

# ASSESSMENT OF ATM SERVICE AND CUSTOMERS' SATISFACTION: CASE OF SELECTED SWITCHED MEMBER COMMERCIAL BANKS IN ADDIS ABABA CITY

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Addis Ababa, Ethiopia

# ASSESSMENT OF ATM SERVICE AND CUSTOMERS' SATISFACTION IN: CASE OF SELECTED SWITCHED MEMBER COMMERCIAL BANKS IN ADDIS ABABA CITY

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## **DECLARATION**

Here with I, declare that, this thesis is prepared for the partial fulfillment of the requirements for MBA Degree in General management entitled "Assessment of ATM service and customers' satisfaction in case of selected switched member commercial Banks in Addis Ababa city "is prepared with my own effort.

This work is original in nature and has not presented for a degree in any university. I have made it independently with the close advice and guidance of my advisor and all source of material used for the thesis have been duly acknowledged.

Declared By: ANWAR SHEMSU	
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St Mary's University Addis Ababa	June 2017

# **ENDORSEMENT**

Here with I, state that, Anwar shemsu has carried out this research work on the topic entitled "Assessment of ATM service and customers' satisfaction in case of selected switched member commercial banks in Addis Ababa city" under my supervision. This thesis has been submitted to St. Mary's University, School of Graduate studies for the examination with my approval as a University Advisor.

Advisor	Signature

St. Mary's University, Addis Ababa June, 2017

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## LIST OF ACRONYMS/ ABRIVATION

AIB Awash International Bank S.C

ATMs Automated Teller Machines

CBE Commercial Bank of Ethiopia

CBO Cooperative Bank of Oromia S.C

CRM Customer Relation Management

DB Dashen Bank S.C

EthS witch Ethio payment switch

SMS Short message service

IT Information Technology

OIB Oromia International Bank S.C

NBE National Bank of Ethiopia

NIB NIB International Bank S.C

PSS Premier Switch Solutions S.C.

PIN Personal Identification Number

POS Point of Sale

UIB United International Bank S.C

WB Wegagen Bank S.C

SC Share company

SPSS Statistical Package for social Science

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#### **ABSTRACT**

It is a recent history in Ethiopian banking industry that competing banks share common facilities to give better service for customers via interbank Switch with the view to improve customer services and maximize their profit .hence, the objective of the study was to assess the level of usage of ATM banking services and customers satisfaction in aftermath of EthSwitch. To achieve the research objective descriptive survey design was employed; both primary and secondary data were used. The primary data was collected from respondents using questioners consists of five point likert scale and some close ended. Convenience sampling technique was used to collect the data; designed questionnaires were distributed to 400 respondents having two and above years ATM usage experience. From total of 400 distributed questionnaires 385 were returned from the customer of the selected switched member banks. The collected data are analyzed using descriptive analysis like tables, percentages, mean and standard deviation. After interoperability of all banks ATMs the research finding shows that majority of the customers' are dissatisfied with the ATM services due to various challenges associated with ATM such as; customers' accounts being debited without dispensing, Shortage of money in ATM's, ATM malfunction due to connectivity problems and power, delayed response time in case of errors transaction, availability of limited services, high service charge for ATM service, Machine complexity, and ATMs late to updated balances are major problems causing dissatisfaction. Even there are problems; surprisingly the customers do prefer to get the service through the shared ATMs, because it saves time and convenience. Finally, the study recommend banks to improve patronage of the ATM services and challenges encountered by customers when using the ATM should be addressed to minimize the dissatisfaction and give customers enough confidence in the use of the ATM and will encourage them to recommend it to nonusers.

Keywords: ATM, Customer satisfaction, E- Banking, EthSwitch, Information Technology

#### **CHAPTER ONE**

#### Introduction

#### 1.1 Background of the study

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 (Adelowo, 2010).

ATM combines a computer terminal, record keeping system and cash vault in one unit, permitting customers to enter the banks record keeping system with a plastic card containing a Personal Identification Number (PIN) or by punching a specific code into the computer terminal linked to the bank's computerized records 24-hours a day (Rose, 1999). ATMs save time and provide convenience to the customer due to the fact that the card holders don't need to go to bank branches to withdraw money, and the card holder is able to make shopping, travelling etc. ATMs' offer a 24 hour banking service to the bank customer like cash withdrawal, fund transfer, balance inquiry, card to card transfer, and bill payment, accept deposit etc (Kumbhar, 2011). As far as customer satisfaction concerned with regard to e-banking products, ATM plays a paramount contribution as they make banking transactions easy to the customers' (Premalatha & Sundaram, 2012). Today customers of any service including banking are interested to the ease, reliability and faster service. They want autonomy in transacting and so that they prefer self service delivery system (Khan, 2010). By automating services that were previously completed manually, ATMs can reduce the costs of servicing customer demands. These potential benefits are multiplied when banks share their ATMs, allowing depositors of banks to access their accounts through other bank's ATM (Mcandrews, 2003). More and more banks have adopted technology to deliver their services and this has resulted in: reduced costs, the creation of value added services for customers (Liao et al, 2002), the facilitation of their employees' jobs and ultimately, the provision of self service options for customers (Dabholker and Bagozzi, 2002). Lovelock and Wirtz (2000) identified secure and convenient location, adequate number of ATM,

Lovelock and Wirtz (2000) identified secure and convenient location, adequate number of ATM, user-friendly system, and functionality of ATM are key factors while adopting it.

Davies, Moutinho and Curry, (1996) examined the factors that influence customers' satisfaction about ATM service quality. These factors include costs involved in the use of ATM, and efficient functioning of ATM.

Al-Hawari and Ward (2006) compiled a list of five major items about ATM service quality that include convenient and secured locations, functions of ATM, adequate number of machines and user-friendliness of the systems and procedures. Dilijonas et al., (2009) identified essential resources (adequate number of ATMs, convenient and secure location and user-friendly system); important dimensions of operation of ATM (maximum speed, minimum errors, high uptime, cash backup); and value-based aspects (quality service at reasonable cost, and maximum offering to cover maximum. needs of customers) as vital facets. Islam et al., (2007) found in leading bank in Bangladesh that significant relationship of ATM service quality with customers' satisfaction. The study identified that location, personnel response, quality of currency notes, promptness of card delivery and performance of ATM were positively and significantly related to customer' satisfaction, but security, frequent breakdown of machine, and insufficient number of ATM were major contributors of customers' dissatisfaction. Halstead et al (1994) states that customer satisfaction is a transaction specific effective response from customers' comparison of product performance to some pre-purchase standard. ATM banking customers have expectations of their banks' ATM banking services against which each service encounter enhances comparison of ATM banking performance to the expectations. The comparison is conducted after the immediate usage of ATM banking services or over time of ATM banking usage.

Faraz (2005) stated that customer satisfaction is the situation when customer expectations have been fulfilled to the fullest capacity when using the product or service. Fulfilling customer expectation consequently brings about strong loyalty to the product or services of a company. Timothy (2012) states customer's satisfaction holds the potential for increasing an organization's customer base, increase the use of more volatile customer mix and increase the firm's reputation. Consequently, obtaining competitive advantage is secured through intelligent identification and satisfaction of customer's needs better and sooner than competitors and sustenance of customer's satisfaction through better products/services.

Automated teller machine was first introduced in Ethiopia in 2001, with the Commercial Bank of Ethiopia (CBE) being the pioneers of this service to the banking sector (Gardachew, 2010).

This was done so as to enable customers have a 24 hour access to their money and hence improve customer satisfaction. Cash machines are relatively new to Ethiopia, but their number is growing quickly, with banks eager to ease access for their customers. A fair distribution of ATMs in areas convenient to the customers does have an effect on satisfaction of customers due

the convenience of bringing banking closer to the customers (www.atmgurus.com). However, despite the Bank's effort to improve access for its customers by increasing the number of machines, network failure, due to service breakdown from the country's sole telecommunications service provider, ethiotelecom, and internal network problems, are the challenges faced by commercial banks in successful service delivery and distribution of ATM throughout the country (Gezahegn, 2015).

To test technological advances in Ethiopian banking industry and integrate all banks electronic transaction to central E- payment Switch and share resources among banks' in order to expand services convenience to customers, National bank of Ethiopia implement central E-payment switch or national switch to enable clearing of cheques and using the ATM of any bank and use Pos (point of sale). EthSwitch is owner and operator of the National E-payment Switch established in 2011 by all banks with 80.5 million Br following the recommended by National bank of Ethiopia (NBE) in order to centralize banks' payment the aim was to bring interoperability among banks in the country, Ethiopia, as a result clients of any Ethiopian retail banks (Switched member banks) created chances to access services via all the ATMs in the country for cash withdrawal, make payment via Pos in any terminal and utilize cheque balancing. Ato Bizuneh Bekle, CEO of Eth\_Switch SC told Addis fortune on 12 May 2016, As a result of relationship with BPS banking technology, it become obvious that the new system powered by Smart Vista, that the Ethiopian financial ecosystem will find new level of efficiency, availability and accessibility while also significantly reducing the level of cash usage. As a result, the system integrates more than 1500 ATMs and over 1300 Pos terminals. These numbers are expected to increase further due to the ease of use to Banks' customers. On April 20, 2016, depositors in Ethiopia withdraw money from any banks' ATM terminals out of their bank where they have deposited their savings. Due to operation of the new system, all switched member banks are benefited from interoperability as well as providing a new level of convenience to Ethiopian citizens, merchants, and organization (allafrica.com/stories/201503241687.html).

As a new technology in Ethiopia to use ATM services via national switch, assessing customer's awareness, faced challenges, and level of customer's satisfaction level is important. Therefore, this study assessed the extent of customer's usage of ATM services and satisfaction aftermath of Ethswitch.

#### 1.2 Statements of the problem

In recent decades, investment in IT by commercial banks has served to streamline operations, improve competitiveness, and increase the variety and quality of services provided (Gabriel A, et al, 2015). The banking industry of our country, Ethiopia, is going through rapid and mounting development, where most of them have started to adopt various e-banking services.

According to Yasuharu (2003), implementation of information technology and communication networking has brought revolution in the functioning of the banks and the financial institutions.

The ATM has been the most successful delivery medium for consumer of retail banking in most countries. Abor (2004) puts the ATM as the most widely used electronic delivery channel for banks in sub-Saharan African countries. Customers consider the ATM as an important service and this influences their choice of banks, and banks that have delayed the implementation of their ATM systems, have suffered irreparably to this service.

Jordan and Katz (1999) stated that the introduction of the ATM has made the distribution of banks services more efficient. ATMs have been able to entrench the one branch philosophy in country by being networked, so people do not necessarily have to go to their branch to do some banking. Before ATMs, withdrawals, balance inquiries, internal funds transfers, mini statement inquiry, among others, all required the face to face interaction between the consumer and the bank teller. Networking of ATMs has therefore increased banking services to customers.

ATM banking adopted by most of Ethiopian Commercial banks with a view of improving the banks service delivery, decongest queues in the banking hall, enable customers withdraw cash 24/7, track personal banking transaction, request for online statement, or even transfer fund to another party's account within similar bank. As Islam et al (2007), despite the benefits to be derived by customers from the use of ATM, they are also faced for lot of challenges with the use of ATM services. Some of the challenges include machine break downs, unsuitable location, currency quality as well as long waiting hours etc. Adeniran (2014) also noted that ATMs at times can deduct money from the customers' account without actually dispensing money; these, among others, are the bane of these money dispensing machines, this create customer dissatisfaction. The banks' also are faced with complaints from different customers side, due to frequent malfunctioning Automated Teller Machines, network downtime, out of cash ATM machines, power failures, wrong transactions, mismatch balance of customers Account shown at ATMs, and delayed in dispute handling for error transactions, lack of awareness on how to

operate the machine such and other factors may hinder the customers ability of trusting the technology and at the same time creating potential customer dissatisfaction.

To this end, National bank of Ethiopia (NBE) implement national Payment Switch or national switch, to bring interoperability in all Banks' ATMs in the country, as a result customers of any Ethiopian retail banks enable to access services via all the ATMs in the country for cash withdrawal, balancing enquires, and mini statements. As a result, now all banks are benefited and provide new level of convenience for Ethiopian citizens, merchants, and organization.

EthSwitch SC was established by all banks and managed by National Bank of Ethiopia to facilitate the E-payment system through dispute management for all switched member Banks shared ATMs transaction related issues and maintenance etc. Even though the benefit to be reaped from shared ATM is significant, as more and more banks transactions related issues have come to dispute handling management it takes more than 8 working days and above but these transaction related problems were solved within 24 hour in a working days and 72 hour weekend when customers used ATM services from their banks' ATMs this may dissatisfy ATM users and discourage them to use ATMs out of their home bank. Therefore this study was designed to assess the level of usage and satisfaction of customers using ATM banking service aftermath of national Switch operationalized.

# 1.3 Research questions

This study was designed to answer the following basic research questions:

- 1. To what extent ATM users are aware of National E-payment Switch or national switch regarding ATM services?
- 2. What are the benefits that customers get when using ATM services after National E-payment Switch operationalised?
- **3.** What are the challenges faced by ATM users while usage ATM services after National E-payment Switch is operationalised?
- **4.** What is the level of satisfaction of customers in ATM services while after National E-payment Switch?

# 1.4 Objective of the Research

#### 1.4.1 General Objective

The general objective of this study was to assess the extent of usage of ATM banking services and satisfaction level of customers after operationalised National Switch.

# 1.4 .2 Specific Objectives

The specific objectives of the study were:

- 1. To evaluate the level customers' awareness of the National E-Payment Switch regarding ATM service.
- 2. To identify the benefits that customers get when using ATM services due to National E-Payment Switch operationalised.
- **3.** To identify the challenges faced by customers while using ATM services after National E-Payment Switch is operationalised.
- **4.** To identify level of customers' satisfaction in ATM services after National E-Payment Switch is operationalised.

# 1.5 Scope and Limitation of the Study

#### 1.5 .1 Scope of the Study

To manage complexity and to gather relevant data related to customer and bank in the course of the research, both public and private commercial banks in Addis Ababa were selected due to the fact that it is new technological phenomenon in Ethiopian commercial banking industry that all competing banks are sharing the facilities through ATMs (national switch) to serve their customer better. The scope of the study is divided in to theoretical, geographical, and methodological shows as follows:

#### 1.5 1.1 Theoretical Scope

This study was designed to assess the Automated teller machine services and user satisfaction with reference to Ethiopian commercial Banks in Addis Ababa city while after all banks' ATMs interoperable. Satisfaction is defined strictly in term of pleasure derived by users in relation to ATM services. Therefore, this study is limited to the assessment of the customers' satisfaction on ATM banking service but concerning; ATM user's level of awareness on National e- payment Switch regarding ATM services, the benefit and challenges while using ATMs, and level of customers' satisfaction.

#### 1.5.1.2 Geographical Scope

The study was confined to assessment of the customers' satisfaction on ATMs' service on Ethiopian commercial banks taking both public and selected private commercial banks working in Addis Ababa city as case study area which has large concentration of ATMs and focusing on those banks with reasonable number of card holder and to fairly represent the card holder population in the city.

#### 1.5. 1.3 Methodological Scope

The study used descriptive survey design and in the course of researching both primary and secondary data was employed. With regard to the secondary sources various publications, books, and journals articles regarding the subject matter were included. Population of the study were active ATM card users in Addis Ababa from each respective commercial banks and to achieve the research objectives, a well designed five point likert scale questionnaire, and close ended questionnaires were used to gather data from sample respondents those were selected on convenience sampling basis.

#### 1.5.2 Limitation of the Study

Due to the infantry stage of ATM banking service in Ethiopia, it is very difficult to get enough secondary data and literatures with regard to the customers' satisfaction on ATM banking service. Moreover, due to the time and financial constraints the researchers tend to investigate customer of public and selected private commercial banks in Addis Ababa city because it takes a lot of time and patience to get the appropriate customers from the target banks' to fill and return the questionnaires and engagement the office to get the documents that was needed to this study was not also easy.

# 1.6 Significance of the Study

The study was intended to assess the ATM banking service and satisfaction of customers' and find solutions for the identified problems in such a way that the banks and customers benefit from the adoption of the new banking electronic payment system technology. Moreover, this study will help the Banking industry for enhancing the customer satisfaction by adopting strategies which serves the purpose. An analysis of study proves useful, as the banks efforts are directed to attract and retain customers by offering them a basket of tailor made schemes supported by a state of the art distribution system (the ATMs). In addition to this, the study will

add value to the existing knowledge regarding ATM banking and satisfaction of customers in Ethiopia; thereby it will help other researchers and students who are interested for further investigation on the issue.

#### 1.7 Organization of the Paper

This study contains five chapters with different sections and sub sections. First chapter deals about the introduction of part of the paper consists of background of the study, statement of problem, basic research question, research objective, scope and limitation of the study, and significance of the research. Second chapter focuses on the theoretical and empirical literature review regarding ATM service and customer's satisfaction in different countries experience. Third chapter discuses about research methodology regarding research design and approach, study's target population, sample design, source of data and method of data collection, data collection procedure, data analysis. Fourth Chapter focuses on results and discussions. Finally, the last and fifth chapter deals about major finding of the study, conclusion and recommendation of the study.

#### **CHAPTER TWO**

#### Literature review

#### 2.1 Definition of ATM

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).

The ATM card helps the customer to be identified by a plastic ATM card with a magnetic stripe or a plastic smartcard with a chip. The security is provided by the customer entering a personal identification number (PIN). As a result of this, 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) (Meena, 2015). Jane (2000) also noted that the customer is identified by inserting a plastic ATM card with a magnetic strip or a plastic smart card with a chip that cont0ains a unique card number and some security information such as the expiration date, and the ATM's are conveniently placed in public places with the aim of enabling customers to transact without the help of a teller of banking officer.

Sowunmi et al. (2014) noted that Automated Teller Machine (ATM) is a cash dispenser that enables bank customers to enjoy banking services without coming in contact with bank tellers (cashier) and helps them to perform the duties of the cashier in term of payment services.

# 2.2 Impact of Technology on Banking Industry

The changing business environment offers challenges and opportunities to the organizations.

The changing customers' perception of quality poses unique challenge. Excellence in quality has Information technology (IT) is turning into the most important factor in the development of banking, influencing banks' marketing and business strategies. Growth of Electronic banking is an invaluable and powerful tool driving development, supporting growth, promoting innovation and enhancing competitiveness (Gupta, 2008; Kamel, 2005). In recent years, the adoption of e-banking began to occur quite extensively as a channel of distribution for financial services due to rapid advances in IT and intensive competitive banking markets (Mahdi and Mehrdad, 2010).

The distribution of banking services can be understood as the place and means by which the bank services are offered to customers. In general, banks try to create a diversified distribution strategy in order to market the range of their services, offering customers several ways through which they can benefit from the bank services due to factors that led to the use of multiple

distribution channels by banks are: major changes in the banking sector by growing competition, increasing pressure from competitors, and changing customers' preferences. As a result, the banks then resorted to compete over price, and now the emphasis is on differentiation by distribution channels used (Mobarak, 2007). Advancement in Technology and communication the service industry found the different channels of delivery for providing the best services to their customers. Recent ten years evidenced that electronic based business models are replacing conventional ones and organizations are rethinking business process designs and customer relationship management strategies. Banks are no exception to this transformation; a use of Information and Communication Technology (ICT) is revolutionizing the banking services through various unthinkable innovations (Islam, Biswas, & Kumar, 2007). As a result, now banks are investing money in ICT infrastructure to provide e-banking services to their customers. It provides various alternative e-channels to using banking services e.g. ATM, credit card, debit card, internet banking, mobile banking, electronic fund transfer, electronic clearing services etc. (Kumbhar, 2011). Electronic delivery channels are widely accepted in business and also in public for providing the best services to customers for interaction and communication (Parasuraman and Zinkhan, 2002; Bauer, Hammerschmidt and Falk, 2005).

E-banking brought great changing Excellence in the quality of service in the current competitive environment has become imperative for banks to sustain organizational competitiveness in such a dynamic world. Being customer oriented and able to offer quality service is the most effective way of building trust and competitive position in banking industries (Athanassopoulos, 2000). The recent trends to the customer favor self-service to manage their financial and the customers increased their banking awareness and they prefer to manage the financial activities by themselves, and thus the banks that do not have the adequate and advanced technology that enable to develop them to a strategy based on self service of the customer will not survive and continue in the banking market and the most important electronic channels is the ATM, which is one of the more prevalent electronic channels, and most commonly used by customers where there is a easy to use for diverse banking services, and currently the banks expand in use this electronic channel because the cost of providing the service to customer which is less than the cost of providing the service through the branch that traditional mean for banks (Zuhair,2012). ATM is the most frequent instrument in electronic channel services of bank. ATM service plays a significant role in customer satisfaction in banking. Now a day, banks began to adopt ATM

banking as a means of widening service options, reaching wider market share, increase customer satisfaction and lower operational costs.

ATM (Automated Teller Machine) is the first well known Machines to provide electronic access to the customers. ATM is designed to perform the most important functions of banks such as withdrawal and easily deposits, printing of Mini-Statement etc. (Premalatha & Sundaram, 2012). An Automated Teller Machine is computerized machine which was designed for certain transactions but today it can do much more like Withdrawal of Money, View Bank Statement, Fund Transfer, Cash Deposit, Balance Enquiry, Cheque Deposit, and Printing bank statements etc. The ATM machine helps the customers to make their life much easier. It does most of the functions which a cashier can do. The ATM card is slowly replacing cheque, the personal attendance of various customers, has increased banking hours and reduced the holidays. They do not require any paper based verification (Meena, 2015). According to Attanasio et al., (2002), ATM transactions and cashless payments do not only affect optimal cash holdings but also are likely to reduce the time-cost per withdrawal.

Goodhart and Krueger (2001) found that the demand for small bank notes is positively related to the number of ATMs. People may visit ATMs more often and withdraw small amounts of cash, which would increase the demand for small bank notes. Sowunmi, et al. (2014) noted that Automated Teller Machine (ATM) is a cash dispenser that enables bank customers to enjoy banking services without coming in contact with bank tellers (cashier) and helps them to perform the duties of the cashier in term of payment services. Automatic Teller Machines (ATMs) have been adopted and are still being adopted by banks to offer considerable benefits to both banks and their depositors. The machines can enable depositors to withdraw cash at more convenient times and places than during banking hours at branches. In addition, by automating services that were previously completed manually, ATMs reduce the costs of servicing some depositor demands (Olatokun and Igbinedio, 2009).

# 2.3 Awareness of customers regarding Automated Teller Machines

With the growing Internet awareness among customers, increase in role of banks in e-business and growing reach of the internet, e-banking, ATM, and etc. would become an important part of banking sector in the Years to come (Nadeera & Vidhyapriya, 2014). The recent trends to the customer favor self-service to manage their financial and the customers increased their banking

awareness and the most important electronic channels is the ATM, which is one of the more prevalent electronic channels, and most commonly used by customers where there is a easy to use for diverse banking services (Zuhair,2012). 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).

The inability on the part of customers to exploit these opportunities provided by the ATM service is mainly due to reasons such as inadequate knowledge about the functions of the ATMs apart from cash withdrawals and balance enquiry, inability of some banks to render diversified ATM services, among others. However it should be noted that ATM services offered to clients differ among banks. Despite the benefits to be derived by customers from the use of ATM, they are faced with lot of challenges with the use of ATM services, inadequate awareness of how to use ATMs is among them (Islam et al, 2007). 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).

Every day Banking activities are modernizing with newest features and update various E-Banking services to their customers. So the Customers can use such facilities through their Credit and Debit Cards, ATMs, Online baking, Phone Banking & Mobile banking(Jun & Cai, 2001; Yen, et al, 2010). Public awareness of e-banking among users has been increased and thus people are ready to migrate to technology applications (Khalaf& Hasan, 2011). Banks are also using different mediums for awareness of services, features, programs to facilitate their clients (Dilijonas et al, 2009). In addition, Chaudhury et al (2002) sated that banks are conducting seminars, introducing new services, promoting their features through media by using TV, newspaper, radio, banners, bill boards etc for increasing awareness among general public. Although banking sector in the developing countries is not performing as good as it is in the

developed countries. Sometimes people of developing countries hesitate to visit banks because majority of population is illiterate therefore facilities of electronic banking system has also increased their confidence to get benefits from banking services. Shariq (2012) observed that the customer by awareness and training programmers.

Prem Lata and Sharma (2012) find that ATM is accepted as a modern and useful tool for dispensing cash in the present era of modern technology. Consumer awareness plays a key role in customer decision making. By increasing a potential or current customer's knowledge about a product, service or business, a healthy economic environment is established in which customers are informed and protected and businesses are accountable. Research has recommended that the commercial banks should do marketing plan that aimed to increase banking awareness among customers towards the ATM and services provided through it, and introduce them the advantages and the benefits they receive, such as saving time, effort and cost, etc., and especially customers the elderly and those with low incomes (Zuhair,2012).

Sathye (1999) explains that lack of awareness about electronic banking and its benefits contribute to the non adoption of electronic banking products. Explained further that, the more knowledge and awareness a customer possesses about electronic banking (ATM), the easier it is for the Consumer to adopt and utilize electronic banking channels. And further strengthened this point by stating that customers who are more aware of likely to perceive e-banking channels as more useful, easy to use and more reliable, thereby influencing their Adoption and utilization. Awareness has been explained in three dimensions with respect to the conviction behind the concept and the usage. These are; Perceived usefulness, Perceived ease of use, and Perceived reliability.

#### 2.4 Benefits of Automated Teller Machines (ATMs)

Automatic Teller Machines (ATMs) have been adopted and are still being adopted by banks to offer considerable benefits to both banks and their depositors (customers).

#### 2.4.1 Benefits of Automated Teller Machines (ATMs) for customers

#### 2.4.1.1 ATM as convenient to customers

E-banking provides higher degree of convenience that enables customers to access internet bank at all times and Place. ATM technologies are easier for the customers to withdraw or deposit money at any particular time and location. Unlike bank branches, they can be accessed irrespective of the time and days of the week. ATMs are also placed in places away from

banking halls and nearer to people's work places and residences thus further increasing the convenience to transact (Daniel, 1999).

The Automated Teller Machine has changed people's lifestyles and how the banking industry.

ATM machines enable depositors to withdraw cash at more convenient times and places than during banking hours at branches. In addition, by automating services that were previously completed manually, ATMs reduce the costs of servicing some depositor demands (Olatokun and Igbinedio, 2009). An Automatic Teller Machine (ATM) allows a bank's customers to conduct their banking transactions. This could be performed transactions at any time during 24 hours. Before an ATM is placed in a public place, it typically undergoes extensive testing with both test money and the backend computer system that allows it to perform transactions.

Bank customers also have come to expect high reliability of ATM machines, which dictates that ATM service providers should take a step to minimize machine and network failure. If ATMs go out of services, customer could be left without the ability to make transactions until the beginning of their bank's next time of opening hours. Indeed, ATM machine and network failure do have financial implications for the service providers, so that they should minimize cases of malfunction. It's important to therefore look at the prospects of fully functioning ATMs (Marshall and Heslop, 1988).

#### 2.4.1. 2 ATM for speed transaction

With regard to speed of the ATMs, Marshall and Heslop (1988) noted that one of the benefits to be reaped by customers while using ATMs is saving time, this is because there is no need to come to the bank and wait in a queue or filling some information in paper format every time when one wants to transact. ATMs are automated machines which are faster than human tellers in processing transactions. According to Komal (2009) explain in his study that ATM services enhance operations and customer satisfaction in terms of flexibility of time, add value in terms of speedy handling of voluminous transactions which traditional services were unable to handle efficiently and appropriately. The machine can enable customers to deposit and withdraw cash at more convenient time and places than during banking hours at branch.

Deutsche Bank AG Research (2006) identifies 'speed' as one of the main driving forces behind the success of E\_banking. Transactions, transaction processing, data transfer, information

requests etc. happen almost instantly in online banking. Similarly, Hoffman et al, (1999) also identified speed as a major factor influencing customer satisfaction.

#### 2.4.1.3 ATMs as Acceptability

With regard to Acceptability, Mols (2000) argued that customer acceptance of the new automated channels of service delivery in banks may bring a dramatic change in the way that retail banks build and maintain a close relationship with their customers. Godwin (2001) argues that ATMs are the other way that banks are going to make their services accepted by their customers. ATMs allow customers to bank at their own schedule and convenience any where due to a wide ATM networks that the banks avail to their customers. Many innovative ideas in the banking sector such as internet banking, automated teller machine (ATM) among others has been in place in order to motivate customer's patronages to banks and reduce cost in the services. But the impacts of such innovative technologies are lost when-ever the systems are rejected by the users. The user acceptance is therefore considered as a determining factor that measure the degree of success or failure of any new innovation or technology (Jun & Cai, 2001; Yen, Tsai, & Chen, 2010).

#### 2.4.1.4 Safety

Safety is one the benefit of ATM, Thanks to the ATM technology, now a day there is no need of carrying large sum of money. Once the customers has the ATM card, he or she can access his or her account whenever need arises. One can keep funds at a bank and receive an interest mean while enjoying a quick and easy access to them (Godwin, 2001). Tague (2010) observed that a plastic Automatic Teller Machine card linked to bank account makes financial transactions a breeze by eliminating the waste of writing cheques or the dangers of carrying large sums of cash. Singh (2009) described ATM as 'Avoid Travelling with money.

#### 2.4.1.5 Reliability

Reliability refers to the promptness of delivering e-banking service such as ATM banking in an accurate way and in line with advertised attributes (Jun, and CAI, 2001; Min, 2003). Many studies argue that the success of electronic banking depends on e-banking service and reliability (Flavián et al, 2008). Reliability is established in some studies as a key factor that most customers consider before and even during usage of e-banking service (Ndubisi, et al, 2007). Prior researches have revealed that reliable/prompt responses, attentiveness, and error-free e-banking platforms have a considerable impact on customer satisfaction (Xiang and Yang, 2004).

#### **2.4.1.6 ATMs** save Cost

Mols (1999) has identified that for customers, internet banking, ATM, and other electronic banks can be of a low cost alternative to traditional banking. The term 'cost' refers to all types of costs from financial costs, time costs, energy costs etc.

In all things considered, E-banking can provide a banking activity at the lowest cost possible. According to Rose (1999) noted in Ephream (2016), ATM transaction is an average of about 6,400 per month compared to 4,300 for human tellers. Furthermore, it saves customers time in service delivery as alternative to queuing in bank halls, customers can invest such time saved into other productive activities.

#### 2.4.2 Benefits of Banks from Automated Teller Machines (ATMs)

According to Gabriel, et al (2015), in self-service technologies, the customer assumes the role of a producer and there are a number of benefits that are accrued to both the bank and the customer as a result of the introduction of this type of technology. The ATMs provide an opportunity for most financial institutions to expand their revenue though the initial costs involved in securing, installing, updating and servicing ATMs to leverage this opportunity can be quite prohibitive. ATMs can reduce the cost of servicing some customer demands for instance the bank will make savings as a result of a reduction in the number of tellers in the bank and reduction in overtime claims made by bank employees working late.

#### 2.4.2.1 ATMs enhance corporate image

E-banking helps to enhance the image of the organization as a customer focused innovative organization. This was especially true in early days when only the most innovative organizations were implementing this channel. Despite its common availability today, an attractive banking website with a large portfolio of innovative products still enhances a bank's image. This image also helps in becoming effective at e-marketing and attracting young/professional customer base (Shah et al., 2009). In relation to internet banking, Brogdon (1999) explain that one of the main benefits of Internet banking to banks is enhancement of the bank's reputation.

According to Wisdom (2012), online banking ensures customer satisfaction as it extends financial services to customers outside the banking hall. Similarly, e-banking has provided banks with a large customer base as it has resulted in increased customer loyalty and satisfaction.

Foley (2000) indicated that, e-banking products help to enhance the image of the organization as a customer focused innovative organization. This was especially true in early days when only the most innovative organizations were implementing this channel.

#### 2.4.2.2 ATM enables Banks to Expand Service easier

The recent trends to the customer favor self-service to manage their financial and the customers increased their banking awareness and the most important electronic channels is the ATM, which is one of the more prevalent electronic channels, and most commonly used by customers where there is a easy to use for diverse banking services ( Zuhair,2012).

Traditionally, when a bank wanted to expand geographically it had to open new branches, thereby incurring high startup and maintenance costs. E-channels, such as the ATM, have made this unnecessary in many circumstances, now banks with a traditional customer base in one part of the country or world can attract customers from other parts, as most of the financial transactions do not require a physical presence near customers living/working place (Ongkasuwan and Tantichattanon, 2002).

#### 2.4.2.3 ATMs Reduce Load on Other Channels

According to Mountinho et al. (1997), new age banks operate with minimal number of physical branches and use remote banking for the bulk of their operations. The remote channels are used to provide basic services while more sophisticated services are provided on a face to face basis. Jordan and Katz (1999) stated that the introduction of the ATM has made the distribution of banks services more efficient. ATMs have been able to entrench the one branch philosophy in country by being networked, so people do not necessarily have to go to their branch to do some banking. Before ATMs, withdrawals, inquiries, internal funds transfers, mini statement inquiry, among others, all required the face to face interaction between the consumer and the bank teller (Gabriel et al. 2015).

Ongkasuwan and Tantichattanon (2002) connoted that E-Channels are largely automatic, and it undertake most of the routine activities such as account checking or bill payment may be carried out using these channels. This usually results in load reduction on other delivery channels, such as branches. In some countries, routine branch transactions such as cash/cheque deposit related activities are also being automated, further reducing the workload of branch staff, and enabling the time to be used for providing better quality customer services.

#### 2.4.2.4 Cost Reduction

Gabriel et al, (2015) noted that ATMs reduce the cost of servicing some customer demands for instance the bank will make savings as a result of a reduction in the number of tellers in the bank and reduction in overtime claims made by bank employees working late. Productivity by bank staff is increased in that the ATM takes up some of the functions that were previously only performed by the banker such as giving out cash, statements, taking cash/cheque deposits and hence the bank staff can now concentrate more in other areas that need improvement and one such area is the cheque sorting and clearing department.

Ongkasuwan and Tantichattanon (2002) indicate that the main economic argument of Electronic Banking so far has been reduction of overhead costs of other channels such as branches, which require expensive buildings and a staff presence. It also seems that the cost per transaction of e-banking often falls more rapidly than that of traditional banks once a critical mass of customers is achieved. The general consensus is that fixed costs of e-banking are much greater than variable costs, so the larger the customer base of a bank, the lower the cost per transaction would be. Whilst this implies that cost per transaction for smaller banks would in most cases be greater than those of larger banks, even in small banks it is seen as likely that the cost per transaction will be below that of other banking channels. Wise and Ali (2009) argued that many banks want to invest in ATMs to reduce branch cost since customers prefer to use them instead of a branch to transact business. The financial impact of ATMs is a marginal increase in fee income substantially offset by the cost of significant increases in the number of customer transactions.

#### 2.4.2.5 Organizational Efficiency by using ATMs

Batiz-Lazo and Barrie (2005) study argued that Information Technology (IT) in banking (as measured by ATM) led to reduced operating costs, coupled with increased output (number of transactions) that resulted in greater efficiency. They concluded that the introduction of ATM was profitable for banks as well as customers.

Paul (1998) noted in their study indicated that banks' adoption of ATM was overall beneficial for banks. The relationship between banking efficiency and the use of ATM (Automated Teller Machine) is a complex one. This is because the overall levels of efficiency and productivity do influence the organization overall success To implement e-banking services like ATM, organizations often have to re-engineer their business processes, integrate systems and promote agile working practices. These steps often result in greater efficiency and agility in organizations,

(Ongkasuwan and Tantichattanon, 2002). In terms of reduction in cost of operation, Batiz-Lazo and Barrie (2005) study argued that Information Technology in banking (as measured by ATM) led to reduced operating costs, coupled with increased output (number of transactions) that resulted in greater efficiency.

#### 2.4.2.6 ATM Increases Revenues

Electronic banking, like ATM, internet, mobile banking etc. has changed the traditional retail banking business model in many ways, for example by making it possible for banks to allow the production and delivery of financial services to be separated into different businesses. This means that banks can sell and manage services offered by other banks to increase their revenues. This is an especially attractive possibility for smaller banks with a limited product range (Shah et al., 2009). E-banking has also resulted in increased credit card lending, as it is a sort of transactional loan that is most easily deliverable over the Internet. Electronic bill payment is also on rapid rise, which suggests that electronic bill payment and other related capabilities of e-banking have a real impact on retail banking practices, and rapidly expanded revenue streams (Young et al., 2007).

#### 2.5 Challenges after the introduction of ATMs in Banking Industry

Adeniran (2014) noted that when it was first introduced, the ATM was meant to reduce the unnecessary traffic in the banking hall, make customers have a quick access to their money and make life convenient to a certain level.

Islam et al, (2007) described that despite the benefits to be derived by customers from the use of ATM, they are faced with lot of challenges with the use of ATM services. Some of the challenges include machine break downs, unsuitable location, currency quality as well as long waiting hours. Despite the introduction of ATMs has been to avoid the mistakes of manual systems, it has affected the relationship between financial institution and their customers. Boateng and Molla (2006) contends that there are several challenges associated with their operations, these problems include; malfunctioning of machines, some of the ATMs are placed in areas with no privacy for instance in a busy trading area. Other problems include that some people do not have the know how to use them and this points back to their malfunctioning leading to their break down and people end up wasting time. Of course not all errors are caused by customers; there have been cases of machines giving out money without debiting the account, or giving out higher value notes as a result of incorrect denomination of bank note being loaded

in money cassettes. Errors may occur due to mechanical (such as card transport mechanisms, keypads, hard disk failures); software (such as operating systems, device drives, applications), communications, or purely down to operator error. Extra costs have been incurred by management that has to invest in expensive ATM network or by allowing their customers to have access to their accounts via net work built by others. This is most experienced by Visa card users. According to Ayo et al. (2010), the situation today has changed drastically; it has become a source of worry to users and providers (banks), because the function it was meant to provide has been seriously eroded. It has become a money spinner for fraudsters, who have found new heaven in compromising innocent people's personal identification numbers (pin). ATM behavior can change during what is called stand in time, where the bank dispensing the cash is unable to access databases that contain account information (possibly for database maintenance), that is, when there is network problem.

#### 2.6 Customer Satisfaction

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. Kotler (1997) defines satisfaction as a person's feelings of pleasure or disappointment resulting from comparing a products perceived performance or outcome in relation to his or her expectations. Satisfaction can therefore be taken as a function of perceived performance and expectations. Customer satisfaction is a key factor in development of customer's desires for future purchase (Hasan, et al, 2013). According to Farris et al (2010), Customer satisfaction is a measure of how products and services supplied by a company meet or surpass customer expectation. Customer satisfaction is also defined as the number of customers, or percentage of total customers, whose reported experience with a firm, its products or its services (ratings) exceeds specified satisfaction goals (Work et al ,2016). Customer satisfaction has been defined as the difference between expectation and performance of organization is offering, but there are differences between quality and satisfaction. Satisfaction determined after experience that quality is the same or not. Customer satisfaction as the extent to which a product's perceived performance matches a buyer's expectations. If the product performance falls short of expectations, the buyer is dissatisfied. If performance matches or exceeds expectations, the buyer is satisfied or delighted (Kotler et al. 2005).

Most researchers agree that satisfaction is an attitude or evaluation that is formed by the customer by comparing what they expect to receive to their subjective perceptions of the performance they actually get (Oliver, 1980). Furthermore, several authors have argued that satisfaction is based on the customer's cumulative experience rather than being a transactionspecific phenomenon (Anderson et al., 1994 and Bayus, 1992). Especially in the context of the relationship between loyalty and satisfaction, conceptualizing satisfaction with a single transaction is too restrictive (Homburg and Giering, 2001). Dissatisfaction with a single transaction does not lead to customer switching, neither does one satisfying transaction result in long-term loyalty. It is generally argued that if customers are satisfied with the product and/or service received after its use, then it is likely that they would engage in a repeat purchase and try line extension. In other words, it is the feeling or attitude of a customer toward a product and/or service after it has been used (Wells and Prensky, 1996). Customer satisfaction as a response, emotional or cognitive pertaining to a particular focus either expectation about a product or consumption experience which occurs at particular time after the consumption or choice based at cumulative experience. Customer satisfaction with ATM banking similarly a response to the used experience of ATMs which occurs at a particular time and is based on customer's automated experience of ATM banking services (Giese and Cote, 2002). Customer satisfaction is one of the key factor which leads to customer retention and customer loyalty or brand loyalty. Therefore, it is vital that companies make sure their customers are satisfied with the products/services they offer. This has led to an increase in the popularity of measuring customer satisfaction in recent years (Gulledge, 1996).

# 2.7 ATM service delivery and customers satisfaction

The service delivery in the world has been changed significantly by technology. This is supported by Humphrey and Hancook (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. According to Hoq and Amin (2010), customer satisfaction is the most important driver of commercial banks, since higher customer satisfaction leads to a lower customer intention to switch banks. Thus, technology is one of the powerful instruments in providing faster, reliable and more efficient services to customers. Shifting the service from the traditional way of banking to the modern banking, Furthermore, it is also known that many of the banks have started to adopt a sort of e-banking services including ATM, either to cope with the

competition or serve the customers in an efficient and effective given that many of the banks have started to adopt the ATM banking service.

Cox (1992) noted 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.

According to Komal (2009) the study establishes that ATM services enhance operations and customer satisfaction in terms of flexibility of time, add value in terms of speedy handling of voluminous transactions which traditional services were unable to handle efficiently and expediently. The machine can enable customers to deposit and withdraw cash at more convenient time and places than during banking hours at branch (Muhammad, 2010). 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 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.

Yavas et al., (1997) argued that customers' focused ATM delivery system that fulfills their needs and maximize operational performance are essential dimensions for bank to achieve and sustain competitive advantage (Khan, 2010). Good service quality leads to satisfying relationship with customers, and higher customer satisfaction results in better profits and word-of-mouth recommendation (Lassar et al, 2000; Beerli et al, 2004).

Fornell (1992) defines customer satisfaction as the overall post purchase or usage evaluation. Halstead et al (1994) states that customer satisfaction is a transaction specific effective response from customers' comparison of product performance to some pre-purchase standard. ATM banking customers have expectations of their banks' ATM banking services against which each service encounter enhances comparison of ATM banking performance to the expectations. The comparison is conducted after the immediate usage of ATM banking services or over time of

ATM banking usage. Customer satisfaction with ATM banking is therefore the feeling developed from an evaluation of the ATM banking use experience whether the ATM banking performed relatively well or poorly against expectations (Mwastika, 2016).

Churchill and Surprenant (1982) look at customer satisfaction as a summation of satisfaction with various attributes of a product which alludes to the fact that satisfaction with ATM banking will come from the satisfaction with the performance of its attributes. The evaluative judgment about satisfaction with ATM banking is therefore conceived to fall somewhere on a bipolar continuum where at the lower end it signifies low levels of satisfaction (expectations exceed performance perceptions) and at the higher end it signifies a higher level of satisfaction (performance perceptions exceed expectations). This evaluative judgment occurs at a particular time based on usage experience of ATM banking which occurred at a particular time or on accumulated experience of ATM banking (Mwastika, 2016).

Brownlie and Moutinho (1989) recommended that some consumers have positive attitudes towards Automated Teller Machines based on dominant of perceptions convenience/accessibility/ease of use. Reichheld and Sasser (1990) have recognized the benefits that customer satisfaction delivers to a bank. For instance, the longer a customer stays with a bank the more utility the customer generates. This is a result of a number of factors relating to the time the customer spends with a bank. Patrico et al, (2003) noted that effective service delivery is a new or significantly improved service concept that is taken into practice. Banks without usage of technology in the banking sector cannot provide customers with a satisfactory service. Kumbhar (2011) stated that effectiveness of service provision have a significant relationship with overall customer satisfaction. Effective service delivery is positively related to customer satisfaction in that, when a customer perceives that the delivery mode of the transactions that the bank is supposed to offer is quite good, the more the customers will be satisfied with the bank services.

#### 2. 8 Effect of ATMs Transaction Failure on Customers Dissatisfaction

Dissatisfaction is the state of attitude of not being satisfied, discontent and displeasure or a particular cause of feeling of displeasure or disappointment. Bank customers feel disappointed upset because their demand at that particular time has not been achieved there by affecting them negatively. Experience shows that customers do break the card due to the failure of the ATM to

dispense cash requested at a particular point of needs. ATM failure make customer to be dissatisfied which affect the banks customer base by losing the customer to the other competitors. Similarly by delivering high level of customer's satisfaction, it improves customer's loyalty to the organization. The ATM failure affect customer's patronage and acceptance/adoption as it erode customer's confidence on the product.

ATM failed transaction refers to one of the following or other similar events; Account of the customer is debited with the amount of intended withdrawal but no cash is dispensed by the ATM, Account of the customer is debited with the amount of intended withdrawal but the entire amount of transaction is not dispensed by the ATM or partial paid, Account of the customer is debited with the amount of intended withdrawal but the customer leaves the ATM before collecting the cash and the cash is either retracted by the ATM or is collected by another person after the customer has left the ATM, The customer make a withdrawal but his/her account gets debited with double the amount, power and network problems, ATM's software problems, and wrong note denominations occurs on ATM's cassettes, back end server problems can be mentioned as causes for ATMs transaction failure (Madawaki, et al., 2014).

## 2.9 Customer Satisfaction on ATM and Outcomes of Satisfaction

Improvement in services offered by the organizations not only increases the convenience of clients but also increases the pleasure of the clients. Electronic services in the banking sector have facilitated clients by saving their time, cost etc. (Furst et al, 2002).

The concept of customer satisfaction has in general become of particular importance because various empirical researchers have shown that it is an antecedent of customer retention (Newman, 2001) that increases market share (Fisher, 2001) the corporate image of the firm (Newman, 2001) and long term profitability. Banks would expect to retain and/or expand customer base of ATM banking, holding other factors constant, if the ATM banking performance meets customers' expectations or surpasses expectations (Mwastika, 2016).

Howcroft (1991) notes that dissatisfaction among customers is associated with frequent Interruption and breakdown of ATM. Intense competition and technology based new services are shaping customers' loyalty. These have resulted into switching of banks by customers based on competitive services (Adeniran, 2014).

Michael (2001) found that location of ATMs, increasing number of ATMs, and diversified service offering are associated with switching of banks. ATM is one type of innovation that can mechanically accept deposits, issue withdrawals, transfer funds between accounts, and collect bills. It has highlighted the relationship between banks and their depositors, as well as the level of quality of banking services (Komal, 2009).

Joseph and Stone (2003) conducted a research and find out that secure and convenient location, adequate number of ATM, user friendly system and functionality of ATM play important role in customer satisfaction. Profitability of firm comes from customer satisfaction which results in behaviors' such as word of mouth recommendation, reduced price sensitivity and product or service loyalty that follows after the achievement of certain level of satisfaction. The under listed are some of the consequences that express satisfied customers.

## 2.9.1 Loyalty and customers satisfaction

Loyal customers are those who have the enthusiasm about the brands or products they use. The more enthusiastic a customer is, the higher the profit contributed to the brand (Kathleen & Khirallah, 2005). Service loyalty is defined as the degree to which a consumer is willing to use a service provider on a regular basis, possesses a positive attitudinal disposition towards this provider, and does not even consider using another service provider for this service (Gremler and Brown, 1996). According to Teich (1997), product or service loyalty develops over a long period of time consistent provision of service quality above the threshold of customer satisfaction. Service quality and corporate image were found to have a positive relationship with customer loyalty. However, customer satisfaction has a negative relationship with customer's loyalty (Rosemont & Agyapong, 2011).

Oliver (1999) defines loyalty as "a deeply held commitment to re-buy or re patronize a preferred product/service consistently in the future, thereby causing repetitive same brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior". In particular, loyalty may be defined as a customer's intention or predisposition to purchase from the same organization again, that result from the conviction that the value received from one seller is greater than the value available from other alternatives As a consequence, loyalty has been considered to be a key factor in order to achieve company success and sustainability over time. Therefore, it is hypothesized that loyalty has positive impact on WOM. Customer loyalty; Power and Associates (2009) noted that the quality of each automated

delivery channel will be important in forming the customers' overall perception of automated service quality and thus a factor in whether the customer is satisfied and decides to remain with the organization or not. Thus, managers should aim to offer continuously improving high standards of automated service quality in order to increase overall levels of customer satisfaction and the attendant positive consequences i.e. loyalty, retention and eventually increased financial performance.

According to Aladwani (2001), if the customers are satisfied with the services of banks they will become loyal and use other services as well. Loyal clients not only use services of banks but also promote their services with positive word of mouth. Satisfied and loyal clients remain attached with the banks and other organizations even in the critical times. Satisfaction of the customers means customers are happy and banks are fulfilling their expectations.

## 2.9.2 Customer Satisfaction and Positive Word-of-Mouth (WOM)

Commercial banking is a service industry and it delivers services to the consumer. And, it is strongly believed that a satisfied customer is the best person to generate positive word of mouth for a commercial bank (Salah, et al, 2014). A satisfied customer conveys positive messages about it to others. An unsatisfied customer, on the other hand, is likely to switch to a substitute product and/or service the next time when he/she feels the same need.

The same customer will also engage in a negative word of mouth, causing a serious damaging effect on the business (Naser et al, 1999; Metawa and Almossawi, 1998). Furthermore, the satisfied customers will probably share their good experiences with others especially in Middle Eastern cultures (Jamal & Naser, 2002). According to Herr et al (1991), Word-of-mouth (WOM) is an informal mode of communication between private parties concerning the evaluation of goods and services (Singh, 1991). Marketing literature has consistently shown its powerful role in influencing consumers' attitudes. For example, WOM is found to have more influence on product judgments than less vivid printed information (Mittal and Lassar, 1998).

In general, Bansal and Voyer (2000) noted that WOM may be defined as an informal type of communication between private parties concerning the evaluation of goods and services and it has been considered to be one of the most powerful forces in the market place. To be precise, the importance of WOM resides in the fact that consumer choice is usually influenced by WOM, especially when the purchase is important. This is explained due to the fact that consumers prefer

to rely on informal and personal communication sources in making purchase decisions instead of on formal and organizational sources such as advertising campaigns (Mohd & Hasan, 2011).

## 2.10 Relationship between ATM transactions and customer retention

The customer satisfaction is determined by the ATM service quality rendered by the ATM stakeholders (Bashir, 2014). The concept customer retention has received a considerable attention from a few decades in both areas as academic and industry. In the dynamic market environment, customer retention is seen as much important factor to compete in the market. Banks deals very closely to their customers, find, and fulfill their needs. Due to the technological advancement, banks are offering technology based services to the customers, the aim is to have a competitive advantage in satisfying their customer needs and hence to retain their customers (Hasan et al, 2013).

Customer satisfaction has significant relationship with customer retention because satisfied customer retain with the organization. While the unsatisfied customer from the services received from organization, would no long have relation with the organization (Wu & Wang, 2007). Automated service quality is defined as the customer's overall evaluation of the excellence of the provision of services through electronic networks such as the internet, Automated Teller Machine (ATM), and telephone banking (Santos, 2003). ATM as an electronic device which help customers to deposit, withdraw, transfer money, pay bills and perform other financial transactions outside the branch. From the prior, it is argued that ATM is the electronic versions of the brick-and-mortar banking halls and customers visit the ATM to perform financial transactions. The ability of the ATM to perform these functions to the satisfaction of customers will measure ATM service quality (Hasan et al, 2013). Mols (2000) argued that customer acceptance of the new automated channels of service delivery in banks may bring a dramatic change in the way that retail banks build and maintain a close relationship with their customers. The key relationship between service quality in this case ATM transactions quality and customer retention or loyalty is that quality which reflect managerial services delivery while satisfaction reflects customer experience with the services.

Looy et al., (1998) noted that keeping customers you already have is essential because replacing them is not easy. Loyalty creates goodwill and serves as an advertisement through word of mouth. Long term customers provide the organization with testimonial. Generally, a bank retains its customers when it is reliable, credible, and attractive and has empathy for customers. This

means that the bank should put its self in the customers' shoes. Customers are highly inconvenienced when ATMs are repeatedly faulty out of money and without proper networking. This is what could cause defection and if the bank is empathetic it would make sure that such occurrences are on the minimal thus retaining its existing customers.

### 2.11 Retaining Customer through satisfaction

Oware et al.(2016) noted in their literature that consumer retention refers to act creating trading relationships by providing reasons to keep existing customers coming back. The relationship marketing era is also characterized by a broadening of the definition of customers to include suppliers. Hence, the guiding emphasis is to develop long-term, mutually satisfying relationships with the firm's customers and suppliers. Successful customer retention starts with the first contact an organization has with a customer and continues throughout the entire lifetime of a relationship. Customer retention is more than giving the customer what they expect; it's about exceeding their expectations so that they become loyal advocates for your brand. It has a direct impact on profitability.

Customer satisfaction increase sales (Kish 2000; Levesque and McDougall, 1996), increases market share (Fisher, 2001); (Levesque and McDougall, 1996) and improves corporate image (Newman, 2001).

Oware et al (2016) noted that customer retention is the ability to keep a customer. It is the customer, who converts economic resources into wealth through his willingness to pay for a good or service. Keeping customers you already have is essential because replacing them is not easy. A customer buys three times that is: the person, the company and the product.

Ducker (2000) also noted that a business entity retains its customers by satisfy them for instance with value and good feeling. A satisfied customer will tell 1 to 5 people about his experience and is likely to remain loyal to the business. The customer will continuously seek out the business product at whatever price. Therefore there is need for reliability, credibility, and attractiveness and having empathy in order for business to retain its customers.

Kotler and Armstrong (1995), in their book noted that although markets currently focus on formulating marketing mixes that will create sales and new customers, the firm's first line of defense lies in customer retention. Banks especially Standard Chartered Bank should adopt the best approach to customer retention which is deliver high customer satisfaction results into

strong customer loyalty. Business survival is the continued existence, sustenance and growth of business entity. The survival of an organization calls for managerial and innovative skills in the execution of various business activities/functions in a competitive environment. It is through such skills that an organization can adapt to its environment and even then change the environment in order to harness its competencies and eventually out rival potential and actual competitors. In the provision of products and services it is usual for the seller and the customer to come into contact. It is during this contact that client form their impression of the quality of the services that the bank is delivering. This may be termed as moment of truth.

Naumann (1995) noted ten factors that lead to customers trust on organization and ways for retention are production of good quality, worry about the corporate image, worry about customer service, do not charge very high prices for your product /services, communicate with customers, in case of any mistake admit it, be reliable, do not misrepresent your products, lead to customer retention. Also when all factors for customer retention are dealt with answered in place, these work hand in hand with factors for customer retention.

## 2.12 Empirical Review

Kanik Verma (2014) conduct comparative study on' analyzing the satisfaction level of customers of Union Bank of India and Yes Bank based on various aspects related to ATMs". In the study, data related to various aspects of ATMs services like location of ATMs, processing time, availability of cash, quality of notes, ATMs grievances settlement, safety & security, sufficient numbers of ATMs etc. was collected from 40 ATMs users of Union Bank of India and Yes Bank through convenient sampling, and the data were analyzed by using statistical technique and tools like Descriptive Statistics, Percentage Method, and Ranking Method. The findings reveals that ATM services of public sector bank are providing more satisfactory services as compared to public sector bank in this study. Therefore private sector banks should concentrate their attention on ATM services quality to improve customer satisfaction. Majority of the respondents in both the banks dissatisfied with the ATM Grievance settlement and sufficient number of ATMs in city, working conditions, cash availability, quality of notes. The study suggested that bank administration should concentrate on proper mechanism on Grievances settlement; besides that, customers' data is increasing day by day correspondingly the number of ATMs should be increased, so it leads to customers' satisfaction.

Kwame et al, (2012) conducted their study to finding out if Automated Teller Machines (ATMs) meet the expectations of the customers and what constrained their use by the customers in Ghana, Accra. The study covered five selected bank's branches. From total ATM users, 120 respondents (customers) were randomly sampled and 10 staffs were selected purposively. The data were analyzed using SPSS. The findings revealed that the inadequate education given to users of ATMs and the functional limitations identified with the machines were major contributors to customers' unpleasant experiences at the ATM points. The study recommended that education given to customers on the use of the ATM should be improved and dummy ATMs be installed in the banking halls to facilitate practical training of prospective users.

Melba and Thanga (2013) study on" issues and challenges faced by ATM customers of state bank of India in south Tamilnadu" To achieve the study's objective, structured questionnaire was prepared and distributed to customers of State Bank of India in south, Tamilnadu, from three district branches in 120 samples were selected through Simple Random sampling method. The data collected was analyzed through Percentages, Chi -square test and Weighted Average Method is applied for the analysis of data. The study shows 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 such as long queuing at ATM counter, inconvenience in operating ATM, and inadequate awareness. finally, the study recommends banks to provide adequate guidance to use ATM cards to avoid problems faced by customers, and to install additional ATM's in order to minimize customer's transaction time.

Gabriel et al (2015) conducted their study on entitled" impact of the ATM technology in delivering service quality in the banking industry in Ghana case of GCB bank LTD" To achieve the study objective descriptive survey research design was used. The study was focus on customers and staff of GCB Bank Ltd in ten branches in Greater Accra Region. The purposive sampling technique was used to 272 customers and staff from 10 branches, both close ended and open ended questionnaire was developed and distributed and collected from sampled respondents. To draw a meaningful, valid and reliable conclusion, and make relevant recommendations, descriptive and statistical analysis in the form of tables was drawn based on percentages. The results of the study generally indicated that three top-most challenges customers are faced with at the ATM were identified in the study and these included," accounts being debited without dispensing", followed by "ATM being sited at an obscured area", and

"the ATM not dispensing the denomination required" by customers ranked third. These show that the ATM service has contributed positively to the provision of banking services in GCB Bank Ltd. and the Ghanaian Banking industry as a whole. Finally, the study recommend the management of GCB to take immediate steps to address challenges before it becomes too late and lose customers to competitors and develop new user friendly, competitive systems and applications that will enable customers harness the full benefit of the ATM.

Abebe (2013) conducted exploratory study on entitled" ATM service quality and customers' satisfaction in Ethiopian banks", Zemen, Dashen, and Commercial Bank of Ethiopia in Addis Ababa were study's target population from them 150 respondents were selected through quota sampling method. Study results shown that majority of the customers are satisfied with ATM banking service regarding accuracy and ease of use. But some of the customers felt that ATM service of their banks have to be improved for their utmost satisfaction regarding convenience and responsiveness.

Ephreame (2016) conducted his masters' thesis on "assessment of ATM Banking service and satisfaction of customers in Ethiopian private Banks case of PSS member banks". The study used descriptive research design and the target population of the study was six PSS member private banks in Addis Ababa city. The questionnaire was distributed to 369 and collected data from respondents they are selected conveniently. The study identified that majority of the respondents agree that the number of ATMs across distance is fair, and the ATMs have user friendly system environment to handle transactions and get services. The study finding result shows that majority of the customers' are dissatisfied with the automated teller machine services and they don't recommend others to use the ATM service.

Fyery (2015) conduct study entitled "ATM adoption of customers in commercial bank of Ethiopia in Mekelle city". The study used descriptive design and the target population of the study was confined on ATM users of commercial bank of Ethiopia in Mekelle city, Mekelle branch. 130 samples of ATM users were selected and structured questionnaire collected from respondents they were selected conveniently. Collected data was analyzed using descriptive analysis such as frequency, percentage, and mean. The result has shown that ATM adopters in the bank use only limited types of services predominantly cash withdrawals. Finally, the study

recommends the bank to increase its promotion by focusing on improving customers' awareness towards the technology and the different types of services ATM provides.

### 2.13 Theoretical framework

Consumer satisfaction is a post-choice evaluation made by the customer concerning a specific purchase or choice for fulfillment of a need or want. Giese and Cote (2002) summarized satisfaction literature by stating that satisfaction is an emotional or cognitive response to a particular focus such as expectations, product or consumption experience, and the response occur at a particular time after consumption or accumulated experience. Customers' satisfaction with their banks is based on the expectations, interactions and experiences with the banks services. The performance of a financial service institution is driven largely by its ability to attract and retain customers who have a wide range of alternatives to choose from. Kano model sited in Gabriel et al, (2015), classifies product or service attributes and their importance based on how they are perceived by customers and their effect on customer satisfaction.

The model is based on the concept of product or service development and customer satisfaction. These classifications are useful for guiding design decisions in that they indicate when good is good enough, and when more is better. It highlights some salient features of customer satisfaction in line with self-service technologies like ATM service.

Over time delightful Innovation becomes another basic need

Not implemented

Basic needs

Delighters

Fully implemented

Figure 2.1 Kano Model on customer satisfaction

Fig 2.1 Kano (1984) sited in Gabriel, et al. (2015)

Source: http://www.12manage.com/methods kano customer satisfaction model.html

#### A. The must be or Basic Needs:

These are the king of needs that customers become dissatisfied when performances of such service are low. Conversely, even with the high performance of the must be or basic needs, customer satisfaction does not rise above the neutral level of satisfaction. A very good example in the context of ATM is the security level, meaning that having secured ATM banking transaction in terms of location, systems and other related issues do not raise the level of customer satisfaction whereas absence will cause customer dissatisfaction (Tasmin et al, 2013a).

#### **B.** The Performance Needs:

These are the kind of needs that if fulfils; they lead to high customer satisfaction. Conversely, if these needs are not satisfied, customers become dissatisfied due to cost (bank charges). Electronic banking is such as ATMs likely to be the performance need, whereas low bank charges in terms of cost related may result in high customer satisfaction (Tasmin et al (2013a).

#### C. The Attractive or Excitement Needs:

Excitement needs increase customer satisfaction if delivered but do not cause dissatisfaction. However, the attractive or excitement needs do not decrease in customer satisfaction, because of the decrease in attributes needs. For example, with the convenience of electronic banking, customer may feel dissatisfied if the ATM does not have some attribute of conveniences in terms of extra function keys, 24/7 service and cash deposition. Conversely, if the ATM does provide such additional service customers will be highly delighted and satisfied (Tasmin et al (2013b). Furthermore, According to Gabriel et al, (2015) these needs surprise the customer and generate delight cause differentiation of the service and put the bank at a competitive advantage with respect to other banks which either have or do not have the ATM facility. Examples of such facilities on an ATM are payment of utility bills, purchase of tickets or simply a talking ATM which gives verbal prompt to the customer.

## **CHAPTER THREE**

## Research Methodology

## 3.1 Research Design and Approach

According to Kerlinger (1978), research designs are invented to enable answering the research questions as validly, objectively, accurately and as economically as possible.

Descriptive research enables to describe characteristics of objects, people, groups, organizations, or environments and explains the conditions of the present by using questionnaires to describe the phenomenon (Gabriel et al, 2015). Survey design is a quantitative procedure in which researchers administer a survey to a portion sample or entire population of the respondents in order to describe opinion, attitudes, characteristics or behavior of the population (Kumar, 2011). The quantitative data generated from the questionnaire was analyzed and interpreted using statistical models such as percentages to cover the entire population of the study, mean and standard deviation. Therefore to achieve the study's objective descriptive survey design was applied. The collected data are organized and tabulated to describe the state of happenings. The designed questionnaires were both close ended but more of five point likert scale measurement because five point likert scale measurement which is recommended to be more appropriate and easier to understand by the respondents and it is the commonest rating scale that allows respondents to rate quality from high to low or best to worst (Seaman, 2007). Westbrook (1980) noted that usual measures of customer satisfaction involve a survey with a set of statements using a Likert Technique or scale.

## 3.2 Target Population

Currently in Ethiopia there are about 19 banks among them 17 banks are commercial banks.

The target population of the study were ten commercial banks Commercial Bank of Ethiopia and selected private banks having five and above banking experience with relatively more active ATM users and better ATM banking familiarity was reason to select those banks. But recently established and late to adopt ATM with relatively small ATM users banks were excluded. Those selected banks were: Commercial Bank of Ethiopia (CBE), Awash international bank (AIB), Dashen bank (DB), Wegagen bank (WB), United bank (UB), Bank of Abyssinia (BOA), Zemen bank, Cooperative Bank of Oromiya (CBO), Oromiya International Bank (OIB), NIB Bank (NIB) those are working in Addis Ababa city. ATM card users were existing customers of

selected commercial banks who have experienced or used ATM banking products/services from respective banks for a minimum of two years the reason behind was that they would have good experience of ATM banking services and can compare the ATM services before and after National e-payment switch (national Switch).

## 3.3 Sampling design

Sampling is the process of choosing from a much large population, a group about which wish to make generalized statements so that the selected part represent the total group (Leedy, 1989). Sample Design must be result in a truly representative sample with reasonable confident level and small sampling error (Kothari, 2004). From the total target population of selected Ethiopian commercial banks active ATM users, proportionally 400 respondents (sample ATM users) were selected from respective commercial banks, convenient sampling method was adopt because it is the most accessible method for reaching the users of ATM. The sample size of the study was determined by statistical formula that was developed by Yamane (1967).

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

Where, n = number of sample size

N = Total number of study population

e= level of confidence to have in the data or degree of freedom which is 95% apply for this study with 5% error.

$$n = 1,679,680/1+1,679,680/(0.05)^2$$
$$= 1,679,680/4200.2 = 400$$

Therefore, sample size of the study was 400 respondents.

Table 3.3.1 Selected Target respondents from respective banks

Name of the	Year of Bank's each	Total Number of	Sample taken	Responded
Banks	establishment	ATM users in	from each bank	Questionnaires
		Addis Ababa	Sample taken	
CBE	1963	736,214	175	172
DB	1995	310,045	74	70
WB	1997	60,545	14	11
OIB	2008	28,100	7	7
AIB	1994	143,878	34	31
ZEMEN	2008	219,681	52	50
NIB	1999	45,045	11	11
СВО	2004	25,500	7	7
UB	1998	50,200	12	12
BOA	1996	60,472	14	14
Total	10	1,679,680	400	385

Source: National bank of Ethiopia annual report 2014/15, each bank's annual report 2015/16 and manager

### 3.5 Data types and source

This study used both primary and secondary data sources. The primary data was collected from sample respondents using five point likert scale and close ended questionnaire. Secondary data was collected from the books, publications, articles, journals and websites etc.

### 3.6 Data Collection Technique

According to Kothari (2004) a researcher should consider two types of data, primary and secondary data. For this research, both primary and secondary data sources were employed. Basically secondary data was collect from the books, publications, journals articles, and websites etc. and primary data was collect through administered questionnaires. Designed questionnaires were contained both close-ended and five point Likert scale where: Strongly Agree (SA) = 5; Agree (A) = 4; Neutral (N) = 3, Disagree (D) = 2; and Strongly Disagree (SD) = 1 (The questionnaire is shown in the appendix). Once the Questionnaires were designed then distribute to banks customers; selected banks' branches for data collection were Dashen bank Piasa branch and Bole premium branch, commercial bank of Ethiopia Finfine branch and Addis Ababa branches because it holds large percentage of the respondents, Nib bank Dembel branch, United

bank Bomb Tera Branch, Zemen bank located at Kasanchis branch, Cooperative bank of Oromia Piasa branch, Awash international bank finfine branch, Bank of Abyssinia fluwuha branch, Oromia international bank finfine branch, Wegagen Legehar branch. The criteria was those were accessible and convenience to the researcher in the course of data collection. The questionnaires were distributed to respondents on convenience sampling basis at various ATMs of selected bank branches and branch hall whey they visited to branches to service.

## 3.7 Analysis of Survey Data Reliability and Validity of the Study

The researcher started the data analysis by examining the reliability and validity of the sample data. Validity and reliability are critical features of effective research. Validity refers to the extent to which questions in an instrument accurately measure the variables therein (Hacker et al., 2003). Whereas reliability refers to the degree to which a set of variables are consistent with what they are intended to measure (Hacker et al., 2003). Accordingly, the reliability of the study survey is dependent on the extent of respondents" satisfaction in using ATM banking services. The validity of this research study was based on total of 35 items that categorized as awareness of customers, benefit that the ATM users get from implementing national Switch and faced challenges, and their satisfaction level which was computed by Cronbach"s Alpha value using statistical package for social scientists (SPSS) version 20.

The level of reliability of the instrument is measured by the consistency of the variables and it was checked with the Cronbach's alpha statistics. Cronbach's Alpha's can only be measured for variables which have more than one measurement question. The results were extracted and presented by the table below 3.6.1, and it shows a result of each variable.

**Table 3.6.1 Reliability Statistics** 

Reliability Statistics												
Va ria bles	Cranach's Alpha value	N of Items										
Awareness	0.667	7										
Benefit	0.712	4										
Challenges	0.649	9										
Satisfaction	0.801	15										

**Source: SPSS Output version 20** 

## 3.8 Procedures of Data Collection

Designed questionnaires were distributed to 400 sample respondents through convenience sampling technique. Data was collected from selected banks' customers in Addis Ababa city ATM terminals found near to selected bank branches while using the ATM service and waiting to use the services and in branches hall when they are visited to deposit. Before contacting the customers to fill the questionnaires, the researcher physically ask each banks branch manager to provide permission to collect the data from each bank hall and branch near ATMs. After permit ATM users have been explained the objectives of the study and requested to their voluntariness to fill the questionnaire. There was also researcher follow-up to provide feedback, clarification, and all possible answers were given in the questionnaire.

## 3.9 Methods of Data Analysis

The data was collected from selected commercial banks sample respondents during the month of April, 2017. Survey was conducted using a close ended structured questionnaire and five point likert scale aimed to collect the data related with the satisfaction level of customer who are using ATM banking service. The collected data using the questionnaires was edited, coded, and tabulate for completeness and accuracy. First raw data gathered was analyzed using Statistical Package for Social Science (SPSS) program version 20. Descriptive statistics was used to analyze the result. Furthermore, mean and standard deviation of the respondents was used to measure the degree of agreed and disagreed responses from the respondents.

## **CHAPTER FOUR**

## **Data Analysis and Interpretation**

A total of 400 questionnaires were personally handed to the respondents with close follow up and guide in filling the questioners. All respondents completed the questionnaires in suitable form. Several questions were asked related to the ATM banking service and their satisfaction level while aftermath of EthSwitch implementation from selected commercial and one public commercial bank in Addis Ababa city. From the total of 400 questionnaires distributed to sample respondents of which 385 (96.25%) questionnaires collected and used to analysis as shown below table 4.1.

## 4.1 Demographic information of the respondents

**Table 4.1 Demographic Profile of ATM banking Customers** 

Variables	Categories	Frequency	Percent	Cumulative Percent
	Male	261	67.8	67.8
Gender	Female	124	32.2	100.0
	Total	385	100.0	
	18-25	169	43.9	43.9
	26-33	180	46.8	90.6
Age	34-41	24	6.2	96.9
1-50	42-49	7	1.8	98.7
	Above 50 years old	5	1.3	100.0
	Total	385	100	
	Below Elementary	25	6.5	6.5
	Elementary school completed	43	11.2	17.7
Educational	High school completed	78	20.3	37.9
level	Diploma	56	14.5	52.5
	Degree	150	39.0	91.4
	Masters and above	33	8.6	100.0
	Total	385	100.0	
	Single	190	49.4	49.4
Marital status	Married	195	50.6	100.0
	Total	385	100.0	

Source: From Questionnaire

As shown in the above table 4.1, 32.2% of the respondents are females and 67.2% of the respondents are male. Therefore the above table shows majority of the respondents are male.

With regard to respondents' age, 43.9% of the respondents belong to the age group of 18-25 years, 46.8% of the respondents are between the ages of 26-33 years, 6.2% of the respondents are between the ages of 34-41 years, 1.8% of the respondents belong to the age between 42-49 years and 1.3% of the respondents' are above the age of 50 years. This shown that most of the ATM card holder's are youngsters.

With regard to educational level of respondents from the above table we can understand that 6.5% of the respondents are below elementary, 11.2% of the respondents are elementary completed, 20.3% are high school completed, 14.5% respondents have Diploma, 39% of the respondents' have first degree and the rest 8.6% have an education level of masters' degree and above. Therefore we can conclude that almost all of the respondents are educated and majority has an educational level of high school completed and above.

# **4.2** Analysis of Collected Data

Table 4.2.1 Awareness of ATM users on National E-payment Switch

No	Statement	Mean	SDV	Strongly	Agree	Agree		Neutral		Disagree		Strongly	Disagree	То	otal
				F	%	F	%	F	%	F	%	F	%	F	%
1.	I don't have any information where to inform if my card captures from different bank's ATM terminals during usage of ATM.	2.55	1.36	34	8.8	95	24.7	32	8.3	112	29.1	112	29.1	385	100
2.	I am informed from My bank to use with my ATM card from any banks' ATM terminals	3.41	1.35	85	22.1	139	36.1	48	12.5	74	19.2	39	10.1	385	100
3.	I am informed where to inform for wrong transaction with my ATM card from different bank's ATM terminals i.e. debiting bank account but not cashed).	3.41	1.29	85	22.1	139	36.1	48	12.5	74	19.5	39	10.1	385	100

4.	I do not know all services that I can get from the ATM other than money withdrawal (I.e. mini statement, balance enquiry, PIN	2.65	1.29	38	9.9	89	23.1	35	9.1	146	37.9	77	20.0	385	100
	change, etc.).														
5.	I am informed and know the ATM service charge for withdrawing money and mini statement from different banks' ATM terminals.	3.32	1.3	77	20.0	134	34.8	56	14.5	73	19.0	45	11.7	385	100
6.	I know where to inform when my account has been debited using my ATM card by unauthorized individual from different banks' ATM terminals.	3.38	1.25	76	19.7	139	36.1	59	15.3	77	20.0	34	8.8	385	
7.	I know the ATMs daily transaction limit for withdrawal.	3.66	1.23	101	26.2	168	43.6	33	8.6	50	13.0	33	8.6	385	100

Source: From Questionnaire

Above table 4.2.1 No.1 shows that 33.5% of the respondents agree, 3.8 % of the respondents are neutral, 58.2% of the respondents disagree with lower mean score of 2.55 on knowledge of respondents where to inform if their ATM card captures from different bank's ATM terminals during usage of ATM. The result indicates that most of the ATM card holders know where to inform if they are faced for card captures during made transaction from different banks' ATM terminals.

Table 4.2.1 No. 2 shows that, 58.2% of the respondents agree, 12.5 % of the respondents are neutral, 39.3% of the respondents replied disagree with a mean value 3.41 on information given from their bank to use from any banks' ATM terminals. Therefore, we can understand that the majority of the respondents have been informed to use their ATM card from different Banks' ATM terminals.

Table 4.2.1 No 3 shows that 58.2% of the respondents agreed, 12.5% of the respondents are neutral, 39.3% of the respondents disagreed with mean score of 3.41 on where to complain when they are faced for wrong transaction (debiting their account without taking cash) from different Banks' ATM terminals. From this we can infer that most of the respondents have knowledge of where to inform or complain for such wrong transaction related problem while using different banks' ATM terminals.

No.4 shows that 30.7% of the respondents agree, 14.6% of the respondents neutral, 54.8% of the respondents disagree when respondents asked about luck of knowledge on availability of services through ATM services other than withdraw with the lower mean score of 2.65. We can conclude that there is a gap in promoting all the services that customers can get when using services from deferent banks' ATM terminals other than withdraw service (I.e. mini statement, balance enquiry, and PIN change). This study result is consistent with Fyery (2015) finding result. Therefore, Switched member banks need to increase promotion by focusing on improving customers' awareness towards the technology and the different types of services customers can get from any banks' ATMs.

Table 4.2.1 No 5 shows that 54.8% of the respondent agrees, 14.5% of the respondents are neutral, 30.7% of the respondents disagree with a mean value of 3.32 on knowledge of ATM users on

ATM service charge for withdrawing money and mini statement from different banks' ATM terminals. The result shows that most of the respondents know service charge for money withdraw, balance enquire, and mini statement.

Table 4.2.1 No 6 when respondents asked on where to inform if their account has been debited by unauthorized individuals with their ATM card from different banks' ATM terminals, shows that 55.8% of the respondents agree, 15.3% of the respondents are neutral and 20.8% of the respondents disagree with the mean score of 3.38. This show that most of the respondents have knowledge of where to inform or complain when they are facing account debit from different banks' ATM terminals by unauthorized individual using their ATM card.

Table 4.2.1 No 7 Shows that 69.8% of the respondents agree, 8.6 of the respondents are neutral, and 21.6% of the respondents are disagree with a mean value of 3.66 that customers have knowledge of ATMs daily transaction limit for withdrawal. So that the findings result shows that majority of the respondents have knowledge on daily ATM transaction limit for withdrawal.

**Table 4.2.2 Benefits of ATM Banking Service to Customers** 

No	Statements	Mean	SDV	Strongly	Agree	Agree		Neutral		disagree		Strongly	disagree	Total		Mean of mean
				F	%	F	%	F	%	F	%	F	%	F	%	
	I get much benefit from my ATM card because I can use it in all banks' ATM.	3.24	1.42	79	20.5	138	35.8	38	9.9	59	15.3	71	18.4	385	100	
	ATMs save me from transport costs and time by bringing self-service banking into convenient locations and working around clock even if my banks' ATMs are not working		1.23	99	25.7	176	45.7	33	8.6	41	10.6	36	9.4	385	100	3.505
	The speed of processing transaction by ATMs is much faster	3.43	1.0	51	13.2	168	43.6	82	21.3	62	16.1	62	16.1	385	100	
	ATMs help me to monitor my bank account outside of bank hours through balance enquiries in every Banks' ATM terminals.		1.14	84	21.8	188	48.8	42	10.9	45	11.7	26	6.8	385	100	
	Total mean	14.02														

Source: From Questionnaire

Table 4.2.2 No 1 shows that 56.3% of the respondents agree, 9.9% of the respondents are neutral and 33.7% of the respondents disagree with the mean score of 3.24 regarding with benefit of ATM card user after common switch. The result indicated that majority of the banks customers agreed that they get benefit because they can make transaction from all bank's ATM terminals.

Regarding benefit that customers are get from ATMs transport costs and time, and convenience location by using all banks' ATM terminals, Table 4.2.2 No 2 shows that 71.4% of the respondents agree, 8.6% of the respondents are neutral, and 20% of the respondents disagree with a mean value 3.68. From this, we can understand that that the majority of the respondents get benefit with convenience and costs.

On speed of processing transaction by ATMs Table 4.2.2 No 3 shows that 56.8 of the respondents agree, 21.3% of the respondents are neutral, and 32.2 of the respondents strongly disagree with a mean value of 3.43. From the result we can conclude that majority of the respondents are agree on ATM's speed of processing transaction but significant number of respondents are disagree with much speed of processing transaction by ATMs. Therefore, banks need to improve their ATM's speed of processing transaction.

With regard to monitoring benefits of bank account outside of bank hours through balance enquiries in every Banks' ATM, Table 4.2.2 No 4 shows that 70.6% of the respondents agree, 10.9% of the respondents neutral and 18.5% of the respondents disagree with mean value of 3.67. From the result we can conclude that majority of the respondents are agree on benefit of ATMs to monitor banks account.

Mean of mean of the four statements on ATMs benefit to the customers has also indicated that it is above three (3.505). This shows that the mean of the responses on all the statements can be taken as the customers have agreed on using ATM banking benefit than using manual teller based banking could give to them.

Table 4.2.3 Challenges faced by ATM users during usage of ATM banking Services

No .	Statements	Mean	Λ	S	Agree	Agree		Neutral		disagree		Strongly	disagree	Total		Mean Of Mean
		Me	SDV	F	%	F	%	F	%	F	%	F	%	F	%	
1	Due to frequent faced problems															
	while usage of ATM from different	3.58	1.27													
	Banks' ATMs, I do not trust the			111	28.8	124	32.2	60	15.6	58	15.1	32	8.3	385	100	
	common switch to use the ATM															
	from different banks' ATMs.															
2	Due to the charges while using		1 21													
	ATM, I prefer to go to my banks'	3.15	1.21	48	12.5	136	35.3	62	16.1	103	26.8	36	9.4	385	100	2 424
	ATM terminals for the service.															3.424
3		2.61	1 12													
	ATM machines dispense the cash	3.61	1.13	07	22.6	150	20.0	0.5	22.1	20	0.0	25	- F	205	100	
	without debiting the account or debiting the account without			87	22.6	150	39.0	85	22.1	38	9.9	25	6.5	385	100	
	dispensing cash.															
4	In case of errors during transaction	2.72	1 25													
	the banks did not give me quick	3.53 1.25	84	21.8	170	44.2	33	8.6	63	16.4	35	9.1	385	100		
	response															

Total Mean 30.82															
,	compared to when I use from my bank ATM.	3.21	1.00	39	10.1	139	36.1	113	29.4	65	16.9	29	7.5	385	100
8	There is frequent interruption of ATM service due to Interruption of electric power.  Availability of limited services	3.76	1.08	84	21.8	143	37.1	94	24.4	52	13.5	12	3.1	385	100
	Lack of knowledge to reading out instruction during performing ATM transaction.	2.7	1.27	26	6.8	102	26.5	77	20.0	90	23.4	90	23.4	385	100
6	There is frequent interruption of ATM service due to network failures.	3.72	1.13	109	28.3	145	37.7	58	15.1	61	15.8	12	3.1	385	100
5	In case of errors during transaction the banks did not give me quick response	3.53	1.25	84	21.8	170	44.2	33	8.6	63	16.4	35	9.1	385	100

Source: From questionnaires

Table 4.2.3 No 1 on trust of ATM users on the new system due to frequent faced problem while using ATM different ATM terminals the table shows that 61% of the respondents agree, 15.6% of the respondents are neutral, 23.4% % of the respondents disagree with a mean of 3.58. The result shows that most of the respondents didn't trust the national switch due to the frequent faced problems while using ATM services this may dissatisfy the customers and encourage them to prefer their home bank ATMs for the service.

Table 4.2.3 No 2 shows on ATM service charge while using from different banks' ATM terminals that 47.8% of the respondents are agree, 16.1% of the respondents are neutral, and 36.2% of the respondents are disagree with mean of 3.15. Therefore, findings result indicates that majority of respondents prefer to go to their bank ATM to get services due to service charge but significant number of respondents disagree that they don't prefer to go to their banks' ATM to get service because of service charge. This indicates ATM service charge is high and discourages the customers not to use every bank's ATM terminals. Currently, when customers use ATMs for the withdraw money out of their home banks' ATMs the service charge is 50 cent per 100 birr but if they use their home bank ATM the service charge is between 0.10 to 0.25cent per 100 birr because the service charge for ATM service is differ bank to bank.

Table 4.2.3 No 3 shows that 61.6% of the respondents agree, 22.1% of the respondents are neutral, 16.4% of the respondents disagree with mean of 3.61. We can conclude that most of the respondents have an experience of debiting bank account without dispensing the cash or dispensing cash without debiting account during ATM transaction from different ATM terminals due to problem associated with ATMs, power and Network. The ATM failure affect customer's patronage and acceptance/adoption as it erode customer's confidence on the product or services like ATM services.

When respondents asked about banks response related to error transaction while using ATM services, Table 4.2.3 No 4 shows that 66 % of the respondents are agree, 8.6 % of the respondents are neutral, 25.5 % of the respondents disagree and mean of 3.53. This shows that most of the respondents agree that didn't respond quickly for error ATM transaction from banks.

No 5 shows that 66 % of the respondents are agreed, 15.1% of the respondents are neutral, 18.9% of the respondents strongly disagree and mean of 3.72 that there is frequent interruption of ATM service due to network failures. Therefore, finding result shows that there are times that the customers don't get the ATM service due to frequent interruption of network failures this will lead the customer to mistrust the ATM service and make them dissatisfaction because Stable and reliable network would encourage customers to use the ATM services at any banks' ATMs resulting in the reduction of queues in the banking hall especially at the end of the month when most workers are paid in the country, weekends and holidays.

When respondents asked about their knowledge to reading out instruction while performing ATM transaction, Table 4.2.3 No 6 shows 33.3% of the respondents are agreed, 20% of the respondents are neutral, and 46.8% of the respondents disagree with mean of 2.7. This finding result shows that most of the respondents don't faced for challenges to reading out the instructions during performing transaction but significant number of respondents are faced challenge on machine complexity when performing ATM transaction.

Regarding challenge faced by ATM users due to frequent interruption of electric power No 7 shows that 58.9 % of the respondents are agreed, 24.4% of the respondents are neutral, and 16.6 % of the respondents disagree with mean of 3.76 that there are frequent interruptions of ATM service due to interruption of electric power. This implies that there are times that the customers don't get the ATM service due to frequent interruption of electric power; this will lead the customer to withdraw money from banks branches and discourage the customers to trust such technology.

With regard to availability of limited services compared to customers' bank's ATM services, table 4.4 No 8 shows that 46.2% of the respondents are agreed, 29.4% of the respondents are neutral, and 29.4% of the respondents strongly disagree with mean of 3.24. This implies that majority of respondents are agreed with availability of limited services on ATM compared to services available on their home bank ATMs. Therefore respondents need additional services on ATMs better than current services because currently, if they perform transaction from

different banks' ATMs other than their bank's ATM terminals they would get only money withdraw, balance enquire, and mini statement.

With regard to availability of needed note denomination on ATM as shown from table 4.2.3 No 9 that 54.5% of the respondents are agreed, 21.87% of the respondents are neutral, and 23.6% of the respondents disagree with mean of 3.45. From this we can understand that most of the respondents are agreed on challenge of getting needed note loaded to ATMs when they want withdraw money.

Generally, as we have seen the nine statements from above Table 4.2.3 which shows the challenge faced by ATM users on new technology, such as high service charge, debiting account without dispensing cash, ATM dawn time due to network and power related problem, availability of limited service on ATMs, difficulty in getting needed note loaded to ATMS are almost all found out mean score value is greater than three and above except lack of knowledge reading out instruction on ATMs during performing transaction which mean score is below three (2.69). Therefore, respondents are agreed on the existence of these challenges on the ATM banking after National switch operationalized and the overall mean or mean of mean result shows 3.424 even if their level of agreement on each of the statements are different.

Table 4.2.4 Satisfaction level on ATM banking service with various aspects

No	State ments	Mean	SDV	Strongly	3184	Agree		Neutral		disagree	Strongly	disagree		Total	
				F	%	F	%	F	%	F	%	F	%	F	%
	The ATM's are placed in convenient and accessible locations in such a way that my Safety, Security and Privacy are maintained.		1.09	69	17.9	208	54	40	10.4	43	11.2	25	6.5	385	100
2.	I get faster transaction from all banks' ATMs terminals whenever I go.	3.03	1.23	41	10.6	126	32.7	65	16.9	108	28.1	45	11.7	385	100
3.	Quality of receipt I get from all Banks' ATM terminals is good.	2.97	1.12	29	7.5	112	29.1	100	26	107	27.8	37	9.6	385	100
4.	I get prompt response from Banks for ATMs transaction related problem.	2.77	1.12	19	4.9	117	27.8	69	17.9	145	37.7	45	11.7	385	100
5.	I use any banks' ATM terminals with my bank ATM card easily.	2.88	1.23	40	10.4	104	27.0	59	15.3	134	34.8	48	12.5	385	100
6.	The charge for getting service from any bank's ATM terminals is fair.	3.4	1.03	24	s6.2	141	36.6	70	18.2	94	24.4	56	14.6	385	100

7.	There are times where the ATM's go out of cash	3.44	1.05	42	10.9	191	49.6	63	16.4	71	18.4	18	4.7	385	100
8.	I always informed via Alert message after every transaction done on ATM.	3.02	1.08	30	7.8	143	37.1	60	15.6	109	28.3	43	11.2	385	100
9.	The ATM always works properly without any abnormality Whenever I go.	2.33	1.11	11	2.9	65	16.9	63	16.4	148	38.4	98	25.5	385	100
	Always ATMs have receipt when I want it to print	2.4	1.09	7	1.8	70	18.2	58	15.5	183	47.5	67	17.4	385	100
11.	The print on the slip during request of mini statement is too small to read	3.07	1.23	20	5.2	111	28.8	151	39.2	85	22.1	18	4.7	385	100
12.	ATM slip always shows me updated balance.	2.67	1.2	20	5.2	106	27.5	58	15.1	132	43.3	69	17.5	385	100

Source: From questionnaires

Table 4.2.4 No 1 shows that 71.9% of the respondents agree, 10.4% of the respondents are neutral, and 17.7% of the respondents are disagree that ATMs satisfied their card banking service needs with a mean score of 3.65. From this table, we can conclude that the most of the ATM users are satisfied on convenient and accessible locations ATM's are in such a way their safety, security and privacy are maintained.

Table 4.2.4 No 2 shows that 43.3% of the respondents agree, 16.9% of the respondents are neutral, 39.8% of the respondents disagree on ATMs seed of transaction when they are used from different banks' ATMs terminals with a mean score of 3.03. From this, we can conclude that the most of the ATM users are not satisfied on ATMs fast seed of transaction therefore ATMs need to improve their transaction processing speed.

With regard to quality of receipt that the customers can get from different banks' ATMs table 4.2.4 No 3 shows that 36.6% of the respondents agreed, 26 % of the respondents are neutral, and 37.4% of the respondents disagree with lower mean score of 2.97. This indicates majority of the respondents are dissatisfied with quality of receipt they get from different ATMs.

No Banks response to customers for transaction related problems No 4 shows that 32.7% of the respondents agree on banks quick response, 17.9 % of the respondents are neutral, 49.4% of the respondents disagree on quick response of banks for transaction related problems with lower mean score of 2.77. This implies majority of the respondents are dissatisfied with prompt response given from banks for ATM transaction related problems in case an error caused by the ATM because the ATMs transaction related problems when users use ATMs other than their bank' ATM are managed by independent institution (Ethswitch). Banks forwarded customers transaction related cases to EthSwitch settlement department for further investigation after the customers complain to his/her bank as a result it takes time until the two independent institutions communicate each other this may causing dissatisfaction on customers.

Table 4.2.4 No 5 shows that 37.4% of the respondents agree, 15.3 % of the respondents are neutral, and 47.3% of the respondents disagree with lower mean score of 2.88 on ease of use of ATMs. This shows most of the respondents are dissatisfied with ease of use ATM when they performing transaction from different Bank's ATMs with their ATM card this may as a result of

instruction variation that ATMs show to customer to perform transactions and banks' ATM feature difference so machines should be user friendly to users or user friendliness of ATMs could be come through awareness of how to perform and use the Machines'.

Regarding fairness ATMs service charge for getting services from different banks' ATM terminals the Table 4.2.4 No 6 shows that 42.8% of the respondents agree, 18.2% of the respondents are neutral, 38.9 % of the respondents disagree with lower mean score of 3.4. This implies that most of the customers feel that it is fair where as there are also significant number of customers are not feeling fair with the charges they pay in other bank ATM terminals this study result is consistent with Ephream (2016) conducting study on PSS members bank's customers.

On ATMs cash availability, table 4.2.4 No 7 above shows that 60.5% of the respondents are agree, 16.4% of the respondents are neutral, and 23.1% of the respondents disagree with a mean value of 3.44. This implies most of the respondents agreed that there are times where the ATMs remain out of cash this will causes customers dissatisfaction because uptime of the ATM and cash availability are very essential to customer satisfaction especially on holidays and weekends when most banking halls were closed. So that well stocked ATM with cash at all times enable customers to access banking products/services freely and easily and also discourage to carry of sum of cashes in wallet/pocket.

Table 4.2.4 No 8 indicates that 44.9% of the respondents agree, 15.6% of the respondents are neutral, and 39.5% of the respondents disagree that ATM users always informed via short message service (SMS) after every transaction done on ATM and branches with mean score of 3.02. This imply that respondents has not been informed via alert message after every transaction done but significant number of respondents are agree on delivery of notification message when their account has been debited or credited. This delay to delivery of notification massage may be as result of poor network or when customer phone's inbox keep full messages, and there might be system side problem this means if customers' current use phone number might not linked to his/her bank account.

Table 4.2.4 No 9 respondents response shows that 19.8% of the respondents reply agree, 16.4% of the respondents are neutral, , and 63.9 % of the respondents replied disagree on ATM always work properly without any abnormality whenever they go with a lower mean value of 2.33.

This implies majority of the customers are dissatisfied with the unavailability of ATM service whenever they go, indicating that the ATMs go out of service due to various reasons such as network problem, electric power, and banks' system side problem these can cause customers' dissatisfaction.

Table 4.2.4 No 10 shows respondents response on availability of receipt on ATM when the users need to print that 20 % of the respondents agree, 15.1% of the respondents are neutral, and 63% of the respondents disagree. Majority of the respondents responded that they didn't get receipt from ATMs for mini statement and money withdrawal with mean of 2.4 because printed receipt after each cash withdrawal from the ATMs displays both the amount withdrawn and the remaining account balance enable user to manage and control their bank account.

No 11 shows that even customers can get the receipt from the ATMs, majority of the respondents remain neutral for the receipt that was enough to read when they want to print as mini statement with a mean score of 3.07.

On the regard of updated balance shown on ATMs table 4.2.4 No 12 shows that 32.7% of the respondents agree, 15.1% of the respondents are neutral, and 61.2% of the respondents disagree with the mean score value of 2.67. This implies that majority of the respondents are disagreed on ATMs shown updated balance when they want to check their bank account.

Table 4.2.5 Overall customers' satisfaction from ATM services

No.	Statements I	Mean	SDV	Strongly	Agree	Agree		Neutral		disagree		Strongly	disagree	Total	
				F	%	F	%	F	%	F	%	F	%	F	%
1.	I get satisfaction from ATM services due National Switch	2.82	1.31	38	9.9	115	29.9	47	12.2	111	28.8	74	19.2	385	100
2.	I recommend my families and relatives to use the ATM services from all banks' ATM terminals.	2.83	1.24	33	8.6	117	30.4	37	9.6	147	38.2	51	13.2	385	100

Source: From questionnaire

The above table 4.2.5 No 1 shows that 39.8% of the respondents agree, 12.2% of the respondents are neutral, and 48% of the respondents replied disagree with a Mean score value of 2.82 when they asked their overall satisfaction on ATMs banking service aftermath National S witch with a Mean score of 2.82. From the above table, we can conclude that due to various faced challenges such as ATM service, delay to respond, ATMs malfunctionality due to power and network, availability of limited services etc. ATM banking needs of customers are not satisfied even all banks ATMs being interoperable for the service. This findings result is consistent with Kwame, Awunyo and Oduro (2012), Islam et al (2007), and Ephream (2016). Therefore banks should minimize the challenges encountered by customers and minimize dissatisfaction.

Table 4.2.5 No 2 shows that 39% of the respondents agree to recommend families and relatives to use ATM services on any banks' ATM, 9.6 % of the respondents are neutral to recommend families and relatives to use ATMs services on any banks' ATM, 51.4% of the respondents respond disagree to recommend families and relatives to use ATM services on all banks' ATM with a mean score of 2.83. Thus majority of the respondents don't recommend others to use the ATM service out of their home bank's ATMs, implying that due to the

malfunctioning of ATM and other problems they are not willing to recommend their families and relatives; while significant number of the respondents agreed that they recommend their families and relatives to use ATM service out of their home banks ATM terminals because satisfied customer conveys positive messages about it to others or non users to use the service.

Table 4.2.6 Source of information to use any Banks' ATM terminal

	Source of			Cumulative
Statement	information	Frequency	Percent	Percent
From where you heard to use	From my bank	186	48.3	48.3
from any banks' ATM	Magazine	19	4.9	53.2
terminals with your ATM	Newspaper	13	3.4	56.6
card?	TV/Radio	105	27.3	83.9
	Friends	49	12.7	96.6
	Relatives	13	3.4	100.0
	Total	385	100	

Source: from questionnaire

From the above table 4.2.6 we can conclude that most of the customers are informed to use any banks' ATMs for the services from their bank branches, but only 12.7% and 3.4 % respondents are informed by their friends and relatives respectively because of frequent malfunctionality of the ATMs and other transaction related problems, delay to respond for their problem in case of error transactions, such and other discourage customers to recommend friends and relatives to use ATMs from different banks' ATMs even their bank's show ATMs are out of services.

Table 4.2.7 ATM user experience of debiting account without dispensing cash

					Cumulative
Statements		Item	Frequency	%	Percent
Do you have faced for cases in which the		Yes	198	51.5	51.5
ATM machines debiting your account		No	187	48.5	100.0
without dispensing cash?		Total	385	100.0	
Duration to respond/ refund debited amount to customers					
	One week		54	27.3	27.3
	Two week		46	23.23	50.53
lon	Three w	Three week		14.14	64.67
Duration	One mo	onth	26	13.13	77.8
Du	More t	han a month	44	22.22	100.0
	Total	Total		100	
Initiation to solve these problems			Frequency	%	Cumulative
					Percent
or	Banks		140	36.31	36.3
iate	Customers		245	63.63	100
Initiator	Total		385	100.0	

Source: From questionnaire

Table 4.2.7 shows that from the total respondents above 50% respondents have an experience of debiting account without dispensing cash when using different banks' ATMs terminals due to malfunctionality of the ATM and only 14% of the customers are refund the debited amount in case of ATM malfunctionality within one week but most of the customers are responded after two weeks and above. As shown on the above table when customers are debited their account without dispensing the cash, the respondents replied that unless they complain to their bank branches as not taking the cash while using from the different banks' ATMs even they use branch side ATMs they are not been refunded. To conclude the above table 4.2.7, majority of the respondents faced for debiting their account without paying during usage of ATMs and they are responded after two weeks after they complain to their bank's branch

because as discussed earlier the transaction related problems while customers use ATM different banks' ATMs if they faced for debiting account without dispensing the cash due to different ATM related problems the settlement is handled by the EthSwitch and duration to settle the debited amount within 10-15 days after banks forwarded their customers case to them unless the amount remain as suspense but settlement duration for error transactions on National Switch according to National bank of Ethiopia on banks ATM interoperability and settlement directive the settlement should be made within 8 working days.

Table 4.2.8 Recommendation made by customers on ATMs improvements

Recommendation	Frequency	Percent	cumulative percentage
More user friendly machine	112	29.1	29.1
Facility to pay utility bills	104	27.0	56.1
Enhancement of withdrawal limits	29	7.5	63.6
Provide training and awareness given to customers on ATM services	118	30.6	94.2
Withdrawal option in the different note denominations	22	5.7	100
Total	385	100.0	

Source: From questionnaire

In order to improve the ATM service and satisfy the users as shown on above table 4.9, customers suggest banks to giving awareness and training on how to perform transaction and availability of different services on ATM other than withdrawal, printing mini statement, and balance enquire services to their customers, facilitate additional services features on ATMs like to pay utility bills and even fund transfer from their bank account to needed any other bank account, and ATM machines should be more user friendly machine increase in number of ATMs are given more percentages by the ATM card user.

### CHAPTER FIVE

# **Summary of Findings, Conclusions and Recommendations**

This chapter presents the overall summary of the findings, recommendations and conclusions of the study. The recommendations however, consisted of two parts. It is made up of the main recommendation as well as recommendation for future research.

# **5.1 Summary of Findings**

The study objective was to assess the level customers' satisfaction on ATM banking services aftermath of EthSwitch. Based on the basic research question, the study findings result is summarized as follows:

When assessed the awareness level ATM users about National Switch regarding ATM services, the following summaries are drawn:

- Most of the ATM card holders know where to inform if they are faced for card captures during ATM transaction from different banks' ATM terminals
- Majority of the respondents are informed to use on different Banks' ATM terminals with their ATM card from their bank branches.
- Most customers have knowledge of where to inform or complain for wrong transaction related problem while using different banks' ATM terminals even they are faced for account debit without dispensing the cash from different banks' ATM terminals by unauthorized individual using their ATM card.
- Majority of the customers know all services that can get from ATMs other than money withdrawal but significant numbers of customers don't know all the services rendered through ATMs.
- ➤ Most of the customers know service charge for money withdraw, balance enquire, and mini statement.

From the attribute listed to the asses the benefits of ATM the following summaries are drawn:

➤ Majority of the respondents agree that using ATM give them an advantage of saving time and cost.

- ➤ Majority of customers are agreed on much speed of processing transaction through ATMs,
- ➤ Due to accessibility and convenience of ATMs most ATMs users agreed that ATMs enable them to monitor and manage their banks account.

The result from the data analysis indicated that in spite of the difficulties associated with the use of different banks' ATMs after national Switch the following summaries are drawn:

- ➤ Due to the frequent faced problems while using ATM services majority of customers prefer to go to their bank ATMs for the service and they didn't trust the system (National Switch).
- Most of the respondents agreed that they prefer to go to their banks' ATM to get service because of ATMs service charge.
- ➤ It is also found that customers are not getting quick response whenever the dispute arises while using ATM.
- Most of the respondents disagreed with challenge to reading out the instructions when performing transaction on ATM but significant number of respondents (33.3%) are agreed on challenges of reading out the instructions during performing transaction.
- ➤ Major of the customers are agreed on the challenges while using ATM services such as frequent interruptions of ATM service due to interruption of electric power and network failure, availability of limited service on ATM, and needed note loaded to ATMs.

The finding result from the data analysis indicates the level of satisfaction of customers on ATM services aftermath of EthSwitch the findings result are summarized as follows:

- Most of ATM users are satisfied on convenient and accessible locations ATM's in such a way their safety, security and privacy are maintained.
- Regarding getting speed of transaction, most of the ATM users are satisfied on ATMs fast seed of transaction but 39.1% customers are dissatisfied on ATMs fast speed of transaction processing time.
- Most of the respondents are dissatisfied with quality of receipt they get from different ATMs whereas significant numbers of respondents remain neutral.

- ➤ Majority of the respondents are dissatisfied with prompt response given from banks for ATM transaction related problems in case an error caused by the ATM.
- Majority of customers are dissatisfied with ATMs' ease of use to perform transaction.
- Reponses on fairness of service charge for getting services from different banks'

  ATM terminals shows that most of the customers feel that it is fair.
- ➤ On ATMs go out of cash, majority of respondents are agreed.
- Majority of the customers are dissatisfied with the ATMs go out of service whenever they go due to network problem, electric power.
- ➤ Majority of the respondents remain neutral for receipt readability and quality but significant number of respondents are dissatisfied.
- ➤ On the regard of updated balance shown at ATMs majority of the respondents are dissatisfied.
- ➤ Overall, majority of the respondents are dissatisfied on ATM service after National switch implementation and most of them don't recommend others to use the ATM service at any banks ATMs.

## **5.2 Conclusions**

The major objective of the study was to assess the level of customers' satisfaction on ATMs in delivering service in the Ethiopian commercial banks while after EthSwitch operationalised. It is evident that the banks should implement the state of art technologies and keep themselves up to date to win the competition in the track. Hence, the fact that interoperability of ATMs among Ethiopian commercial banks gives banks many advantages to deliver their service to their customers and in fact it has benefits to customers too by gives them a sort of alternative to use the service. Meanwhile, these benefits have not come without challenges the research finding shows that there is customers dissatisfaction on ATM services after interoperability due to problems encountered include; customers' accounts being debited without dispensing, not loading the ATM with the denomination of cash needed by customers, Shortage of money in ATM's, ATM malfunction due to connectivity problems and power, delayed to response in case of dispute or errors transaction, ATMs receipt's availability, quality, and readability, and ATMs late to update balance, availability of limited services, service charge, awareness of customer on availability of services other than withdraw, Machine complexity are the major problems identified by the ATM users.

These challenges on ATMs after operation of National e-payment switch interrupt the service and caused dissatisfaction on potential customers. However there are challenges when using ATMs but still customers prefer to get the service from all banks' ATMs. Thus, competition in banking industry is getting tough, and to create competitive advantage and customer satisfaction only through ATM technology cannot bring the intended result unless banks create competitive advantage and achieve more customer satisfaction by improving supporting service and managerial decision working on those areas those even are identified by the researcher as challenges in ATM banking services.

# **5.3 Recommendations**

From the findings of the study it is believed that the following recommendations would help owner and operator of National e-payment Switch (Ethswitch), switched member banks, and customers realize the full benefit of the ATM as a service delivery channel.

- The central monitoring unit should check proper operation of all banks' ATMs so as to deal expeditiously with customers' issues such as debits without dispensing; ATMs cash availability, connectivity issues and remote monitoring of the ATMs across the country in other to provide customer satisfaction especially weekends and holidays.
- All switched member Banks should enhance the education given to customers on the use of the ATM. This should begin at the point of issuing new ATM cards to customers and provide brochure, manuals or fliers to customers to guide them as reference how to operate the machine and get various services through all ATMs, the charges associated with using the ATM at home and other banks' ATM, and aware them all services that are available through home ATMs and if they transact from other bank's ATMs. Furthermore, the banks should provide phone support to clients who experience service interruption, so users can get direct assistance especially where the branches were close.
- Non-functioning or the failure of the ATM machine was the negative remark made by the ATM users because availability of good network and electric power is the key to give all E-banking service among them ATM services are utilized by most of banks customers. Therefore, switched member banks should work with the telecom about the matter and prepare generator as backup near to the ATMs to be standby when the power gets off in order to solve power related problem as one part of improving service to satisfy their client.

- All Switched member banks should reconsider the charge of getting the service from other banks ATM terminals so that the card banking service needs of the customer's will be satisfied and will encourage customers to use any bank's ATMs even they want to withdraw large amount otherwise they will prefer to use their home bank's ATMs.
- Switched member banks should acquire most recent sophisticated user friendly ATM machine. User friendliness can be improved by increasing awareness of how ATMs can be used and another option may be redesigning the software used in ATMs. Also should check their ATMs whether it show customers' updated balance whenever request, ATMs' receipt availability and their quality and readability, and also stocked notes in ATMs with different denomination, and ATMs should be install in business area will encourage customer to use the ATM services.
- ➤ Each Switched member bank's management should ensure officers that ATMs should always made enough cash available so as to enable the machine dispense cash to customers whenever they need arises.
- Ethswitch dispute management department should respond quickly customer's problems related to transaction related problems (in case of error transaction) with in stipulated period or early as possible before customers complained their bank branches.
- The services provided by the ATM should be configure to enable interbank fund transfers and payments of bills and try to solve or minimize case of ATMs' systemic errors this will encourage and satisfy ATMs user's needs.
- All Switched member banks should negotiate to stipulate standard date for the refund of each type of ATM failed transaction occurs on inter switch and to respond immediately so as to satisfy their customers.

# 5.4 Further Research recommendation

The research assessed customer satisfaction on ATM services while after National Switch further study will be needed by including all E-banking services. Further study would need to assess ATM user's satisfaction before and after all banks' ATM being interoperable. It will be also necessary to replicate this study on a sample different in demographic characteristics. Such as having low levels of education and indifferent regions of the country for comparison of the study results.

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# **APPENDIX I: Questionnaires ATM user**

#### ST. MARY'S UNIVERSITY

#### SCHOOL OF GRADUATE STUDIES

#### DEPARTMENT OF BUSINESS ADMINISTRATION

### Dear Respondent,

The objective of the study is to assess the ATM Banking Service and customers' Satisfaction in Ethiopian commercial Banks after implementation of National E\_Payment switch. Therefore, this questionnaire is design to collect data from the respondents (customers) in connection with ATM Banking regarding with awareness of customers about common switch for ATM usage, benefits and challenges, and customers' Satisfaction in Ethiopian commercial Banks regarding with ATM banking service. As a result, your involvement in this regard has a precious value because quality of this research result is depend on the accuracy of the information you provide to the researcher while filling out the questionnaire. Finally, I would like to assure you that utmost care will be taken for the confidentiality of the information you will provide to researcher.

# **General Guidelines**

This questionnaire has two parts; you are kindly requested to respond to the questions based on the instructions under each section. If you have any comment or further explanation please don't hesitate to use space provided at the end of the questionnaire

### Part I. Respondent's general information

Please indicate the following information's by ticking  $(\sqrt{})$  on the spaces provided in front of the each option.

1.	Gender:	Male	Female	
2.	Marital status:	Single	Married	

3.Age tick (	√) appropriate one
Under 20	
21-30	
31-40	
41-50	
Above 50	

4.Educational tick (√) appropria	te one
Below Elementary	
Elementary school completed	
High school completed	
Diploma	
Degree	
Masters and above	

# Part II. Questionnaire related to ATM usage

The following lists of statements are used to get relevant information for the accomplishment of the research objective. Thus, please indicate your level of agreement with each statement by ticking  $(\sqrt{})$  on the spaces provided under each option. The options range from Strongly Agree to Strongly Disagree.

Note: SA - for Strongly Agree

A- For Agree

N- For Neutral

D- For Disagree, and SD- For Strongly Disagree

1. Awareness of ATM users on National Switch regarding ATM banking			D	N	A	SA
services	3					
1.	I don't have any information where to inform if my card captures					
	from different bank's ATM terminals during usage of ATM.					
2.	I am informed from My bank to use with my ATM card from any					
	banks' ATM terminals.					
3.	I am informed where to inform for wrong transaction with my ATM					
	card from different bank's ATM terminals (I.e. unsuccessful					
	transaction i.e. debiting bank account but not cashed).					
4.	I do not know all services I can get from the ATM terminals other					
	than money withdrawal (I.e. mini statement, balance enquiry, PIN					
	change, etc.).					
5.	I am informed and know the ATM service charge for withdrawing					
	money and mini statement from different banks' ATM terminals.					

ATM card by unauthorized individual from different banks' ATM terminals.  7. I know the ATMs daily transaction limit for withdrawal.  2. Indicate the Benefits that you get when using ATM service after SD D N A SA EthSwitch operationalised.  1. I get much benefit from my ATM card because I can use it in all banks' ATM.  2. ATMs save me from transport costs and time by bringing self service banking into convenient locations and working around clock even if my banks ATMs are not working.  3. The speed of processing transaction by ATMs is much faster.  4. ATMs help me to monitor my bank account outside of bank hours through balance enquiries in every Banks' ATM terminals.  3. Challenges that you faced in ATM services after Eth_Switch is SD D N A SA operationalised.  1. Due to frequent faced problems while usage of ATM from different banks' ATMs, I do trust the national switch to use the ATM from different banks' ATMs.  2. Due to the charges while using ATM, I prefer to go to my banks' ATM terminals for the service.  3. There are cases in which either the ATM machines dispense the cash without debiting the account or debiting the account without dispensing cash.  4. In case of errors during transaction the banks did not give me quick response  5. There is frequent interruption of ATM service due to network failures.  6. Lack of knowledge to reading out instruction during performing ATM transaction.	(	I know where to inform when my account has been debited using my					
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6 Lack of knowledge to reading out instruction during performing ATM transaction.		response					
transaction.	5.	There is frequent interruption of ATM service due to network failures.					
	6.	Lack of knowledge to reading out instruction during performing ATM					
7 There is frequent interruption of ATM service due to Interruption of		transaction.					
	7.	There is frequent interruption of ATM service due to Interruption of					

	electric power.					
8.	There are limited services available on ATMs compared to when I use					
	from my bank ATM.					
9.	There are cases in which I faced difficulties to get needed note					
	denomination on ATMs in money cassettes.					
<b>4.</b> S	Satisfaction by using ATM banking service after National Switch	SD	D	N	A	SA
1.	The ATM's are placed in convenient and accessible locations in such a					
	way that my Safety, Security and Privacy are maintained.					
2.	I get faster transaction from all banks' ATMs terminals whenever I go.					
3.	Quality of receipt I get from all Banks' ATM terminals is good.					
4.	I get prompt response from Banks for ATMs transaction related					
	problem.					
5.	I use any banks' ATM terminals with my bank ATM card easily.					
6.	The charge for getting service from any bank's ATM terminals is fair.					
7.	There are times where the ATM's go out of cash					
8.	I always informed via Alert message after every transaction done on					
	ATM.					
9.	The ATM always works properly without any abnormality Whenever I					
	go.					
10.	Always ATMs have receipt when I want it to print					
11.	The print on the slip during request of mini statement is too small to					
	read					
12.	ATM slip always shows me updated balance.					
5.	Overall customers' satisfaction by using ATM banking service on	SD	D	N	A	SA
Natio	onal Switch.					
1 I	get satisfaction from ATM services after national Switch operationalised			1		
2 I	2 I recommend my families and relatives to use the ATM services from all					
. ba	anks' ATM terminals.					
			<u> </u>			<u> </u>

1.	From where you heard to use from any banks' ATM terminals with your ATM card?
	From my bank Magazine Newspaper
	TV/Radio Friends Relatives
Ifa	any
2.	Do you have faced for cases in which either the ATM machines debiting your account
	without dispensing cash from other banks' ATM terminals? Yes No No
3.	If you say 'yes', to sattle/refund the amount how long it was take?
	1-10 days 11-20 days 21-30 days
	a month if any, if any,
4.	When you faced for ATM transaction related problems during usage of ATM from different banks'
	ATM terminals, from where the initiation comes to solve these problems?
	From the banks from your request
5.	What is your suggestion or recommendation to bring improvements on ATM banking
	Services to satisfy customers?
	More user friendly machine
	Facility to pay utility bills
	Enhancement of withdrawal limits
	Withdrawal option in the different note denominations
	Provide training and awareness given to customers on ATM services
Ifa	any
6.	If you have any suggestions that are not mentioned above please explain briefly here: