



**ST. MARY'S UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**

**ASSESSMENT OF THE CHALLENGES AND BENEFITS OF ATM  
BANKING SERVICE (THE CASE OF COMMERCIAL BANK OF  
ETHIOPIA)**

**BY**  
**HABTAM ZEWDU**

**MAY, 2019**  
**ADDIS ABABA, ETHIOPIA**

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**BY**

**HABTAM ZEWDU**

**A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY SCHOOL OF  
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**ADDIS ABABA, ETHIOPIA**

**ST. MARY'S UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**  
**MBA PROGRAM**

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## DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Zemenu Aynadis (Ass. Prof). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or full to any other higher learning institution for the purpose of earning any degree.

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**Name**

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**signature**

**St, Mary's university Addis Ababa**

**MAY, 2019**

## **ENDORSEMENT**

Here with I, state that **HABTAM ZEWDU ASSEGU** has been carried out this project work on the topic entitled “assessment of the challenge and opportunity for the adoption of ATM-banking service the case of commercial bank of Ethiopia.” under my supervision. This project work has been submitted to St, Mary’s university, School of Graduate studies for the reward of MBA in general management with my approval.

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**Advisor**

**St, Mary’s university**

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**signature**

**MAY, 2019**

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## **LIST OF ACRONYMS**

<b>MAC</b>	Money access card
<b>ICT</b>	Information and communication technology
<b>ATM</b>	Automated teller machine
<b>PIN</b>	Personal identification number
<b>CBE</b>	Commercial Bank of Ethiopia
<b>MIS</b>	Management information system
<b>ISO</b>	Independent sales organization
<b>ECX</b>	Ethiopian commodity exchange
<b>NBE</b>	National bank of Ethiopia
<b>SPSS</b>	Statically package for social science
<b>TID</b>	Terminal identification number
<b>ABM</b>	Automated banking machine
<b>WWW</b>	World Wide Web
<b>SMS</b>	Short message service
<b>PC</b>	personal computer
<b>L/C</b>	Letter of credit
<b>SWIFT</b>	Society for worldwide inter-bank financial telecommunication
<b>M-BANKING</b>	Mobile banking

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## ABSTRACT

*Despite the growth of ATM banking users worldwide, commercial bank of Ethiopia customers continue to conduct most of their banking transactions using traditional methods. The general objective of the study is to examine ATM-banking service in the Commercial Bank of Ethiopia with respect to the challenges which restrict customers from taking advantage of ATM-banking system and expected benefits derived from the system. From the general objective four specific issues were explored such as to assess the current statuses of CBE with regard to ATM banking technology, to assess customers attitude towards ATM banking, to assess the major challenges of ATM banking and to assess the benefits realized from the technology. To acquire the intended information the researcher used different data collection instruments. The major source of primary data for conducting this paper are ATM banking customers of selected three CBE branches located in Addis Ababa administration zone via questionnaires that were both objective and close ended in nature. And CBE management information system department used as a main source of secondary data. The secondary data was mainly used to assess and see the status of ATM banking service in CBE whereas the primary data was used to address the challenge and benefits of ATM- banking technologies from the customer's perspective. The target population of the study was 18,300 active ATM-banking customers from three branches; from this number 156 samples were used. Convenience sampling technique was used for data collection. The collected data was analysed by using descriptive method of data analysis such as tables, charts, graphs, percentages and mean. With regard to validity and reliability test the researcher provide supporting evidence that a measuring instrument does in fact measure what it appears to measure. Preparing questionnaires to customer of CBE will be a way of maintaining validity. The Cronbach's alpha was 0.826 closer to cronbach's alpha coefficient value of 1.0 which is high and showing strong internal consistency among the measuring items. Based on the finding the challenges for the adoption of ATM banking include lack of awareness in the society, poor telecommunication infrastructure, frequent power interruption, machine break down and being out of service, lower limit of cash withdrawal, debit of balance from account with no cash payment and some other challenges are stated. Among the different benefits, cost saving, time saving, 24/7 service, conveniences, ease of use, availability of ATM machines, trend of organizations paying of salary through bank etc. are listed by their rank from the most to the least opportunity. Based on the finding of the study the recommendations listed were the bank should have use diesel generators to avoid minimize power interruption, the Bank should work with Ethio-telecom to resolve service interruptions and minimize the brunt of the consequences of unreliable internet services or the bank management should provide an additional telecommunication network to the branch so that it can rely on that network when the present network goes offline. also should have to create awareness about the technology, should have to redesign and upgrade their ATM machines to avoid challenges faced by customers because of TM machines, the bank should have take fast response and corrective action to customers dispute because on today's strong computation among banks the customer need no to waste time,*

*Key words: - ATM-banking adoption, challenge and opportunity*

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background of the study

As an introduction of the study, this chapter presents: background of the study, statement of the problem, research questions, research objective, scope of the study, limitation of the study, significance of the study and organization of the whole paper respectively.

To access the funds which are kept in the bank at any time it's not an easy task but today it is not at all difficult. A person just has to tell his bank that he wants an ATM card. The bank issues him an ATM card which is Pass coded and could be used by him alone. ATM card is called by different names like bank card, MAC (Money access card), client card, key card or cash card, etc. In most cases even debit and credit card could be used (Meena, 2015).

Globalization, left bank with no option other than to adopt convenience of transaction to enhance customers' satisfaction if they really want to stay in business and also be profitable. Electronic Banking system is a brain child of ICT that made it possible for service providers and their customers in developing economies to enjoy a good semblance of the services enjoyed in the developed countries. It afforded banks the opportunities to satisfy customers who will encourage their consistence and continuous patronage (Odusina, 2014).

E-banking can offer speedier, quicker and dependable services to the customers for which they may be relatively satisfied than that of manual system of banking. Online banking which provides various alternative e-channels to using banking services i.e. ATM, credit card, debit card, internet banking, mobile banking, electronic fund transfer, anywhere banking, any time banking, and electronic clearing services (Melba and Merlin, 2013).

The most commonly used delivery channel introduced for financial services is Automated Teller Machine (ATM) which is a product of technological development developed

Enhance quick service delivery as well as diversified financial services such as cash deposits, withdrawals, funds transfer, transactions such as payment for utilities credit card bills, cheque book requests and other financial enquiries. All financial institutions are using this method/system, aggressively encouraging all their customers to take advantage of these services on the grounds of ease process but an unannounced financial generation to the bank. Automated Teller Machine (ATM) is the first well known machines to provide electronic access to customers. With the advent of ATM, banks are able to serve customers outside the banking hall. ATM is designed to perform the most important function of banks such as withdrawal of cash, deposits, printing of mini statements settlements of bills. It does all through an access to personal identification number (PIN), and a plastic that contains magnetic chip which the customer is identified through (Odušina, 2014).

ATM was introduced in Ethiopia for the first time by CBE for local users of Addis Ababa in 2001 (Garedachew 2010). It is an electronic computerized telecommunications device that allows a financial institution's customers to directly use a secure method of communication to access their bank accounts, order or make cash withdrawals (or cash advances using a credit card) and check their account balances without the need for a human bank teller or cashier, transfer money between their bank accounts for 24 hours of a day. In Commercial Bank of Ethiopia it is operated by inserting a plastic card with a magnetic stripe or a plastic smartcard with a chip that contains his or her account number. The customer then verifies their identity by entering a pass code, often referred to as a **PIN (Personal Identification Number)** of four digits upon successful entry of the PIN, the customer may perform a transaction ( Google definition and re written as the Ethiopian case). CBE is giving the service for its account holder customers for free for the first time and charges 50 birr for request for the second time due to different reasons like lost of ATM cards, card scratched etc . Customers can also request for new PIN if they lost the previous one. This study assessed opportunities and challenges for the adoption of ATM service in commercial bank of Ethiopia.

## **1.2. Statement of the problem**

Now a day's banks use different schemes so as to satisfy their customer needs. Among these approach using card banking technology has get a wider concern. Despite this growth of IT worldwide, Ethiopian banks continue to conduct most of their banking transactions using traditional methods. In Ethiopia, cash is still the most dominant medium of exchange, and electronic payment systems are at an infant stage. In the face of rapid expansion of electronic

payment systems throughout the developed and the developing world, Ethiopia's financial sector remain behind in expanding the use of the System. Certainly, the banking industry in Ethiopia is underdeveloped .With a growing number of import-export businesses, increased international trades and increased demand of the customer and international relations, the current banking system of commercial bank of Ethiopia lack of providing efficient and dependable services. The customers of Ethiopian commercial banks have missed to enjoy with the technological advancement in banking sector, which has been entertained elsewhere in African and the rest of the world.

The modern E-banking methods like Automated teller machine (ATM), Debit cards, credit card which refers to the use of modern technology that allows customers to access banking services electronically whether it is to withdraw cash, transfer funds and to pay bills, or to obtain commercial information and advices are not well known and used in Ethiopia. In Ethiopia, it is difficult to withdraw money without presenting the passbook and money transfer is allowed only in between branches of the same bank. However, from the public and the economy there is a strong need for strengthening linkages among banks in order to allow healthy flow of financial resources among financial institutions and optimize the contributions of the entire financial system to the development processes as whole.

Based on the report speech done in the opening ceremony of the 75th year anniversary CBE had more than twenty two million customers and more than 1,265 branches throughout the country This indicates on average a single branch has more than ten thousand customers. however only 12% of the total customers are active ATM card holders Serving this much number of customer with only the traditional way that is face to face banking operation become cumbersome, bulky and creates customer dissatisfaction, nowadays Commercial Bank of Ethiopia (CBE) is currently working aggressively on ATM banking expansion and E banking technology is among the strategic issues .(CBE corporate strategy 2015/16-2019/20) the bank is using different strategies of expanding the technology for instance campaign, discount for payments made via the ATM banking technology, branches individual target for ATM user recruitment to be achieved by the end of the business year and considered as one criteria for performance measurement of the branch So branches are recruiting ATM banking customers unreservedly. But being an ATM banking customer does not necessarily mean the customer is using the service sustainably. Commercial bank of Ethiopia had a goal of creating cash less society in 2025 G.C but only with only 12% of active ATM card holders the goal

become journey to nowhere, very low and not proportional relative to the total customers of CBE. As a result implementing mechanisms for customers that enables them to access their account without visiting their branch is very essential. With this regard using ATM banking technology can be a remedial solution. And it's important to study what challenges the customer's face and what benefits the realized from the technology.

The use of ATM is increasing day-by-day, it is important to study the opportunity and challenges towards use of ATM services in commercial bank of Ethiopia. The customers were facing different types of problems with which ATM is directly related. Machine complexity, machine breakdown, poor quality notes, network failure, unsuitable location, ATM card loos, forgot ATM pin number, High frequency of use, safety and security are the major problems of ATM users. Customers do not like ATMs because of impersonality, vision problem, fear of technology and reluctance to change and adopt new mode of delivery of service.

Finally even though there are research papers conducted in other countries like Nigeria and India Limited studies were available in Ethiopia with respect to ATM banking service rather most of the researchers focus on E-banking technologies as a whole which each of the E-banking tools have quite different challenges and benefits in many aspects, also there are gaps with regarding to taking customers as target population to collect primary data however they are the first touch or concerned organ in assessing the challenges and opportunities of ATM service, Therefore this study identified the major challenges & benefits of ATM banking service based on the research problem stated above.

### **1.3. Research questions**

Based on the above facts the study tried to investigate and assess the challenge and opportunity for the adaption of ATM service in commercial bank of Ethiopia in order to find out the following basic research equations.

1. What look like the current status of CBE ATM banking service?
2. What are the major challenges to sustainably use ATM banking in CBE?
3. What are the existing benefits realized from ATM banking in CBE?
4. What look like the Customer's attitude towards ATM banking service?

## **1.4. Objectives of the study**

### **1.4.1 General objective**

The general objective of this study is to identify the major challenges and opportunity for the adoption of ATM banking service the case study of commercial bank of Ethiopia.

### **1.4.2 Specific objective**

- To assess the current status of ATM banking service in CBE.
- To identify the major challenges of ATM banking service in commercial Ethiopia of Ethiopia.
- To identify the existing benefits of ATM banking service in commercial bank Ethiopia.
- To assess the customers attitude towards ATM banking service.

## **1.5. Significance of the study**

The findings of the study will have practical importance through Provide opportunity for the respective decision makers or Banks to Consider and evaluate the benefits and challenges observed in the existing Practices also to inform the appropriate organ of the bank about what to be done in order to take appropriate corrective measures in the area and to accelerate the positive factors (if any) and to scale up the favourable advantage for the expansion of ATM practices. In addition to this had helped researcher in gaining insight about current status of ATM systems in Ethiopia and points problem areas that need further investigation and possible solution. Finally the study will also help further researchers who have interest to conduct research on the area, as a source of reference.

## **1.6. Scope of the study**

The study is confined to assess the challenges and benefits of ATM banking service in the case of commercial bank of Ethiopia. Although there are many branches in CBE, the scope of the study was delimited on geographical location which is focused only in Addis Ababa Town, because of uniformity in all districts the study Specifically restricted itself on one randomly selected district named south Addis Ababa district and from the selected district the study confined itself on purposely selected 3 branches all providing ATM services based on their grade and busyness of serving ATM card holder customers of CBE. In this study For the sake of uniformity primary data was obtained via questionnaires from only ATM card holder



customers of commercial bank of Ethiopia as they are concerned organs, relatively genuine and close to the case. on the other hand to collect secondary data a theoretical study compromise of article, journals , annual reports of the bank and the bank's Management Information System was used because MIS department could capture any E banking history performed by any kind of E banking instruments as a result it became the right source for secondary data information.

### **1.7. Limitation of the study**

The focus of this study is on the assessment of the challenge and benefits of ATM banking service in commercial bank of Ethiopia. Due to time, working condition, distance and finance limitation the geographical coverage for the study was limited to CBE branches found in Addis Ababa city only. The study also became more complete if it includes the ATM trend of some private owned banks however it include none of them. Given the aforementioned limitations the researcher tried to provide clear picture through making proper analysis of the different variables considered against the challenges and opportunities of ATM adoption in CBE and thereby other researchers may projectile to further studies based on the results found.

### **1.8. Organization of the paper**

The research paper is divided into five chapters. Chapter one presents the introduction part, which contains, back ground of the study, statement of the problem, research questions, objectives of the study, scope & limitations of the study and significance of the research paper. In chapter two, a range of literatures review were captured there to gather relevant information concerning ATM banking. Chapter three presents research methodology which includes the research design and methodology, target population and sample size, sampling technique and data collection and method of data analysis. The research results and discussion was present in chapter four. Then the final chapter five was summarizes the findings, concludes the paper, and forwards some recommendations.

## CHAPTER TWO

### LITERATURE REVIEW

This chapter talks about the detailed theoretical and empirical concepts like challenges and opportunities of ATM-banking that the researcher believe they provide a good back ground to carry out the research work.

### THEORETICAL LITERATURE

#### 2.1 Electronic banking

E-banking is the modern delivery channel for banking services. Banks have used electronic channels for years to communicate and transact business with both domestic and international corporate customers. With the development of the Internet and the World Wide Web (WWW) in the latter half of the 1990s, banks are increasingly using electronic channels for receiving instructions and delivering their products and services to their customers. This form of banking is generally referred to as e-banking or Internet banking, although the range of products and services provided by banks over the electronic channel vary widely in content, capability and sophistication. E-banking is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. The definition of e-banking varies amongst researches partially because electronic banking refers to several types of services through which bank customers can request information and carry out most retail banking services via computer, television or mobile phone (Sathye, 1999).

In recent years, banks have made their services increasingly convenient through electronic banking. Used as a banking services that consumers can access, by using Network system or an Internet connection to a bank's computer centre, in order to perform banking tasks, receive and pay bills, and so forth. Many other financial services can be accessed via the Internet. To most people, electronic banking means 24-hour access to cash through an ATM or pay checks deposited directly into checking or savings accounts. (Donell, 2003)

#### 2.2 E-banking channels

**Internet banking:** refers to systems that enable bank customers to access accounts and general information on bank products and services through a personal computer (PC) or other intelligent device (Rahman, 2006).

**Mobile Banking:** Mobile banking (also known as M-banking or SMS banking) is a term used for performing balance checks, account transactions, payments etc. via a mobile device such as a mobile phone. Mobile banking is most often performed via SMS or the Mobile Internet but can also use special programs called clients downloaded to the mobile device.

**Tele Banking:** Tele banking refers to the services provided through phone that requires the customers to dial a particular telephone number to have access to an account, which provides several options of services (Rahman, 2006).

**Home Banking:** Home banking frees customers from visiting branches and most transactions will be automated to enable them to check their account activities, transfer funds and to open L/C sitting in their desk with the help of a personal computer and a telephone (Rahman, 2006).

**Point of Sale Terminal:** An advanced payment system, which enables customers to use an ATM card to pay for goods and services, electronically debiting the cardholders account and crediting the account of the merchant (Rahman, 2006).

**Society for Worldwide Inter-Bank Financial Telecommunication (SWIFT):** It is a bank owned non-profit co-operative based in Belgium servicing the financial community worldwide. It is a highly secured messaging network enables banks to send and receive fund transfer, L/C related and other free formal messages to and from any banks active in the network. Having SWIFT facility, banks will be able to serve its customers more profitable by providing L/C, payment and other messages efficiently and with at most security. Especially it will be of great help for clients dealing with imports and exports etc (Mohammed, 2008).

### **2.3 Automated teller machine (ATM)**

Automated Teller Machine is a computerized telecommunications device that provides the customers of a financial institution with access to financial transactions in a public space without the need for a human clerk or bank teller. On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smartcard with a chip that contains a unique card number and some security information, such as an expiration date. Security is provided by the customer entering a personal identification number (PIN).

ATM combines computer terminal, record –keeping system and cash vault in one unit, permitting customers to enter the banks book keeping system with a plastic card containing

personal identification system or by punching a special code number in to the computer terminal linked to the banks computerized record 24 hours a day once access is gained it offers several retail banking service to customers. They are mostly located outside the banks and are also found at airports, malls, and places far away from the home bank of customers. They were introduced first to function as cash dispensing machines. However, due to advancement in technology ATMs re to provide a wide range of services, such as making deposits, fund transfers between two or more accounts and bill payment, banks tend to utilize this e-banking device, as all other competitive advantage (Giddens, 2008).

Automated teller machine (ATM) works on the ATM cards, as when a user inserts an ATM card in to the card reader component of the ATM machine, then it prompt for the authentication through personal identification number. Each and every ATM machine is programmed with a unique TID (terminal identification number) assigned to identify the ATM machine in different location. The ATM transactions are done through over the phone line via internet connection. All the ATM machines are globally interconnected with each other with the financial institution through the global ATM network like Master card, Maestro, Cirrus, Visa, American express etc. In back side of every ATM card some logos re printed which refer to the ATM network. So the ATM machine connects to ATM network through processing canter and card holder's bank. After the authorization step, if there is sufficient fund in the ATM card holder's account, then the transaction is completed successfully (Aditi, 2013).

According to (Steve, 2002), ATMs are placed not only near or inside the premises of banks, but also in locations such as shopping centres/malls, airports, grocery stores, petrol/gas stations, restaurants, or any place large numbers of people may gather. These represent two types of ATM installations: on and off premise. On premise ATMs are typically more advanced, multi-function machines that complement an actual bank branch's capabilities and thus more expensive. Off premise machines are deployed by financial institutions and also Independent Sales Organizations (ISOs) where there is usually just a straight need for cash. Although ATMs were originally developed as just cash dispensers, they have evolved to include many other bank-related functions. In some countries, especially those which benefit from a fully integrated cross-bank ATM network, ATMs include many functions which are not directly related to the management of one's own bank account, such as: Paying routine bills, fees, and taxes (utilities, phone bills, social security, legal fees taxes, etc.), Printing bank

statements, Updating passbooks, Loading monetary value into stored value cards, Purchasing and so on.

### 2.3.1 Types of ATM's

There are three types of ATM by nature this are Bank ATM's, Brown Label ATM's and White Label ATM's and three types by Location: Onsite ATM's, Offsite ATM's and Stand Alone ATM's.

#### ATM'S by nature

- **Bank ATM's:** The ATM's which are owned, installed and managed by banks.
- **Brown Label ATM's:** They are outsourced to a company who installs, manages and look after the ATM's. These have a logo of the bank that ensures it is installed by the bank. These are mostly used by private sector banks.
- **White Label ATM's:** These are similar to Brown Label ATM's except they don't have any logo of the bank (Meena, 2015).

#### ATM's by Location

- **Onsite ATM's:** These ATM's are seen in the bank or its branch building.
- **Offsite ATM's:** These ATM's are in separate building but in the area where the bank or its branch is.
- **Stand Alone ATM's:** These are similar to Offsite ATM's except they are nowhere in the bank or its branch area. It is mainly found in malls and stations, etc (Meena, 2015).

### 2.3.2 Features of Automated Teller Machine

An Automated Teller Machine is a computerised machine which was designed for certain transactions but today it can do much more like:

- Withdrawal of Money
- Printing and Viewing Bank Statement (Mini statements which gives you 5 recent transactions conducted)
- Fund Transfer (Transferring money between linked account such as transferring between checking and savings accounts)
- Cash Deposit
- Balance Enquiry

- Paying routine bills, fees, and taxes (utilities, phone bills, social security, legal fees, taxes, etc.)
- Cash advances
- Paying (in full or partially) the credit balance on a card linked to a Specific current account.
- Order a cheque book.
- Prepaid Mobile Recharge (Meena, 2015).

## **2.4 Debit card VS credit card**

### **2.4.1 Debit Card as E-payment systems**

Debit card is a kind of payment card that transfers funds directly from the consumer's bank account to the merchant's. It can be used with or without a personal identification number (PIN) almost everyone retail stores, gasoline stations, restaurants, pay phones.

Debit cards are upgraded ATM cards branded with the Visa, MasterCard, or other familiar credit card company logo. They look exactly like credit cards, except they directly tap your checking account every time you make a purchase or withdrawal. They are easier, more convenient, less burdensome, and offer greater access to your money than do check, ATMs, or credit cards. They are descendants of the ATM cards that become popular in the early 1980s. Debit cards are different, however, because transactions are processed through the issuing bank's credit card network. When a debit card is used with a PIN, as in using an ATM machine, it is called an online transaction. You simply insert the card in the machine, enter the PIN number, and proceed as you do when using an ATM card (Joseph, 2004).

#### **Needs to know about debit card**

1. Using a debit card frees you from having to carry cash or a check book. You don't have to carry traveller's checks, show identification, or give out personal information at the time of the transaction.
2. Debit cards are more readily accepted by merchants than are checks, especially in countries where check cashing and check processing are not widely used.
3. It is generally easier to get a debit card than a credit card. You can get a debit card the moment you have a checking or a saving account (Joseph, 2004).

### **2.4.2 Credit Card as E-Payment systems**

Credit card is a plastic card with prearranged spending limit based on the credit card holders credit rating, employment record etc. To sell things on the web you must accept credit cards. Credit cards have proved popular for a number of reasons as the following:

1. The system is familiar to users and was widely used before the advent of e-commerce, thus bolstering the users' confidence.
2. Transaction costs are hidden from users (i.e. basically met by sellers, and passed on to customers, not just credit card users).
3. Payment is simple anywhere and in any currency, thus matching the global reach of the Internet.
4. The credit issuing company shares the transaction risk; helping overcome customers' fear and reluctance to buy goods.

But it has its own limitations: the relatively high transaction cost makes them impractical for small-value payments; they cannot be used directly for individuals to make payments to other individuals (peer-to-peer transactions); protecting the security of transactions is vital, especially on the virtual world where there is no payment guarantee to the merchant by a bank (Joseph, 2004).

### **2.5 Evolution of payment cards**

The concept of payment card came to existence in the late 1940s and early 1950s in the United States. It was developed in response to people's high instant demand for bank loan to purchase household items. Considering the inconveniences of the long process it takes to follow the traditional loan processing system, a credit officer in one of the banks in New York, has introduced way of making approvals of loans in advance that is before the customer selects what you buy. The approved loan serves as a special currency which the merchant need to agree to accept (Ibrahim, 2004/5).

### **2.6 Facial recognition technology (image processing)**

In today's technology the ATM machine recognize the customer by facial not need any pin code to inter only by recognizing the customer by ATM camera the machine will give service like human bank teller. According to AJER, " its digital camera is on 24 hours a day, and its

computer will automatically initiate a face recognition procedure, whenever the computer detects a human face in camera obtains a picture of your face, the computer compares the image of your face to the image of registered customers in its database. If your face (as seen by the ATMs camera) matches the picture in the data base you are automatically recognized by the machine. An image may be defined as a two dimensional function  $f(x, y)$  where  $x$  and  $y$  are spatial (plane) coordinates  $x, y$  is called intensity or gray level of the image at the point. When  $x, y$  and the amplitude values off are all finite, discrete quantities, we call the image a digital image. Interest in the digital image areas: improvement pictorial information for human interpretation for autonomous machine perception. The entire process of image processing and starting from the receiving of visual information to the giving out of description of the scene may be divided in to three major stages which are also considered as major sub areas and are given below discretization and representation: converting visual information in to discrete form. (AJER, P.190).

### **2.6.1 Advantages of face recognition technology**

- Deliver practical and workable solution that addresses the requirements of the regulatory authorities.
- Limit the financial risk given that they were forced to take responsibility for financial losses rather than being allowed to pass this on the account-holder.
- Higher withdrawal and transaction limit
- Take societal responsibility to reduce rising levels of crime that were associated with cash –card transactions.
- Increase customer satisfaction for the account holder, (AJER, P.192)

### **2.7 ATM banking practice in Ethiopia**

Commercial Bank of Ethiopia, introduced ATM service for local users in 2001 with its fleet of eight ATMs located in Addis Ababa. Moreover, CBE has had Visa membership since November 14, 2005. However, due to lack of appropriate infrastructure it failed to reap the fruit of its membership. Despite, being the pioneer in introducing ATM based payment system and acquired Visa membership. Available services on CBE ATMs are: Cash withdrawal, Balance Inquiry, Mini statement, Fund transfer between accounts attached to a single card and PIN (Personal Identification Number) change. Currently, the bank gives debit service only for Visa cards. CBE clients can withdraw up to 10,000 birr in cash and can buy



goods and services of up to 10,000 birr per day. Expanding its leadership, CBE has begun accepting MasterCard in addition to Visa credit cards it began serving over four years ago the first ever electronic banking gateway was signed between Ethiopian Commodity Exchange (ECX) and CBE. The electronic banking system being developed with CBE is designed to give a secure electronic data sharing gateway between clients, banks and ECX, facilitating a smooth transaction (Abiy, 2008)

## **2.8 Challenges of E-payment**

### **2.8.1 Security**

Securing the payment process involves authenticating both the customer and the merchant and protecting the information to be transmitted from interception. In addition, a means must be provided that prevent repudiation both by the merchant and customer once the payment process has taken place. E-payment system has to take into account the need of multilateral security i.e. security needs of all participating parties in the e-payment system must be given due attention. An e-payment system that is not secured may not get trust from its users. Trust is one of the crucial factors for the acceptance of e-payment system the major security challenges of e-payment system are counterfeiting is the creation of new data or duplication of existing data, which are technically valid but not legally admissible. Cloning of e-money for double spending and creation of accounts are examples of counterfeiting. One popular form of counterfeiting attacks is duplication of electronic data from a payment cards (e.g. ATM card) which is used, create duplicate cards and withdraw money from the accounts; illegal alteration of payment data may result in loss money. This may again results in the loss of customer confidence. Alteration could be made to the transaction account numbers resulting in misdirected payments, to the payments amounts or to electronic balances on electronic and usage of a fraudulent websites by an attacker to collect credit card number and other personal and/or financial information; disclosure of private information, in e-payment there are many ways in which private information may be accessed by attackers. For insurance hackers may intercept network traffic to get confidential data (Hayal, 2007).

### **2.8.2 Infrastructure**

Lack of Technological Infrastructure - the implementation of e-payment is been impeded by unavailability of ICT infrastructure. Most rural areas where majority of small and medium scale industries are concentrated haven no access to internet facilities (Ibrahim, 2009).

For the effective deployment of e-payment, it is necessary to have a reliable and cost effective infrastructure that can be accessible to the majority of the population. The most common communication infrastructure for e-payment is computer network such as Internet. Most e-payment systems use Internet to communicate with their customers. The other communication infrastructure available for e-payment users is the mobile network used for mobile phone (Wondweson & Tsegai, 2005).

### **2.8.3 Regulatory and Legal Issues**

Inexistence of proper legal and regulatory framework is one challenge of legal issues (Ibrahim, 2009). National, regional or international set of laws, rules, and other regulations are important prerequisites for successful implementation of e-payment schemes. of the main elements include rules on money laundering, supervision of commercial banks and e-money institutions by supervisory authorities, payment system oversight by central banks, consumer and data protection, Cooperation and competition issues: the virtual and global nature of e-payment also raises legal questions such as which jurisdiction will be competent and about applicable laws in disputed cases, validity of electronic data, electronic contracts, and electronic signature. Moreover, a legal and regulatory framework that builds trust and confidence supporting technical efforts to meet the same is another important issue that needs addressed. Regulatory and legal framework is in line with regional and international agreement is crucial in creating a certain and reliable environment (Wondweson & Tsegai, 2005).

### **2.8.4 Socio-cultural challenges**

Consumers confidence and trust in the traditional payment system has made customers less likely to adopt new technologies not dominate the market until customers are confident that their privacy will be protected and adequate assurance of security is guaranteed. New technology also requires the test of time in order to earn the confidence of the people, even if it is easier to use and cheaper than older methods (Wondwossen & Tsegai, 2005).

### **2.8.5 Resistance to changes in technology among customers and staff**

- Lack of awareness on the benefits of new technologies,
- Fear of risk,
- Lack of trained personnel in key organisations,

- Tendency to be content with the existing structures, and
- People are resistant to new payment mechanisms;

### **2.8.6 ICT Equipment Costs**

Where available, the cost of ICT is a critical factor relative to per capital income. This makes the cost of entry higher compared to developed countries.

### **2.8.7 Non-readiness of banks and other stake holders (acceptability)**

Even though some have shown impressive willingness, some banks are still not fully ready to for this new payment regime. Especially the non-regular banks that do not enter clearing e.g. Microfinance banks, mortgage houses and Savings and Loans banks This is a concern because many civil servants are indebted to these non-regular banks through mortgage loans. (Ibrahim, 2009).

## **2.9 Disadvantages of Automated Teller Machine**

- Fake ATM's
- Attack on ATM's
- PIN crack
- If ATM networks do go out of service, customers could be left without the ability to make transactions until the beginning of their bank's next time of opening hours.
- The ATM machine doesn't guarantee a 100% availability of cash. It may run low of funds and the customers have to wait till the management takes care of it.
- The cost levied to a customer using an ATM can be higher.
- Robbers preyed on people using money machines in poorly lit or otherwise unsafe locations and criminals also devised ways to steal customers' PINs.
- There is a limitation of cash withdrawals from ATM's. Many banks do not permit withdrawal of more than 25,000 at a time.
- There is strong possibility of misusing ATM card if misplaced, lost or stolen. There are number of such reported incidences nowadays.
- There is loss of personnel touch of customers with the Banks. (Meena, 2015)

## 2.10 Benefits of ATM

**There are** multiple advantages in providing a self-service technology for banks and plays vital role in empowering customers in having the service they required t their own convenient time and place

### 2.10.1 Benefits of ATM to the customers

- **Personalized bank service:** ATM use increases of perception of control. Empirical studies have demonstrated the customers benefit of using SSTs in this regard ATMs include being control. This means the customer is in control of the technology with regard to ease of use and the user friendly on screen menus that guide the customers as they transact on the ATM. (Dbholkar, 1996).
- **Convenience:** is one aspect as the customers have access to their bank account 24 hours a day and 7 days a week and so they can transact whenever they feel like. Another dimension to it is the location of these ATMs in strategic places like, shopping malls as well as filling stations. Actually the more location there are available to the user the more valuable is the access to the system customers also do not rush to the bank during the banks normal operation hours. (Dbholkar, 1996).
- **Time saving and cost:** is another customer benefit as the customer will save time by accessing their accounts at convenient times the ATM is consistently a product of innovation with implication for customer demand.
- **Consistence:** this refers to availability of the ATM service 24 hours a day without much variation. (Ayana, 2012).
- **Fund transfer:** transfers between the same financial institutions online can be done almost semltniously. Not only is there no hold on the money being moved around, you can do it whenever you like and from wherever. (Omari, 2012).
- **Real time account information**
- **Multi-tasking** ATMs are able to offer a combination of service on a single machine such as withdrawal, balance enquiry, mini statement and foreign exchange and fund transfer without the customer having to go through a string of bank attendants to get this service. This helped in reducing the amount of time customers were appending on queues in the bank waiting to be served.

### 2.10.2 Benefits of ATM to the bank

Banks have become the principal deplorers of ATMs. Two reasons that they want is to increase their market share, although due to the prevalence of ATMs it is not likely to be the primary means by which ATMs increases profitability for most banks; and above a certain level of operations, the cost of single transaction performed at an ATM is potentially less than the cost of transaction conducted from a teller, as ATMs are capable of handling more transaction per until of time than tellers (Laderman, 1990).

- **Enhance customer satisfaction:** ensure continuity of service to card holder's emergency or disaster situation which aid in increase customer satisfaction and enhance service to constitute.
- **Branded off-premise:** ATMs extend the banks visibility to current customers, providing visibly reassurance of their banks reaches beyond the branch. (Gezahegn, 2015).
- **Tool for efficiency:** improve operational efficiency and profitability of issuing banks
  - Reduce queue on the counters creates a less intense environment increase work load and manual labor.
  - Employee's effort will be diverting to service standardization and operational efficiency in stated redundant and routine work, learning and innovation will take places.
  - Many repetitive and tedious tasks have now been fully automated resulting in greater efficiency, better time usage and enhanced control.
- **Improved revenue:** reducing the amounts that are paid are paid to the bank tellers as well as overtime pay for back office staff. It also an extent tasks in to consideration the cost of renting bank premises in some cases. (Meaza, 2013).
- **Creates paper light environment:** reduce paper work, printing, mailing and financial handling costs associated with processing transaction, thus helping them to move the paper less environment. (Donald, 2008).

It is not necessary to be a professional to understand the operations of an ATM machine. Any individual with a valid ATM card and PIN number can easily operate it without seeking the help of others. Some advantages of ATM are;

- ATM points are conveniently located at multiple locations. You can go the ATM of any bank to withdraw cash – provided your ATM card is linked with that bank.
- There is no need to fill out withdrawal and deposit slips – unlike the practice at the bank branch.
- Even when travelling overseas, you can withdraw cash at ATMs – provided your local laws permit it.
- You can withdraw your money at any time of the day or night from the ATM machines. This helps a lot of people during the emergency situations. All the hospitals, railway stations, and airports are provided with at least one ATM machine to help people to withdraw the money as and when required.
- The ATM machines have become so advanced that you can even transfer your money using them. Both intra-bank and inter-bank transfers are possible with the help of these machines. Though the inter-bank transactions will be charged as per the terms and conditions, you can do intra-bank transactions absolutely free of cost.
- All the ATMs will provide a mini statement which will help you to know the transactions that have happened through your account. You will get the details of the last 8 transactions you have made using your account from the ATM machines.
- ATM machines are not only used for withdrawing money, but also for checking the balance amount in your account.
- The advertisers nowadays make use of the ATM machines to promote their products by displaying ads on the screen of these machines. Some of the ATMs also provide the receipts along with the details of the offers provided by a company or a brand.
- Almost all the major stores, petrol pumps, etc., have ATM machines. Hence, you can swipe your card on these machines and pay the bill easily. You do not have to bring the cash every time you wish to make the purchase.
- You can also pay all your electricity, TV channel subscription, and telephone bills using the ATM machines.
- There are some ATM machines which support both the card based and card-less cash deposits. Not all the ATM machines across the globe are equipped with this feature.
- Pre-booking of the Airline tickets has become easier with the help of these ATM machines. If your internet is not working or the travel agents are fully occupied with a lot of other customers, you can book your tickets in advance via the ATM counters.

## REVIEW OF EMPIRICAL LITRATURE

Related studies were conducted on the challenge and opportunity for implementation of ATM. But relatively not much is done in Ethiopia. Under this section some of the researches conducted around ATM will be discussed.

Globally automated teller machine (ATMs) has been adopted and still being adopted by banks. They offer considerable benefit to both banks and their customers the machine can enable depositors to withdraw cash at more convenient time and place than during banking hours at branches. In addition, by automating services that were previously completed manually, ATM reduces the cost of serving some depositors demand. These potential benefits are multiplied when banks share their ATMs allowing depositors of other banks to access their accounts through a bank's ATM (Mcandrews, 2003)

A study undertaken by (abaynesh, tizita, enanawerk, 2014) challenges and opportunities of automatic teller machine (ATM) on wegagen bank share company focus on challenges and opportunity of e-payment conclude that It is comfortable to use something that is known and understood. There is also fear involved to switching from known to unknown (new) one. Besides, there are many things needed to change from old to new system, like, time to learn the new system, training cost, resources cost, etc. However, the change is essential to be competent in the market and to satisfy customers. Electronic payment system means a process of transaction through internet weather the customer uses visa card, master card American discover card agar card express and any other form of card electronic payment system gas several opportunity such as increase cash flow increase productivity increase convenience of payment reduce transaction costs save time make cash available at any time and minimizes risk of theft. However it has also its own challenges; the study identifies the following as challenges in adopting and using of e-payment system in the Bank. Socio-cultural challenge that is; lack of awareness on the benefit of new technology and fear of risk. security challenges related to use of e-payment card infrastructure problem such as frequent connectivity failure in telephone line, low band width for internet and frequent power interruption,, lack of skilled man power especially in e-payment system, absence of legal framework and regulatory issues even if national bank of Ethiopia is on the way to introduce national electronic system. In his study he also found that the bank has several challenges and opportunities of e-payment the findings are to strength its opportunities by sharing knowledge with various similar organizations b y giving further training for its employees and updating

its technologies in addition to this it should try to weaken the challenges by communicating with government agencies (such as Ethio-Tele com, EPECO, NBE, etc), creating awareness of its customers about E-payment.

Several reviews have pointed out opportunities and challenges in the adoption of E-banking, some of which include: technological innovation play a crucial role in banking industries by creating value for banks and customers, that it enables customers to perform banking transactions without visiting a brick and mortar banking system. On the other hand E-banking has enabled banking institutions to compete more effectively in the global environment by extending their products and services beyond the restriction of time and space (turban, 2008).

A study conducted towards Automated Teller Machine – Its Benefits and Challenges by (Meena, 2015) states Safety issues are the main concern for many of the customers under her analysis. Hence the banks have come up with safety measures that could be of beneficial for many of the customers, such as changing of PIN often, provision for blocking the card and one time password for online transactions. The study also states that Cash shortage and unavailability of preferred denominations are the complaints received maximum from the customers generally the study conclude that The Automated Teller Machine has changed people's lifestyles and how the banking industry functions. ATM's provides a lot of benefits to the people but it has given rise to criminal activities. The most important benefit the banks experience is of providing its customers funds as and when it is required. That is because the customers are more than happy and satisfied. They are able to do various other transactions also and it has proved to be very helpful to the customers. The banking industry should take steps to make its ATMs safe and secure for its customers.

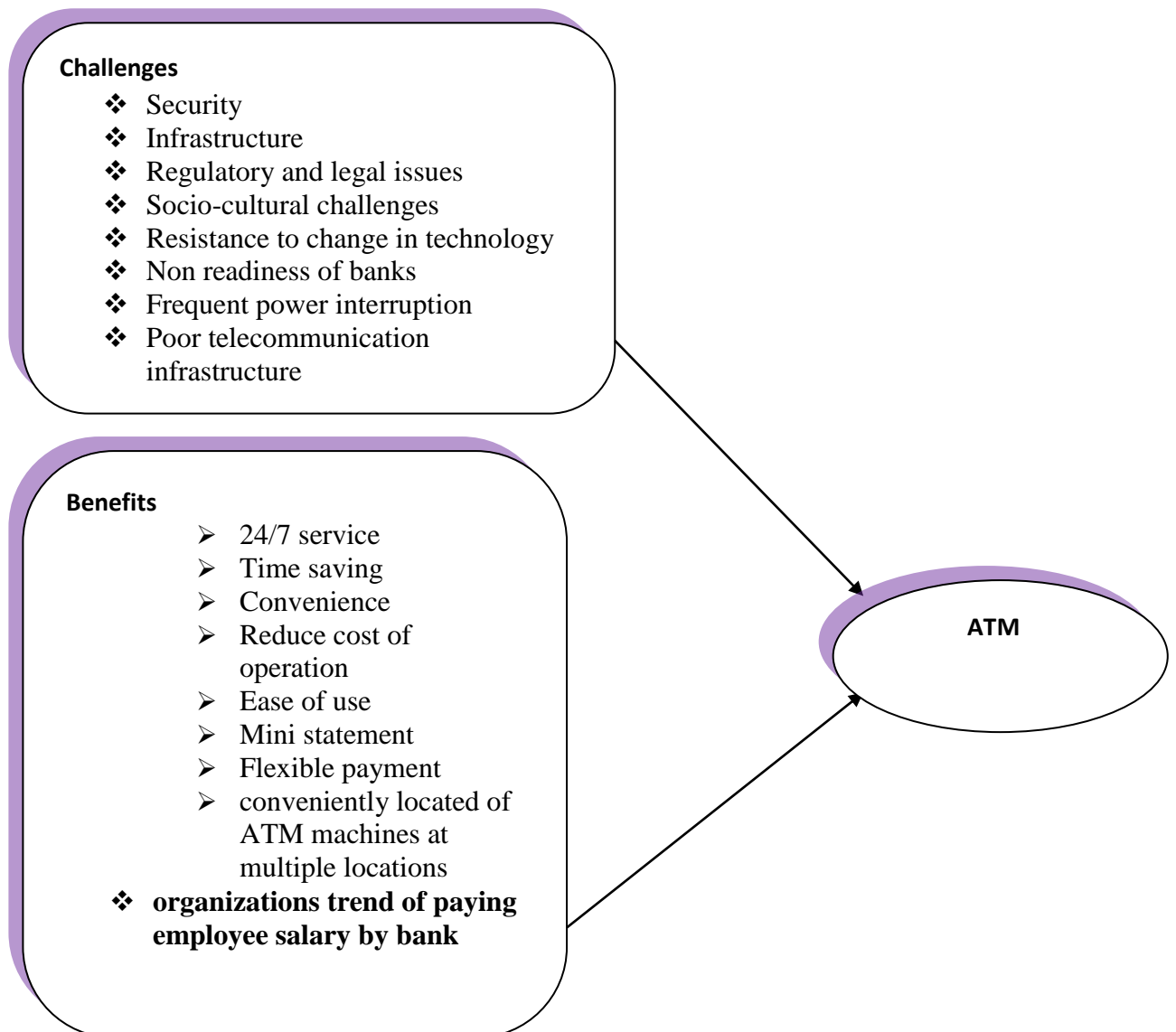
The other explorative study conducted by (Sofowora,2011 )on The Adoption of Automated Teller Machine in Ile- Ife, Osun State: Factors, Rate, Problems and Challenges try to addressed the problems and challenges users have with ATM. Based on the finding of the study some of The opportunity that encouraged adoption of ATM among the staff of f OAU Ile-Ife include government strong desire to encourage its usage, reliable communication and infrastructures, perceived benefits and the factor of security. On the other hand, factors that impeded non-adoption are: misconception and cultural beliefs, lack of skills and knowledge about how to operate ATM, poor information at the grassroots especially in the rural areas, and fear of fraudsters.



Banks have become the principal developers of ATMs. Two reasons for this are that they want to increase their market share, although due to the prevalence of ATMs it's not likely to be the primary means by which ATMs increase profitability for most banks, or above a certain level of operation the cost of single transaction performed at an ATM is potentially less than the cost of a transaction conducted from a teller, as ATMs are capable of handling more transactions per unit of time than tellers (Landerman, 1990).

According to (Wondwossen and Tsegai, 2005), an adequate legal structure and security framework could foster the use of E-payments, which is contradicting with the finding of the previous study. On the other hand (Melba and Merlin, 2013) in their view states that that the limit in withdrawing cash per day. Number of ATM machine shortage as Transactions and withdrawals are made every now, network connection, non availability of ATM services in the ruler area, Un availability of complaint book, location aspect and number of ATMs in the city, Non-functioning or the failure of the ATM machine was the negative remark made by the ATM users. In general their conclusion shows ATM services of SBI south Tamilnadu were well received and utilized by the customers. It was revealed withdraw in cash through ATM was very convenient and majority of the respondents had used ATM services regularly. With regard to purpose more weight age was given to 'withdrawal' facility of ATM. The positive association between the age of respondents and purpose of using ATM cards was well accepted by the study. The study has demonstrated that a considerable number of customers have access to this machine and are consequently utilizing them for multi-purpose transactions, despite its challenges and shortcomings. It is important to note that most of the people using the machine are young person. The conclusion that may be reached here is that young people today are the drivers of emerging technology in a developing area.

## 2.10 Conceptual framework



Source: own conceptualization.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

Designing appropriate research methodology is a prerequisite in order to conduct a good research work. Accordingly, this chapter discusses about the methodology by which the researcher used to conduct this study thus included research design, target population and sample size. Sampling technique, source of data, method of data collection and analysis are presented below respectively.

#### **3.1 Research Design and approach**

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2004).

The study was used quantitative research approach according to (kumar, 2005) quantitative research approach is used to the purpose of the research data collected process and analysis since the purpose of quantitative research is to quantify the situation this research implement quantitative type of approach to analyze and interpret the data collected through questioner

In this study the researcher aim to obtain information concerning the challenge and opportunity for the adoption of ATM banking service in commercial bank of Ethiopia, thus The study was used the descriptive type of research design to provide solutions to the research problems because Descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection. This research design is also used because it often uses visual aids such as graphs and charts to aid the reader in understanding the data distribution. Because the human mind cannot extract the full import of a large mass of raw data, descriptive statistics are very important in reducing the data to manageable form (Glass and Hopkins, 1984).

#### **3.2 Target population and sampling techniques**

The target populations of this study was ATM user customers of Commercial Bank of Ethiopia from three branches in their geographical location found only in Addis Ababa city administration zone this is because there are branches like Ankober, Enwari, D/Birhan,

Gunchire, Debretsige, Gohatsion, Bishoftu included under A.A district but cited outside city administration zone. The selected three branches are based on the number of ATM machine the branch have because of their grade termed as Grade four and Grade three branches and based their busyness of serving ATM card holders the whole day For this reason the selected branches qualified as a good representative of the entire branches and assumed the researcher can get ATM user customers much better than finding in other branches. Total population in this study was 18,300 from this number 156 sample size selected composed of 44, 66, and 46 card holder customers of Jemmu, Sengatera and Mexico branches respectively.

In this study the researcher used convenience sampling method. This sampling method is chosen due to its difficulty to find the customers that would select randomly because of ATM service is at an evolutionary stage thus finding person who use such service is quiet difficult so this method were used for data collection. Plus to this Convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient Accessibility and proximity to the researcher Convenience sampling is very easy to carry out and requires relative little cost and time to carry out.

### 3.3 Sample size

The population of this was active ATM customers of the three selected branches. Accordingly, the total study population will be 18,300 to calculate sample size; the simplified formula provided by Taro Yamane (1967) was used.

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

n= sample size

N = Total population

e = error (0.08)

Using this formula, considering 0.08 percent margin of error, 0.92 percent level of confidence

Based on this  $n = \frac{18,300}{1+18,300(0.08)^2}$  accordingly n=156

$$1+18,300(0.08)^2$$

This means 156 customers used from the total of 18,300 respective numbers of customers under the three branches located in the city administration zone of Addis Ababa. The selected 156 customers can be distributed to three branches of Jemmu, Sengatera and Mexico using

proportionality formula such as  $n_i = n \cdot N_i / N$ , where  $n_i$  = sample of strata,  $N_i$  = population of strata,  $N$  = total sample size.

- Jemmu  $n_1 = 156 \times 5,166 / 18,300 = 44$
- Sengatera  $n_2 = 156 \times 7,734 / 18,300 = 66$
- Mexico  $n_3 = 156 \times 5,400 / 18,300 = 46$

Therefore, number of suitable size of respondents of each branch were decided using the above formula as depicted in table 3.1.

**Table 3.1 Population and Sample Size Determination**

Branch's	Active No. of ATM-Banking Users	Sample size
Jemmu	5,166	44
Sengatera	7,734	66
Mexico	5,400	46
Total	18,300	156

Source: MIS report of each branch as of mar 30, 2019.

### 3.4 Source of data and method of data collection

The study mainly used both primary and secondary sources of data. The types of primary data that the researcher used in this research involve well structurally designed Five point Likert scales that are prepaid in the form closed ended questions 1(strongly disagree), 2(Disagree), 3(Neutral), 4(Agree), 5(strongly agree) was distributed for respondents of selected Addis Ababa city branch customers who are using ATM machines and secondary source of data was collected mainly from the banks Management Information System (MIS) found at head office beside various procedure manuals, strategic documents of CBE was used. In addition, findings of prior research works, E payment journals and procedures, different Bank-related Magazines (CBE) and, the CBE website will be used as reference materials.

The questionnaire was divided in to two sections: Section one capture demographic back ground about the respondents while section two captures information about the challenge and benefits of ATM banking service.

### 3.5 Method of data analysis

In order to meet the stated research objectives, the collected data was analyzed based on the nature of the objective. A descriptive analysis was used to present and interpret the data collected on challenge and benefits of ATM- banking. Using frequency, percentages and

mean then tables was employ to analyse each objective. The data collected via questionnaires was analyzed with descriptive statistics using statistical package for social science (SPSS) software IBM version 20. and reviews of documents and data collected from MIS were interpreted qualitatively in order to depict the secondary data Appropriate graphs were used to show the current status CBE ATM banking service To sum, the analysis of quantitative data and interpretation of qualitative data combines to seek convergence among the results (Creswell, 2003).

### 3.6 Validity and reliability test

**Validity:** a conclusion of any study can be affected by either a researcher’s bias or subjective judgment in the data collection process (Yin, 1994). Accordingly, the researcher must provide supporting evidence that a measuring instrument does in fact measure what it appears to measure. Preparing questionnaires to customer of CBE will be a way of maintaining validity.

It is important to make sure that the instrument that we develop to measure particular concept has indeed accurately measuring the variable and then in fact, we are actually measuring the concept that we set out to measure. In this case, the use of better instrument will ensure more accuracy in result, which in turn enhances the scientific quality of the research.

**Table 3.2 reliability statistics**

No	Variables	Dimensions	Alpha value
1	Challenge	10	0.880
2	Opportunity	11	0.743
3	Customers attitude	7	0.855

Source: - Own survey, 2019

Cronbach’s alpha	Number of items
0.826	28

Source: - Own survey, 2019

As indicated in the table above the cronbach’s alpha is 0.826 which is very high and showing a very strong internal consistency among the measurement items. According to (George and mallery, 2003), the value of alpha should be greater than 0.7 so as to accept the instrument. And the closer cronbach’s alpha coefficient is to 1.0 the grater the internal consistency of the items in the scale Moreover, to secure the content validity of the instrument.

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter deals with the presentation, analysis and interpretation of data gathered from both primary and secondary sources, As it is discussed in the methodology part of this study primary data were collected using questionnaire targeting the customers of CBE who are closely related to the case as a result total 156 questionnaires were personally handed to the respondents with close follow up and guide in filling the questioners. Out of these 156 respondents 150 (96% of respondents) were completed the questionnaires in suitable form. And secondary data were obtained from the banks Management Information System department, now onwards MIS used to show the current ATM banking status of CBE as of march 31 2019. And the study used different graphs and tables to show the current status.

#### 4.1 Analysis of secondary data

##### 4.1.1 The current status of CBE ATM banking system

The following table shows the current CBE total customer base against ATM card holders and active ATM cards as of march 31, 2019 of the current year.

**Table 4.1 CBE ATM banking service current status**

<b>Account holders VS card holders</b>		
Number of account holders	Number of card holders	Number of active ATM cards
22,041,131	6,443,062	3,772,129
	29% of total customer	41% of total ATM card users

**Source, CBE, management information system as of Marv31 2019**

Based on the MIS report as of Mar, 2019 CBE Currently has 22,041,131 customers starched across the country. All accounts in the study years might not be eligible for ATM card user for instance from those newly opened account it might include fixed time deposit ,minor account , pension account ,etc that were not eligible for ATM card user . However regardless of the non eligibility of accounts for ATM card use the current number of card user customers from the opened bank accounts shows only 6,443,062 or nearly 29% which shows ATM numbers is not proportional and are very low relative to the total account holders. Even

Commercial bank of Ethiopia issues different type of card payment to its customers like CBE proprietary or private level cards such as co-branded pre-paid gift card, general purpose pre-paid gift cards etc. The second one is domestic visa cards which most of CBE account holders have like, visa-classic debit card, visa classic women debit cards, visa classic IFB and selam cards, visa gold debit cards, visa platinum debit cards, etc, the third type is international visa debit cards like Visa-classic debit cards, visa platinum debit cards, visa infinite debit cards etc the fourth type of payment card issued by CBE Is international visa pre-paid like visa-classic pre-paid cards, visa-gold and platinum pre-paid cards are included the user is still very near to the ground as compared to the total account holder of CBE (CBE e- payment procedure).

serving this much customers with only traditional way or face to face banking operation creates customer dissatisfaction, work load for employees and increases cost per transaction moreover being an ATM banking customer does not necessarily mean that customers sustainable use ATM banking for instance currently as of march 2019 from total 6,443,062 ATM registered customers only 3,772,129 card are active the rest 2,670,933 ATM card are inactive meaning the card is prepared in the name of the customer but they are not using the card which is nearly 41% of the total ATM card holders and 12% of the total account holders of CBE. On average birr 75 is required to prepare a single ATM card. Therefore if the above number remains inactive the bank loses 200,319,975 birr. This inactive number also did not include those ATM cards that periodically discarded as a result of not collected by the customer on time that is not collected for more than six month. This is might be the low awareness and fear of the customer about the technology; power interruption low system conveniences to use may force customers not to use the technology sustainably.

## **4.2 Analysis of Primary data**

### ***Section one: Demographic Profile of ATM banking Customers***

In this part of the study the researcher tried to treat some socio demographic characteristics of respondents which include age, sex, educational level/qualification and year of usage and type of account they use from the bank of selected commercial banks of Ethiopia customers To find the major out puts of the study and to give important recommendations, the collected data should be analyzed and discussed, accordingly the analysis and important findings from the collected data are discussed below.



#### 4.2.1 Demographic Profile of ATM-banking Service Customers

Table 4.2 demographic back ground of respondents

No.	Demographics	Frequency	Percentage	
1.	<b>Gender</b>	Male	93	62%
		Female	57	38%
		<b>TOTAL</b>	<b>150</b>	<b>100%</b>
2.	<b>Age (Years)</b>	18-24	33	22%
		25-35	99	66%
		36-50	12	8%
		Above 50	6	4%
		<b>TOTAL</b>	<b>150</b>	<b>100%</b>
3.	<b>Educational Levels</b>	Below diploma	23	15.3%
		Diploma	35	23.3%
		Degree	55	36.7%
		Masters and above	37	24.7%
		<b>TOTAL</b>	<b>150</b>	<b>100%</b>
4.	<b>Type of account</b>	Saving	115	77%
		Current	35	23%
		<b>TOTAL</b>	<b>150</b>	<b>100%</b>
5.	<b>Year of usage</b>	1 year	31	20.7%
		1-5 years	96	64%
		Above 5 years	23	13.3%
		<b>TOTAL</b>	<b>150</b>	<b>100%</b>

Source: own survey, 2019

The above Table 4.1 shows regarding gender of respondents 93 (62%) were Male and 57 (38%) were female. This implies that majority of ATM banking users were male than female counterparts. concerning age category out of 156 respondents 33(22%) were between the age (18-24) years, 99(66%) were between 25-35 years old, 12(8%) were between 36-50 years old and the rest least few respondents 6(4%) were above the age 50. This shows majority of the service users were within the range of 25-35 age group which is the highest percentage of all. This implies ATM banking users are youngest and most active population group here the researcher understood ATM banking technology is new to our country. Also Respondents are matured enough to provide answers to survey questions. Table4.2, also shows The that respondents were predominantly degree and above degree holders (36.7%) and (24.7) respectively, Diploma (23.3%) and below diploma (15.3%) from this it's possible to conclude most ATM-banking respondents are customers with sufficient academic preparation or had good literacy levels.. As far as type of account concerned, the respondents were (77%) saving

account holders and the remaining (23%) of them are current account holders this implies most of CBE ATM banking users are saving account holders rather than current or cheque account. When coming to the customers user experience 34 respondents use ATM for 1year, 93 of them use the technology for 1-5 years and the rest 23 respondents use ATM banking for above 5years this data shows ATM usage has incremental for the past five years. And the researcher considered the majority of respondents use ATM banking for 1-5 years which know better the challenges and opportunists of ATM banking in CBE. And become good representatives of the rest CBE ATM banking customers.

**Section two: questions regarding the challenges, benefits and the attitude of customers towards ATM banking service.**

**4.2.2 Challenges for the adoption of ATM banking service**

**Table 4.3 challenges of ATM banking service**

Item		SDA 1	DA 2	N 3	A 4	SA 5	Total	Mean
I found CBE ATM faces Low level of internet penetration and poorly Developed telecommunication infrastructure	Frequency	4	20	6	42	78	150	4.1333
	Percent	2.7%	13.3%	4%	28%	52%	100%	
Frequent power interruption restricts me from using ATM banking	Frequency	15	10	1	49	75	150	4.0600
	Percent	10%	6.7%	0.6%	32.7%	50%	100%	
Some non ATM users influence me not to use ATM banking technology.	Frequency	15	30	12	60	33	150	3.4400
	Percent	10%	20%	8%	40%	22%	100%	
My non readiness to use new technologies makes me not to use the ATM banking technology provided by the bank.	Frequency	9	40	29	60	12	150	3.1733
	Percent	6%	26.7%	19.3%	40%	8%	100%	
CBE ATM machines are mostly out of cash.	Frequency	15	25	13	71	26	150	3.4533
	Percent	10%	16.7%	8.7%	47.3%	17.3%	100%	
CBE ATM machine gets card blocked.	Frequency	10	25	12	29	74	150	3.8800
	Percent	6.7%	16.7%	8%	19.3%	49.3%	100%	
I found the machines of CBE Is always overcrowded.	Frequency	35	70	5	20	20	150	2.4667
	Percent	23.3%	46.7%	3.3%	13.3%	13.3%	100%	
CBE ATM cash withdrawal limit is lower.	Frequency	31	27	12	56	24	150	3.1000
	Percent	20.7%	18%	8%	37.3%	16%	100%	
CBE ATM machines debit or minus the balance from the account without cash payment.	Frequency	6	25	6	42	71	150	3.9800
	Percent	4%	16.7%	4%	28%	47.3%	100%	
CBE ATM machines are always out of service.	Frequency	10	16		53	71	150	4.0600
	Percent	6.7%	10.7%		35.3%	47.3%	100%	

**Source: own survey, 2019**

Table 4.2.3 shows the frequency distribution showing respondents level of agreement to the statement saying “I found CBE ATM faces Low level of internet penetration and poorly Developed telecommunication infrastructure”. All of the respondents answered to the above statement, Out of the total 150 respondents, 52% and 28% of the respondents were strongly agreed agree respectively. 13.3% and 2.7% was disagreed and strongly disagrees respectively and only four respondents i.e. 4 % of the total population were neutral. at the same time Referring to table above for the statement saying “Frequent power interruption restricts me from using ATM banking” 82.7% of the total respondents agree, 16.7% of the total respondents disagree with it and the rest 0.6% of the respondents were neutral here in both statements there was very strong consensus by the respondents that Low level of internet penetration, poorly Developed telecommunication infrastructure and frequent power interruption significantly impacts and challenges ATM Banking users of CBE. It is necessary to have a reliable and cost effective infrastructure that can be accessible to the majority of the population This result confirms the study of (Wondwossen and Tsegai, 2005) stated that lack of sufficient telecommunication infrastructure is one of the basic challenges in the development of E-payment in Ethiopia. As promising nation trying hard for extrication from the dilemma of poverty, we feel it how the development of infrastructure is affecting our daily life. The government should take the leading role to mobilize its resources to bring about radical change in the development of Power and ICT infrastructures. Otherwise, the provision of ATM banking and creating of cash less society would be journey to nowhere unless infrastructural development becomes the upfront agenda of the Government as the business is highly leveraged by ICT and power infrastructure’s.

The above table express that non CBE ATM banking customers push me not to use the technology out of the total respondents 22% of the respondents strongly agree, 40% agree, 8% neutral and the rest 20% and 10% of the respondents were disagree and strongly disagree. This implies in majority of the respondents there was much pressure not to use ATM banking technology from the rest non ATM user customers this is because of lack of awareness on the benefits of new technologies, Fear of risk, Tendency to be content with the existing structures, and People are resistant to new payment mechanisms this result is in a line with a study (Wondwossen and Tsegai, 2005). New technology also requires the test of time in order to earn the confidence of the people, even if it is easier to use and cheaper than older methods.

at the same time for the statements says my non readiness to use new technologies makes me not to use the ATM banking technology provided by the bank out of the total respondents 8% strongly agree, 40% agree, 19.3% nether agree or disagree, 26.7% disagree and the reaming 6.7% of the respondents were strongly disagree. This shows respondents are not ready to use new technologies which are available to them. Customers trust and confidence in the traditional payment system has made customers less likely to familiar new technology. New technologies will not dominate the market until customers are confident that their privacy will be protected and adequate assurance of security is guaranteed. Here the researcher understood that fear of new things or something different from the existing system becomes a big challenge to use ATM banking service. The bank will need to create awareness and give appropriate information to the society about ATM banking.

With respect to the statement related to CBE ATM machines frequently out of cash. From the total respondents 15(10%) of the respondents were strongly disagree, 25(16.7%) of them were disagree, 13(8.7%) were neutral, 71(47.3%) were agree and the rest 26(17.3%) of the total respondents were strongly agree the above result shows ATM machines didn't grant 100% availability of cash ,over 64% of the respondents face a challenge related to cash shortage on ATM machines which implies the bank didn't follow whether ATM machine castes are empty or not And didn't frequently loaded a cash on ATMs.

With regard to the bank ATM is blocking of ATM card. out of the total respondents 49.3% of respondents were strongly agree, 19.3% of them were agree, 8% of the total respondents were neutral and 16.7% and 6.7% of the total respondents were disagree and strongly disagree respectively with the statement. This shows the bank ATM machine gets card block become obstacle for the adoption of ATM banking which wastes their time and restricts the customers from using ATM cards. The bank should have to fix this kind of problems and follow the ATM machines will not stuck cards frequently for giving delight service to its customers.

I found the bank ATM machine is overcrowded out of the total respondents 13.3% of respondents were strongly agree, 13.3% were agree, 3.3% were neutral, 46.7% of the respondents were disagree and the rest 23.3% were strongly disagree. From this the researcher can conclude that the customers can easily make transaction through ATM machines without need to waste time in waiting line to get the service here the customers can prefer using CBE ATM machines than wasting their time in branches or banking halls.

With regard to the daily cash withdrawal limitation on ATM banking transaction the majority of the respondent, 53.3%, of the total respondents agreed that it is insufficient and not acceptable by users to the contrary 38.7% of the respondents disagree that the daily limitation is lower and where as 8% of the respondent were in determinate. This implies that the branch ATM cash withdrawal service is under utilized by the customers and daily cash withdrawal limitation is lower. The daily limit on the ATM also becomes problematic for customers need of monies which exceed the set limit, Customers can easily go to some other banks with a better cash withdrawal limit options.

47.3% of the respondents were strongly agree , 28% of respondents were agree, 4% were neutral 16.7% of them were disagree and the rest 4% of the respondents were strongly disagree with a statement CBE ATM machines debit or minus the balance from the account without cash payment. The result indicate CBE ATM machine debit balance without cash payment customers face a challenge of wrong transaction made via ATMs which disappoint customers, waste customers time for adjusting such inconveniency they may force to wait more than a week this discourages customers from using CBE ATM banking system and also restricts other non users from using the service. Thus the bank losses its prospect and current customers of ATM card holders.

With regard to the statement CBE ATM machines are always out of service. Out of the total respondents 47.3% of the total respondents were strongly agree, 35.3% of them were agree, and the reaming 10.7% and 6.7% of the respondents were disagree and strongly disagree respectively. This result indicates most customers agree with CBE ATM machines are always out of service may be because of maintenance problem and server breakdown this shows the bank didn't follow machines frequently As a result customers challenged to sustainably use the service they just forced to left back without making transaction. So they simply shift to other banks with A good ATM banking service unless the can do transactions whenever they went. This result contradicts the study of (Tan and Teo, 2000) the customer needs to use ATM banking in effective manner

To summarize the challenges of ATM banking standing from result shown in table above. Most of the respondents agree on the statements say I found CBE ATM machines faces Low level of internet penetration and poorly Developed telecommunication infrastructure with a mean value of 4.1 which is the first serious challenge. This implies the bank and the government should have work on ICT and telecommunication infrastructure first to provide

sustainable e-payment service to the customers and also to create cash less society. Next to this CBE ATM machines are always out of service and frequent power interruption ranked as the next serious challenge faced by customers with a mean value of 4.06. The third serious challenge faced by customers is CBE ATM machines debit balance from ATM customers with no cash payment (3.9) which leads customers to a big inconveniency. Plus to the above first three challenges the researcher put the rest challenges in their descending order based on the respondents result. CBE ATM machines get card block (3.88), CBE ATM machines usually out of cash (3.45), Account holders of CBE were influenced by other non ATM-users this shows customers of CBE face big socio-cultural challenge. the non readiness of customers to adopt new technology(3.17) and lower limit of daily cash withdrawal from CBE ATM machines listed at the 4<sup>th</sup>,5<sup>th</sup> 6<sup>th</sup>,7<sup>th</sup> 8<sup>th</sup> rank respectively. The least challenge which most of the respondents disagree with the statement having lowest mean value 2.4667 is ATM machines of CBE are overcrowded. The table below shows the first and least challenge of ATM-banking.

**Table 4.3.1 the first serious challenge faced by customers in the adoption of ATM banking service.**

<b>I found CBE ATM faces Low level of internet penetration and poorly Developed telecommunication infrastructure.</b>			
	Frequency	Valid Percent	Mean
strongly disagree	4	2.7	4.1333
Disagree	20	13.3	
Neutral	6	4.0	
Agree	42	28.0	
strongly agree	78	52.0	
<b>Total</b>	<b>150</b>	<b>100.0</b>	

**Table 4.3.2 the least serious challenge for the adoption of ATM-banking**

<b>I found the machines of CBE are always overcrowded.</b>			
	Frequency	Valid Percent	
Strongly disagree	35	23.3	2.4667
Disagree	70	46.3	
Neutral	5	3.3	
Disagree	20	13.3	
strongly agree	20	13.3	
<b>Total</b>	<b>150</b>	<b>100.0</b>	

### 4.2.3 Benefits gained form ATM-banking service.

**Table 4.4 benefits of ATM-banking service**

Item		1 SDA	2 DA	3 N	4 A	5 SA	Total	Mean
ATM banking provide 24 hours -7 days service	Frequency	-	30	12	62	46	150	3.8267
	Percent	-	20%	8%	41.3%	30.7%	100%	
The ATM banking provided by CBE is time saving	Frequency	22	26	8	55	39	150	3.4200
	Percent	14.7%	17.3%	5.3%	36.7%	26%	100%	
I believe ATM banking is cost efficient	Frequency	19	20	10	60	41	150	3.5067
	Percent	12.7%	13.3%	6.7%	40%	27.3%	100%	
CBE ATMs will provide a mini statement which will help me to know the transactions that have done through my account.	Frequency	20	25	16	60	29	150	3.3533
	Percent	13.3%	16.7%	10.7%	40%	19.3%	100%	
ATM banking allows me to transfer money between the same banks.	Frequency	11	25	-	50	64	150	3.8733
	Percent	7.3%	16.7%	-	33.3%	42.7%	100%	
ATM banking is easy to use.	Frequency	23	28	15	51	33	-	3.2867
	Percent	15.3%	18.7%	10%	34%	22%	-	
I found being CBE ATM banking customers is very easy.	Frequency	22	33	15	41	39	150	3.2800
	Percent	14.7%	22%	10%	27.3%	26%	100%	
I find CBE ATM machines are available everywhere.	Frequency	23	37	5	55	30	150	3.2133
	Percent	15.3%	27.7%	3.3	36.7%	20%	100%	
The organizations trend of paying salary by banks creates opportunity to use ATM banking	Frequency	19	20	10	60	41	150	3.7667
	Percent	12.7%	13.3%	6.7%	40%	27.3%	100%	
Employees of CBE give me appropriate practical training when I take my card from the branch.	Frequency	35	55	15	30	15	150	3
	Percent	23.3%	36.7%	10%	20%	10%	100%	
CBE ATM machines dispensing cash as the denomination I require.	Frequency	25	50	15	20	40	150	2.5667
	Percent	16.7%	33.3%	10%	13.3%	26.7%	100%	

**Source: own survey, 2019**

The above table shows the greatest number 30.7% and 41.3% of the total respondents strongly agree and agree with the statement ATM provides 24/7 service respectively 8% of



the respondents were neutral. And 20% of the total respondents were against. This shows over 70% of the total respondents agree with the statement and can conclude ATM banking service were no limited by time a customers of the using ATM banking can get service 24 hours a day and 7 days a week and being able to withdraw cash note for their immediate use any time this favours customers to use ATM banking. According to (Macandrew, 2003) Views the machines can enable depositories to withdraw cash at more convenient time.

At the same with respect to ATM is time saving out of the total respondents 26% of respondents were strongly agree, 36.7% were agree, 5.3% were indeterminate, 17.3% of them were disagree and the last 14.7% of respondents were strongly disagree which implies the t ATM banking service is time saving According to result, one of the basic of ATM banking system, is that it saves time to accomplish banking activities both for banks as well to customers that using ATM banking system helps to perform banking activities within a short period of time. Clients can simply check their balance, transfer funds and make withdrawal with just a touch of button. On the other hand using ATM banking is more convenient in terms of saving time and delivering of bank service to customer 24 hours a day and 7 days a week. This were in line with the study of (Karjaluoto, 2002), which identifies time saving as a major benefit of online banking system.

According to the question related to ATM banking is cost saving 27.3% of the respondents were strongly agree, 40% were agree, 6.7% of the respondents were neutral while the remaining 13.3% and 12.7% of the respondents were disagree and strongly disagree respectively. This indicated the greatest number with 101 respondents agree that ATM banking is cost efficient. Over the internet the transaction cost is about penny, every financial transaction eventually turns into an electronic process. The sooner it makes the conversion, the more cost effective the transaction become. This indicates that, the basic benefit a firm or customers gained from the adoption of ATM-banking is cost minimization. Customers can get banking service at lower costs compared with traditional banking service, because, it is cheaper to make transaction over Electronic fund transfer. Similarly, the study of, (Balachandher, 2010), noted that, online banking fees have reduced over the years and less expensive when compared with traditional system.

With regard to CBE ATMs will provide a mini statement which will help me to know the transactions that have done through my account. 19.3% of the respondents were strongly agree, 40% of the respondents were agree, 10.7% of them were neutral, 16.7% of the

respondents were disagree while 13.3% of the total respondents were strongly disagree. Which means customers can check the balance and see their recent transaction in their nearby CBE ATM machines without visiting branches this encourage them to use the service.

According to the statement ATM banking allows me to transfer money between the same banks. Out of the total respondents 42.7% were strongly agree, 33.3% of the respondents were agree, 16.7% were disagree and 7.3% were strongly disagree. This implies the greatest number of the respondents agree with ATM machine can transfer money without the need of wasting time in branches by waiting our line to be served this encourages customers to use ATM banking services.

With regard to I found being ATM card holders of CBE is very easy out of the total respondents 26% of the respondents strongly agree, 27.3% percent of respondents were agree, 10% of them ware neutral and the rest 22% and 14.7% of the respondents were disagree and strongly disagree respectively. This indicates being ATM banking user of CBE is very ease. Since the requirement for being CBE card holders is simply enough to have account of CBE which is eligible for ATM banking service, it encourages accounts holders and the bank to use the technology.

I found CBE ATM machines are available everywhere. In this statement out of the total 150 respondents 30(20%) of them were strongly agree, 55 (36.7%) of the respondents were agree, 5(3.3%) were neutral, 37(27.7%) of the respondents were disagree and 23(15.3%) of them were strongly disagreed. The result shows customers can access ATM machines where in the city within in reasonable distance or can access the ATM nearby which motivate customers to use the technology. The result is in a line with the study of (Tan and Teo, 2000). ‘‘availably of ATM-banking empowers customers to perform their transactions anywhere in efficient and effective manner’’

With respect to the organizations trend of paying salary by banks creates opportunity to use ATM banking 41(27.3%) of respondents strongly agree, 60(40%) of the respondents were agree, 10(6.7%) were indeterminate, 20(13.3%) of respondents were disagree and the rest 19(12.7%) of the total respondents were strongly disagree this indicated over 65% of respondents agree with the statement which means the today’s increased trend of organizations paying of their employees salary by bank become a good opportunity for customers to use ATM banking service.

With regard to employees of CBE give appropriate practical training when I take my card from the branch out of the total respondents 10% were strongly agree, 20% of the respondents were agree, 10% were neither agree or disagree, 36.7% of the respondents were disagree and 23.3% of the respondents were strongly disagree. From the result its possible to conclude that respondents didn't get a necessary practical training form the bank branches provide ATM card for just achieving their target but in the other hand it becomes the reason for the increasing number of inactive ATM card as indicated in the secondary data which increases the cost of the bank.

With regard to CBE ATM machine not dispensing cash as the denomination I require out of the total 150 respondents 40(26.7%) of them were strongly agree, 20(13.3%) were agree, 15(10%) of the respondents were indeterminate, 50(33.3%) were disagree finally the rest 25(16.7%) of the respondents were strongly disagree this implies majority of the respondents disagree with the opportunity stated as CBE ATM machine is dispensing cash as the denomination the user require. So this mean the customers use the face to face banking service for getting money as they require. Customers force to withdraw only 100 currency notes from CBE ATM machines. The monies loaded into ATMs are often new and intact, thus 50, 10, and 5 currency notes of Ethiopia are torn and soiled monies normally jam the machine. The bank should have try to sort all the available currencies and load the cash to machines according to their denomination all as much as possible this helps the customer to withdraw money as they required without denomination limit.

To generalize the above finding the first three important benefits that most customers agree with is, ATM banking allows me to transfer money between the same banks mean value, CBE ATM machine provide 24/7 service, and the organizations trend of paying salary by banks creates opportunity to use ATM banking. With a mean value of 3.87, 3.82 and 3.76 respectively. The rest benefits of ATM banking are listed below in their descending order, I believe ATM banking is cost efficient, CBE ATMs will provide a mini statement which will help me to know the transactions that have done through my account, The ATM banking provided by CBE is time saving, ATM banking is easy to use, I found being CBE ATM banking customers is very easy and I find CBE ATM machines are available everywhere are listed. The least opportunity that most respondents disagree is that Employees of CBE give me appropriate practical training when I take my card from the branch with 3 mean value and CBE ATM machines dispensing cash as the denomination I require 2.56 which most of the respondents disagree with the statement included under the benefit of ATM banking

adoption. Here also the researcher tried to show the first and the last benefits realized from ATM banking service based on the respondents mean value with table.

**Table 4.4 1The first most important benefit of ATM banking service**

<b>ATM banking allows me to transfer between the same banks.</b>			
	<b>Frequency</b>	<b>Valid Percent</b>	<b>Mean</b>
strongly disagree	11	7.3	3.8733
Disagree	25	16.7	
Agree	50	33.3	
strongly agree	64	42.7	
<b>Total</b>	<b>150</b>	<b>100.0</b>	

The first most important benefit based on the respondents result is CBE ATM machines allow to transfer fund between the same accounts or branch which enable them to transfer money without the need of wasting time in branches by waiting our line to be served this encourages customers to use ATM banking services.

**Table 4.4.2 the least benefit of ATM-banking service**

<b>CBE ATM dispensing cash as the denomination I require</b>			
	<b>Frequency</b>	<b>Valid Percent</b>	<b>Mean</b>
strongly disagree	15	10.0	2.5667
Disagree	30	20.0	
Neutral	15	10.0	
Agree	55	36.7	
strongly agree	35	23.3	
<b>Total</b>	<b>150</b>	<b>100.0</b>	

The least opportunity that most respondents disagree is that CBE ATM machines dispense cash as the denomination I require with mean value of 2.5 which most of the respondents disagree with the statement included under the benefit of ATM banking adoption.

#### 4.2.4 Attitude of Customers towards ATM banking service

**Table 4.5 attitude of customers towards of ATM-banking**

Item		SDA	DA	N	A	SA	Total	Mean
		1	2	3	4	5		
I have received enough information about the benefits of using ATM banking services.	Frequency	-	79	26	21	24	150	2.9333
	Percent	-	52.7%	17.3%	14%	16%	100%	
ATM banking service present in easily and understandable manner.	Frequency	-	15	10	92	33	150	3.9533
	Percent	-	10%	6.7%	61.3%	22%	100%	
I Believe that using ATM-banking has risk.	Frequency	14	10	20	70	36	150	3.6933
	Percent	9.3%	6.7%	13.3%	46.7%	24%	100%	
I have lack of confidence with the security of ATM machines.	Frequency	12	10	3	75	50	150	3.9400
	Percent	8%	6.7%	2%	50%	33.3%	100%	
ATM banking transaction error are adjusted with in reasonably short time period	Frequency	18	52	18	47	15	150	2.9267
	Percent	12%	34.7%	12%	31.3%	10%	100%	
I found CBE handled properly customers request for new PIN, replacement of damaged or expired cards and other related dispute of ATM banking.	Frequency	27	61	11	31	20	150	2.7067
	Percent	18%	40.7%	7.3%	20.7%	13.3%	100%	
Generally I am happy within the personal service I get from the bank related to ATM banking.	Frequency	25	61	9	35	20	150	3.2400
	Percent	16.7%	40.7%	6%	23.3%	13.3%	100%	

**Source: own survey, 2019**

In the above table with respect to the statement say I have received enough information about the benefits of ATM it is found that 16% of the respondents strongly agree, 14% of the total respondents agree they have received enough information from the bank and 17.3% and

52.7% of the total respondents disagree and strongly disagree respectively from this the researcher conclude respondents didn't know well or not getting information about ATM banking this means the branches are just recruiting ATM-banking customers just simply to chive the target not to the sustainability of ATM banking usage which restricts, customers from using the technology provided by the bank. And the banks might not meet its E-banking goal of creating cash less society to become a world class commercial bank. The result contradicts with the view of (rogers, 1996) that banks could find better ways to teaching peoples how use.

Table 4.5 given above also showed that 83.3% of the total respondents agreed that ATM banking presents in easily and understandable way where as 6.7% and 10% of the total respondents were in determinate and against respectively. This implies t the ATM technology provided by the bank is presented in a very clear and precious manner and the customers are happy with this the presented two machine languages (Amharic and English) have not negative impact on them. And can conclude complexity is not created in ATM users mind. this study is in line with the result found by (Hoppe, 2001) which suggest that the more complex a new technology is perceived to be, the less likely it will be adopted and the more ease of use the more likely to be adopted.

With regard to ATM banking has risk 36(24%) and 70(46.7%) of the total respondents strongly agree and agree respectively that ATM banking has risk where as 20(13.3%) are indeterminate and 10(6.7%) and 14(9.3%) disagree and strongly disagree respectively in the same time 125(83.3%) of the respondents agree that they feel lack of confidence with security of ATM banking while 22(14.7) of the respondents disagree of the case. The result obtained here is customers of CBE have fear of risk with the transaction they made by ATM banking and didn't feel confidence with the security issue which may discourage the customer from usage of ATM banking technology. This result confirms the finding of (Sathye, 1999) which suggests; the greatest challenge among the electronic banking sector is winning the trust of customers in the issue of security or perceived security risk as a key inhibitor in the adoption of online banking.

With regard to adjustment of ATM transaction error 41.3% of the total respondents agreed that ATM banking transaction error are adjusted with in reasonably short period of time where as 46.7% and 12% of the total respondent were against and indeterminate respectively from this the researcher conclude ATM banking transaction error were not adjusted on time

the customer's request for card replacement for expired and damaged cards, new PIN request and request for wrong transaction didn't get appropriate solution from the bank 41.3% of the total respondents agreed that ATM banking customer request for replacement of expired and damaged ATM card and request for new PIN etc. were solved within a reasonably short period of time. But 46.7% and 12% were against and indeterminate respectively. This also indicates customers were served in a delayed time to get back expired or damaged ATM cards and this might dissatisfied or discouraged customers from use of the technology consistently and might force them to turn back to the traditional means of getting banking service.

With respect to the above table results about I am happy within the personal service I get from the bank related to ATM banking. 13.3% of the total respondents strongly agree, 23.3% of respondents were agree, 6% of respondents were neither agree nor disagree, the remaining 40.7% and 16.7% of the total respondents were disagree and strongly disagree respectively with general ATM banking service provided to them this confirms that the majority of the respondents or over 60% of the respondents are not happy by the ATM banking service provided by the bank.

To summarize the attitude of customers towards ATM banking most of the respondents have a negative attitude almost in all parameters. The only good or positive attitudes are ATM banking presents in an easily and understandable manner which most of the respondents agree with relative to the other parameters. Unless most of the respondents have a negative attitude on the parameters present in the above table to list them, they believe that ATM banking has a risk 3.6 and they have a lack of confidence with a security issue 3.9 they were also against the statement I have received enough information from the bank about ATM banking benefits 3.06 and disagree the statement "I found CBE handled properly customers request for new PIN, replacement of damaged or expired cards and other related dispute of ATM banking" and "ATM banking transaction error are adjusted within a reasonably short time period." 2.7 mean value. According to the data in the above table of customers attitude towards ATM banking service the research concludes most commercial banks of Ethiopia ATM banking customers are not happy with the ATM service provided to them.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

In this chapter the major findings of the study are summarized in section 5.1 conclusions are drawn based on the findings in section 5.2 and recommendations are forwarded for the concerned bodies in section 5.3.

#### 5.1 Summaries

Based on the analysis made in chapter four the following conclusions are made on the assessment of the challenges and benefits of ATM-banking service in commercial bank of Ethiopia.

Every business has several processes, some has simple, others have complex and burdensome. But as the business grows, acquires new customers, enters new markets, the business should have keeps the needs and wants of the customers and to be survive and competent in the market must develop it is service and follow the new technology. The company needs to maintain highly accurate and up-to-date payment system. Electronic payment system helps to simplify, integrate, and streamline all the business process, cost-effectively and easily.

Concerning the current status of CBE ATM banking service, based on the secondary data obtained from the banks MIS department from the total of 22,041,131 account holders only 6,443,062 are ATM card users. This shows ATM user's number is very low and not proportional to the total account holders of CBE. Serving this much customer with only a traditional banking system creates customer dissatisfaction, increase work load and also cost of the bank. Out of total 6,443,062 only 3,772,129 cards are active the rest 2,670,933 ATM card are inactive. The analysis result showed that not every ATM banking registered customers actively use the technology, as a result a bank losing 75 birr per each inactive card.

Based on the primary data the study found out the following challenges, most of the customers face challenge of low level of internet penetration, power interruption as power off ATM machines stop working and being out of service which lower the confidence of customers making transaction at any time they went, lower cash withdrawal limit per day is another challenge in the adoption of ATM banking service which returns the customers to a



face to face banking system even they like the technology. Another serious challenge faced by customers include ATM machines of CBE has a problem of getting card block and of deducting balance without cash payment. Customers will not have confidence and reliability on ATM machines with such kind of problems. They may need to wait a day, a week or more to adjust the inconveniency happened because the ATM machines blocked their card and minus balance with no cash payment. Low level of internet penetration, frequent power interruption, Lack of adequate practical training given to customers, inability of withdrawing cash as the denomination they want from ATM machines are included as a challenges for the adoption of ATM banking.

On the section of benefits of ATM-banking, based on the analysis in chapter four the researcher conclude availability of making transaction or payment to the same bank, getting ATM service 24 hour's day 7 days a week, time saving, cost efficiency, the organizations increased trend of paying their employees by bank, knowing current balance and mini statement become the most important benefits for ATM banking service.

To sum up the in the customers attitude section the researchers come up with conclusion that most customers are not happy with the ATM service provided to them based on the respondent's result.

## **5.2 Conclusions**

The Automated Teller Machine has changed people's lifestyles and how the banking industry functions. ATM's provides a lot of benefits to the people but have also challenges the study aims to investigate the challenge and opportunity for the adoption of ATM banking the case of commercial bank of Ethiopia, Based on the perception of ATM banking user customers. To address the objectives, a quantitative research approach was used and data was collected from MIS and survey questionnaire from 150 ATM-banking users. Frequency, percentage and mean were used to analyze the data.

Certainly ATM banking is underdeveloped in banking industry the study aims at investigating challenges and benefits of ATM banking in the case of commercial bank of Ethiopia.

Based on the findings of the study the following conclusion is forwarded.

- even though CBE has been in banking business over 75 years and giving ATM banking service for more than 18years, number of ATM card holders are very low and unproportional in relative to the 2025 goal of the bank of creating cashless society. Only 29% of total customers are ATM card holders more over only 12% of them are active ATM cards for those inactive cards the bank is losing 200,319,975 birr.
- The study shows that the main challenges that influence customers to sustainably use ATM banking service in commercial bank of Ethiopia are the level of development of ICT infrastructure, the road network and frequent power interruption these two items are a very serious challenge that hinders customers from using and embracing the technology advancement of banking industries in the rest of the world even in African countries.
- Result of the study shows respondents' faces challenge of how to use ATM cards because they didn't get appropriate practical training from the bank when they are collecting their ATM card from branches of CBE, The target base ATM-banking user recruitment makes them not to get well training how to use the ATM at the same time some of respondents also said that customers might not know the purpose of the registration.
- Challenges of ATM-banking are not only confined to the above factors the other challenges listed in the study was non-readiness of customers to use or familiar with new technology, influence of non-ATM users, They however stated that the daily cash withdrawal limit of ETB 10,000 was unfavorable to them because they sometimes had to withdraw monies which were bigger than the prevailing daily cash limit plus commercial bank of Ethiopia ATM machines get card blocked, also machines debit balance from customers account with no cash payment CBE ATM reverses the false transaction but when it does not do so, it takes a very long time for it to be reversed when they complain to the branch authorities it took the branch management three weeks or more weeks to credit back into his/her account. in addition to this CBE ATM machines usually out of cash and out of service.
- Still the respondents were also agreed that the current treatment of the bank's E banking customer complain and requests might discourage customers from use for instance adjustment of E banking transaction error were not adjusted with in a

reasonably short period of time, request for new PIN replacement of lost card, expired card etc did not solved as fast as possible.

- On the other hand, the study reveals that the benefits of the technology it help customers to perform transaction in little cost than that of manual banking operation because ATM withdrawals or any service from ATM were with little charge, speed and time saving from the service can be attained, customer can enjoy 24/7 service from the ATM machines, availability of CBE ATM machines at reasonably speed, it allow customers to make fund transfer among the same bank and ability of getting mini statement or knowing transaction that had made on customers account are the benefits realized from the technology.
- Customers attitude is not that much good because even they believe ATM banking has risk and have lack of confidence with security of ATM machines even organizations create a good opportunity to be customer of CBE and card holder trough paying salary by bank but Customers of the bank have low attitude about the system, they are not eager to know the system.

### **5.3 Recommendations**

- As the secondary data indicates the majority of the registered ATM card holder customer of commercial bank of Ethiopia did not use the technology sustainably because of customers lack of awareness on how to use ATM cards and what benefits it had so, the concerned organ has to give serious attention for not losing the benefits gained from technological advancement in banking industry and should ask why customers did not use the product frequently once they registered for being user.
- Another important factor related to customers challenge with regard to ATM banking service is infrastructure, frequent interruption of electric power is a challenge by itself for sustainably use ATM banking service, electric power providers are expected to deliver uninterrupted power supply but the bank itself should have take alternatives action to reduce the power interruption by using diesel generators which can work even after regular working hours of the bank including holidays and weekends.
- Registering customer for being ATM banking user was a cost for the bank by itself there for the bank should not recruit customers simply to fulfill the target given to branches as measurement of performance but should aware that customers about the

technology before they came to bank through intensive promotion systems supported by video jockey and during recruitment at branch for being better and sustainably provider of ATM banking service.

- The bank should have to follow whether their ATM machines are working effectively even in weekends and holidays also should have check whether they have sufficient cash on their cassettes or not. This helps the bank to reduce the serious challenge face by customers because of these easily solved problems.
- For the successful implementation of E-banking system ICT infrastructure, is a major prerequisite, so government, should support banking sector by investing on ICT infrastructure development plus Bank should work with Ethio-telecom to resolve service interruptions and minimize the brunt of the consequences of unreliable internet services. Or the bank management should provide an additional telecommunication network to the branch so that it can rely on that network when the present network goes offline.
- The bank should make an intensive promotion towards ATM banking and raised awareness that ATM banking has no risk and offer training program about opportunities of the technology plus the bank should offer frequent education on all the services the ATM can offer to customers. This helps the bank to win confidence the customers. And reduce number of customers who resist from using the technology due to lack of awareness.
- The bank should have Redesign and upgrade ATM machines to avoid problems related of card blocked and debit of balance with no cash payment which hider's customers from using the technology.
- By far of these the bank has to avoid discouraging factors in using the technology for instance delay in responding customer compliant and requests ,system should have take fast response and corrective action to customers dispute.
- On today's strong computation among banks the customer need no waste time. The bank should make easy and fast the process of ATM card issuance. 1

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## Appendix



### St, Mary's university School of graduate studies

#### Questionnaire

**Dear Respondents,**

I am Habtam Zewdu, MBA student of general management at St, Mary's University School of graduate studies. I am undertaking a project work on opportunity and challenge of ATM banking technologies in Commercial Bank of Ethiopia for the partial fulfilment of the requirements of the degree of Master of Art in general management the aim of this project work is to find out the major opportunity and challenge of ATM banking service Here I kindly request you to attempt all the questions in the questionnaire to meet the aim of the study. Whatever information is provided will be treated with utmost confidentiality and strictly will be used for academic purpose only.

I thank you in advance

Habtam Zewdu

#### **Part I: demographic profile of respondents**

**Please put right mark (✓) in front of your choice box of your responses for the following questions.**

1. Gender:

Male  Female

2. Age:

18-24□ 25-35□ 36-50□ 51-60□ above 60□

3. Education level

Less than diploma □ Diploma □ Degree □ masters □ above master's □

4. Which type of account do you used in the bank.

Current Account□ Saving Account□

5. For how long you used ATM banking in CBE.

1 year □ 1-5 years□ above 5years □

Part II. Questions related with CBE customer's Attitude, challenges and opportunities of ATM banking service.

Below are lists of questioners relating to ATM banking customer attitude, challenge and opportunity? Please indicate whether you agree or disagree with each statement by ticking (√) on the spaces that specify your choice from the options that range from "strongly disagree" to "strongly agree". Each choice was identified by numbers ranged from 1-5.

**Key 1.SA=strongly disagree, 2.A= disagree, 3.N= Neutral, 4.DA= agree 5.SDA= strongly agree**

	Dimensions	SDA	DA	N	A	SA
		1	2	3	4	5
<b>1. Customers Attitude towards about ATM banking</b>						
1.1	I have received enough information about the benefits of using ATM banking services.					
1.2	ATM banking service provided by CBE present in easily and understandable manner.					
1.3	I Believe that using ATM-banking has no risk.					
1.4	I have lack of confidence with the security of ATM machines.					
1.5	ATM-banking transaction errors are adjusted with in reasonably short time period.					



1.6	I found CBE handled properly customers request for new PIN, replacement of damaged or expired cards and other related dispute of ATM banking.					
1.7	Generally I am Happy within the personal service I get from the bank related to ATM banking.					
<b>2 Challenges for the adoption of ATM banking</b>						
2.1	I found CBE ATM faces Low level of internet penetration and poorly Developed telecommunication infrastructure.					
2.2	Frequent power interruption restricts me from using ATM banking.					
2.3	Some non ATM users influence me not to use ATM banking technology.					
2.4	My non readiness to use new technologies makes me not to use the ATM banking technology provided by the bank.					
2.5	CBE ATM machines frequently out of cash.					
2.6	CBE ATM machine gets card blocked.					
2.7	I found the machines of CBE Is always overcrowded.					
2.8	CBE ATM cash withdrawal limit is lower.					
2.9	CBE ATM machines debit or minus the balance from the account without cash payment.					
2.10	CBE ATM machines are always out of service.					
<b>3. Opportunities for the adoption of ATM banking practice</b>						
3.1	ATM banking provide 24 hours -7 days service					
3.2	The ATM banking provided by CBE is time saving					
3.3	I believe ATM banking is cost efficient.					
3.4	CBE ATMs will provide a mini statement which will help me to know the transactions that have happened through my account.					
3.5	ATM banking allows me to transfer between the					

	same banks.					
3.6	ATM banking is easy to use.					
3.7	I found being CBE ATM banking customers is very easy.					
3.8	I find CBE ATM machines are available everywhere.					
3.9	The organizations trend of paying salary by banks creates opportunity to use ATM banking					
3.10	Employees of CBE give me appropriate practical training when I take my card from the branch.					
3.11	CBE ATM dispensing cash as the denomination I require?					

THANK YOU.



**ቅድስተ ማርያም ዩኒቨርሲቲ**

**ድህረ ምረቃ መረሃ-ግብር**

**መጠይቅ**

**የተከበራችሁ ተሳታፊዎች !**

የዚህ መጠይቅ ዋና ተግባር ትምህርታዊ ምርምር ሲሆን የጥናቱም ርዕስ ኤቲም ባንኪንግ አገልግሎት ያሉት ችግሮች እና ጥሩ እድሎች ሲሆን ጥናቱም በንግድ አመራር የማስተራት ዲግሪ ለማጠናቀቅ እንደ አንድ መስፈርት የሚረዳ ነው። ጥናቱ የሚካሄደው በአትዮጵያ ንግድ ባንክ ተመረጡ ቅርንጫፎች ላይ ነው ። መጠይቁን ለመሙላት ያሉት ፍቃደኝነትና ትብብር በጣም አስፈላጊ ስለሆነ ለምርምሩ አስፈላጊ የሆነውን መረጃ ለመሰብሰብ ከዚህ በታች በተቀመጡት ክፍሎች አኳኋን በጥንቃቄ እንዲሞሉ የእርሶን ትብብር በትህትና እየጠየኩ ማንኛውም እርሶ የሚሰጡኝ መረጃ ሚስጥራዊነቱ የተጠበቀ መሆኑን ቃል እገባለሁ።

ለሚያደርጉልኝም ትብብር በቅድሚያ አመሰግናለሁ።

ሃብታም ዘውዱ

**ለአትዮጵያ ንግድ ባንክ የኤቲኤም ባንኪንግ ደንበኞች የተዘጋጀ መጠይቅ**

**ክፍል አንድ፡ የተሳታፊዎች የግል መረጃ (✓) ምልክት በማድረግ መልስዎትን እንዲሰጡኝ እጠይቃለሁ**

1. ያታ :

ወንድ  ሴት

2. ዕድሜ

ከ18-24  ከ25-35  ከ 36-50  ከ51- 60  ከ60 በላይ

3. የትምህርት ደረጃ:

ከ ዲፕሎማ በታች  ዲፕሎማ  ዲግሪ  ማስተርስ እ ና ከዛ በላይ

4. የኢ.ን.ባን ኤቲም ባንኪንግ አገልግሎት ለምን ያህል ጊዜ ተጠቅመዋል

1 አመት  ከ2-5 አመት  ከ5-10አመት  ከ10 አመት በላይ

5. ከ እ.ን.ባ የትኛውን አይነት ሂሳብ ይጠቀማሉ:

ተንቀሳቃሽ ሂሳብ

የቁጠባ ሂሳብ

ክፍል ሁለት: ስለ ኤ ን ባ ኤ.ቲ.ም ባንኪንግ ያሉት አመለካከቶች፣ ችግሮች እና ጥቅሞች

ፍንጭ:- 1 ቢ.አ =ቦጣም አልስማማም 2.አ=አልስማማም 3.ገ.ለ=ገለልተኛ 2. እ ስ =እስማማለሁ 1. ቢ.አ ቦጣም አስማማለሁ

	መለኪያ	ቢ.አ	አ	ገ.ለ	እ	ቢ.አ
		1	2	3	4	5
<b>1.ደንበኞች ስለ ኤ.ቲ.ም ባንኪንግ ያላቸው የግንዛቤ አመለካከት</b>						
1.1	ስለ ኤ.ቲ.ም ባንኪንግ አገልግሎት ጥቅም በቂ መረጃ አለኝ።					
1.2	የ እ.ን.ባ የኤ.ቲ.ም ባንኪንግ ለአጠቃቀም ምቹ እና ግልጽ በሆነ መንገድ ለደንበኛው ቀርባል።					
1.3	የኤ.ቲ.ም ባንኪንግ አገልግሎት መጠቀም አደጋ አለው ብዬ አምናለሁ።					
1.4	በ ኤ.ቲ.ም ማሽን ደህንነት አገልግሎት አመኔታ የለኝም።					
1.5	ኤ.ቲ.ም ማሽን ላይ ለሚያጋጥሙኝ ማንኛውም አይነት ስህተት ባንኩ አፋጣኝ ማላስሽ ይሠጠኛል።					
1.6	እ.ን.ባ ኤ.ቲ.ም ማሽን አገልግሎትን በተመለከተ ለሚገጥሙኝ ችግር ከ ባንኩ አጥጋቢ መላሽ አገኛለሁ።					
1.7	በአጠቃላይ በ እ.ን.ባ ኤ.ቲ.ም ባንኪንግ አገልግሎትን ደስተኛ ነኝ።					

**2. የ ኤ.ን.ባ ኤ.ቲ.ም ባንኪንግ ያሉት እክሎች**

2.1	ከፍተኛ የኢንተርኔት መቆራረጥ እና ፈጣን አለመሆንኤ.ቲ.ም ባንኪንግ እንዳልጠቀም አድርጎኛል።					
2.2	በቂ ያልሆነ የኤሌክትሪክ ሃያል አቅርቦት ኤ.ቲ.ም ባንኪንግ አገልግሎቶች እንዳልጠቀም አድርጎኛል።					
2.3	አንዳንድ ኤ.ቲ.ም ባንኪንግ ተጠቃሚ ያልሆኑ ሰዎች የአገልግሎቱን እንዳልጠቀም ተጽኖ ፈጥረዋል።					
2.4	አዳዲስ ቴክኖሎጂዎችን ያለመጠቀም ልምዴ የባንኩን ኤ.ቲ.ም ባንኪንግ አገልግሎት እንዳልጠቀም አድርጎኛል።					
2.5	የባንኩ ኤ.ቲ.ም ማሽኖች አብዛኛውን ጊዜ ብር አይኖራቸውም።					
2.6	የባንኩ ኤ.ቲ.ም ማሽን ካርድ የይዛል።					
2.7	የባንኩ ኤ.ቲ.ም ማሽኖች ብዙ ጊዜ ወርፋ ይበዛበቸዋል።					
2.8	የኤ.ን.ባ ኤ.ቲ.ም ማሽን የወጪ መጠኑ አነስተኛ ነው።					
2.9	የባንኩ ኤ.ቲ.ም ማሽን ገንዘብ ሳይሰጥ ከሂሳብ ላይ ይቆርጣል።					
2.10	የባንኩ ኤ.ቲ.ም ማሽን ብዙ ጊዜ ከ አገልግሎት ወጪ ነው።					

**3. ለኤ.ቲ.ም ባንኪንግ ምቹ ሁኔታዎችን የሚፍጥሩ ነገሮች**

3.1	ኤ.ቲ.ም. ባንኪንግ 24 ሰዓት 7 ቀን አገልግሎት ይሰጣል።					
3.2	የባንኩ ኤ.ቲ.ም ባንኪንግ አገልግሎት ጊዜየን ቆጥቦልኛል።					
3.3	የኤ.ን.ባ ባንክ ኤ.ቲ.ም ባንኪንግ አገልግሎት ወጪ ቆጣቢ ነው ብዬ አምናለሁ።					
3.4	በኤሌክትሮኒክስ ባንኪንግ ያለፈውን ዝርዝር መረጃዎች በፍጥነትና በማንኛውም ጊዜ ማየት እችላለሁ።					
3.5	በኤ.ቲ.ም ባንኪንግ ተመሳሳይ ባንኮች ላይ ገንዘብ ማስተላለፍ ይቻላል።					
3.6	ኤ.ቲ.ም ባንኪንግ ለአጠቃቀም ቀላል ነው።					
3.7	የኤ.ን.ባ ባንክ ኤ.ቲ.ም ካርድ ተጠቃሚ መሆን በጣም ቀላል ነው።					
3.8	የኤ.ን.ባ ባንክ ኤ.ቲ.ም ማሽንን ሁሉም ቦታ በቀላሉ ማግኘት የቻላል ።					
3.9	የድርጅቶች ሰራተኞችን በባንክ የመክፈል ልምድ መጨመር የኤ.ቲ.ም? ባንኪንግ ለመጠቀም ጥሩ አድል ፈጥሮልኛል።					

3.1 0	የባንኩ ሰራተኞች የኤ.ቲ.ም ካርድ ስዎስድ በቂ የተግባር ስልጠና ሰጠዉኛል።					
3.1 1	ስኬ.ን.ባ የ ኤ.ቲ.ም ማሸን የመምራልገዉን የገንዘብ አየነት ወጪ ማድረግ አልችልም።					

አመሰግናለሁ።