bureaucracy of the bank.

5.3. Conclusions

The findings of the study revealed that implementation of CBE Birr service in Commercial Bank of Ethiopia stretches wide across the two extremes of the challenges and opportunities where the determined effort by stakeholders to overcome the challenges will bring about huge opportunities to the main players in the field with the ultimate result of transforming the country towards financial inclusion. Therefore, based on the above summary of the major findings it can be concluded that growing acceptance of CBE Birr service by agents and merchants and individual customers and also a positive perception towards usefulness and ease of use of CBE Birr payment system, ICT infrastructure development and NBE policy direction are among the existed opportunities in the implementation of CBE Birr service in the CBE. On the other hand , low awareness, lack of trust and fear of risk, low support and follow up, lack of coordination and cooperation between different units of the bank, low support by top management, ambiguous role and responsibility of the CBE Birr staff are major challenges in the adoption of CBE Birr mobile payment system in CBE.

5.4. Recommendations

Based on the findings the researcher came up with the following possible recommendations to the banks in order to overcome the challenges, exploit the unused opportunities in adoption of CBE Birr mobile payment system and to ensure a successful practice of CBE Birr in CBE.

So based on the findings from the analysis of the collected data, the following recommendation are forward:-

- ❖ To solve the Ambiguous role and responsibilities on CBE Birr, the bank should develop a clear procedure or a guideline to CBE Birr employee to eliminate the ambiguous role and responsibility of the employee and to improve the coordination of different bank unit.

- ❖ To eliminate mal operation practice by agents, the bank should improve the system to control the mal operation practice through calculating the commission of agents by percentage of the money transfer.
- ❖ Raise public awareness on the use of CBE Birr mobile banking system. For instance, by preparing brochures on how to use CBE Birr for their daily base trade activities when the bank recruit the customers. Moreover, aggressive media advertisements on different Medias including FMs and regional TV programs should also be there.
- ❖ The call center of the bank, which offers tremendous potential to solve customers' problems, on ATM and POS services of the bank should be organized and established with skilled manpower to give support 24hrs a day and 7 days a week for CBE Birr services.
- ❖ To solve connectivity failure, CBE should identify the causes of the problem; whether it is related to the incompatibility of the software and hardware, or the network provided by the network operator (Huwawi), and then take proper action to avoid the problem.
- ❖ The bank should take steps such as giving immediate response to consumers' request, to manage and minimize perceived security and risks. Because the successful implementations of CBE Birr payment system, which would improve the market confidence in the system, depends on how the security and efficiency dimensions perceived by consumers as well as merchants are readily managed.
- ❖ The bank should facilitate proper and sustainable trainings for its employees on issues such as marketing approach for CBE Birr service and technical knowhow to have adequate understanding of the E-payment system, particularly on CBE Birr to achieve the desired objectives.
- ❖ For police clearance requirement of agent creation, the bank should facilitate the process for e.g. by taking the Prospect agent thumb print for police clearance.
- ❖ Creation of electronic money at least should be at district office.

5.5. Suggestion for Future Research

This study described the challenges and opportunities of adopting CBE Birr mobile payment system in Commercial Bank of Ethiopia. Nevertheless, it did not consider the network provider perspective and other stakeholder like Government, national bank of Ethiopia and other. Therefore, the researcher would like to recommend further research be made on the area especially to capture the network provider and other above stakeholders perspectives.

References

- Adano Duba Habane (2012). The Relationship between Mobile Money Transfers & Economic Growth in Kenya.
- Andualem Ufo Baza & K.Sambasiva Rao (2017). Financial Inclusion in Ethiopia. International Journal of Economics and Finance; Vol. 9, No. 4; 2017
- Berger, A.N, Molyneux, P, and Wilson, J.O. (2010). The Oxford Handbook of Banking. Oxford University Press.
- Blauw, S. and Franses P (2011). The Impact of Mobile Telephone Use on Economic Development of Households in Uganda. Tinbergen Institute Discussion Paper No. 2011-152/4. Erasmus University Rotterdam.
- CBE. (2014). Commercial Bank of Ethiopia Profile 2014/2015. Addis Ababa: Commercial Bank of Ethiopia.
- Commercial Bank of Ethiopia. (2016). CBE Informer. Vol. 6 No.1. CBE Communication Sub Process.
- CBE Birr department (2018). Assessment of CBE Birr's nine months progress Report from July 1 -2017 to March 31-2018
- Chatain, Hernandez-Coss, Borowik and Zerzan, (2008). Integrity in Mobile e-Phone Financial Services. World Bank Working Paper No. 146, Washington, D.C.
- C.R. Kothari (2004), Research Methodology Methods & Techniques. New Age International (P) Limited, Publishers.
- Davis Fred D. (1989). User Acceptance of Computer Technology: A comparison Of two theoretical models. Management Science, vol. 35 No. 8, August 1989

- Denis Dennehy & David Sammon (2015). Trends in mobile payments research: A literature review. *Journal of Innovation Management JIM* 3, 1 (2015) 49-61.
- Dr. Edwin M. Agmu & Dr. Adele Louise Carten (2014). Mobile Phone Banking in Nigeria: Benefits, Problems and Prospects. *International Journal of Business and commerce*, Vol. 3, No. 6: Feb 2014 (50-70)
- Eriksson, M. (2010). Reciprocity, nepotism or costly signaling evidence from Mobile phone money transfers in Nairobi. *National ekonomiska institutionen. Vid lunds universitet. Department of Economics at the University of Lund. Sweden.*
- Eva Gutierrez & Tony Choi (2014). Mobile Money Services Development. The Cases of the Republic of Korea and Uganda.
- Gay & Diehi (1992). *Research Method for Business and Management.*
- Gikunju, W. (2009). Mobile money transfers edge out rival operators. *Business Daily*, July 14 2012. Retrieved from:
<http://www.businessdailyafrica.com/>
- Hezlin, H., Balachander, K. G., and Mohan, V. A. (2011). 'Evidence of Firms' Perceptions toward Electronic Payment Systems (EPS) in Malaysia'. *International Journal of Business and Information*, 6(2): 226 - 245
- ITU (n.d). The UN Millennium Development Goals. Retrieved from December 10, 2009 from <http://www.itu.int/ITU-D/ict/mdg/>
- Jack W. & Suri T. (2010). The Risk Sharing Benefits of Mobile Money. MIT Working paper.
- James R. Kanagwa (2016). Establishing Mobile Financial Services in Ethiopia.
- Janine Aron (2015). 'Leapfrogging': a Survey of the Nature and Economic Implications of Mobile Money.
- Johnson & Turner (2003). Data Collection Strategies in Mixed Methods Research.

- Masinge (2010). Studied the factors influencing the adoption of mobile banking Services at the bottom of the Pyramid in South Africa
- Merritt, C. (2010). Mobile Money Transfer Services, the Next Phase in the Evolution in Person-to-Person Payments Retail Payments Risk Forum, White Paper. Federal Reserve Bank of Atlanta.
- Morawczynski, Olga and Mark Pickens (2009). Poor People Using Mobile Financial Services: Observations on Customer Usage and Impact from M-Pesa. CGAP: Washington, D.C.
- Morawczynski, O. (2009). Examining the Usage and Impact of Transformational M-Banking in Kenya. Internationalization, Design and Global Development. N. Aykin, Springer Berlin / Heidelberg. 5623: 495-504.
- Morawczynski O. (2010). Examining the Adoption, Usage and Outcomes of Mobile Money Services. The Case of M-PESA in Kenya.
- Rajiv Lal & Ishan Sachdev (2015). Mobile Money Services - Design and Development for Financial Inclusion.
- R. Jensen (2007). The digital provider: information (technology), market Performance, and welfare in the south Indian fisheries Sector. The Quarterly journal of economics 122(3), 879-924, 2007
- Saunders et al. (2009). Research methods for Business Studies.
- Stexen R. Terrell (PhD) (2012). Mixed Methods Research Methodologies. Nova Southeastern University USA, the qualitative report volume 17: 254-280

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Annex I

Addis Ababa University
College of Commerce
Department of Project Management

Dear Sir/Madam

I am Sewalem Sisay, M.A. student in the Department of Project Management at Addis Ababa University. I am undertaking a research on the topic “**The Challenges & Opportunities of Implementing E-payment Projects. In case of CBE Birr Project**” for the partial fulfillment of the requirements of the degree of Master of Arts in Project Management. The aim of this interview is to assess the challenges and benefits of CBE Birr service. This interview is design to be conduct with managers/officers at CBE Birr office of the Commercial Bank of Ethiopia.

The results of the study will have a paramount important to the institutions, to clients, to concerned government offices and policy makers and others.

To this end, this questionnaire is prepared to gather pertinent information. I sincerely assure you that the information you provide will be used only for academic purposes. Your involvement is regarded as a great input to the quality of the research results. Your honest and thoughtful response is invaluable. Thank you in advance for your cooperation.

Yours faithfully,
Sewalem Sisay

1. What are the opportunities in the implementation of CBE Birr mobile service?
2. What are the challenges of implementing CBE Birr mobile service in the Commercial Bank of Ethiopia?

Section II: Opportunities and challenges of Implementing CBE Birr

The following are believed to be some **challenges faced, in using CBE Birr**, please indicate the level of your agreement.

NB. 1-SA = Strongly Agree 2-A = Agree 3-N = Neutral 4-D = Disagree
5-SD = Strongly Disagree

External Factors

No	Description	1-SA	2-A	3-N	4-D	5-SD
1.	Agent and Merchants perceive that using CBE Birr would enhance their business performance					
2.	Merchants prefer cash over CBE Birr					
3.	Implementing CBE Birr payment system improve customer services and creates better relationship between the bank and its clients					
<u>Perceived Ease of Use</u>						
4.	The CBE Birr is easy to use by consumers					
5.	Customers, agents and merchants think that using CBE Birr is more sophisticated than cash.					
6.	The ease of use for CBE Birr depends on prior experience with other technologies such as mobile and computer					
<u>Attitude towards Using CBE Birr</u>						
7.	The attitude of Tellers is a challenge when transacting business with CBE Birr					
8.	Consumers have confidence and trust in the cash payments system than CBE Birr					

9.	People are resistant to new payment mechanisms					
10.	Lack of Trust on CBE					
11.	Lack of tip					
12.	Fear of risk					
Infrastructures - electronic payment infrastructures towards an efficient implementation of CBE Birr						
13.	Network failure is one of the challenges in using CBE Birr					
14.	There is 24/7 support from the Commercial Bank of Ethiopia					
Operational factors - Please indicate the level of your agreement how the following factors affect the adoption of CBE Birr						
15.	Employees of the bank have the knowledge to answer customer questions related to CBE Birr					
16.	Low support and follow up					
17.	Lack of Coordination and cooperation between branches, districts and E-payment process					
18.	Limited top management support					
19.	Increases cost of the Bank					
20.	A specific legislation on consumer protection related to the usage of CBE Birr services is in place					
21.	Lack of immediate responses by the bank in solving problems					
22.	Ambiguous roles and responsibilities on CBE Birr related activities					

	(Procedural and guidance gap)					
Payment Mode Factors - the following characteristics of payment systems are among the factors that make customers of the bank not to use CBE Birr						
23.	Security of communication over the network					
24.	Double debit of accounts for single transaction					
25.	Deduction of customers account for failed transactions					
Opportunities/ Benefits - the following are the existing opportunities in the bank/ country that initiates the adoption of CBE Birr						
26.	Growing acceptance of CBE Birr					
27.	ICT Infrastructure Development					
28.	Business growth of the bank					
28.	NBE policy direction that enforce banks to adopt technological innovation					
29.	Change in the society life style (The ongoing digital and technology revolution)					
30.	Acceptance by business holder to work as agent and merchant of CBE Birr.					

Please provide any additional comments and/or clarifications on specific systems' features that may not be properly captured in this questionnaire.

ክፍል ሁለት፡ የCBE Birr Mobile Money Service ለመተግበር የሚገጥሙ ችግሮች/ተግዳሮቶች (challenges) እና ያሉት ምቹ ሁኔታዎች (Opportunities/Benefities)

መመሪያ፡- ቀጥሎ ለተዘረዘሩት ጥያቄዎች የሚከተሉትን ደረጃዎች መሠረት በማድረግ ይመልሱ፡፡

- 1-በ.እ = በጣም እስማማለሁ 2-እ = እስማማለሁ 3-ገ = ገለልተኛ ነኝ
 4-አል = አልስማማም 5-በ.አል = በጣም አልስማማም

ተ.ቁ	መግለጫ	1-በ.እ	2-እ	3-ገ	4-አል	5-በ.አል
1.	ጊዜንና ወጭን ይቆጥባል					
2.	የግብይቱን ውጤታማነት ሊጨምረው ይችላል					
3.	የአገልግሎቱን/ግብይቱን መጠን ሊጨምርልኝ ይችላል					
4.	ሐሰተኛ/ህገወጥ ገንዘቦችን ከመቀበል ያድነኛል					
5.	ከጥሬ ገንዘብ ወይም ሌሎች እንደ ቼክ ያሉ የክፍያ መንገዶች ጋር ከተያያዙ ማጭበርበሮች ያድነኛል					
6.	ትልቅ ምቹትና ደንካት ይሰጣል					

የCBE Birr Mobile Money Service አጠቃቀም አመቺነት/ቀላልነት ግንዛቤ (Perceived Ease of Use) –(እብከዎ ከላይ የተቀመጡትን ደረጃዎች መሠረት በማድረግ ይመልሱ)

ተ.ቁ	መግለጫ	1-በ.እ	2-እ	3-ገ	4-አል	5-በ.አል
1.	ጥሬ ገንዘብን ከመቀበል አንጻር ውስብስብ ነው					
2.	ቀልጣፋና ውጤታማ ነው					
3.	ክፍያዎችን በቀላሉ ለመቆጣጠር ይረዳል					
4.	Is CBE Birr Friendly package					

ድርጅታዊ/ ውስጣዊ ምክንያቶች

ተ.ቁ	መግለጫ	1-በ.እ	2-እ	3-ገ	4-አል	5-በ.አል
1.	የባንኩ ሠራተኞች ከCBE Birr ጋር የተያያዘ ማንኛውንም ጥያቄ ለደንበኞች የመመለስ ዕውቀት/አቅም አላቸው					
2.	ቴክኒካዊ ድጋፍ በሳምንት 7 ቀናት 24 ሰዓት ማግኘት ይቻላል					
3.	ባንኩ CBE Birr በተመለከተ በቂ ድጋፍና ክትትል አያደርግም					
4.	CBE Birr ተጠቃሚዎችን የሚጠብቅ ልዩ ሕግ አለው					

የክፍያ ስርዓት/ አሰራር/ Payment Mode Factors - ከዚህ በታች የተዘረዘሩትና ከክፍያ ስርዓቱ ጋር የተያያዙ ምክንያቶች CBE Birr ይልቅ ጥሬ ገንዘብን እንድንመርጥ አድርጎናል

ተ.ቁ	መግለጫ	1-በ.እ	2-እ	3-ገ	4-አል	5-በ.አል
1.	CBE Birr መጠቀም ጋር ተያይዞ ያሉትን ዕድሎች፣ ጥቅሞች እንዲሁም ጉዳዮችን በአግባቡ አለመረዳት					
2.	የክፍያ ስርዓቱ ሊያመጠ የሚችለውን ጉዳት/አደጋ በመፍራት / Fear of risk					
3.	ሰዎች አዳዲስ የክፍያ ሥርዓቶችን ለመቀበል ይከብዳቸዋል					
4.	በነባሩ የክፍያ ስርዓት የመርከት					

5.	የከፍተኛ ስርዓቱ ደኅንነት ያሳስበኛል					
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ምቹ አጋጣሚዎች/ Opportunities/ Benefities

ተ.ቁ	መግለጫ	1-ቢ.አ	2-አ	3-ገ	4-አል	5-ቢ.አል
1.	CBE Birr ተቀባይነት እያደገ መምጣቱ					
2.	CBE Birr ለመጠቀም አሁን ባለው ሁኔታ ምንም ክፍያ አለመኖሩ					

በዚህ መጠይቅ ያልተካተቱ ተጨማሪ አስተያየቶች/ሐሳቦች ካልዎት ያስፍሩ _____

ለዚህ ጥናታዊ ፅሁፍ መሳካት የእርስዎ እገዛ ትልቅ ዋጋ አለው!

አመሰግናለሁ!

ወደ ባንኩ በመቅረብ ጠይቁ

እንድጠቀም ባንኩ ጥያቄ አቅርቦልኝ

6. በንግድ ሥራዎች ላይ ለሚቀበሉት ክፍያዎች የትኛውን የክፍያ ሥርዓት ይመርጣሉ?

ጥሬ ገንዘብ ቼክ ሲ.ፒ.ኦ የክፍያ ካርዶች
 በCBE Birr ሌላ (ይጠቀስ) _____

7. የትኞቹን የኤሌክትሮኒክ ክፍያ ዘዴዎችን ይጠቀማሉ በምን ያህልጊዜ?

የኤሌክትሮኒክ ክፍያ	በየቀኑ	በየሳምንቱ	በየወሩ	አልፎ አልፎ	አልጠቀምም
ሞባይል ባንኪንግ					
ኢንተርኔት ባንኪንግ					
ኤ.ቲ.ኤም					
CBE Birr					

ክፍል ሁለት፡ የCBE Birr Mobile Money Service ለመተግበር የሚገጥሙ ችግሮች/ተግዳሮቶች (challenges) እና ያሉት ምቹ ሁኔታዎች (Opportunities/Benefities)

መመሪያ፡- ቀጥሎ ለተዘረዘሩት ጥያቄዎች የሚከተሉትን ደረጃዎች መሠረት በማድረግ ይመልሱ፡፡

- 1-በ.እ = በጣም እስማማለሁ 2-እ = እስማማለሁ 3-ገ = ገለልተኛ ነኝ
- 4-አል = አልስማማም 5-በ.አል = በጣም አልስማማም

ተ.ቁ	መግለጫ	1-በ.እ	2-እ	3-ገ	4-አል	5-በ.አል
.	ጊዜንና ወጭን ይቆጥባል					
2.	የግብይት ውጤታማነት ሊጨምረው ይችላል					
3.	ሐሰተኛ/ሀገወጥ ገንዘቦችን ከመቀበል ያድነኛል					
4.	ከጥሬ ገንዘብ ወይም ሌሎች እንደ ቼክ ያሉ የክፍያ መንገዶች					

	ጋር ከተያያዙ ማጭበርበሮች ያድነኛል					
5.	ትልቅ ምቹትና ደኅነት ይሰጣል					

የCBE Birr Mobile Money Service አጠቃቀም አመቺነት/ቀላልነት ግንዛቤ (Perceived Ease of Use) —(እበክም ከላይ የተቀመጡትን ደረጃዎች መሠረት በማድረግ ይመልሱ)

ተ.ቁ	መግለጫ	1-በ.እ	2-እ	3-ገ	4-አል	5-በ.አል
1.	ጥሬ ገንዘብን ከመቀበል አንጻር ውስብስብ ነው					
2.	ቀልጣፋና ውጤታማ ነው					
3.	ክፍያዎችን በቀላሉ ለመቆጣጠር ይረዳል					
4.	CBE Birr እንዳንጠቀም ካደረጉን /ከሚያደርጉን ነገሮች ውስጥ አንዱ የኔትዎርክ መቆራረጥ ነው					

ድርጅታዊ/ ውስጣዊ ምክንያቶች

ተ.ቁ	መግለጫ	1-በ.እ	2-እ	3-ገ	4-አል	5-በ.አል
1.	የባንኩ ሠራተኞች ከCBE Birr ጋር የተያያዙ ማንኛውንም ጥያቄ ለደንበኞች የመመለስ ዕውቀት/አቅም አላቸው					
2.	ቴክኒካዊ ድጋፍ በሳምንት 7 ቀናት 24 ሰዓት ማግኘት ይቻላል					
3.	ባንኩ CBE Birr በተመለከተ በቂ ድጋፍና ክትትል አያደርግም					
4.	CBE Birr ተጠቃሚዎችን የሚጠብቅ ልዩ ሕግ አለው					

የክፍያ ስርዓት/ አሰራር/ Payment Mode Factors - ከዚህ በታች የተዘረዘሩትና ከክፍያ ስርዓቱ ጋር የተያያዙ ምክንያቶች CBE Birr ይልቅ ጥሬ ገንዘብን እንድንመርጥ አድርጎናል

ተ.ቁ	መግለጫ	1-ቢ.እ	2-እ	3-ገ	4-አል	5-ቢ.አል
1.	CBE Birr መጠቀም ጋር ተያይዞ ያሉትን ዕድሎች፣ ጥቅሞች እንዲሁም ጉዳዮችን በአግባቡ አለመረዳት					
2.	የክፍያ ስርዓቱ ሊያመጠ የሚችለውን ጉዳት/አደጋ በመፍራት / Fear of risk					
3.	ሰዎች አዳዲስ የክፍያ ሥርዓቶችን ለመቀበል ይከብዳቸዋል					
4.	በነባሩ የክፍያ ስርዓት የመርካት					
5.	የክፍያ ስርዓቱ ደኅነት ያሳስበኛል					

ምቹ አጋጣሚዎች/ Opportunities/ Benefities

ተ.ቁ	መግለጫ	1-ቢ.እ	2-እ	3-ገ	4-አል	5-ቢ.አል
1.	CBE Birr ተቀባይነት እያደገ መምጣቱ					
2.	CBE Birr ለመጠቀም አሁን ባለው ሁኔታ ምንም ክፍያ አለመኖሩ					

በዚህ መጠይቅ ያልተካተቱ ተጨማሪ አስተያየቶች/ሐሳቦች ካልዎት ያስፍሩ _____

ለዚህ ጥናታዊ ዕሉፍ መሳካት የእርስዎ እገዛ ትልቅ ዋጋ አለው!

አመሰግናለሁ!