



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

**Assessing the Automated Teller Machine (ATM) service
quality of Commercial Bank of Ethiopia (CBE) in Addis
Ababa**

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Advisor; AbebawKassie(Phd)

June 2017

Addis Ababa

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ST MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES FACULTY
OF BUSINESS AND ECONOMICS MBA IN ACCOUNTING AND FINANCE

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A thesis submitted to the department of accounting and finance

Presented in partial Fulfillment of the Requirements for the Degree of Masters in Accounting and Finance

ST MARRY'S UNIVERSITY

Addis Abeba Ethiopia

DECLARAION

I declare that this thesis is my original work and that all sources of materials used for this thesis have been fully acknowledged. This thesis has been submitted in partial fulfillment of the requirement for the Degree of master of Accounting and finance.

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THESIS APPROVAL

This is to certify that the thesis prepared by Hana Settargachew entailed Assessing the Automated Teller Machine (ATM) service quality of Commercial Bank of Ethiopia (CBE) in Addis Ababa in partial fulfillment of the requirements for the degree of masters in accounting and finance complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

Approved by the board of examiners

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Examiner	signature	date

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Abstract

The objective of the study is to examine the ATM service quality of Commercial bank of Ethiopia. Five ATM service dimensions namely reliability Convenience, Responsiveness, efficient operation and security and privacy have been established based on the literature review. For this investigation primary data was collected from a convenience sample of 240 customer of CBE located in Addis Ababa city using ATM service through structured questionnaire .the collected data was analyzed using mean .the mean result indicate that five dimension of ATM service quality except reliabilities found more than 4 this indicate the respondents have agreed CBE ATM service quality.

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CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

The trend in banking sector has evolved from cash economy and transformed to cheque economy which has further been converted to plastic card economy (Pahwa and Saxena, 2011). For the past twenty years, the use of Information and Communication Technology (ICT) has grown tremendously. The influence of technology over product innovations in banks is enormous. (Fumiko, Richard, and Stuart 2003), Many Banking industries globally and worldwide are applying ICT for their Banking activities and some Banks use ICT-platform as their main transaction environment. Some examples of these Banking transactions involving the use of ICT include: Internet Banking, ATM Banking, Mobile Device Banking, Credit Card Transactions etc. Transactions are made more accurately, faster, secure and profitable with the use of ICT in Banking as compared to the manual approach which was being used formally, especially in developing nations (Khan, 2010).

Khan (2010) cited Surjadjaja, The developments of technologies have enabled organizations to provide superior services for customers' satisfaction. The number of bank customers preferring to use self- service delivery systems is on the increase. This preference is attributed to increased autonomy in executing the transactions. Banks are increasing their technology-based service options to remain competitive. One of the channels of banking service delivery is through the Automated Teller Machines (ATMs) of which the traditionally and primary use was to dispense cash upon insertion of a plastic card. ATM is such type of innovation that can mechanically accept deposits, issue withdrawals, transfer funds between accounts and collect cheques (Kadir, Rahmani and Masinaei 2011). The study will evaluate the effect of ATM service quality on the level of customers' satisfaction and their relationships against its dimensions in Ethiopian context with in the case of the Commercial Bank of Ethiopia (CBE).

1.1.2 Back ground of the company

Commercial bank of Ethiopia (CBE) is the leading bank in Ethiopia established in 1942. It is governmental bank that has a pivotal role in finance sector. Currently it has more than 1185 branches stretched across the country and has about 13 million Account holders. It is pioneer to introduce Western Union Money Transfer Services in Ethiopia and has reliable and long-standing relationships with many internationally acclaimed Banks throughout the world. CBE also pioneer to introduce modern banking to the country, the first bank in Ethiopia to introduce ATM service for local users. Currently CBE has more than 450 ATM machines installed within the capital city Addis Ababa. In the years to come, CBE will continue to expand its branch net work, deployed more ATMs and POS machines so that it should enhance convenience to its customers and further improve its service delivery. By enhancing its service delivery and expanding its outreach, the Bank is committed to maintaining its market share in addition to adding more values to its customers.

CBE Reliable Visa Card

Reliable is a visa branded debit card issued by CBE to facilitate the exchange of funds without paper or hard copy. Reliable visa debit card is either domestic or international. The domestic card is valid only in Ethiopia while the international card is used to make international transactions.

Benefits

- Make financial transactions, including withdrawal of money without the help of a human clerk
- Accessible 24 hours a day and 7 days a week
- No need to carry cash to purchase goods or services. You can transfer the sum of money needed from your account to supplier account by using POS terminal
- No need to go to the bank every time you need to withdraw money. You can access your account at any of the bank's ATM installed in various public places

- Safe from theft and loss of money
- Provides alternative services other than cash withdrawal and purchase of goods, such as mobile top up, bill payment, funds transfer, deposit, balance inquiry, etc

Eligibility

- To enjoy reliable visa debit card services, you must
- be above 18 years old
- have a valid and renewed ID card
- Have an account in one of CBE's branch. Those who are not account holder can get the service through prepaid reliable visa
- fill visa debit application form properly by approaching the nearby branch

The bank has a vision to become a world class commercial bank by the year 2025.
(<http://www.combanketh.com>)

1.2 Statement of the Problem

Organizations in this dynamic global economy demand them to be highly competitive in every aspect. Information technology is considered as the key driver for the changes taking place around the world. Due to a pervasive and steadily growth of information and communication technology, the world banking industry is entering into new phenomena of unprecedented form of competition supported by modern information and communication infrastructure. The information and communication applications are paramount concern to the banks in today's business environment and Internet has become the major platform for all financial, banking and commercial transactions in the present scenario (Worku2010). One on the most determinant factors for organizations success is the quality of their service and products.

Pahwa and Saxena (2011) cited in Cabas(2003) states that use of ATM has become extremely popular among customers as convenient mode of transactions. The technological innovation has transformed the banking business. Banks are aggressively adopting this mode. The advantages of

using ATM have given new momentum in dimensions of service quality and banks are offering new choices to customers.

Even though financial services are paramount importance in domestic and international economies to facilitate service (Patrick, 1966), Banks face a number of challenge during the function of giving operation for its customer like system problem due to power supply cut and telecommunication service in interruption relation to network. Despite the potential financial services have remained limited in the developing world where information asymmetry, inappropriate products, poor infrastructure, cultural influences, low awareness about how to familiar with new coming of technology these service accessible only to the top ties of economic affordable people (IMF, 2015). Therefore, many of them is unable to accessed their money as there is limited a number of ATM because of a number of problem as mentioned above. Number of people face empty ATM box, because these happen quite a number these challenges are categorized into two – machine and human related challenges (Odachi, GebrielNwabounu, 211). These problems relates to the lack of or absence of proper operational efficiency and competence in Ethiopia. Worku (2010) stated that Certainly the banking industry in Ethiopia is underdeveloped and therefore there is an all immediate need to embark on capacity building arrangements and modernize the banking system by employing the state of the art technology being used anywhere in the world.

The study focused to know the effect on ATM service and bank performance caused as a result of adopting ATM service ,in Ethiopian context. service quality and performance of organization can be measured using different proxies. hence, this study measured bank performance and ATM service quality by answering the following basic questions

- What is the contribution of ATM service Quality to service reliability?
- What is the contribution of ATM service to assurance?
- What is the impact of adopting ATM service quality on responsiveness?

1.3. Objectives of the Study

The study has the following general and specific objectives

General Objective

The general objective of the study is to examine the Automated Teller Machine(ATM) service quality of Commercial Bank of Ethiopia (CBE) in Addis Ababa

Specific Objectives

The specific objectives of the study are:

1. To examine the contribution of ATM service quality to reliability.
2. To examine the impact of ATM service quality on bank responsiveness.
3. To investigate the effect of ATM service on empathy.
4. To identify the existing factors that affect performance of ATM in CBE,
5. To investigate the influence of ATM performance in overall efficiency and achievements of the Bank and,

1.4. Research questions

The study was try to answer the following research questions

1. Are CBE's ATM's responsive at the location where they are deployed?
2. Are CBE's ATM's Efficient and operate at the location where they are deployed?
3. Are CBE's ATM's location Convenient enough for customers to use?
4. Are CBE's ATM's Reliable for customer to use ?
5. Are CBE's ATM's Secure and private enough for customer to use?

1.5. Significance of the Study

In this contemporary world using E- payments is a mandatory thing for financial sector. Moreover, in order to create non cash society ATM performance is abase. Specifically, in our society who sees the bank pass book as a warranty for their deposits, ATM helps to change the situation of fearing robbed in the society. Almost every walk of life requires the use of money and carrying cash money would not be safe and comfortable. As a result, E-payments became an integral foundation of modern society. However, part of a society particularly uneducated one, faces a lot of problems in understanding and implementing these E-payment methods particularly

ATM. Having said this about the importance of E- payment, it is believed that this study may help:

- ✓ CBE to raise knowledge and skills of customers to utilize all the benefits of ATM service.
- ✓ CBE to point out factors that influence the ATM process and excel achievement of the Bank,
- ✓ To indicate possibilities to explore and overcome the barriers encountered, and
- ✓ Other researchers working the same area to used the findings as a reference.

1.6. Scope of the study

The study focus on the various dimensions of ATM service quality determinantsubsiding other countries studies in ordertoassessthecurrent ATM service quality level in Ethiopian context the case of CBE. The choice of the bank is that is with large customer base. The study limited on services of ATM and on those customers who use the ATM cards of CBE that are located in Addis Ababa.

1.7. Limitation of the study

To do detail investigation on the problem and to minimize barriers on the identification and assessment process of those ATM service utility difficulties, the study will be delimited in one of a governmental bank at Addis Ababa the name of the bank is Commercial Bank of Ethiopia (CBE). Specifically, the research focus on 20 ATM machines which are located in Addis Ababa and its intention will be investigating the ATM performance difficulties.

1.8. Organization of the study

This research paper consists of five chapters. The first chapter contain of the background of the study, statement of the problem, Objective of the study, significance of the study, delimitation of the study, and organization of the study. The second chapter contain literature review of the study. The third chapter deal research design and methodology. The fourth chapter with the data presentation analysis and interpretation of the research study. The fifth chapter have summary,

conclusion and recommendation based on data collection analysis . Finally list of reference or bibliography and other related item will be attached.

CHAPTER TWO

2. LITERATURE REVIEW

2.1 INTRODUCTION

It is very important for one country to have well organized financial service sector to increase customer and modern service sector to have multi client in market development of economy. The existence of bank makes life of everyone much easier to move their money and keep it as place of store of money. But today banks as well as the overall development of the financial service sector would mean a lot to life of modern economy.

The changing business environment offers challenges and opportunities to the organizations. The changing customers' perception of quality poses unique challenge. Excellence in quality has become an imperative for organizational sustainability. The developments of technologies have enabled organizations to provide superior services for customers' satisfaction Surjadjaja et al. cited at Khan (2010). The number of bank customers preferring to use self- service delivery systems is on the increase. This preference is attributed to increased autonomy in executing the transactions. Banks are increasing their technology-based service options to remain competitive. The ATM is an innovative service delivery mode that offers diversified financial services like cash withdrawal, funds transfer, cash deposits, payment of utility and credit card bills, cheque book requests, and other financial enquiries (Khan, 2010).

A wide range of examples shows the power of information and communications technology to reduce distribution and customer service costs, including the village of ATM of Citibank and ICIC Bank in India, and the mobile transactions services of Wizzit and MTN Banking in South Africa, SMART communications and Globe Telecom in the Philippines, Ceplay in Zambia and the democratic of Congo, and Vodafone and Safaricom in Kenya indeed. A recent study by the consultative Group to assist the poor found that 62 financial institutions in 32 countries report using technology-based channels, ranging from ATMs, point of sale devices and mobile phones, for transactions with low-income clients. Interestingly, Wizzit and Globe Telecom provide financial service sectors without associating with a bank or other financial institution, thus eliminating the need for the poor to hold bank accounts in order to pay bills, transfer funds, and deposit or withdraw cash.

Moutinho (1992) as cited in Pahwa and Saxena (2011) stated that ATM is the abbreviation of automated teller machine which acts as a teller in a bank who takes and gives money over the counter and it was the first well known machines to provide electronic access to customers. With the appearance of automated teller machine, banks are able to serve customers outside the banking hall because ATMs are placed inside or near the banks and also outside the banks such as shopping malls, restaurant, airports or any places that people may gather. In another article Mcandrew (2003) talked about the various utilities of ATMs which has given world wide popularity. The utilities include withdrawal of cash as per convenience of the customers than during the banking hours at branches. Besides providing off time and off shore services, there is reduction of cost of servicing.

Weiner (1999) pointed out that the total number of ATM transaction has more than doubled over the last ten years and is estimated to reach near 11 billion and total number of ATM terminals in United States has tripled over last ten years. This shows that ATM cards have become most popular non cash instruments in USA and its popularity has been explosively increasing throughout the world. Investment opportunities, reduction in costs, satisfaction of customers and competitiveness are motives to install and add new ATM to the existing network. With appearance of ATMs, some limitation of time and geographic location has been resolved. And it also resulted in speed of transactions and saved time for customers.

2.2 Profile of Commercial Bank of Ethiopia

The Commercial Bank of Ethiopia (CBE) is the largest commercial bank in Ethiopia .The bank has around 30,000 employees, who staff its headquarters and its over 1180 branches positioned in the main cities and regional towns.

The leading bank in Ethiopia, established in 1942. Pioneer to introduce modern banking to the country. It has 1185 branches stretched across the country. CBE plays a catalytic role in the economic progress & development of the country.It is the first bank in Ethiopia to introduce ATM service for local users. Currently CBE has more than 12 million account holders. It has strong correspondent relationship more than 50 renowned foreign banks and a swift bilateral arrangement with 500 others. CBE combines a wide capital base with more than 30,000 talented and committed employees. Pioneer to introduce western union money transfer services in

Ethiopia. CBE has reliable and long-standing relationships with many internationally acclaimed banks throughout the world

2.3. ATM banking practice in Ethiopia

Certainly the banking industry in Ethiopia is underdeveloped and therefore there is an all immediate need to embark on capacity building arrangements and modernize the banking system by employing the state of the art technology being used anywhere in the world. With a growing number of import-export businesses, and increased international trades and international relations, the current banking system is short of providing efficient and dependable services and therefore all banks operating in Ethiopia should recognize the need for introducing electronic banking system to satisfy their customers and meet the requirements of rapidly expanding domestic and international trades, and increasing international banking services.

Undeniably the largest state-owned bank, 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 100,000 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 (AbiyDemilew, 2008)

2.4 ATM TECHNOLOGY EVOLUTION

Most inventions have happened due to sheer necessity and ATM is one of them. The history of ATM is full of interesting facts of which some are known and others unknown. According to the website www.engineersgarage.com/invention-stories/atm-history, it is believed that the history

of ATM started when an Armenian named Luther George Simjian was forced to move to USA in the year 1920, under the account of Armenian Genocide. He owned to his credit the invention of a portrait camera and then he later rolled out the formulated idea of ATM. Confident of his invention, he persuaded Citibank to run his product on a six month trial basis. Soon enough, he was disappointed with the performance and the lack of users and concluded that ATM was a wasteful addition to personal banking. The lack of demand for the ATM finally forced him to take a back seat. During this period it was very clear that the time was not right for this concept to have been accepted generously. Simjian clearly lost out on the success and fame and the same was passed on to two other gentlemen, John Shepherd-Barron and Don Wetzel. John Shepherd-Barron was a Scottish national born in India. Later he relocated to Britain and pursued his education from the University of Edinburgh, and at Trinity College, Cambridge. After returning empty handed from a bank, Shepherd-Barron was disappointed to have had no option than to wait till the bank opened the next working day. And thus in a similar fashion like Archimedes, Shepherd-Barron claims to have hit his interesting moment while taking a bath. A self-sufficient cash dispensing machine was what he was thinking about. And soon the ATM was invented in the 20

early 1960s. The invention of a self-sufficient cash dispensing machine was his second and successful attempt at inventions. Prior to this invention he had invented an instrument to scare away seals (fish eating mammals) at his Scottish Salmon farms. Unfortunately, this device instead of deterring the seals attracted them, and was thus a failure. The same website also shows that the ATM machine gained Shepherd-Barron an ever-lasting recognition in the banking world and paved the way for hi-tech banking techniques, online bank accounts, Personal Identification Number (PIN) and chip security technology. The four-digit internationally accepted standard PIN was also invented by him. Earlier, he had a six-digit Army serial number in his mind but later his wife suggested for a shorter PIN as it would be easy to remember. Finally in 1967, the first ATM that dispensed paper currency round the clock (24 hour basis) was unveiled. The ATM was installed outside a Barclay's bank in North London. The ATM machine accepted and generated money through cheques impregnated with certain chemicals. A mild radioactive substance, Carbon 14 was used for detection by the machine. Once the PIN was given, the machine gave out the cash. This radioactive substance had no ill effects on the health of users and Shepherd-Barron claimed that a user would have to eat about 136,000 cheques to suffer any

kind of ill-effects. Reg Varney, a famous TV sitcom popular became the first person to use the ATM in the year 1967 and withdrew about 10 dollars. The amount seems too less for us, but this money was enough for a complete night out spent on the tiles in London, inclusive of dinner, drinks, a show and a taxi-ride back to home. While this prototype device originated by Shepherd-Barron had started functioning, various parallel developments were happening in different parts of the world. The same website further shows that an American engineer Donald Wetzel of Docutel engineered the Docuteller ATM which was declared as the first modern 21 magnetic stripe machine. It recognized magnetically encoded plastic (credit cards) and not the usual paper cheques.

The development of ATM has gone through many stages, it started from its baby stage in the late 1930s and then geared up for longer runs in the 1960s, and finally a matured and stable stage that we see today. Undoubtedly, most of the ideas and patents contributed for makeover of the ATM from time to time form the backbone of what was initiated as “holes in the wall”.

Today, ATMs hold a strong foothold in the world, offering everyone a better access to their money, be it in any corner of the world. There are about 1.8 million ATMs in use around the world with ATMs on cruise and navy ships, airports, newsagents and petrol stations. ATMs too have been categorized as on and off premise ATMs. On Premise ATMs are capable to connect the users to the bank with multi-function capabilities. Off premise, ATM machines on the other hand are the "white label ATMs" and are limited to cash dispense.

The developments have not stopped; the contactless technology is on its rise. The same website concludes that Shepherd-Barron continued to take inimitable and lively interest in technology well even in his old age and had foreseen a future where plastic cards too would be numbered. For his excellent and unforgettable contributions to financial technologies, Shepherd-Barron was offered the OBE award in the year 2005. In the year 2010, he took his last breath and left behind his legacy of technological advancements.

2.5 ATM USAGE

In Ghana to encourage the use of ATM and smart cards the government has introduced ezwich an interbank payment system which will make it possible for customers of one bank to use other banks’ ATM to make cash withdrawals. When the installation of the system becomes complete, customers from one bank can withdraw monies from other banks ATMs 22

e.g. A Barclays Bank customer can withdraw cash from an ATM belonging to Merchant Bank, Ecobank, Ghana Commercial Bank, Stanbic Bank, Zenith Bank etc by the use of the biometric smartcard or the ezwich and vice versa. Although the software meant for the common switch has been designed and demonstrated to all the banks, not all the banks in Ghana including Barclays Bank have configured their ATM for this service (<http://www.iflr1000.com/legislationguide/192/the-e-zwich-electronic-clearing-and-payment-system.html>). It is expected that the common ATM usage would ease sufferings of customers who travel long distances to withdraw monies at their banks. People who are illiterate usually find it difficult to operate the ATM because it requires reading out instructions; this is in line with the study carried out by Khan when he stated in his findings that technical complexities and lack of knowledge are the major disadvantages of the ATM usage (Khan, 2010). Some customers are also reluctant to use the ATM because they are not aware of the charges and this also is in agreement with a study done by Bhatta (2011) whose findings in Nepal showed that over 50% of his study respondents were unaware of the cost and service charges of the ATM use. With the growth in literacy levels, there have been growing and changing needs and expectations of consumers which has resulted in them demanding a wider range of products and services at more competitive prices and the use of more efficient and convenient channels (Kassim,2006). Hone et al. (1998) found that although the world has witnessed a successful and widespread use of the ATM, a significant proportion of bank customers are not using it or experience difficulties when interacting with it. To address this trend they suggested that speech guiding technology should be incorporated in the ATM to encourage customers patronise its services. 23

2.5.1 BENEFITS ASSOCIATED WITH THE USE OF THE ATM

According to the website <http://kalyan-city.blogspot.com/2011/02/automated-teller-machine-atm-advantages.html>, most modern ATMs have the following benefits a. ATMs provide 24 hours service: ATMs provide service round the clock enabling bank customers to make cash withdraw up to a certain limit, depending on the daily withdrawal limit set up by their bank. b. ATMs gives convenience to bank's customers: ATMs provide convenience to the customers. Now-a-days ATMs are located at convenient places such as within the bank premises(on site ATMs) and away from the bank premises(off site ATMs) , such as at the air ports, super markets, fuel filling stations, shopping malls et cetera (etc). c. ATMs reduce the workload of bank staff: ATMs

reduce the work pressure on bank staff and reduces queues in bank premises. d. ATMs provide service without any error: ATMs provide service without error, the customer can obtain exact amount of cash they request. e. ATMs are very beneficial for travelers: ATMs are of great help to travelers because they need not carry large amount of cash with them. They can withdraw cash from any city or state, across the country and even from outside their country with the help of ATM. f. ATMs may give customers new currency notes: Customers may get brand new currency notes from ATMs. The monies loaded into ATMs are often new and intact, this is because torn and soiled monies normally jam the machine. g. ATMs provide privacy in banking transactions: ATMs provide privacy in banking transactions to the customer. He/she will not be shy to withdraw a very small amount of money from the machine as compared to withdrawing that same amount of money from the 24 banking hall teller. h. ATM technology has reduced paper work because it does not require a customer to fill cash withdrawal slips or cheques in order to withdraw money. This is supported by William et al, (2005) findings that application of technology in banking has offered opportunities for the reduction of both paper and people.

2.5.2 PROBLEMS ASSOCIATED WITH THE USE OF THE ATM

Although ATMs provide an extremely useful service to bank customers, at times they can be very frustrating to use and therefore there is a lot of room for improvement in the interface design. The interface enables communication between the user and the machine. Therefore good user interface design is imperative for high usability levels. Often there are problems or inconveniences experienced when using an ATM. Some of these problems include: a. Network problems- The ATM relies on the bank communication network hence when the bank communication network goes off line the ATM services become unavailable for customers use. b. Inability to see the ATM screen well: This depends on the location of the ATM in relation to the position of the sun. At times it can be difficult to view the contents of the ATM menu. c. Wrongly inserting the ATM card: This problem is more common with new ATM users who are not familiar with their new card and the ATM. d. Getting the required amount of money: Some ATM's may not offer the user the required amount of money they want on the initial cash withdrawal screen. The user will then have to use a few more key strokes to select the required amount (e.g. to withdraw GHC55.00 the user might have to select the „other amounts“ option

then type in „55“ using the keypad and then press „enter“). The daily limit on the ATM also becomes problematic for customers needing monies which exceed the set limit. 25

e. Understanding how to perform operations: Some ATM users find the instructions on how to perform operations quite difficult to understand. Often the ATM card is returned to the user while further operations are required and thus the user would have to re-insert his/her ATM card and these further increases the time spent at the ATM. e. Waiting in the queue to use the ATM: If users ahead of you in the queue experience difficulties in using the machine, this will increase the time waiting in the queue. f. ATM charges: Some banks also charge their customers whenever they use the ATM to make cash withdrawal.

2.6 SERVICE DELIVERY

The service delivery in the world has been changed significantly by technology. This is supported by Humphrey (1997), views that the role of technology in today's international financial community has changed significantly. ATMs have made banking services easy for bank customers; Cox (1992) wrote that the ATM can handle normal cash routine enquiries such as cash withdrawal, funds transfer from one account to the other, account statement request, account activity enquiry and others. In some developing countries and developed countries customers can use their VISA and MasterCard branded ATM cards to transact banking services with other compliant VISA or MasterCard branded ATMs. Lovelock (1996) stated that the ATM technology customizes service offerings, reduces waiting time for customers, serves as an alternative channel for service delivery and provides vital information needed by customers in the shortest possible time. The ATM consists of three very important parts, namely the hardware, software (the running program) and the communication modules for the transaction processing to be completed. In 26

order for a bank to have an uninterrupted ATM service operation, it must have a very efficient internet service provider, reliable electric power supply from both the national grid and stand by generators and modern ATM hardware and software. The ATMs are normally installed both within and outside the bank premises such as fuel filling stations, shopping malls, restaurants, airports, school campuses etc. The ATM provides uninterrupted 24 hour service to the bank customers. Some modern ATM s have incorporated features such as biometric technology which

involves obtaining ATM services by the use of finger prints of the account holder other than the use of ATM cards. This technology provides extra security to the customer as without the customer biometric data, transactions on his/her accounts via the ATM would not be possible. Most modern ATMs are also now incorporated with cash deposit features as well as utility payment features such as cellular talk time top up, water and electricity payment for prepaid customers. The ATM screen can also serve as an advertising space for banks to advertise their products. Customers are the life blood of every company, without them most companies will fail to exist; therefore the need to improve service delivery is a must. Unfortunately pursuing the highest level of services does not come cheap. In the service industry, customers perceive that the quality of a company is very essential to the company's profitability. Gronroos (1990) suggested that perceived service quality is as a result of an evaluation process in which customers compare expected perceptions of service delivery and its outcomes with what they actually expected to receive. Mass generation and delivery of services are very difficult. This can be seen as a problem of inconsistent service quality. Both inputs and outputs to the processes involved in providing 27

services are highly variable, as are the relationships between these processes, these makes it difficult to maintain consistent service quality. Human resource management is very important in service delivery; the human factor is often the key success factor in service economies. Demand can vary by season, time of day, business cycle, etc. There is also consumer involvement as most service provision requires a high degree of interaction between the service consumer and the service provider. The combined services of both the Automated and human tellers imply more productivity for the bank during banking hours. Also, it saves customers time in service delivery as alternative to queuing in bank halls, customers can invest such time saved into other productive activities. ATMs are a cost-efficient way of yielding higher productivity as they achieve higher productivity per period of time than human tellers. Furthermore, ATMs continue working when human tellers stop and thus there is continual productivity for the banks even after banking hours.

2.7 CUSTOMER SATISFACTION

Customer satisfaction has been defined by many authors. Oliver (1980) defined customer satisfaction as the product of the accumulated experience of a customer's purchase and

consumption. Porter and Miller, (1985) defined customer satisfaction as a post consumption evaluation that meets or exceeds expectations. According to the website http://en.wikipedia.org/wiki/Customer_satisfaction, in a competitive marketplace where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy. Customer satisfaction ratings can have powerful effects in organizations. They focus employees on the importance of fulfilling customers' expectations. Furthermore, when these 28 ratings dip, they warn of problems that can affect sales and profitability. These metrics quantify an important dynamic. When a brand has loyal customers, it gains positive word-of-mouth marketing, which is both free and highly effective. Therefore, it is essential for businesses to effectively manage customer satisfaction. To be able to do this, firms need reliable and representative measures of satisfaction. The same website shows that in researching satisfaction, firms generally ask customers whether their product or service has met or exceeded expectations. Thus, expectations are a key factor behind satisfaction. When customers have high expectations and the reality falls short, they will be disappointed and will likely rate their experience as less than satisfying. For an organisation to be profitable and over take its competitors and have enhanced customer loyalty, it must focus on improving its customer satisfaction. In order to achieve this, customer feedback must be taken very seriously. Customer satisfaction can be received by feedback using suggestion boxes, toll free telephone lines, electronic mails, observations etc. Organisations can surprise customers by calling to congratulate them on their birthdays, wedding days etc. Organisations can take advantage of the satisfaction of their products by their consumers to increase the price of their products. The level of satisfaction can vary depending on other options the customer may have and other products against which the customer can compare the organization's product. Work done by Parasuraman, Zeithaml and Berry (Leonard L) between 1985 and 1988 provides the basis for the measurement of customer satisfaction with a service by using the gap between the customer's expectation of performance and their perceived experience of performance. This provides the measurer with a satisfaction „gap“ which is objective and quantitative in nature. The usual measures of customer satisfaction involve a survey with a set of statements using a 29 Likert Technique or scale. The customer is asked to evaluate each statement and in term of their perception and expectation of performance of the organization being measured.

CHAPTER THREE

3. METHODOLOGY

The study is to examine the Automated Teller Machine(ATM) service quality of Commercial Bank of Ethiopia (CBE) in Addis Ababa .In this part, the data and method of analysis that are used for the investigation are presented. To achieve the objectives of this study, the researcher collected the data from the customers .This study finding is based on sample survey through questionnaire method, which tries to analyze the view of the customers using the information collected from them.

3.1.Research Design

The study was employ survey research design that will most suit to achieve an answer for the proposed research questions. Among government and private owned banks found at national level, CBE will be selected purposively due to its special and service coverage, being pioneer in the banking system, large number of customers and other factors. Convenience sampling technique used to select Addis Ababa city, in which the selection basis similarly on factors of CBE selection. Regarding the method of sample size selection simple random sampling technique will be employed to determine the sample size (i.e. the number of ATM Card holders). The collected data will be subjected to statistical software like SPSS 20 for analysis and results will be presented using descriptive statistics, graphs, tables etc.

3.2. Sampling and Data Collection

3.2.1.Population and Sample

The population of the study is CBE ATM card holders who are located in Addis Ababa. Convenience sampling technique is used to collect the data from the study population and 240 customers who hold ATM card contacted arbitrarily. Questionnaire is selected as data collection instrument since it is easy to get a wide range of data in a short period of time from each respondent. The sample size is determined based on previous studies (PahwaandSaxena, 2011).

3.2.2. Data source:

Primary data is used for the purpose of the study. One set of structured questionnaire is used to collect primary data for the study. Questionnaires were distributed and collected from the customers of the Commercial Bank of Ethiopia (CBE) ATM users and 214 respondents return the questionnaires. There are more than 450 ATM terminals of CBE Bank with in Addis Ababa city. The questionnaires are administered by personal delivery on 20 ATM terminals based on Convenience. Respondents are selected from bank customers who visited the sampling locations during various working hours of the same day (morning and evenings), as well as various days of the week, to reduce any potential bias owing to high concentration of bank customers during certain hours of the day, or certain days of the week or month, in order to eliminate the sampling frame errors and to ensure the representation of the population under study in the sample units. This data collection procedures outlined by similar studies. Respondent ATM users have been explained the objectives of the study and were requested to fill in the questionnaire on the spot.

3.3. Development of Instrument

The survey questionnaire measured five dimensions of ATM service quality and its effect on customer satisfaction. The convenience dimension contains (4 items); efficient operation (4 items); security and privacy (2 items); reliability (2 items); responsiveness (3 items); ATM service quality (1 items) and customer satisfaction (1 items) respectively.

The questionnaire contains three parts; the first part deals with the respondents back ground and related facts, the second part which focused on the five dimensions of ATM service quality and the third part focused on the overall service quality and customer's satisfaction. Its design uses two scales to collect the data. The nominal scale is used to collect personal information about respondents. Five point Likert scale ranging from one (strongly agree) to five (strongly disagree) is used to measure the response of all dimensions of ATM service quality and customer satisfaction. The questionnaire is prepared in English as well as in Amharic language to enhance the reliability of the study.

3.4 Statistical tools Used for Data Analysis

SPSS (Statistical Package for Social Sciences) version 16.0 is used to compute and analyze the data. The statistical tests in data analysis include descriptive statistics such as frequency, percentages and mean.

First, the data analyzed by using descriptive statistics. ATM service quality of the respondents is calculated using the information gathered for analyzing the situation by using Mean level. Weighted Average Scores is calculated using SPSS between various aspects of ATMs regarding their level of satisfaction and then ranking is done determining the aspect contributing the most towards the overall satisfaction of customers. To determine the relationship between variables, correlation analysis is done. That are convenience, efficient operation, security and privacy, reliability and responsiveness relationship with ATM service quality is examined. Based on the result ATM service quality relationship with customer satisfaction is evaluated

3.5 Data presentation

The collected data was presented using (editing, coding, tabulation and mean and standard deviation) for the realization of the study. This method is thought to be suitable for this research because the researcher believes that this method will not be sophisticated and time consuming

Editing: is a process by which raw data are checked to verify that the data have been correctly entered from the data collection form to the device of analysis.

Coding: is assigning numerals or other symbols to answers so as to enable the responses to be grouped in to a limited number of classes or categories.

Tabulation: is the process of summarizing raw data and displaying it in compact form for further analysis.

Mean: is the average of the numbers collected from the questionnaire.

Standard deviation: a standard deviation of more than 1 , shows high dispersion but, less than 1 shows the responses are clustered around the mean

3.6. Validity and Reliability of the Study

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.

Reliability: on the other hand, is the central concern to social scientists because the measuring instruments they employ are rarely completely valid. Reliability is the extent to which a measuring instrument contains variable errors, that is, errors that appear inconsistently from observation during any one measurement attempt or that vary each time a given unit is measured by the same instrument. Reliability of the data will be checked by triangulation of the collected data and information (Kothari, 2009)

3.7. Ethical consideration

The respondents are given privilege of not writing name and other identities to hide them from un wanted approaches to be maintained by any other groups, no respondent was forced to fill the questionnaires unwillingly and/ or without his/her consent.

Chapter Four

4.1. DATA ANALYSIS, PRESENTATION AND INTERPRETATION

For this study 240 questionnaires were distributed and collected from the customers of the Commercial Bank of Ethiopia (CBE) ATM users. From the collected questionnaires 214 (89.17%) of them were found to be useable for analysis. Descriptive analysis is done on the gathered data.

4.1. Demographic Characteristics of Respondents

Table 1: Demographic Characteristics of Respondents

Demographic Characteristics	Alternatives	Frequency	Percentage	Valid percentage	Cumulative percentage
Gender	Male	125	58.41	58.41	58.41
	Female	89	41.59	41.59	100.00
	Total	214	100.00	100.00	
Age	<25	44	20.56	20.56	20.56
	25-40	124	57.94	57.94	78.50
	41-55	34	15.89	15.89	94.39
	>55	12	5.61	5.61	100.00
	Total	214	100.00	100.00	
Educational Background	High school or less	8	3.74	3.74	3.74
	Certificate or diploma	26	12.15	12.15	15.89
	First degree	152	71.03	71.03	86.92
	Second degree and above	28	13.08	13.08	100.00
	Total	214	100.00	100.00	
Profession	Employee	142	66.36	66.36	66.36

	Business man	42	19.63	19.63	85.98
	Student	14	6.54	6.54	92.52
	Professional	12	5.61	5.61	98.13
	Retired	4	1.87	1.87	100.00
	Total	214	100.00	100.00	
Monthly Income	<2000	18	8.41	8.41	8.41
	2000-4000	66	30.84	30.84	39.25
	5000-11999	110	51.40	51.40	90.65
	12000 or more	20	9.35	9.35	100.00
	Total	214	100.00	100.00	
Frequency of ATM use	4 or less times	118	55.14	55.14	55.14
	5-8 times	40	18.69	18.69	73.83
	9-12 times	32	14.95	14.95	88.79
	13 Or more	24	11.21	11.21	100.00
	Total	214	100.00	100.00	

Source: questioner returned

The result of the analysis of demographic characteristics of the respondents' shows that (58.41%) are males and the rest are females (41.59%). Table 1, shows more than 78% of ATM users age ranges from age 25 - 40 and indicates that this banking channel more preferred by younger societal group. Hence, commercial bank needs to do more to create awareness among the society at different age group. In addition the analysis of respondents' educational status shows; 3.74% who completed high school or less grade, 12.15% certificate or Diploma, 71.03% first Degree, 13.8% second degree and above. Moreover respondents' professional status found as 66.36% employed, 19.63% Businessman, 6.54% students, 5.61% professional workers and 1.87% retired. The level of income of the respondents are also 8.41% (<=2000), 30.84% (2000-4999), 51.40% (5000-11,999), and 9.35% (>=12000).

So this analysis implies that majority of the ATM banking service users of the CBE are male (58.41%) sex wise. In addition majority of the Bank's ATM users are holders of First Degree

(71.03%) and also most of the respondents are found to be employed (66.36%) in different organizations. The above statistics indicates that this banking channel more preferred by male, highly educated and employed societal group. Hence, commercial bank needs to do more to create awareness among the society at different gender and economic group.

As can be seen from table-1, the respondents were asked ‘How often they use ATM to get a banking service in a month?’ they answered that 55.14 % (<=4 times a month) uses ATM to get service from the bank, 18.69% (5-8 times a month) use ATM, 14.95% (9-12 times a month) use ATM and 11.21 % (>=13 times a month) use ATM to get services. From this it can be said that out of the ATM users of the bank around 73% do not effectively use the technology to get the required banking services that could be used through ATM. Hence, commercial bank needs to do more to create awareness about the benefits of ATM technology and encourage using.

4.2. Responsiveness

Table 2: Responsiveness

		Strongly agree	agree	neutral	Disagree	disagree	Total	Measurement	
								mean	mean of mean
1	The company Promptly deliver ATM Card(A1)	42	98	46	28	0	214	4.95	4.87
2	Cash is withdrawn from the machine Promptly(A2)	26	104	50	28	6	214	4.91	
3	The bank takes care of problems promptly(A3)	30	76	44	48	16	214	4.76	
							Overall mean	14.62	

Source: questioner returned

From the analysis of the three questions which deal about Responsiveness of ATM service quality to the bank customers, the mean of each of the above statements in the table -2 above are;

4.95 for A1, 4.91 for A2 and 4.76 for A3. The mean response of the ATM users on each statement is above four which indicates that most of the respondents are satisfied on ATM service responsiveness. In other word, A1, A2 and A3 have means greater than four which imply that respondents are better convinced, indicating some level of agreement on the statements; The company Promptly deliver ATM Card, Cash is withdrawn from the machine Promptly and The bank takes care of problems promptly.

Mean of mean of the three statements on ATM responsiveness quality dimension to the customers has also indicated that it is above four (4.87). This shows that the mean of the responses on all the statements can be taken as the customers have agreed on ATM service quality dimension categorized under Responsiveness.

4.3. Efficiency operations and customer satisfaction

Table 3: Efficiency operations

		Strongly agree	Agree	Neutral	disagree	disagree	Total	Measurement	
								Mean	mean of mean
4	Cash always Available in ATM (B1)	32	86	60	36	0	214	4.95	4.82
5	Cash is withdrawn Correctly as it ordered(B2)	42	132	32	8		214	4.47	
6	Notes of good Quality are available in ATM(B3)	104	82	16	10	2	214	4.91	
7	The ATM enables me to complete a transaction quickly(B4)	44	110	44	14	2	214	4.95	
							Overall mean	19.28	

Source: questioner returned

According to table 3, of the four questions which deal about Efficiency operation of ATM service quality to the bank customers, the mean of each of the above statements are; 4.95 for B1, 4.47 for B2, 4.91 B3 and 4.95 for B4. The mean response of the ATM users on each statement is

above four which indicates that most of the respondents are satisfied on ATM service efficiency. In other word, B1, B2 ,B3 and B4 have means greater than four which imply that respondents are better convinced, indicating some level of agreement on the statements; Cash always Available in ATM, Cash is withdrawn Correctly as it ordered , Notes of good Quality are available in ATM and The ATM enables me to complete a transaction quickly.

Mean of mean of the four statements on ATM efficient operation quality dimension to the customers has also indicated that it is above four (4.82). This shows that the mean of the responses on all the statements can be taken as the customers have agreed on ATM service quality dimension related to efficiency operation.

4.4. Convenience and customer satisfaction

Table 4: Convenience

		Strongly agree	agree	neutral	disagree	disagree	Total	Measurement	
								mean	mean of mean
8	ATM machines can be accessed any were in the city in reasonable distance(C1)	38	114	48	14	0	214	4.89	4.72
9	The ATM user interface is simple and easy to understand (C2)	66	128	18	2	0	214	4.59	
10	I can access the ATM nearby(C3)	52	126	28	8	0	214	4.64	
11	Information at this ATM screen is well organized(C4)	58	122	22	12	0	214	4.74	
							Overall mean	18.86	

Source: questioner returned

From table -4 above, the mean responses of the respondents for each of the statements which can indicate the convenience ATM service quality dimension are as follows. The mean responses of the ATM users on the first statement which says ‘ATM machines can be accessed any were in

the city in reasonable distance’, second statement which says ‘The ATM user interface is simple and easy to understand’, the third statement which says ‘I can access the ATM nearby’ and the fourth statement which says ‘Information at this ATM screen is well organized’ are 4.89, 4.59, 4.64 and 4.74 respectively.

These indicate that most customers of the CBE who use the ATM banking technology have agreed on the convenience dimensions of ATM service quality.

When we see the mean of mean of the responses of the ATM users on the four statements it is 4.72 which implies ATM service quality with regard to convenience make respondents satisfied.

4.5. Reliabilities and customer satisfaction

Table 5: Reliabilities

		Strongly agree	Agree	neutral	disagree	disagree	Total	Measurement	
								mean	mean of mean
12	The ATM is always available for business(D1)	20	86	68	38	2	214	4.95	3.37
13	Power Back up /Generator / is Available(D2)	12	50	56	66	30	214	1.80	
							Overall mean	6.75	

Source: questioner returned

In this research assessment of the attitude of the ATM users towards reliabilities of ATM service quality dimension is made using two statements. The respondents were given the statements ‘The ATM is always available for business’ and ‘Power Back up /Generator / is Available’. To express their level of agreement or disagreement in five points scale Likert scale. The mean of the responses of the ATM user on D1, and D4 are found to be 4.95 and 1.80 which imply that each of the means is greater than 4.00. Indicates those respondents have agreed on these

statements. Otherwise if the means is less than 4.00 indicates those respondents disagree on these statements.

The result of the analysis in table-5 above has also indicated that the mean of mean of the statements regarding the reliabilities of the ATM service quality dimension is 3.37. From this we can infer that ATM users have not a positive attitude toward this service quality dimension of the technology.

4.6. Security and privacy and customer satisfaction

		Strongly agree	Agree	neutral	disagree	disagree	Total	Measurement	
								mean	mean of mean
14	I feel secure in using ATM card(E1)	60	108	30	12	4	214	4.98	4.97
15	Location of ATMs are safe to withdraw money(E2)	60	96	42	14	2	214	4.96	
							Overall mean	9.94	

Table 6: Security and privacy

Source: questioner returned

The bank customers' responses on the Security and Privacy of ATM service quality dimensions as shown in table-6 are the results. When we see the mean of the first statement 'I feel secure in using ATM card' and the second 'Location of ATMs are safe to withdraw money' are 4.89 and 4.96 respectively. The mean of the two statements regarding the Security and privacy service quality dimension of ATM banking technology are greater than to 4.00 indicating that the customers are convinced or satisfied that ATM technology make them feel secure and Location of ATMs are safe to withdraw money.

Generally the mean of means of the two statements on security and privacy is found 4.97 which indicate respondents have agreed service quality with regard to security and privacy of this technology to some level.

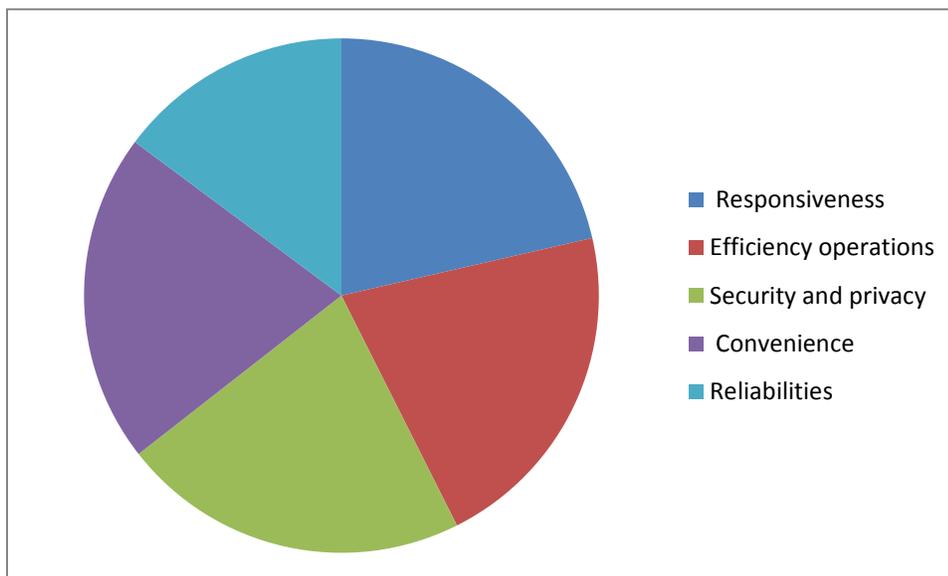
The survey questionnaire measured five dimensions of ATM service quality and its effect on customer satisfaction. The convenience dimension contains (4 items); efficient operation (4 items); security and privacy (2 items); reliability (2 items); responsiveness (3 items); respectively

Table 4.7 The mean of five dimensions of ATM service quality and effect on customer satisfaction.

Dimensions	MEAN
Responsiveness	4.87
Efficiency operations	4.82
Security and privacy	4.97
Convenience	4.72
Reliabilities	3.37

:

Chart 4.1 The mean of five dimensions of ATM service quality and effect on customer satisfaction



Source: questioner returned

Generally the mean of means five dimensions of ATM service quality and effect on customer satisfaction except Reliabilities found more than 4 this indicate the respondents have agreed service quality.

4.8. ATM Service quality rated by respondents

Table 7: ATM Service quality rated by respondents

	frequency	percentage	Valid percentage	cumulative percentage
Excellent	18	8.41	8.41	8.41
Very good	50	23.36	23.36	31.78
Good	124	57.94	57.94	89.72
Bad	18	8.41	8.41	98.13
Very bad	4	1.87	1.87	100.00
Total	214	100.00	100.00	

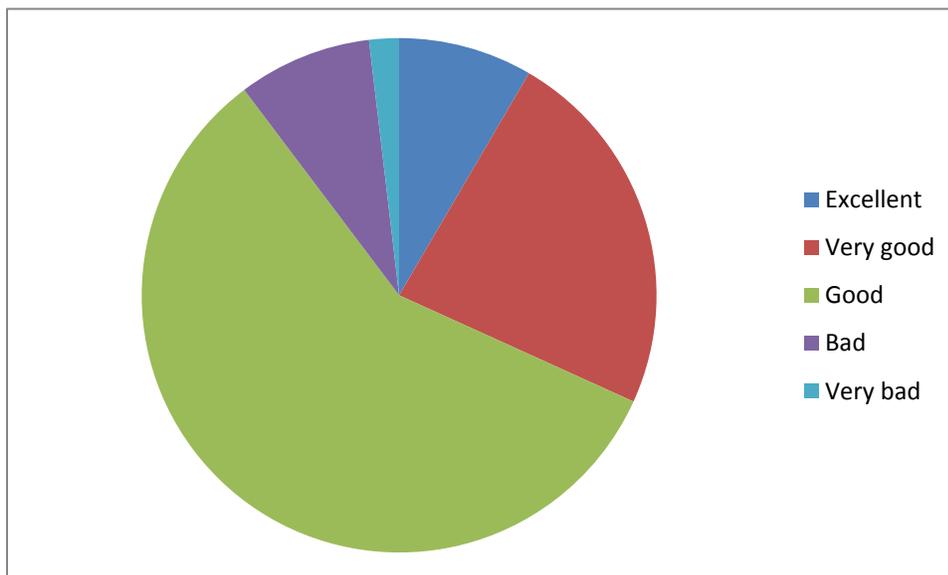


Chart: 4.2 Service quality rated by respondents

Source: questioner returned

From the table and chart above, 89.72 % of the sampled respondent indicated that Automated Teller Machine service quality is rated as good to excellent. Therefore, it can be deduced that Automated Teller Machine service quality of CBE at the right track.

4.9. Customers' satisfaction rated by respondents

Table 8: Customers' satisfaction

	frequency	percentage	Valid percentage	cumulative percentage
Very satisfied	28	13.08	13.08	13.08
Satisfied	114	53.27	53.27	66.36
Neutral	56	26.17	26.17	92.52
Dissatisfied	14	6.54	6.54	99.07
Highly Dissatisfied	2	0.93	0.93	100.00
Total	214	100	100	

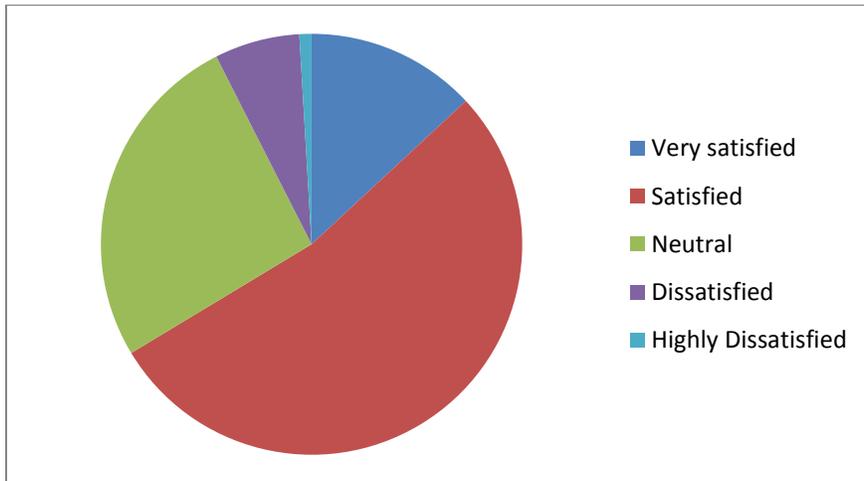


chart4.3: Customers’ satisfaction rated by respondents

Source: questioner returned

Table 8 and chart 4.2 shows more than 66% of ATM users are satisfied this indicates that this banking channel more preferred .Hence; commercial bank of Ethiopia needs to do more improvements to create more satisfaction to customers even if most of the respondents are satisfied with regard to ATM service .

CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this chapter the major findings of the study are summarized; conclusions are drawn based on the findings and recommendations are forwarded for the concerned bodies.

5.1. Summary and conclusions

The main objective of this study was to to examine the Assessing the Automated Teller Machine(ATM) service quality of Commercial Bank of Ethiopia (CBE) in Addis Ababa and The specific objectives of the study are to assess the current performance and the existing factors that affect performance of ATM in CBE.

The study was try to answered the following research questions

1. Are CBE's ATM's responsive at the location where they are deployed?
2. Are CBE's ATM's Efficient and operate at the location where they are deployed?
3. Are CBE's ATM's location Convenient enough for customers to use?
4. Are CBE's ATM's Reliable for customer to use ?
5. Are CBE's ATM's Secure and private enough for customer to use?

The mean response of the ATM users on each statement which indicates that most of the respondents are satisfied on ATM service responsiveness. In other word, A1, A2 and A3 have means greater than four which imply that respondents are better convinced, indicating some level of agreement on the statements; The company Promptly deliver ATM Card, Cash is withdrawn from the machine Promptly and The bank takes care of problems promptly.

Mean of mean of the three statements on ATM responsiveness quality dimension to the customers has also indicated that it is above four (4.87). This shows that the mean of the responses on all the statements can be taken as the customers have agreed on ATM service quality dimension categorized under Responsiveness.therefore answer of research questions # 1is yes CBE'S ATM responsive.

Efficiency operation of ATM service quality to the bank customers, have means greater than four which imply that respondents are better convinced, indicating some level of agreement on the

statements; Cash always Available in ATM, Cash is withdrawn Correctly as it ordered , Notes of good Quality are available in ATM and The ATM enables me to complete a transaction quickly. Mean of mean of the four statements on ATM efficient operation quality dimension to the customers has also indicated that it is above four (4.82). This shows that the mean of the responses on all the statements can be taken as the customers have agreed on ATM service quality dimension related to efficiency operation.

The mean responses of the respondents for each of the statements which can indicate the convenience ATM service quality dimension are as follows. The mean responses of the ATM users on the first statement which says 'ATM machines can be accessed any were in the city in reasonable distance', second statement which says 'The ATM user interface is simple and easy to understand', the third statement which says 'I can access the ATM nearby' and the fourth statement which says 'Information at this ATM screen is well organized' are 4.89, 4.59, 4.64 and 4.74 respectively.

These indicate that most customers of the CBE who use the ATM banking technology have agreed on the convenience dimensions of ATM service quality.

When we see the mean of mean of the responses of the ATM users on the four statements it is 4.72 which implies ATM service quality with regard to convenience make respondents satisfied.

In this research assessment of the attitude of the ATM users towards reliabilities of ATM service quality dimension is made using two statements. The respondents were given the statements 'The ATM is always available for business' and 'Power Back up /Generator / is Available'. To express their level of agreement or disagreement in five points scale Liker scale. The mean of the responses of the ATM user on D1, and D4 are found to be 4.95 and 1.80 which imply that each of the means is greater than 4.00. Indicates those respondents have agreed on these statements. Otherwise if the means is less than 4.00 indicates those respondents disagree on these statements .the mean of mean of the statements regarding the reliabilities of the ATM service quality dimension is 3.37. From this we can infer that ATM users have not a positive attitude toward this service quality dimension of the technology.

The bank customers' responses on the Security and Privacy of ATM service quality dimensions When we see the mean of the first statement 'I feel secure in using ATM card' and the second 'Location of ATMs are safe to withdraw money' are 4.89 and 4.96 respectively. The mean of the

two statements regarding the Security and privacy service quality dimension of ATM banking technology are greater than to 4.00 indicating that the customers are convinced or satisfied that ATM technology make them feel secure and Location of ATMs are safe to withdraw money.

Generally the mean of means of the two statements on security and privacy is found 4.97 which indicate respondents have agreed service quality with regard to security and privacy of this technology to some level.

Generally the mean of means five dimensions of ATM service quality and effect on customer satisfaction except Reliabilities found more than 4 this indicate the respondents have agreed service quality.

5.2. Recommendations

The following recommendations were made in line with the findings and the conclusions drawn.

The study found that there are more males ATM subscribers than females in the study area. To reverse this situation management should draw an educational program that would target female customers in order to increase the patronage of women in the use of the branch ATM. Management should also conduct frequent education on all the services the ATM can offer to customers. It was found that majority of the subscribers are within the age ranges 25 - 40 years. There is therefore the need for management to target customers in the other age categories. This can be done by carrying out promotions to attract the various age groups. It was also found that majority of the customers are employed societal group. Management is being recommended to offer education and promotion for customers in the other occupations.

All the Service Quality attributes adopted from empirical researches are valid attributes of ATM Service quality and that all the five dimensions significantly associate with ATM service quality. ATM technologies installed by the banks are convenience, have good operational efficiency ATMs. This demonstrates CBE have invested in effective ATM technologies that enhance the performance of ATM SQ. The results have further found that service quality performance under reliabilities dimension performing the least among the other service quality dimensions. ATM banking performed the lowest in ATMs Power Back up /Generator / is Availability.

Most attributes perceived high in performance are related to personnel and management decision making. Competition in banking industry is getting tough, and to create competitive advantage and customer satisfaction only through ATM technology cannot bring the intended result, as it

were in the early introduction of ATM to the market. Hence, banks to create competitive advantage and achieve more customer satisfaction needs to improve supporting service and managerial decision, working on those area identified by the researcher as a weakness in ATM banking.

Improved management decisions are required when installing ATMs to provide customers with reliabilities and convenience in the usage of ATM service to ensure increased preference to ATM banking. In addition, there should be a standby team equipped with a car that can be dispatched to any location where a customer faces any problem due to power loss and improve ATMs Power Back up /Generator / is Availability.

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Appendix 1: Questionnaire for ATM users

St. Mary University College School of Graduates studies

Questionnaire

The purpose of this questionnaire is to *Study the effect of Automated Teller Machine Service Quality on Customers' Satisfaction: the case of CBE*. I assure you that your answer is confidential, but highly valuable to achieve the research objective. The researchers want to forward their deepest gratitude for your keen cooperation in advance.

Section I: Personal Data

- 1-Gender: male female
- 2- Age in years: < 25 25-40 41-55 >55
- 3- Level of education: High school or less Certificate or diploma 1st Degree
 2nd Degree and above
- 4- Profession: Employee Businessmen Student Professional Retired
- 5- Monthly income (Birr)

< 2 0 2,0 4,999 5 0-11,999 12 0 or more

6- Frequency of ATM use

- 4 or less times a month 5 to 8 times a month
- 9 to 12 times a month 13 or more times a months

Section II: You are requested to put “X” mark on your impressions of the items listed below

No	FACTORS	Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
	Responsiveness					
1	The company Promptly deliver ATM Card					
2	Cash is withdrawn from the machine Promptly					
3	The bank takes care of problems promptly					
	Efficiency operations					
4	Cash always Available in ATM					
5	Cash is withdrawn Correctly as it ordered					
6	Notes of good Quality are available in ATM					
7	The ATM enables me to complete a transaction quickly					
	Convenience					
8	ATM can be accessed any were in the city in reasonable distance					
9	The ATM user interface is simple and easy to understand					
10	I can access the ATM nearby					
11	Information at this ATM screen is well organized					

No	FA;CTORS	Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
	Reliabilities					
12	The ATM is always available for business					
13	Power Back up /Generator / is Available					
	Security and privacy					
14	I feel secure in using ATM card					
15	Location of ATMs are safe to withdraw money					

Section III: Overall service quality and customer satisfaction (Please put ‘x’ mark below)

1. How do you rate the overall service quality of the ATM service of CBE?

Excellent	Very good	Good	Bad	Very bad

2. Overall how satisfied are you with ATM service provided by the bank?

Very satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied

Thank you!!!

