

***THE EFFECT OF AUTOMATED TELLER MACHINE SERVICE ON  
CUSTOMER SATISFACTION IN COMMERCIAL BANK OF  
ETHIOPIA: (A CASE OF HOSSAENA BRANCH)***

***A Research Project Submitted to the School Graduate Studies of Jimma  
University Partial Fulfillment of the Award of the Degree of Masters of  
Business Administration (MBA)***

**By**

**ZEKIYOS MULUGETA**



**JIMMA UNIVERSITY  
COLLEGE OF BUSINESS & ECONOMICS  
MBA PROGRAM**

**JUNE, 2016  
JIMMA, ETHIOPIA**

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## CERTIFICATE

This is to certify that the thesis entities “The Effect of Automated Teller Machine Service on Customer Satisfaction in Commercial Bank of Ethiopia: The Case of Hossaena Branch”, Submitted to Jimma University for the award of the Degree of Master of Business Administration (MBA) and is a record of bonafide research work carried out by Mr. Zekiyos Mulugeta, under our guidance and supervision.

Therefore, we hereby declare that no part of this thesis has been submitted to any other university or institutions for the award of any degree of diploma.

*Main Adviser's Name*

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*Co-Advisor's Name*

*Date*

*Signature*

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## DECLARATION

I hereby declare that this thesis entitled “The Effect of Automated Teller Machine Service on Customer Satisfaction in Commercial Bank of Ethiopia: The Case of Hossaena Branch”, has been Carried out by me under the guidance and supervision of Mr. Eminent Negash and Miss.LaliseKumera

The thesis is original and has not been submitted for the award of degree of diploma any university or instructions.

Researcher’s Name

Date

Signature

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## **ACRONYMS**

**ATM:** Automated Teller Machine

**CBE:** Commercial Bank of Ethiopia

**CSATM:** Customer satisfaction on automated teller machine

**DB:** Dashen Bank

**ICT:** Information Communication Technology

**PIN:** personal identification number

**POS:** Point of Sale

**SERVQUAL:** Service Quality

**SPSS:** Statistical Package for Social Science

**SQ:** service quality

**WTO:** world trade organization

## **ABSTRACT**

*This research project focuses on identifying the effect of ATM service on customer satisfaction in commercial bank of Ethiopia Hossaena branch. The main objective of this project is to assess the effect of ATM services quality on customer satisfaction in commercial bank of Ethiopia. Quantitative research method was used to conduct this study. A sample of 390 customers was selected using convenient sampling technique from ATM users of CBE Hossaena branch in Hossaena town for distributing and collecting questioners. For the purpose of the study primary data were collected using likert scale based questionnaire. Data were analyzed using SPSS 20 (statistical package for social sciences) version and binary logistic regression model were employed in addition to descriptive statistics tools such as: percentages, frequency and tables to analyses and draw conclusions. The result of this study shows that, there was significant relationship between all service quality dimension and customer satisfaction in commercial bank of Ethiopia. The seven service quality dimension (accessibility, convenience, responsiveness, performance, transaction efficiency, security & privacy and reliability) have positive and significant effect on customer satisfaction at the bank. Finally from the findings it can be inferred that network problem were the big issues. The network problem was the major obstacle in the check clearing operations, restriction on withdrawal of cash by the provider, accessibility, power fluctuation and etc. In addition, the temporary failures in ATM services were not fixed immediately. Based on these, it is recommended that the bank should work more on the two service quality dimension (accessibility and performance) to enhance customer satisfaction.*

**Key words:** *Customer satisfaction, ATM, Service Quality.*

# CHAPTER ONE

## INTRODUCTION

### 1.1. Back ground of the study

ICT has become a very critical aspect of today's banking and financial services delivery in the world at large and Ethiopia in particular. The Ethiopia banking industry have engaged the use of information communication technology for effective and efficient means of conducting financial transactions now named as the Electronic Banking System. Technology gives the cutting edge to come out with customer centric products and delivery channels in time (Devandhiran & Sreehari 2012).

Automated Teller Machine is the first well-known machines to provide electronic access to customers. According to Sultan & Kemal (2009), with advent of Automated Teller Machines (ATM), banks are able to serve customers outside the banking hall. It is designed to perform the most important function of bank and operated by plastic card. The plastic card is replacing cheque, personal attendance of the customer, banking hour's restrictions and paper based verification. Also allow you to do a number of banking functions such as; withdrawing cash, making balance inquiries and transferring money from account to account.

Mohammed and Dada, (2014) in their article, ATM is the abbreviation of Automated Teller Machine which acts as a teller in a bank who takes and gives money over the counter. ATMs are placed not only near or inside the premises of banks, but also in locations such as shopping centers/malls, airports, grocery stores, petrol/gas stations, restaurants, or any place where large numbers of people may gather.

In Ethiopian banking industry CBE is the pioneer in introducing ATM to the country. With the ATM card, you can bank 24 hours a day and 7 days a week. Enjoy a host of services, including cash withdrawals, bill payments, forex, fund transfer, mobile top up, balance inquiry, etc. in recent time is the Automated Teller Machine (ATM) and it tends to be the most popular and the most widely accepted means of electronic banking service

in the country, this can be traced partly to the fact that ATMs were the first well-known machines to provide electronic access for bank customers in Ethiopia (Gardachew, 2010).

From recent research Dada et al.(2014)ATMs allow customers to perform a number of banking transactions such as withdrawing cash from one's account, making balance enquiries, transferring funds from one account to another and effecting payment of bills and Also, ATM provides 24 hours service round the clock. A customer can withdraw cash up to a certain limit anytime of the day or night and not wait to be attended to by the bank staff or be affected by the instability of the banking system.

Hence, the adaptation of this ICT plat form (ATM) creates an environment not only for the effectiveness and efficiency but also for quality of services to increase customer satisfaction level.

In the light of empirical study, it's quite understandable that many researchers have conducted research on Automated Teller Machine (ATM) in different and other parts of the world. However, it is pertinent to note that many researches carried out on ATM in were conducted on other countries. This creates a big gap. To fill it, the current work on ATM and customers' satisfaction in Hosaena, in SNNPRS. In particular, it assesses the effect of the ATMs service at CBE Hossaena branch.

## **1.2. Statement of the Problem**

Satisfying customers is the first major mission and purpose of any business organization and specially banking industries are in tough competition to attracting potential customers (Dilijonas, 2009). It is when customers are satisfied the organizations achieves higher sales, profit and market share and vice versa. Customer satisfaction also leads organizations to gain loyalty and achieve the desired objectives. Therefore, in a broader sense it is essential for organizations to satisfy their customers promptly so that they can achieve what they plan. According to Endalkachew (2013), Banks as a business organization should provide a great care for its customers' to attract retain and gain their loyalty.

J. Baker (2007), customer care is a natural consequence of increased competition and the search for sustainable competitive advantage through segmentation, targeting and positioning. Nevertheless, those banks found in our country have little care about their customers. This leads them to use more obsolete and traditional technologies that cause dissatisfaction and switching among customers (Endalkachew, 2013). This means the banks are not satisfying their customers enough due to using traditional technologies is among them. Levesque and McDougall (1996) have confirmed and reinforced the notion that consistent poor customer experience as a result of poor service quality leads to a decrease in the levels of customer satisfaction and the chances of further willingness to recommend the service is lessened.

Therefore, it believed that using modern and latest technologies is important for the organizations competitive advantage as well as a tool to satisfying customer and retaining them. In the face of rapid expansion of electronic payment systems throughout the developed and the developing world, Ethiopia's financial sector cannot remain isolated in expanding the use of the system (Gardachew, 2010). As the result of this the CBE applied ATM technology in 2001 E.C to facilitate the services delivered in its all branch banks and to improve the quality of its services. The application of this technology is believed to have many contributions for the banks in many folds.

In the light of empirical study, it's quite understandable that many researchers have conducted research on Automated Teller Machine (ATM) in different and other parts of the world. However, it is pertinent to note that many researches carried out on ATM in were conducted on other countries. This creates a big gap. To fill it, the current work on ATM and customers' satisfaction in Hosaena, in SNNPRS. In particular, it assesses the effect of the ATMs service at CBE Hossaena branch.

### **1.3. Research question**

The studies will answers the following questions:

- ☞ What are the automated teller machine service quality dimensions that have effect on customer satisfaction on selected Banks in Hossaena town?
- ☞ What is the level of customer satisfaction in the ATM service in the selected Banks in Hossaena town?

- ✎ What are the major problems in ATM service to satisfy customer at selected Banks in Hossaena town?

## **1.4. Objective of the study**

### **1.4.1. General objective**

The general objective of this research was to describing the effect of ATM service quality on Customer Satisfaction in some selected private and public banks in hossaena town.

### **1.4.2. Specific objective**

The specific objective of the study was as follows: -

- ✎ To identify the automated teller machine service quality dimensions that have effect on customer satisfaction on selected Banks in Hossaena town.
- ☞ To identify level of customer satisfaction in the ATM in selected Banks in Hossaena town.
- ☞ To identify the major problems in the ATM service to satisfy the customer.

## **1.5. Scope of the Study**

The studies do had two variables; ATM service quality was the *independent variable* such as (Accessibility, Convenience, Efficiency, Responsiveness, Security & Privacy, Reliability and performance) whereas customer satisfaction was the *dependent variable*. And the researcher decided to Cary out the study in the CBE in Hossaena Branch. The study focuses on at how the ATM system of banking has been providing quality services in relation to customer's satisfaction

First, the study was confined only to customers' viewpoint of ATM. Second, it does not include bank customers who are registered and took VISA card and yet never utilize it. Third, it was also limited to banks customers who have been using ATM up to the maximum of three years in some selected bank.

Conceptually it will be restricted only on seven quality dimensions to the ATM, which was Accessibility, convenience, transaction efficiency, responsiveness, security & privacy, reliability and performance. Methodologically, the research was focused on the active ATM users and not includes those registered and took VISA card but yet never utilize it.



## **1.6. Significance of the study**

Findings from this study will assist academicians in broadening of the prospectus with respect to this study hence providing a deeper understanding of the critical ATM service quality dimensions that has effect on customer satisfaction in banking industry. In addition Result from this research project can be used as a reference point for further studies in the related issues.

The findings of this study will furthermore help Banks in Hossaena town and others, within an insight into the benefits of using different service quality dimensions that will be studied in the research to predict the ATM service quality dimensions that has effect on customer satisfaction.

The findings also helpful in building on the already existing literature about ATM service quality and customer satisfaction.

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

The limitations of the study are social desirability bias was faced, un willing to fill the questioner was happen, primarily related to the methodology, the study undertaken was cross-sectional, which various segments of a population are sampled and data are collected at a single moment in time. However, the study observes that those factors in customer satisfaction are better understood if we collect data at different time. All ATM card holders were not included (participated) in the study, due to time and accessibility constraints. This may be considered as lack of representation of the whole population in the study area.

## **1.8. Organization of the research**

The study has five chapters. The first chapter deals with an overall introduction and provides an overview of the entire study. Chapter two will present the theoretical and empirical related literature to the study, while chapter three will provides research methodology. Chapter four outlines data analysis and discussion of result and chapter five will encompass; conclusion, recommendation and potential areas for future research.

## **CHAPTER TWO**

### **REVIEW OF LIRETATURE**

#### **2.1. Theoretical Review**

##### **2.1.1. Meaning of Automated teller machine (ATM)**

Ode wale (2008) sited on Mohammed and dada (2014) noted that ATM as previously highlighted is the abbreviation of Automated Teller Machine, and it is an electronic appliance that gives out or receives cash deposits from account holders. A smart card is used to initiate and complete a transaction with the machine. The smart card or simply put, ATM card as widely called, has electronic chip that identifies each customer with respect to corresponding accounts belonging to the customer

According to sultan & Kemal (2009), Automated teller machines (ATMs) were the first well-known machines to provide electronic access to customers. With advent of Automatic Teller Machines, banks are able to serve customers outside the banking hall. ATM is designed to perform the most important function of bank. It is operated by plastic card with its special features. The plastic card is replacing cheque, personal attendance of the customer, banking hour's restrictions and paper based verification. ATMs have made hard cash just seconds away all throughout the day at every corner of the globe.

It allow customer to do a number of various functions such as withdrawing cash, making balance inquiries and transferring money from one account to another by using a plastic, magnetic-stripe card and personal identification number (PIN) issued by the bank to the account holder.

##### **2.1.2. Operation of ATM**

ATMs are electronic machines, which are operated by a customer himself to deposit or to withdraw cash from bank. For using an ATM, a customer has to obtain an ATM card from his bank. The ATM card is a plastic card, which is magnetically coded. It can be easily read by the machine.

To operate an ATM card, the customer has to insert the card in the machine. He has to enter the pass word (number). If the authentication or pass word (number) is correct, the ATM permits a customer to make entries for withdrawal or for deposit. On completion of the transaction, the customer's card is ejected from the ATM. (GauravAkrani, 2011)

### **2.1.3. Benefits of ATMs to Cardholders**

According to the global non-profit trade organization for the ATM Industry (2010), customer or cardholders will have the following benefits:-

ATMs allow citizens to draw cash outside of banking hours, enabling retail cash purchases around the clock.

ATMs save cardholders transport costs and time by bringing self-service banking into convenient, non-branch locations near to where they live, work and shop in a variety of locations such as shopping malls, supermarkets, convenience stores, railway stations, hotels, airports, petrol/gas stations, post offices, university campuses, restaurants and bars, etc. creating time-saving convenience for modern citizens

ATMs provide cardholders travelling outside their country with a reassuringly familiar, uniform and comprehensible interface for obtaining cash

ATMs can help cardholders monitor their bank accounts outside of bank hours through balance enquiries. (ATMIA, 2010)

### **2.1.4. ATM service quality Dimension**

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).

Service quality (SQ) is an important construct in the study of customer satisfaction. It is the other most researched area in services marketing (Fisk et al., 1993) and just like customer satisfaction, despite all the studies on SQ there is no commonly accepted definition. SQ is best defined by the consumer of the product or service. It is generally understood, however, that quality implies the totality of features and characteristics of a product or service that bears its ability to satisfy implied or stated needs of

consumers. Lewis and Booms (1983), define SQ as a measure of how well a service delivered matches the customers' expectations.

Robinson (1999), defines SQ as an attitude or global judgment about superiority of a service whereas Gronroos (1990, defines SQ as an outcome of a comparison that customers make between their expectations about a service and their perceptions of the manner in which the service has been performed. It has improved the relationship between banks and their depositors, as well as the level of service quality of banking services (Davies et al., (1996); Mcandrews, 2003; Komal& Singh, 2009). Researchers identified secure and convenient location, adequate number of ATM, user-friendly system, and functionality of ATM, plays important role in customers' satisfaction

While Jha& et al. (2014), mentioned that Accessibility, Convenience, Efficiency, Responsiveness, Security & Privacy and Reliability as a service quality dimension of ATM. Earlier research by Brownlie1 (1989) has recommended that some consumers have positive attitudes towards ATMs based on dominant perceptions of convenience/ accessibility/ease of use.

#### **2.1.5. Emergence and Development of ATM in Ethiopia**

The banking industry in Ethiopia is underdeveloped and therefore there is an all immediate need to broad on capacity building arrangements and modernize the banking system by employing the state of the art technology being used anywhere in the world. With a growing number of import-export businesses, and increased international trades and international relations, the current banking system is short of providing efficient and dependable services and therefore all banks operating in Ethiopia should recognize the need for introducing electronic banking system to satisfy their customers and meet the requirements of rapidly expanding domestic and international trades, and increasing international banking services. (Gardachew, 2010)

Definitely the largest government - owned bank, Commercial Bank of Ethiopia, introduced ATM service for local users in 2001 with its fleet of eight ATMs located in Addis Ababa. Moreover, CBE has had Visa membership since November 14, 2005.

However, due to lack of appropriate infrastructure it failed to reap the fruit of its membership. Regardless of, being the pioneer in introducing ATM based payment system and acquired Visa membership, CBE lagged behind Dashen Bank, which worked aggressively to maintain its lead in electronic payment systems.

Dashen bank, a precursor in introducing e-banking in Ethiopia, has installed ATMs at convenient locations for its own cardholders. The Dashen Bank ATM is available 24 hours a day, seven days a week and 365 days a year providing service to Dashen Debit Cardholders and International Visa Cardholders coming to the country. At the end of June 2009, Dashen bank has installed more than 40 ATMs in its area branches, university compounds, shopping malls, restaurants and hotels.

Available services on Dashen Bank ATMs are: Cash withdrawal, Balance Inquiry, Mini statement, Fund transfer between accounts attached to a single card and PIN (Personal Identification Number) change. Wegagen Bank has signed an agreement with Technology Associates (TA), a Kenyan based IT firm, for the development of the solutions for the payment system and installation of a network of ATMs on December 30, 2008,

The memorandum of understanding signed by three private commercial banks to launch an Automated Teller Machine (ATM) and Point of Sale terminal (POS) network, in February 2009 is welcoming strategy to improve electronic card payment system in Ethiopia. Three private commercial banks - Awash International Bank S.C., Nib International Bank S.C and United Bank S.C. have agreed in principle to establish an ATM network called Fettan ATM network. If everything goes as planned, Fettan ATM will install over 140 ATM machines and over 340 POSs across Ethiopia. There will be one ATM at every branch of the consortium banks, all domestic airports serviced by commercial service, shopping complexes and merchants. The agreement is the first significant cooperation between competing banks in Ethiopia, which others should be encouraged to follow as there is no single bank in Ethiopia that can afford to provide extensive geographical coverage and access (BinyamTamene, 2009).

### **2.1.6. Customer Satisfaction**

According to Kotler (2011), outstanding marketing companies go out of their way to keep important customers satisfied. Research shows that higher levels of customer satisfaction lead to greater customer loyalty, which results in better company performance. Customer satisfaction depends on the service perceived quality relative to customer expectations. If the service quality falls short of expectations, the customers become dissatisfied. If service matches expectations, the customers become satisfied. If service exceeds expectations, the customer is highly satisfied or delighted.

Kotler and Armstrong (2001) in their *Principles of Marketing*, define customer satisfaction as the extent to which a product's perceived performance matches a buyer's expectations. They continued that, if the product's performance falls short of expectations, the buyer would be dissatisfied but if performance matches or exceeds expectation, the customer will be satisfied or highly satisfied.

Customer satisfaction is a "psychological concept that involves the feeling of wellbeing and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service" (WTO, 1985);

"Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's performance (outcome) in relation to his or her expectation." (Kotler & Keller, 2006 p. 144).

Satisfaction has been considered as one of the most important theoretical as well as practical issues for most marketers and customer researchers (Jamal, 2004). In other words, we may say that satisfaction reflects a post-purchase evaluation of product quality given pre-purchase expectations (Kotler, 1991).

This view has its roots in motivation theories that postulate that people are driven by the desire to satisfy their needs (Maslow, 1954) or that their behavior is directed at the achievement of relevant goals (Vroom, 1964). In the context of this study, customer satisfaction is defined from process perspective because the researcher believe that in ATM arena, customers' evaluation of ATM service quality takes place primarily during

the service delivery process and continues, but not just an outcome that customers strive to achieve.

### **2.1.7. The relationship between service Quality and Customer satisfaction**

Service quality is the critical aspect of customer experience that determines customers' satisfaction and Lewis et al. (1994) ascertain that excellence in SQ has become an imperative for organizational sustainability. Private Banks dealing in retail banking Industry is consequently put into lot of pressures due towards increase in global competition. Different strategies are formulated to satisfy and retain the customer and the key of it is to increase the service quality level. Typically, customers perceive very little difference in the banking products offered by private banks dealing in services as any new offering is quickly matched by competitors (Endalkachew 2013).

Parasuraman et.al (1985) and Zeithaml et.al (1990), noted that the key strategy for the success and survival of any business institution is the deliverance of quality services to customers. The quality of services offered will determine customer satisfaction and attitudinal loyalty (Ravichandran et al. 2010). According to S.SIVESAN 2012, there is positive linear relationship between the service quality and customer satisfaction. Therefore, it is founded that the performance of the service provider on core and relational dimensions of services was an important driver for customer satisfaction in banking.

### **2.1.8. Definition of Independent (Explanatory) variables**

#### ***Accessibility***

Ease of use is important in using e-banking, which related to customer apprehension about the efforts required to learn to use e-banking (David, 2010).

#### ***Convenience***

E-banking provides higher degree of convenience that enables customers to access internet bank at all times and places. According to Ainscough and Lockett (1996), the provision of customer interactivity is an important criterion that attracts users in the delivery of e-banking. Gerrard and Cunningham (2003) also identify other factors of

paramount importance in ensuring the success of e-banking, i.e. the ability of an innovation to meet users' needs using different feature availability on the web site.

### ***Transaction efficiency***

Efficiency is the ability of the customers to get any of e-banking service, find the desire product and information associated with it, and check out with minimal of effort. Transaction efficiency also can understand as performance of e-banking base on some elements: up to date information, response time, download time, complete product information, tutorial/demonstration, and help function (Leelapongprasut et al, 2005).

### ***Responsiveness***

It is not always possible to expect flawless ATM service delivery at all times to customers as technologies can, sometimes, fail to deliver as expected. Responsiveness measures the extent to which the banks put in place measures to recover services when ATM services are negatively confirmed. Effective service recovery has been shown to have a positive impact on customer satisfaction (Magnini et al., 2007).

With ATMs, responsiveness quality deals with the banks' ability to handle customer complaints arising as a result of transactional failures. Acceptable recovery practices may vary from a simple apology to compensating customers against losses incurred such as monies illegally withdrawn from their accounts. Responsiveness was found as an important ATM quality by both Khan (2010) and Kumbhar (2010).

### ***Security & Privacy***

Security is defined as the freedom from danger, risk, or doubt. It involves physical safety, financial security and confidentiality. It consists of employees who instill confidence in customers, making customers feel safe in their transactions, employees who are consistently courteous and employees who have the knowledge to answer customer question (Parasuraman, Zeithaml & Berry, 1985).

### ***Reliability***

Reliability refers to the ability to perform the promised service accurately and consistently. It involves accuracy in billing, keeping records correctly, and performing



the service at the designated time. Reliability consists of providing services as promised, dependability in handling customers' service problems, prompt reply to customer enquiries, provide services at the 17 promised time and maintaining error-free record. Reliability is the most important factor in conventional service (Parasuraman, Zeithaml, & Berry 1988).

### ***Performance***

Performance is the operating quality of each e-banking service and feature offered by banks. It includes whether e-banking services provide in multi-language or not, e-banking provide 24 hours-7 days service, allow to transfer funds between banks (Garvin, 1987).

## **2.2. Empirical Review**

Many researchers have discussed the effect of electronic banking and ATM services on customers' satisfaction in Ethiopia and other parts of the world, with a number of such studies specifically focusing on ATM usage and the level of satisfaction of banks' customers. This segment will so review the recent of such studies.

Definitely (Gardachew, 2010) conducted a research on the opportunities and challenges of e-banking in Ethiopia. The study was focused on analyzing the status of electronic banking in Ethiopia and investigates the main challenges and opportunities of implementing e-banking system. The author conducted a survey on the existing operating style of banks and identifies some challenges of using e-banking system, such as, lack of suitable legal and regulatory frame works for e-commerce and e-payments, political instability in neighboring countries, high rates of illiteracy and absence of financial networks that links different banks.

Wondossen & Tsegai (2005) also studied the challenges and opportunities of e-payments in Ethiopia; their objective was studying of e-payment practices in developing countries. The authors employed interview and on site observation to investigate challenges to e-payment in Ethiopia and found that, the main obstacles to the development of e-payments are, lack of customers trust in the initiatives, unavailability of payment laws and regulations particularly for e-payment, lack of skilled manpower and frequent power disruption. According to (Wondwossen & Tsegai 2005), an adequate legal structure and

security framework could foster the use of e- payments, which is contradicting with the finding of the previous study.

Additionally (Assefa, 2013) conducted a study on the impact of e-banking on customer satisfaction in two private banks in Gondar city. The researcher employed descriptive and inferential statistics in analyzing this study and it was limited to customers of two private banks only. The results of the study implied that majority of users of e-banking are the young, the educated, salaried and students, business men and women are not actively using the service of e-banking, e-banking currently provided for saving and current accounts holders only, e- banking reduced frequency of bank hall for banking service, reduced waiting time for customers, there are customers who don't know the fee charged for being e-banking users , the bank customers satisfaction increased after being e-banking users, enabled customers to control their account movements and there is high opportunity to expand e-banking service in the city.

Dilijonas et al., (2009) examined the essential aspects of ATM service quality in Baltic States. They 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. Based on the prior studies, Al-Hawari et al. (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. An empirical study found that these items constitute important aspects of ATM service quality.

According to Odusina (2014) while investigating the level of ATM usage and customers satisfaction in Nigeria using comparative analyzes of three banks in Ogun State Metropolis of Nigeria. The study employed primary data, sourced through questionnaires which were administered to a total of 200 respondents, cutting across the three banks. The data were analyzed using the Chi-square statistical tool; the study thus revealed that there is a positive and significant relationship between ATM usage and customers' satisfaction.

Ogunlowore and Oladele (2014) also examined the impact of electronic banking on satisfaction of corporate bank customers in Nigeria. Data were collected with a structured questionnaire and also analyzed with descriptive statistics while the hypotheses of the study were tested using Chi-square technique. The study revealed that there is a significant relationship between electronic banking and customers' satisfaction and also suggested that critical infrastructure like power; security and telecommunication should be strengthened to ensure the application of electronic banking in Nigeria and optimum satisfaction on the part of customers.

Alabar (2012) conducted research in electronic banking services and customers' satisfaction in the Nigerian banking industry. He sampled 400 respondents of some selected banks across the six geo-political zones of the country. Using regression analysis, the study revealed that an electronic banking service has significant effect on customers' satisfaction in Nigeria.

Similarly, Ebiringa (2010) investigated the effect of ATM infrastructure on the success of e-payment. The analysis of the study was based on primary data collected from the users of ATMs. A total of 1141 users of ATM were sampled. The data were analyzed using the factor analysis simulation model. The study also modeled five strategic decision clusters, in which inadequate availability of quality infrastructure was identified as the most critical limitation to the efficient e-payment via ATMs. The study thus concluded that provision of adequate infrastructure such as power is critical for effective integration of the Nigerian banking system to the global network of electronic payment via ATMs; and for this to be possible, the study advocated for concerted effort by stakeholders to resolve the lingering crises in the energy sector.

Contrarily, Chinedu & et al (2012) analyzed the negative effect of the ATM as a channel for delivery banking services in Nigeria. Using a sample of 600 respondents, conveniently selected from two states of the federation. The data were analyzed using Chi-square. The study found that the ATM system of delivery banking service not only contribute to the increasing rate of bank fraud, but equally lures Nigerians into profligate expenditures. They therefore recommended that banks should strive to increase their

security layers to subvert the tricks of web scammers and limit the amount which customers may be allowed to withdraw at a time.

Jannatul (2009) in his study of e-banking & customer satisfaction which focus on understanding the impact of variables of e-banking, on customer satisfaction in Bangladesh, five service quality dimensions namely reliability, responsiveness, assurance, empathy, and tangibles are established based on the SERVQUAL model and the literature review. These variables are tested in e-banking to explore the relationship between service quality and the customer satisfaction. Data were gathered through survey interview by a structured questionnaire with 250 customers. The study shows that these factors are the core service quality dimensions for customer satisfaction in e-banking. It also explores that reliability, responsiveness, and assurance have more contribution to satisfy the customers of e-banking in Bangladesh.

In another instance, Alabar and Agema (2013) also investigated the effect of information and communication technology and customer satisfaction in the Nigerian banking industry. The study employed primary data and four hundred banks' customers were served with questionnaire and the regression analysis was used in testing the hypothesis. The study discovered that the present state of ICT had significant influence on customer satisfaction. They therefore suggested that banks should raise the standard of ICT based services to customers in the country.

Adewoye (2013) equally examined the impact of mobile banking on service delivery in the Nigerian banks. The study employed primary data sourced through questionnaires, which were administered to staff and customers of some selected banks in the country. The data collected were analyzed using Chi-square statistical technique. The result of the findings shows that mobile banking improves banks service delivery in a form of transactional convenience, saving time and so on. To this end, the study recommended that banks management should create awareness to inform the public about the benefits delivered on the e-banking service products.

Also, Jegede (2014) investigated the effect of ATM on the performance of Nigerian banks. Questionnaires were used to collect the data from a convenience sample of 125

employees of five selected banks in Lagos state with Inter switch network. The data were analyzed statistically using the Chi-square technique, which was done electronically via the Software Package for Social Science (SPSS version 20.0). The result therefore indicated that less than the benefits, the deployment of ATMs terminals have averagely improved the performance of Nigerian banks. The researcher thus recommended in conformity with Chinedu, et al (2012) recommendations, that banks should strive to increase their security layers so as to subvert the tricks of web scammers and also limit the amount which customers may be allowed to withdraw at a time and the provisions of extra security layer that can prevent third party from making use of someone else's ATM card for unauthorized withdrawals.

Lastly, Ray and Ghosh (2014) empirically examined the impact of internet banking service quality dimensions on customer satisfaction. The study employed pre-structured questionnaire in collecting the primary data from a sample of 120 respondents through personal contact, field survey and email. The data were analyzed through SPSS version 21.0. The analysis revealed that there are three dimensions of service quality, namely; Assured service, Service efficiency and convenient service, which impact customer satisfaction and that customers are more satisfied with additional service dimensions like trustworthiness, sincerity, accessibility and awareness.

Therefore, from the previous research efforts, one could say with all modest that the relationship between ATM service quality and the level of satisfaction derived by banks' customers has received a fair share of empirical studies and a number of recommendations from both administrative and monetary analysts across the globe.

In the light of the above empirical study, it's quite understandable that many researchers have conducted research on Automated Teller Machine (ATM) in different and other parts of the world. However, it is pertinent to note that many researches carried out on ATM in were conducted on other countries. This creates a big gap. To fill it, the current work on ATM and customers' satisfaction in Hosaena, in SNNPRS. In particular, it assesses effect the ATMs at CBE Hossaena branch.

However, as it is observed on Jha& et al, (2014), in there article they mentioned that Accessibility, Convenience, Efficiency, Responsiveness, Security & Privacy and Reliability as a service quality dimension of ATM. In advance the student researcher added one variable i.e. performance, additional variable (dimension) as studied by Garvin (1987) to describe the effect on satisfaction of ATM users. and no one has investigated on ATM service quality dimensions in relation to customer satisfaction in Ethiopia, particularly in Hossaena, thus creating a research gap which necessitated the study.

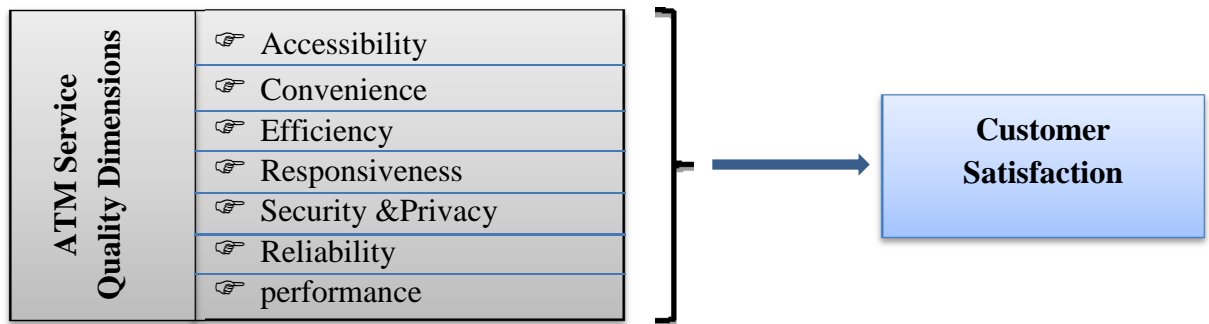
### **2.3. Conceptual framework**

Service Quality is a vital antecedent of customer's satisfaction (Cronin and Taylor, 1992). In turn customer satisfaction is believed to affect post-purchase and perception and future decisions. Following from the literature review done above, the relationship between service quality variables and customer satisfaction can be shown as following.

According to (Jha& et al., 2014) on their journal article identified six (6) ATM service quality dimensions that have effect on customer satisfaction and in advance one service quality dimension of ATM by adopting from Garvin(1987), `performance` . Therefore the researcher employs these factors to conduct this research.

#### **Conceptual framework for the effect of ATM service on customer satisfaction**

The aim of this study was to assess the effect of the seven service quality dimensions of ATM on customer satisfaction by the bank and the array shows that the direction of effect. Therefore, the researcher developed this conceptual model in order to make the study simply understandable (See Figure 2.1).



**Fig 2.1** Conceptual framework

*Source:* adopted and modified Garvin (1987), and Jha& et al, (2014), Model of service quality dimension

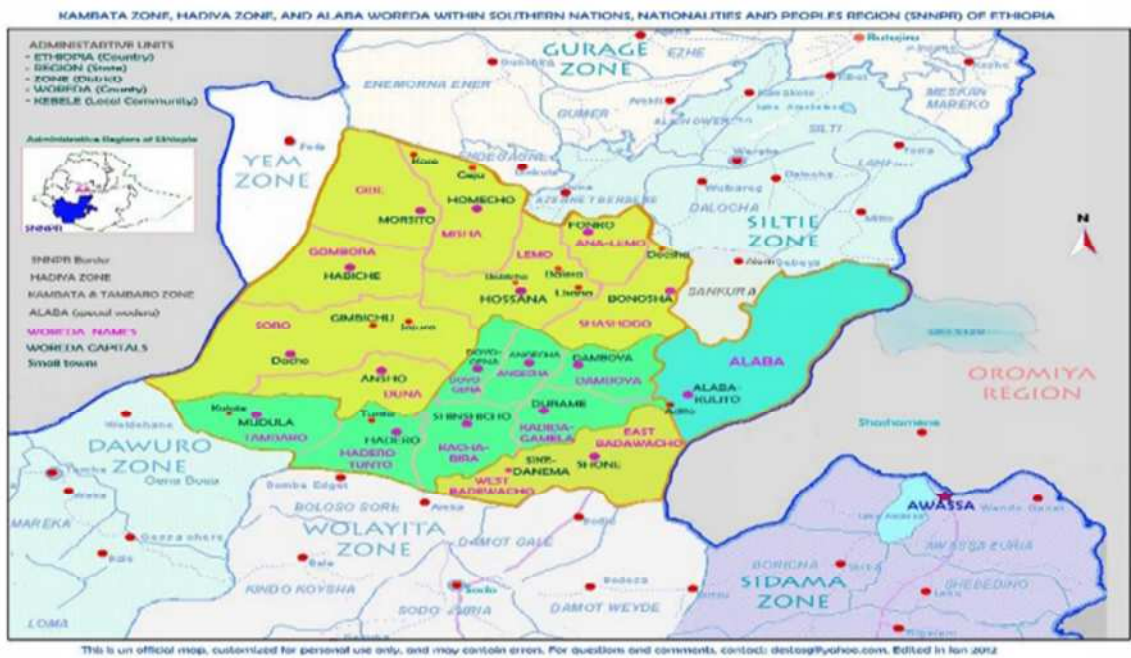
# CHAPTER THREE

## METHODOLOGY OF THE STUDY

### 3.1. Description of Study Area

The study was conducted in southern Ethiopia, Hadiya Zone, Hossaena town. Topographically the zone lies within an elevation range of 1500 to 3000 meters above sea level. The zone has three agro-ecological / zones. Dega (23.7%), Wayne dega (64.7) and Kolla (11.6%). The annual average temperature of the zone is 22.02°C and the mean annual rainfall is 1260 mm. Hosanna town is the administrative and trading center of the zone. The town is located at a distance of 231 km south of Addis Ababa and 160 km west of Hawassa town. Hosanna has a latitude and longitude 7°33'N 37°51'E, with an elevation of 1500-2177 meters above sea level. The annual average temperature of the town is 14.4°C and the average annual rainfall is 1331.6mm (SNNBPOA, 1997).

**Fig 3.1 Map of Hosaena Town**



Source: <http://www.weema.org/where-we-work/hadiya-zone/>



### **3.2. Research Design**

Research design is the plan and structure of investigation so conceived as to obtain answers to research questions (Kothari, C. (2004). The plan is an overall scheme or program of the research process. The type of research design under this study will be descriptive research design. The major purpose of descriptive research was to determining the frequency with which an event occurs or relationship between variables (Kothari, C. (2004). . Moreover, the study use cross-sectional in the sense that all relevant data were collected at a single point in time. The reason for preferring a cross-sectional study is due to the vast nature of the study. Beside, in this study a mixed qualitative and quantitative research approach was used since the data collected from both numeric information as well as text information i.e., the data were collected through questionnaires.

### **3.3. Data sources and Collection techniques**

In order to realize the target, the study was used primary and secondary sources. The primary data were obtained from questionnaire and interview as best instrument. The questioner was adopted from research conducted by **Endalkachew (2013)**, at Hawassa University on “Assessing the impact of core banking and service quality on Customer Satisfaction in CBE (case of Bishoftu branch),”and modified after review of the literature about service quality and its factors on Garvin (1987) and Jha & et al, (2014) and its consistency were pre-tested using Cronbach Alpha.

The Question was prepared in English and Amharic in order to gather sufficient response and then distributed and collected from customer of ATM card holders from selected Bank. The Data for this study was collected in Hossaena town and obtained through survey method using a standard questionnaire the items that was used to measure the variables in this study are based on theory and largely drawn from the literatures.

However, the questionnaire containing 5 likert scale questions were distributed to the respondents at the various ATM centers and branches of CBE in Hossaena. Ethical principles such as voluntarism, anonymity and confidentiality were carefully and strictly followed in the course of data collection.

### 3.4. Population and sampling

The population of this study was ATM customers of the selected commercial banks who have been using the service from 0 to 3 years. Accordingly, sample respondents were taken from each bank who has been using ATM. To calculate sample size, the researcher used the simplified formula provided by Taro Yamane (1967) will be used i.e.  $n = \frac{N}{1+N(e)^2}$  in which  $e$  is the level of precision i.e.,  $e = 0.05$  (5%),  $n$  is number of sample size and  $N$  is Total number of study population. A 95% confidence level and  $p = 0.5$  assumed for the question below.

$$\text{Where: } n = \frac{N}{1+N(e)^2} = \frac{14,918}{1+14,918(0.05)^2} = \frac{14,918}{38.295} = \underline{\underline{390}}$$

Accordingly, 390 respondents were selected from 14,918 ATM card holders of Bank

### 3.5. Sampling Technique

The population was consisting of respondents drawn from customers of Commercial Bank of Ethiopia (CBE) Hossaena Branch. The choice of the banks stems from the number of ATM users. The study was employ primary source of data through the use of questionnaire and distributed and collected from a sample of respondents selected conveniently at the banks' ATM terminals during the course of transactions. The researcher has selected some days randomly and approach the clients who has come to make transactions to the ATM terminal. The decision to select the sample through convenience sampling was based on the fact that utmost, a good number of ATM users often have time to respond to issues like sparing a few minutes to answer the questionnaires.

### 3.6. Methods of Data Analysis, processing and Presentation

Data processing and analysis is an important part research work. After data were collected, it were processed and analyzed. In the processing part the researcher were edited the collected raw data to identify error and omissions and correct them when it was possible. After data were edited the next step was coding and classification as well as tabulation. All these activities were carried out in this study to make data as ease for

analysis. The collected data were entered into SPSS and analyzed by using descriptive statistics. In this study, descriptive analysis was chosen because of its simplicity and clarity to draw inferences. Percentages, frequency and tables were used for the analysis of the collected data; binary logistic regression was employed.

### **3.7. Reliability test**

Reliability is defined as be fundamentally concerned with issues of consistency of measures (Bryman and Bell, 2003). According to Hair, et al., (2006), if  $\alpha$  is greater than 0.7, it means that it has high reliability and if  $\alpha$  is smaller than 0.3, then it implies that there is low reliability. Cronbach alpha has been employed to evaluate the reliability scale of construct and dimension of each construct. Reliability scale of the overall service quality was 0.763. This means that it highly reliability

### **3.8. Ethical consideration**

The researchers were aware of and attend to the ethical considerations related to their studies. All the research participants included in this study were appropriately informed about the purpose of the research and their willingness and consent was secured before the commencement of distributing questionnaire. Then legally and smoothly communicate to the concerned body without harming any individual and institution. Before starting distributing questioner, the researcher was introduced himself and explains the purpose of the study to the person who was asked. Although it was impossible as the respondents were not voluntary. Regarding the right to privacy of the respondents, the study maintained the confidentiality of the identity of each participant. In all cases, names are kept confidential thus collective names like ‘respondents’ were used.

## CHAPTER FOUR

### DATA ANALYSIS AND DISCUSSION OF RESULT

#### 4. Introduction

This chapter will present a discussion of the final results and the process through which the results were obtained. In addition to this, background information of respondents will be presented. Finally, the statistical methods of analysis were discussed, which included a descriptive analysis, a regression analysis through SPSS version 20.

#### 4.1. Data Analysis

##### 4.1.1. Background information from Respondents

A total of 390 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. The demographic characteristics include: gender, age, level of education, and frequency of usage of the ATM of the respondent. This aspect of the analysis deals with the personal data on the respondents of the questionnaires given to them. The table below shows the details of background information of the respondents.

*Table 4.1(a) background information of respondents*

| No | Characteristics                  | Frequency                | Percent    |              |
|----|----------------------------------|--------------------------|------------|--------------|
| 1  | Gender of respondents            | Male                     | 226        | 57.9         |
|    |                                  | Female                   | 164        | 42.1         |
|    |                                  | <b>Total</b>             | <b>390</b> | <b>100.0</b> |
| 2  | Age of respondents               | 18-30                    | 229        | 58.7         |
|    |                                  | 31-45                    | 161        | 41.3         |
|    |                                  | <b>Total</b>             | <b>390</b> | <b>100.0</b> |
| 3  | Educational level of respondents | primary to 10th complete | 205        | 52.6         |
|    |                                  | Diploma                  | 62         | 15.9         |
|    |                                  | 1st degree               | 123        | 31.5         |

|          |                           |                    |            |              |
|----------|---------------------------|--------------------|------------|--------------|
|          |                           | <b>Total</b>       | <b>390</b> | <b>100.0</b> |
| <b>4</b> | Occupation of respondents | Unemployed         | 68         | 17.4         |
|          |                           | Student            | 93         | 23.8         |
|          |                           | Salaried           | 107        | 27.4         |
|          |                           | business man/women | 122        | 31.3         |
|          |                           | <b>Total</b>       | <b>390</b> | <b>100.0</b> |

**Source: own survey, 2016**

Table 4.1(a) shows the background information of the respondents of the study. The survey showed that there were more males as compared to females. Male respondents represent 57.9%, and the remaining 42.1% were females. This finding is not surprising; men have always dominated the different spheres of life including business.

As far as age of respondents is concerned, 58.7% of the respondents are in the range of 18-30 years, 41.3% of the respondents are in the range of 31-45 years. The age groups and corresponding responses reveal the level of maturity and responsibility of the responses. This implies that the respondents were knowledgeable about ATM use and customer satisfaction.

With regard to educational level of respondents, primary to 10<sup>th</sup> complete represents 52.6% of the customer, Diploma holders represents 15.9% of the customers and 1<sup>st</sup> degree holders represents 31.5% of the customers. The respondents were therefore knowledgeable about the study variables.

Finally In relation with occupation of respondents, unemployed represents 17.4% of customers, students represents 23.8% of customers, salaried represents 27.4% of customers and finally business man/women represents 31.3% of customers.

**Table 4.1(b) Frequency of using the ATM**

|       |              | Frequency | Valid Percent |
|-------|--------------|-----------|---------------|
| Valid | Daily        | 24        | 6.2           |
|       | twice a week | 201       | 51.5          |
|       | Weekly       | 109       | 27.9          |
|       | Monthly      | 56        | 14.4          |
|       | Total        | 390       | 100.0         |

**Source: own survey, 2016**

From the table above In relation to frequency of usage of customers, majority (51.5 percent) of the respondents uses the service twice a week, 27.9 percent of the customer uses the service weekly, 14.4percent of the customers uses the service monthly, and the least (6.2 percent) of the respondents uses the services daily. The frequency of operation of the respondents banking with both Banks and corresponding responses reveal the level of maturity and responsibility of the responses. By implication, the responses were unbiased and largely informative because most of the respondents had been served by the bank frequently and therefore capable of responding to the questions set by the researcher.

**Table 4.1(c) Do you experience problem/s while using ATM?**

|       |     | Frequency | Valid Percent |
|-------|-----|-----------|---------------|
| Valid | Yes | 390       | 100.0         |

**Source: own survey, 2016**

Table 4.1(c) shows the result of customer’s response towards the question “Do you experience problem/s while using ATM?” From the result it can be obtained that 100 percent of customers of both Banks are responded yes.

## 4.2. Analysis of Descriptive statistics

**Table 4.2 Customer feeling about ATM service Quality concerning Accessibility**

| Variables   | Category  |      |              |      | N |
|---|-----------|------|--------------|------|---|
|   | satisfied |      | dissatisfied |      |   |
|   | Frequency | %    | Frequency    | %    |   |
| I can easily locate my banks ATMs in my city  | 68        | 17.4 | 322          | 82.6 |   |
| I can locate my bank <sup>''</sup> ATMs easily when I am out of station                   | 60        | 15.4 | 330          | 84.6 |   |
| ATMs of my bank are easily found at all useful places like hospitals, malls, station etc. | 127       | 32.6 | 263          | 67.4 |   |

**Source: own survey, 2016**

The above table shows the result of customer's response towards the question I can easily locate my banks ATMs in my city. From the result it can be obtained that the majority (82.6 percent) of respondents are strongly dissatisfied with the question and 17.4 percent are strongly satisfied.

As fare customer's response towards the question I can locate my bank ATMs easily when I am out of station. From the result it can be obtained that 84.6 percent of respondents are strongly dissatisfied with the question and 15.4 percent of respondents are strongly dissatisfied.

Also customer's response towards the question ATMs of my bank are easily found at all useful places like hospitals, malls, station etc. From the result it can be obtained that 32.6 percent of respondents are strongly satisfied with the question and majorities (67.4 percent) of the respondents are strongly dissatisfied by the bank ATM accessibility in the city at all useful places like hospitals, malls, station etc.

Therefore, from the above discussion one can easily concludes that majority of respondents are strongly dissatisfied with the accessibility. Islam et al., (2005) examined the satisfaction level of ATM card holders of a leading bank (HBSC) in Bangladesh. The study found significant relationship of ATM service quality with customers' satisfaction. The study identified insufficient number of ATM was major contributors of customers'

dissatisfaction. The banks must also work for the accessibility issue order to make those dissatisfied customer satisfied and retain them loyal.

**Table 4.3** *Customer feeling about ATM service Quality concerning Convenience*

| Variables   | Category  |      |              |      | N          |
|---|-----------|------|--------------|------|------------|
|   | satisfied |      | dissatisfied |      |            |
|   | Frequency | %    | Frequency    | %    |            |
| Screen language of my ATM is understandable                 | 344       | 88.2 | 46           | 11.8 | <b>390</b> |
| Directions to operate ATM are clear                         | 369       | 94.6 | 21           | 5.4  | <b>390</b> |
| It is easy to operate ATM of my bank                        | 390       | 100  | -            | -    | <b>390</b> |
| Menu options are aligned with their corresponding menu keys | 369       | 94.6 | 21           | 5.4  | <b>390</b> |

**Source: own survey, 2016**

The above table depict that the majority (88.2 percent) of respondents are strongly satisfied at the Screen language of my ATM is understandable and the rest 11.8 percent customers are satisfied and 11.8 percent customers strongly dissatisfied. With this specific convenience question, customers are strongly satisfied.

As far customer’s response towards the question Directions to operate ATM are clear. From the result it can be obtained that 94.6 percent of respondents are strongly satisfied and 5.4 percent of the respondents are strongly. And 100 percent of customers are strongly satisfied at easy to operate ATM of my bank. With this specific convenience question, customers are very satisfied.

The fourth question shows the results of customer’s response towards the question Menu options are aligned with their corresponding menu keys. From the result it can be obtained that 94.6 percent of respondents are strongly satisfied with the question and 5.4 percent are strongly dissatisfied by the bank ATM Menu options.

*To conclude*, from the above discussion one can easily concludes that respondents are strongly satisfied with the understandability of screen language, easiness to operate, clarity of direction and alignment of menu options. This is an indication of high customer satisfaction with the operations of the ATM. Al-Hawari et al. (2006) support



the finding.

**Table 4.4** *Customer feeling about ATM service Quality concerning transaction Efficiency*

| Variables  | Category           |      |                       |      | N |
|--|--------------------|------|-----------------------|------|---|
|  | Strongly satisfied |      | Strongly dissatisfied |      |   |
|  | Frequency          | %    | Frequency             | %    |   |
| Key pad of ATM machine is working properly                   | 390                | 100  | -                     | -    |   |
| I am happy with request processing time of my ATM            | 390                | 100  | -                     | -    |   |
| ATM card is always accepted by machine in very first attempt | 311                | 79.7 | 79                    | 20.3 |   |
| Processing of transaction is very fast                       | 369                | 94.6 | 21                    | 5.4  |   |

**Source: own survey, 2016**

As shows the results of customer's response towards both Key pad of ATM machine is working properly and I am happy with request processing time of my ATM. From the result it can be obtained that 100 percent of respondents are strongly satisfied. With this specific efficiency question, customers are very satisfied.

Also from the table 79.7 percent of respondents are strongly satisfied at ATM card is always accepted by machine in very first attempt and 20.3 percent of respondents are strongly dissatisfied. From question four shows the results of customer's response towards the question Processing of transaction is very fast. From the result it can be obtained that 94.6 percent of respondents are strongly satisfied and 5.4 percent are strongly dissatisfied.

*To summarize*, From the above discussion one can easily concludes that respondents are strongly satisfied regarding key pad working properly, request processing time, acceptability of the card and speed of transaction of ATM. Mobarek (2007) support the fining.

**Table 4.5 Customer feeling about ATM service Quality concerning Responsiveness**

| Variables  | Category           |      |                       |      | N          |
|--|--------------------|------|-----------------------|------|------------|
|  | Strongly satisfied |      | Strongly dissatisfied |      |            |
|  | Frequency          | %    | Frequency             | %    |            |
| I always find exact amount of money as requested by me                 | 320                | 82.1 | 70                    | 17.9 | <b>390</b> |
| My ATM slip always shows updated balance in my account                 | 390                | 100  | -                     | -    | <b>390</b> |
| Helpline numbers are displayed inside the ATM cabin and easy to locate | 366                | 93.8 | 24                    | 6.2  | <b>390</b> |
| My ATM grievances are settled within reasonable time by my bank        | 345                | 88.7 | 44                    | 11.3 | <b>390</b> |

**Source: own survey, 2016**

Table shows the results of customer's response towards the question I always find exact amount of money as requested. From the result it can be obtained that 82.1 percent of respondents are strongly satisfied and 17.9 percent are strongly dissatisfied. And item two Depict that 100 percent of respondents are strongly satisfied at My ATM slip always shows updated balance in my account of my ATM. With this specific responsiveness question, customers are very satisfied.

As far from the table the results of customer's response towards the question the Helpline numbers are displayed inside the ATM cabin and easy to locate. From the result it can be obtained that 93.8 percent of customers of both Banks are strongly satisfied and 6.2 percent of respondents are strongly dissatisfied. Also from the table 88.7 percent of respondents are strongly satisfied at My ATM grievances are settled within reasonable time by my bank and 11.3 percent of respondents are strongly dissatisfied.

*To windup the discussion*, from the above discussion one can easily concludes that respondents are strongly satisfied regarding availability of cash, slip always show updated balance, easiness to locate help line cabin and reasonable time of grievance settling of ATM.

**Table 4.6 Customer feeling about ATM service Quality concerning Security & Privacy**

| Variables   | Category           |      |                       |      | N          |
|---|--------------------|------|-----------------------|------|------------|
|   | Strongly satisfied |      | Strongly dissatisfied |      |            |
|   | Frequency          | %    | Frequency             | %    |            |
| Only one person is allowed to enter in ATM cabin  | 369                | 94.6 | 21                    | 5.4  | <b>390</b> |
| I feel safe & secure when I withdraw cash from ATM  | 368                | 94.4 | 22                    | 5.7  | <b>390</b> |
| I feel safe & secure when I transfer cash from account to account with my ATM.              | 169                | 43.3 | 221                   | 56.7 | <b>390</b> |
| I feel safe & secure when I enter my PIN/Password to ATM                                    | 352                | 90.3 | 38                    | 9.7  | <b>390</b> |
| I am sure that my PIN will not be hacked  | 165                | 42.3 | 225                   | 57.7 | <b>390</b> |
| In case of two ATMs in same premises, there is a partition between them to maintain privacy | 305                | 78.2 | 85                    | 21.8 | <b>390</b> |

**Source: own survey, 2016**

Table above shows the result of customer's response towards the question only one person is allowed to enter in ATM cabin. From the result it can be obtained that 94.6 percent of respondents are strongly satisfied and 5.4 percent are strongly dissatisfied. Therefore, the banks must maintain for the security issue order to make customer satisfied and to be confident on the service. Also the table depict that 94.4 percent of customers are strongly satisfied at the *feeling* safe & secure when withdrawing cash from ATM and 5.7 percent of respondents are strongly dissatisfied with this specific security and privacy question.

In the table item three Shows the results of respondents towards the question I feel safe & secure when I transfer money to account to account with my ATM. The majorities 56.7 percent of respondents are strongly dissatisfied and 43.3 percent are strongly satisfied. Response towards the question I feel safe & secure when I enter my PIN/Password to ATM. It depict 90.3 percent of respondents are strongly satisfied and 9.7 of the respondents are strongly dissatisfied. And response towards the question I am sure that

my PIN will not be hacked. Shows 42.3 percent of respondents are strongly satisfied and 57.7 percent are strongly dissatisfied.

As far table above shows respondent response towards the question In case of two ATMs in same premises, there is a partition between them to maintain privacy. The majorities 78.2 percent are strongly satisfied and 21.8 percent are strongly dissatisfied.

From the discussion on table 4.6 it can easily conclude that respondents are strongly satisfied on item (1, 2, 4 and 6) but are strongly dissatisfied on I feel safe & secure when I transfer cash from account to account and I am sure that my PIN will not be hacked. Therefore bank is better to strengthen the security aspect of and create awareness about security how to handle the card secure and safe.

**Table 4.7 Customer feeling about ATM service Quality concerning Reliability**

| Variables  | Category           |      |                       |      | N          |
|--|--------------------|------|-----------------------|------|------------|
|  | Strongly satisfied |      | Strongly dissatisfied |      |            |
|  | Frequency          | %    | Frequency             | %    |            |
| Balance in my account reduced without withdrawal of cash | 145                | 37.2 | 245                   | 62.8 | <b>390</b> |
| I never found my ATM out of cash                         | 115                | 29.5 | 275                   | 70.5 | <b>390</b> |
| I never find fake currency notes from my ATM             | 390                | 100  | -                     | -    | <b>390</b> |
| I am happy with denomination of currency of my ATM       | 352                | 90.3 | 38                    | 9.7  | <b>390</b> |
| I always get mini statement                              | 68                 | 17.4 | 322                   | 82.6 | <b>390</b> |

**Source: own survey, 2016**

As far as Balance in my account reduced without withdrawal of cash is concerned, 37.2 percent of the respondents are strongly satisfied and 62.8 percent of the respondents are strongly dissatisfied. Most of the customers are satisfied with the account reduced without withdrawal. From the above analysis the bank should maintain of the services in order to reduce customers frustration.

As shows in the table the response towards the question I never found my ATM out of

cash. From the result it can be obtained that 29.5 percent of respondents are strongly satisfied with the question 70.5 percent are strongly dissatisfied. And response towards the question I never find fake currency notes from my ATM, it can be obtained that the majority (100 percent) of respondents are strongly satisfied. This implies customer confidence on the bank maintained.

As far the results of respondent’s response towards the question I am happy with denomination of currency of my ATM. From the result it can be obtained that 90.3 percent of customers of both Banks are strongly satisfied with the question, 9.7 percent are strongly dissatisfied. And respondent’s response towards the question I always get mini statement, it can be obtained that 17.4 percent of customers of both Banks are strongly satisfied and 82.6 percent are strongly dissatisfied.

Finally, from the above discussion in table 4.7, the bank must work strong for the improvement of mini statement of account to satisfy respondents those are strongly dissatisfied.

**Table 4.8 Customer feeling about ATM service Quality concerning performance**

| Variables  | Category           |      |                       |      | N |
|--|--------------------|------|-----------------------|------|---|
|  | Strongly satisfied |      | Strongly dissatisfied |      |   |
|  | Frequency          | %    | Frequency             | %    |   |
| My bank ATM allow me to transfer funds between banks | 221                | 56.7 | 169                   | 43.3 |   |
| My bank ATM provide 24-Hours access                  | 269                | 69   | 121                   | 31   |   |
| There is always power & backup on my bank ATM        | 141                | 36.2 | 249                   | 63.8 |   |

**Source: own survey, 2016**

From above table the result of respondent’s response towards the question “My bank ATM allows me to transfer funds between banks.” From the result the majorities 56.7 percent of respondents are strongly satisfied and 43.3 percent of respondents are strongly dissatisfied. And respondent’s response towards the question, my bank ATM provide 24-Hours access, it can be obtained that 69 percent of respondents are strongly satisfied and 31.percent of respondents are strongly dissatisfied.

At last item of above table as far the question there is always power & backup on my bank ATM, majority 63.2 percent of respondents are strongly satisfied and 63.8 percent of respondents are strongly dissatisfied.

To windup the discussion above respondents are highly satisfied on ATM allow me to transfer funds between banks and ATM provide 24-Hours access. But respondents are highly dissatisfied on availability of power & backup on bank ATM. Alex (2014), Ogunlowore and Oladele (2014) support the findings

**Table 4.9** *General satisfaction level towards ATM service*

| Measurement       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------|-----------|---------|---------------|--------------------|
| low(dissatisfied) | 117       | 30.0    | 30.0          | 30.0               |
| high(satisfied)   | 273       | 70.0    | 70.0          | 100.0              |
| Total             | 390       | 100.0   | 100.0         |                    |

**Source: own survey, 2016**

Table 4.9 shows the general Satisfaction level of ATM service. Majority (70 percent) of the respondents satisfaction level were high(satisfied) and 30 percent of the respondents satisfaction level were low(dissatisfied). The above discussion implies that most customers of the bank are highly satisfied with the ATM service and therefore, the bank must work more on those dissatisfied (low) satisfaction level respondents to make them satisfied of customers with relation to ATM service quality.

### **4.3. Results of Inferential Statistics**

In this final part of analysis, the results of inferential statistics are presented. Accordingly, for the purpose of assessing the objectives of the study, binary logistic regression analyses were performed. Finally, with the aid of these inferential statistical techniques, conclusions are drawn with consider to the sample and decisions are made with respect to the research question.

#### 4.4. Regression Analysis and Model Specification

In this study binary Logistic regression model was used to examine the relationship between the independent variables and dependent variables ATM service quality and customer satisfaction. The justification for using binary Logistic regression model, the outcome variable being dichotomous (binary) and that it's clearly shows the association between dependent and independent variables. It is extremely flexible and easily used model from mathematical and statistical point of view and results in a meaningful interpretation. Hence, the logistic model has been selected for this study and the result of the study regarding the effect of ATM service quality that could affect their overall satisfaction were presented as follow

**Table 4.11:** Bi-variant table logistic regression analysis showing variables associated with ATM service quality on commercial bank of Ethiopia Hassaena SNNPR, 2016

| No | Variables   | Frequency of Categories (%) |                   | $\beta$ | COR(at 95% CI) |       | P-value |
|----|---|-----------------------------|-------------------|---------|----------------|-------|---------|
|    |   | Strongly agree              | Strongly disagree |         | lower          | Upper |         |
| 1  | I can easily locate my banks ATMs in my city  | 79.7                        | 20.3              |         | .181           | 0.66  | 0.00*   |
| 2  | I can locate my bank'' ATMs easily when I am out of station                               | 62.3                        | 37.7              |         | 1.179          | 5.035 | 0.016   |
| 3  | ATMs of my bank are easily found at all useful places like hospitals, malls, station etc. | 70.5                        | 29.5              |         | 0.264          | 0.817 | 0.008   |
| 4  | Screen language of my ATM is understandable   | 79.7                        | 20.3              |         | 1.782          | 8.820 | 0.001*  |
| 5  | Directions to operate ATM are clear   | 75.9                        | 24.1              |         | 0.175          | 0.652 | 0.001*  |
| 6  | It is easy to operate ATM   | 56.4                        | 43.6              |         | 0.178          | 0.659 | 0.001*  |

|    |   |      |      |  |       |       |        |
|----|---|------|------|--|-------|-------|--------|
|    | of my bank  |      |      |  |       |       |        |
| 7  | Menu options are aligned with their corresponding menu keys     | 74.1 | 25.9 |  | 1.668 | 7.431 | 0.001  |
| 8  | Key pad of ATM machine is working properly                      | 67.7 | 32.3 |  | 0.288 | 0.982 | 0.007  |
| 9  | ATM card is always accepted by machine in very first attempt    | 17.4 | 82.6 |  | 0.941 | 3.558 | 0.051  |
| 10 | Processing of transaction is very fast                          | 15.4 | 84.6 |  | 0.157 | 0.497 | 0.000  |
| 11 | My ATM slip always shows updated balance in my account          | 32.6 | 67.4 |  | 1.047 | 3.299 | 0.015  |
| 12 | My ATM grievances are settled within reasonable time by my bank | 88.2 | 11.8 |  | 0.223 | 0.789 | 0.007  |
| 13 | Only one person is allowed to enter in ATM cabin                | 94.6 | 5.4  |  | 0.258 | 0.844 | 0.012  |
| 14 | I feel safe & secure when I withdraw cash from ATM              | 100  | -    |  | 1.030 | 3.592 | 0.018  |
| 15 | I feel safe & secure when I enter my PIN/Password to ATM        | 94.6 | 5.4  |  | 0.258 | 0.844 | 0.040  |
| 16 | I am sure that my PIN will not be hacked                        | 100  | -    |  | 0.254 | 0.831 | 0.0010 |
| 17 | I always get mini statement                                     | 100  | -    |  | 0.254 | 0.831 | 0.0010 |



|    |  |      |      |  |       |       |       |
|----|--|------|------|--|-------|-------|-------|
| 18 | Balance in my account reduced without withdrawal of cash | 79.7 | 20.3 |  | 0.264 | 0.817 | 0.014 |
| 19 | I am happy with denomination of currency of my ATM       | 94.6 | 5.4  |  | 1.782 | 8.820 | 0.041 |
| 20 | My bank ATM allow me to transfer funds between banks     | 82.1 | 17.9 |  | 0.175 | 0.652 | 0.023 |
| 21 | My bank ATM provide 24-Hours access                      | 100  | -    |  | 0.178 | 0.659 | 0.037 |
| 22 | There is always power & backup on my bank ATM            | 93.8 | 6.2  |  | 1.668 | 7.431 | 0.045 |

Key; Where: strongly satisfied = Coded as 1

Strongly dissatisfied = coded as 0

\* Alternatives responded by participants and simply analyzed just as it is.

#### **4.4.1. Variables independently associated with the customers satisfaction**

Variables whose p-value less than or equal to 0.25 at bi-variant analysis were transferred to final multi-variant regressions. In this regard I can easily locate my banks ATMs in my city (p-value of 0.001), I can locate my bank“ ATMs easily when I am out of station (p-value of 0.006), ATMs of my bank are easily found at all useful places like hospitals, malls, station etc. (p-value of 0.008), Screen language of my ATM is understandable (p-value of 0.001), Directions to operate ATM are clear (p-value of 0.001), It is easy to operate ATM of my bank (p-value of 0.001), Menu options are aligned with their corresponding menu keys (p-value of 0.015), Key pad of ATM machine is working properly (p-value of 0.007), ATM card is always accepted by machine in very first attempt (p-value of 0.051), Processing of transaction is very fast (p-value of 0.000), My ATM slip always shows updated balance in my account (p-value of 0.015), My ATM grievances are settled within reasonable time by my bank (p-value of 0.007), Only one person is allowed to enter in ATM cabin (p-value of 0.012), I feel safe & secure when I

withdraw cash from ATM (p-value of 0.018), I feel safe & secure when I enter my PIN/Password to ATM (p-value of 0.040), I am sure that my PIN will not be hacked (p-value of 0.001), I always get mini statement (p-value of 0.001), Balance in my account reduced without withdrawal of cash(p-value of 0.014), I am happy with denomination of currency of my ATM(p-value of 0.041), My bank ATM allow me to transfer funds between banks(p-value of 0.023), My bank ATM provide 24-Hours access(p-value of 0.037), and There is always power & backup on my bank ATM(p-value of 0.045), were independently associated with the dependent variable at p-value  $\leq 0.05$ .

**Table 4.12:** multiple logistic regression analyses showing variables independently and significantly associated with customer satisfactions

| No | Variables   | Frequency of Categories (%) |                   | COR(at 95% CI)     | P-value | AOR(at 95% CI)     |
|----|---|-----------------------------|-------------------|--------------------|---------|--------------------|
|    |   | Strongly agree              | Strongly disagree |                    |         |                    |
| 1  | I can easily locate my banks ATMs in my city  | 79.7                        | 20.3              | 0.347(.181,0.66)   | 0.001   | 2.100(2.04,3.074)* |
| 2  | ATMs of my bank are easily found at all useful places like hospitals, malls, station etc. | 70.5                        | 29.5              | 0.465(0.264,0.817) | 0.009   | 0.173(.046,.645)*  |
| 3  | Screen language of my ATM is understandable   | 79.7                        | 20.3              | 3.965(1.782,8.820) | 0.005   | 0.998(.639,.222)*  |
| 4  | Directions to operate ATM are clear   | 75.9                        | 24.1              | 0.338(0.175,0.652) | 0.053   | .355(.124,1.014)   |
| 5  | It is easy to operate ATM of my bank  | 56.4                        | 43.6              | 0.343(0.178,0.659) | 0.012   | .330(.099,.104)*   |
| 6  | Menu options are aligned with their corresponding menu keys                               | 74.1                        | 25.9              | 3.520(1.668,7.431) | 0.013   | .311(.114,.849)*   |
| 7  | Key pad of ATM machine is working   | 67.7                        | 32.3              | 0.524(0.288,0.982) | 0.015   | .300(.114,.763)*   |

|    |   |      |      |                    |       |                   |
|----|---|------|------|--------------------|-------|-------------------|
|    | properly  |      |      |                    |       |                   |
| 8  | ATM card is always accepted by machine in very first attempt    | 17.4 | 82.6 | 1.830(0.941,3.558) | 0.051 | 0.489 (.253-.944) |
| 9  | Processing of transaction is very fast                          | 15.4 | 84.6 | 0.297(0.157,0.497) | 0.025 | 0.300(.104,.867)* |
| 10 | My ATM slip always shows updated balance in my account          | 32.6 | 67.4 | 1.858(1.047,3.299) | 0.12  | 0.355(.124,1.01)* |
| 11 | My ATM grievances are settled within reasonable time by my bank | 88.2 | 11.8 | 0.420(0.223,0.789) | 0.022 | 1.339(.135.856)*  |
| 12 | I feel safe & secure when I withdraw cash from ATM              | 100  | -    | 1.924(1.030,3.592) | 0.012 | 0.322(.128,.465)* |
| 13 | I feel safe & secure when I enter my PIN/Password to ATM        | 94.6 | 5.4  | 0.467(0.258,0.844) | 0.007 | 0.420(.233,.783)* |
| 14 | I am sure that my PIN will not be hacked                        | 100  | -    | 0.459(0.254,0.831) | 0.005 | 1.673(.248,.903)* |
| 15 | I always get mini statement                                     | 100  | -    | 2.051(1.103,3.815) | 0.018 | 0.345(.138,.861)* |
| 16 | Balance in my account reduced without withdrawal of cash        | 79.7 | 20.3 | 2.184(1.174,4.063) | 0.018 | 0.271(.092,.803)* |
| 17 | My bank ATM allow me to transfer funds between banks            | 82.1 | 17.9 | 2.051(1.103,3.815) | 0.001 | 2.10(2.04,3.074)* |
| 18 | My bank ATM provide 24-Hours access                             | 100  | -    | 0.509(0.270,0.959) | 0.009 | .173(.046,.645)*  |

|    |   |      |     |                    |       |                   |
|----|---|------|-----|--------------------|-------|-------------------|
| 19 | There is always power & backup on my bank ATM | 93.8 | 6.2 | 0.590(0.308,1.130) | 0.005 | 0.998(.639,.222)* |
|----|---|------|-----|--------------------|-------|-------------------|

## 4.5. Results and discussion

Variables significantly and independently associated with customer satisfaction. This study tried to know the level and variables significantly and independently associated with customer satisfaction in Hossaena town on ATM.

Consequently, I can easily locate my banks ATMs in my city, ATMs of my bank are easily found at all useful places like hospitals, malls, station etc., Screen language of my ATM is understandable, Directions to operate ATM are clear, It is easy to operate ATM of my bank, Menu options are aligned with their corresponding menu keys, Key pad of ATM machine is working properly, ATM card is always accepted by machine in very first attempt, Processing of transaction is very fast, My ATM slip always shows updated balance in my account , My ATM grievances are settled within reasonable time by my bank, I feel safe & secure when I withdraw cash from ATM, I feel safe & secure when I enter my PIN/Password to ATM, I am sure that my PIN will not be hacked, In case of two ATMs in same premises, there is a partition between them to maintain privacy, Balance in my account reduced without withdrawal of cash, My bank ATM allow me to transfer funds between banks, My bank ATM provide 24-Hours access and There is always power & backup on my bank ATM were significantly and independently associated with customer satisfaction.

As suggested in this study regarding accessibility questioner, respondents who had easily access of ATM to locate were 2.100 times more likely to be satisfied compared to those who had no easily access of ATM in their city (AOR:2.100, 95%CI:(2.04,3.074)). This quantitative result supported by qualitative data gained from banks bullet. The response of participants in this result showed that user who had easily locate ATM at all useful places like hospitals, malls, station etc. are 0.173 times less likely to be satisfied to those who were no access. (AOR: 0.173, 95%CI :(0.046,0.645)).

As far the result from regression above, accessibility of ATM was the critical and significant in satisfying customer. This is comparable with the study done in; Howcroft (1991), (Lewis & Bingham, 1991), Joseph and Stone (2003), Michael (2001) Dilijonas et al., (2009), Al-Hawari et al. (2006)

As the same convenience dimension of ATM, understandability of Screen language had its own adverse effect on customer satisfaction. As participants response in this study, customer who can understand the screen language displayed were 3.879 times more likely to be satisfied compared to those of their counterpart who were do not understand easily (AOR:3.879,95%CI:(2.106,2.450)). In addition to this, direction to operate had significant effect on customer satisfaction. The response of participants in this result showed that customer who had not clearly operate ATM for their transaction were 0.330 times dissatisfied in their transaction compared to those who were do that(AOR: 0.330,95%CI: (0.099,1004)). As much of research participants agreed those who had not perceive easiness to operate were 0.311 times less dissatisfied than those of easily perceive (AOR: 0.311, 95%CI :( 0.114, 0.849)). As suggested in this study, respondents who had responded Menu options are aligned with their corresponding menu keys were 0.300 times less likely to be dissatisfied compared to those who do not(AOR:0.300, 95%CI: (0.104,0.863)).

From the result convenience dimension of ATM above, screen language, easiness to operate and clearness of directions seen as had significant effect on customer satisfaction. This is study is supported by the finding done by: Dilijonas (2009), and Simutis (2009), Odusina (2014)

Regarding transaction efficiency dimension of ATM , response of participants in this result showed that customer those who had used ATM that the key pad work properly were 0.300 times dissatisfied than those who not used work properly(AOR: 0.300 95%CI: (0.104, 0.867)). Similarly, processing time of ATM had considerable effect customer satisfaction. As reported by the respondents in this study, that user who had feel processing time of ATM as fast 0.355 times dissatisfied compared with those not fell operate fast (AOR: 0.355 95%CI: (0.124,1.01)) As most of research participants suggested that customer who had ATM accepted the card in the very attempt were 1.339

more likely satisfied than that of felt different (AOR:1.339 95%CI:(0.135,0.856)). Concerning process of transaction, result of this study revealed that who customer who transact fast with ATM were 0.322 times less likely to be satisfied compared to those who had not do fast(AOR:0.322, 95%CI: (0.128,0.465)). From the result convenience dimension of ATM, screen language, easiness to operate and clearness of directions seen as had significant effect on customer satisfaction. This is study is supported by the finding done by: Ahsan (2005), Dilijonas et al. (2009) and Jegede (2014)

When we see responsiveness dimension question, results in this research showed that settling grievance on reasonable time were 1.339 times more likely satisfied than those who are not settled quickly (AOR: 1.339, 95%CI: (.135,856)). From the result responsiveness dimension of ATM, grievance settling time of ATM was highly significant in effect with customer satisfaction. This is study is supported by the finding done by: Simhan Raja (2003), Joseph and Stone (2003), Michael (2001), Jennatul (2009).

Under security dimension of ATM, results in this research showed that customer who feel safe & secure when withdraw cash from ATM were 0.322 times less likely satisfied than those who do not feel safe & secure (AOR: 0.322, 95%CI: (.128,.465)). And also results in this research showed that those feel safe & secure when enter PIN/Password to ATM were 0.420 times less likely satisfied than those who are not feel safe & secure when enter PIN/Password (AOR: 0.420, 95%CI: (.233,.783)). Concerning sureness that PIN will not be hacked, result of this study revealed that satisfaction were 1.673 times more likely to be high compared to those who had not sure whether PIN be hacked or not (AOR:1.673, 95%CI: (0.248,0.903)). This is study is supported by the finding done by: Ogunlowore and Oladele (2014), Chinedu, et al (2012), Alabar and Agema (2013)

Issues related with reliability, always getting mini statement after withdraw or transfer had significant impact on customer satisfaction. The report of participants in this result showed that customer those who always get mini statement were 0.345 times less likely to be satisfied in reliability compared to those do not get mini statement (AOR:0.345, 95%CI: (0.138,0.861)). Concerning balance account, customer those experience Balance account reduced without withdrawal of cash were 0.271 times less likely dissatisfied in

reliability than customer not experience the same (AOR:0.271,95%CI: (0.092,0.803)) This result is comparable with the study done by: (Komal & Singh 2009), Alabar (2012) Ebiringa (2010) and Jannatul (2009)

Under performance dimension of ATM, results in this research showed that customer who transfer cash with ATM were 2.100 times more likely satisfied than those who do not transfer with ATM (AOR: 2.100, 95%CI: (2.04,3.074)). And also results in this research showed that those who get 24-Hours service access of ATM were 0.173 times less likely satisfied than those who do not access (AOR: 0.420, 95%CI: (.046 ,.645)). At last concern to having always power & backup on bank ATM, result of this study revealed that satisfaction were 0.998 times less likely to be high compared to those who had not sure whether PIN be hacked or not (AOR:0.998, 95%CI: (.639,.222)). This is study is supported by the finding done by: Simhan Raja (2003), Ahsan (2005), Oladele (2014) and Dilijonas et al. (2009).

#### **4.6. Analysis of open ended question**

Majority of the respondent states their opinion regarding ATM service. From their suggestion it can be inferred that network problem is the big issues. The network problem is the major obstacle in the making transaction, restriction on withdrawal of cash by the provider, accessibility, card retention and power fluctuation and etc. In addition, the temporary failures in ATM services are not fixed immediately.

# CHAPTER FIVE

## CONCLUSION AND RECOMMENDATION

### 5.1. Conclusion

From the finding in measuring the general Satisfaction level on ATM. Majority (70%) of the respondents categorized under high (satisfied). Therefore, finding of the study implies that most customers of the bank are highly satisfied with the ATM service and but this not mean there is no respondents are dissatisfied on the service, therefore, the bank must work more on those customer who are dissatisfied to make them satisfy and loyal.

Dimensions (variables) significantly related with this result were: Accessibility like easily locate banks ATMs city, ATMs are found at all useful places like hospitals, malls, station etc., Convenience like, Screen language understandability, clearness of Directions to operate, alignment of menu options with their corresponding menu keys etc., Transaction efficiency like: functionality of Key pads, card acceptability by machine in very first attempt, speed of transaction etc. were dominant variables that directly affected the satisfaction of customer in the study area and the result meaningfully addressed the research question and general and specific objectives.

In addition to above dimensions responsiveness factors like grievances settling time (speed) by bank; security & privacy like: feeling safe & secure when withdraw cash from ATM, feeling safe & secure when enter PIN/Password, trust that PIN will not be hacked etc., Reliability like: getting always mini statement, reduction of balance without cash withdraw and at last performance variable like: allowing to transfer funds between banks, providing 24-Hours access and having always power & backup on bank ATM, were significantly affected that overall satisfaction of customer in the study area and the findings significantly addressed the research question and general and specific objectives.

The main constraints identified in this study regarding ATM service, network problem was the big issues. The network problem was the major obstacle in making transaction, restriction on withdrawal of cash by the provider, card retention, power fluctuation and etc. In addition, the temporary failures in ATM services are not fixed immediately.



## **5.2. Recommendations**

In this sub section based on the empirical results of this study the researcher provides the following recommendations with regard to the ATM service quality. The researcher believes that giving due attention and an in-depth analysis of the following recommendations can even improve the quality of ATM service and customer satisfaction. Based on the conclusions of the study, the researcher forwards the following recommendations to the management of the banks and suggestion for other researchers.

Accessibility dimension was one of the most important factors influencing customer satisfaction. But customers of the bank are less satisfied with this dimension. The bank is better to place ATM on the convenient useful areas in city, places like hospitals, malls, station etc. It is obvious that if customers do not have a satisfied on the Accessibility on the banking services it is meaningless to talk about the good will of the bank. Therefore, the bank is better to handle its customers so well to achieve its organizational aims.

Finally, it is worthy to affirm that customers are the key for any business organization's success. Performance dimension of ATM was also considered as one of the most important factors influencing customer satisfaction. However, the customers of the banks were less satisfied in terms of this dimension. One way of addressing this could be by inter linking (shared network) them to enable transferring funds between banks (), providing 24-Hours access and always having power and backup. This is to say, the bank management should focus on this factor to maximize customer satisfaction.

In addition to the above recommendation, the bank it is advisable to create some mechanism to minimize problems happening such as; network problem, restriction of cash to withdrawal in a one day, accessibility, card retention and the power fluctuation problem to stay and retain the customer satisfied. Therefore, Banks are better to provide awareness about various facilities offered by ATM, The limit in with cash withdraw per day may be increased, Bank had better frequently inspect the ATMs it is helpful to avoid breakdown of ATM and at last Bank better to place ATMs in different useful location in order to meet customer needs.

### **5.3. Potential areas for future research**

This study has yielded considerable results and produced substantial contributions to the existing body of knowledge; however, there are also significant limitations which require further research that rigorously tests its validity and applicability in other populations to be conducted.

The limitations of the study are primarily related to the methodology, the study undertaken was cross-sectional, which various segments of a population are sampled and data are collected at a single moment in time. However, the study observes that those factors in customer satisfaction are better understood if we collect data at different time. Therefore, the future study needs to provide longitudinal data to examine continuity of response and to observe progress that occur over time and also add other dimensions of ATM service quality.

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## Appendix

**JIMMA UNIVERSITY  
COLLEGE OF BUSINESS AND ECONOMICS  
DEPARTMENT OF MANAGEMENT  
MBA PROGRAMME**

### Questionnaire

**Sir/ Madam;**

This questionnaire is designed specifically to carry out a research on assessing the effects of ATM service quality on customer satisfaction in Hossaena town specifically and its main purposes are: to find the ATM service quality dimensions that have the effect on customer satisfaction and analyze the level of customer satisfaction: Commercial Bank of Ethiopia and identifying frequently occurring problems while using ATM as partial fulfillment of the requirements for the degree in Master of business administration..

Here I kindly request you to attempt all the questions in the questionnaire to meet the aim of the study. Whatever information is provided will be treated with utmost confidentiality and strictly will be used for academic purpose only. There is no need to write your name.

I thank you in advance

Zekiyos Mulugeta  
Tell: 0926268492/ 0913889508  
Email: [omg.amerzaki@gmail.com](mailto:omg.amerzaki@gmail.com)

Please put a tick mark (√) in the appropriate box

#### **Part I. Demographical Information**

**1. Gender:** Male  Female

**2. Age:** 18 - 30  31 – 45  46 – 60  61 & above

**3. Educational level:**

Primary to 10<sup>th</sup> complete  Diploma   
1<sup>st</sup> degree  Masters and above

**4. Occupation:**

Unemployed

Student

Salaried

Business man/woman

Pensioner

Other

**5. Frequency of using the ATM:**

Daily

Twice a week

Weekly

Monthly

**6. Do you experience problem/s while using ATM?**

Yes

No

**7. If yes, what types of problem do you faced?**

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**8. What do you suggest to overcome these problems?**

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**Part II. Customer satisfaction with relation to ATM service quality dimensions**

Please rank your views using 1-5 on whether you are satisfied or not with the service provided by the ATM and the general environment under which it operates

- 1= strongly disagree                      2= Disagree                      3= Uncertain  
 4= Agree                                      5= Strongly Agree

Please put right mark (√) for response of your view about the question provided

| No                            | Dimensions  | Scale        |   |           |   |   |
|-------------------------------|---|--------------|---|-----------|---|---|
|                               |   | Dissatisfied |   | satisfied |   |   |
|                               |   | 1            | 2 | 3         | 4 | 5 |
| <b>Accessibility</b>          |   |              |   |           |   |   |
| 1.1                           | I can easily locate my banks ATMs in my city  |              |   |           |   |   |
| 1.2                           | I can locate my bank“ ATMs easily when I am out of station                                |              |   |           |   |   |
| 1.3                           | ATMs of my bank are easily found at all useful places like hospitals, malls, station etc. |              |   |           |   |   |
| <b>Convenience</b>            |   |              |   |           |   |   |
| 2.1                           | Screen language of my ATM is understandable   |              |   |           |   |   |
| 2.2                           | Directions to operate ATM are clear   |              |   |           |   |   |
| 2.3                           | It is easy to operate ATM of my bank  |              |   |           |   |   |
| 2.4                           | Menu options are aligned with their corresponding menu keys                               |              |   |           |   |   |
| <b>Transaction Efficiency</b> |   |              |   |           |   |   |
| 3.1                           | Key pad of ATM machine is working properly  |              |   |           |   |   |
| 3.2                           | I am happy with request processing time of my ATM   |              |   |           |   |   |
| 3.3                           | ATM card is always accepted by machine in very first attempt                              |              |   |           |   |   |
| 3.4                           | Processing of transaction is very fast  |              |   |           |   |   |
|                               |   |              |   |           |   |   |

|                               |   |  |  |  |  |  |
|-------------------------------|---|--|--|--|--|--|
| <b>Responsiveness</b>         |   |  |  |  |  |  |
| 4.1                           | I always find exact amount of money as requested by me                                      |  |  |  |  |  |
| 4.2                           | My ATM slip always shows updated balance in my account                                      |  |  |  |  |  |
| 4.3                           | Helpline numbers are displayed inside the ATM cabin and easy to locate                      |  |  |  |  |  |
| 4.4                           | My ATM grievances are settled within reasonable time by my bank                             |  |  |  |  |  |
| <b>Security &amp; Privacy</b> |   |  |  |  |  |  |
| 5.1                           | Only one person is allowed to enter in ATM cabin  |  |  |  |  |  |
| 5.2                           | I feel safe & secure when I withdraw cash from ATM  |  |  |  |  |  |
| 5.3                           | I feel safe & secure when I transfer cash from account to account with my ATM.              |  |  |  |  |  |
| 5.4                           | I feel safe & secure when I enter my PIN/Password to ATM                                    |  |  |  |  |  |
| 5.5                           | I am sure that my PIN will not be hacked  |  |  |  |  |  |
| 5.6                           | In case of two ATMs in same premises, there is a partition between them to maintain privacy |  |  |  |  |  |
| <b>Reliability</b>            |   |  |  |  |  |  |
| 6.1                           | Balance in my account reduced without withdrawal of cash                                    |  |  |  |  |  |
| 6.2                           | I never found my ATM out of cash  |  |  |  |  |  |
| 6.3                           | I don't find fake currency notes from my ATM  |  |  |  |  |  |
| 6.4                           | I am happy with denomination of currency of my ATM  |  |  |  |  |  |
| 6.5                           | I always get mini statement   |  |  |  |  |  |
| <b>Performance</b>            |   |  |  |  |  |  |
| 7.1                           | My bank ATM allow me to transfer funds between banks  |  |  |  |  |  |
| 7.2                           | My bank ATM provide 24-Hours access   |  |  |  |  |  |
| 7.3                           | There is always power & backup on my bank ATM   |  |  |  |  |  |

**Part III. Customer General Satisfaction level towards ATM banking service**

Please rank your views using 1-5 on whether you are satisfied or not with the overall service quality measured in above table of ATM service quality and the general environment under which it operates.

- 1= strongly disagree                      2= disagree                      3= Uncertain  
 4= Agree                                      5= strongly Agree

Please put right mark (✓) for response of your view about the question provided

| No | Variables   | Scale        |   |           |   |   |
|----|---|--------------|---|-----------|---|---|
|    |   | dissatisfied |   | satisfied |   |   |
|    |   | 1            | 2 | 3         | 4 | 5 |
|    | <b>General Satisfaction level towards ATM banking</b> |              |   |           |   |   |
|    | High  |              |   |           |   |   |
|    | Low   |              |   |           |   |   |