



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

**THE EFFECT OF ATM SERVICE QUALITY ON CUSTOMER
SATISFACTION: THE CASE OF DASHEN BANK**

BY
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DECEMBER, 2022

ADDIS ABABA

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DECLARATION

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

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ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Graduate studies for examination with my approval as a University advisor.

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LIST OF ACROYMS

ANOVA	Analysis of Variance
ATM	Automated Teller Machine
DB	Dashen Bank
E- Banking	Electronic Banking
EBSD	Electronic Banking Service Department
IT	Information technology
PIN	Personal Identification Number
POS	Point of Sale
SERVPERF	Service performance
SPSS	Statistical Package for Social Science

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ABSTRACT

The aim of this paper was to look at the effect of ATM service quality on customer satisfaction at Dashen bank in Addis Ababa. The research objective focus on the effective ATM service quality: tangibility, convenience, responsiveness, efficiency, reliability, assurance, security and privacy and empathy on customer satisfaction. The study was conducted based on data collected from customers and management of the bank through questionnaires and unstructured interview. The questions were focused to evaluate the extent of customer satisfaction regarding ATM services of the bank in eight service quality dimensions towards ATMs. To achieve the research objective the research adopted a descriptive research design; using both qualitative and quantitative approach. The quantitative methods was based on descriptive research design with convenience sample consists mainly of respondents in different professions at the age of above 18 years. Self-administered questionnaire, which consists of demographic characteristics and survey questions both in Amharic and English, a sample of 300 was taken distributed and of which 200 Dashen Bank ATM users samples were considered valid. Out of 404 ATMs, 20 ATMs terminals were selected in order to reach ATM users in different parts of Addis Ababa. Source of data was primary data and primary data were collected by using 5-point Likert-Scale. To accomplish this, a questionnaire survey was conducted by taking the most important ATM service quality dimensions that were identified. The data from the questionnaires were analyzed through frequency, percentage and mean as well as through correlation and regression analysis with the help of SPSS version 21 statistical software program. According to the findings, among the eight service quality dimensions: Tangibility, convenience, security, assurance, empathy, reliability, responsiveness and efficiency dimensions are found highly important dimensions for overall customer satisfaction. Descriptive result shows that customer are highly satisfied with tangibility dimension; however, in assurance found to be lowest customer's perception that are not good enough dimensions for customer satisfaction in this study. Furthermore; the outcome of inferential statics shows that all of the selected service quality dimensions have positive relationship with customer satisfaction with reliability highest value followed by tangibility dimension. The researcher recommend that the bank needs to train and equip its supporting staffs related with ATM , has to give equip and nice location of the ATMs area and assure customers by no means pin never be hacked through technology and to overcome various ATM problems that the bank should have to put effective ATM management.

Keywords: *ATM , Customer satisfaction and ATM service quality*

CHAPTER ONE

1. Introduction

1.1 Background of the study

By the 1960 several teams around the world were working independently to devise a method for withdrawing cash from a bank after hours without committing a crime. The timeline for advent and spread of an electronic machine say ATM have announced. In 1960 an American named Luther George Simjian invented the Bankograpgh, a machine that allowed customer to deposit cash and checks in to it. Then after, in June 1967 the first ATM was set up on street of Enfield, London at branch of Barclays bank. From that onwards ATM was used worldwide. The advent of ATMs revolutionized the field of banking and changed the way banks interacted with their customers. People began identifying themselves with the bank's brand, rather than the individual branch and the technology helps to avoid congestion in the bank branches, cut labor cost and generate revenues from service fee. An ATM allows a person to check account balances, withdraw or deposit money, print statement of account transaction without the aid of a branch representative or teller. Newer and advanced ATMs provide option to open or withdraw a fixed deposit or to apply for a personal loan, book railway ticket, pay insurance premiums, income tax, utility bills, recharge mobile and deposit cash (David E. McDyscan, Darren L. Spohn, 1998).

In Ethiopia, government commercial bank and private commercial banks have formed integrated online system with national wide networks so that the customer of one bank can use the ATM of another for cash access through a system rules of the national e-Payment Switch. Even if the aim of the EthSwich is to provide simple, affordable, secured, and e-payment infrastructure, there has been an exception to some transactional failures in the interoperability of ATMs. These conditions create suspicious in the minds of the card holders. In case of power off and network system interrupted withdrawals may not be successful but the system deduct from the customer accounts. Hence the customer is not get cash from ATM and the customer raise the dispute claiming the amount of transaction. The service rendered through electronic retail payment transactions within a bank or between banks which passes EthSwitch sometimes challenged by cardholders (EthSwitch S.C system rules, 2015)

ATM service quality is indispensable factor in operability of the networking system, product performance as well as the functionality of the inner part of an ATM without the interruption transactions. Parasuraman et al. (1988) defines service quality as a difference between customers' expectation of service and customers' perceptions of the actual service. Quality is an ability of a set of inherent characteristics of product, system or process to fulfill requirements of customers and other interested parties. But service quality means overall collection of implicit and explicit characteristic that the service can satisfy the customer. Customer satisfaction is generally described as the fulfillment of one's expectations. Customer satisfaction is the feeling or attitude of a customer towards a product or service after it has been used. According to Oliver et al. (1992) "Customer satisfaction is a consumer's post-purchase evaluation and affective response to the overall product or service experience. Satisfaction (or dissatisfaction) results from experiencing a service quality encounter and comparing that encounter with what was expected". So, customer satisfaction is the collective outcome of perception, evaluation and psychological reactions to the consumption experience with a product or service.

Quality and satisfaction have been linked to customer behavioral intentions like repurchase and loyalty intention, willingness to spread positive word of mouth, and referral. As banks provide identical services, it is the quality of services that play a key role in the present competitive environment. Quality of service is not only an important parameter of operational efficiency, but has a positive relationship with customer satisfaction.

Therefore, in order to meet the expectations of the customers, and to keep peace with the changing environment, commercial banks have not only been adopting technology and innovative strategies at a faster rate but have also been offering numerous services and embracing many new features in their services. They have realized that product, service characteristics, customers' aspirations & perceptions and the availability of competing alternatives can be used to enhance customer satisfaction. This will enable the banks to survive in the present competitive environment.

In general, customer satisfaction means that how will the products satisfy the customer and fulfill their expectations. It is performance of the organization's products according to the customer willing. Whenever the product performance is not according to the customer's satisfaction, then the customer confidence is decrease on product performance. But on the other hand when performance of the product according to the standard of the customer's then customer loyalty

increase in this regard, traditionally banks are mostly busy in day to day running physical operations due to either minimal workforce or unskilled man power. Customers dislike waiting lines during service time and even want leave the bank. Queuing most of the times create dissatisfaction on the customer side in the bank hall. The customers want short waiting time as place an order and promptly leave during given time period. To mitigate this kind of situation banks changes its direction to sophisticated technological advancement to improve service quality and to increase the demand of the customer in area of banking sector. Now a day banks try to create a diversified distribution strategy in order to market the range of their services. To meet better market requirements in terms of speed and efficiency of services, banks have adopted an interactive electronic and computerized system for their clients.

Automated Teller Machines (ATMs) were first introduced by commercial Bank Ethiopia. And from private commercial banks Dashen bank is the first bank that introduces Automated Teller Machine (ATM) as an aim to achieve its goal of efficiency, effectiveness and convenience. On most modern ATMs, the customer is identified by inserting a plastic ATM card with a magnetic stripe or a plastic smart card with a chip that contains a unique card number and some security information such as an expiration date. Authentication is provided by the customer entering a personal identification number (PIN). Using an ATM, customers can access their bank accounts in order to make cash withdrawals, credit card cash advances, and check their account balances as well as purchase prepaid cell phone credit. Today ATMs do much more than dispensing cash but also offer the following services, checking account balances, printing bank statements, ticket purchases, donations and transfers to other bank accounts. (E-Banking department, 2014)

Customers need not to move with huge sums of money in their bags because withdraw and deposits can be done from any branch in any part of the world using ATM machine. The machines can enable customers to withdraw cash at more convenient times and places than during banking hours at branches (Musiime & Biyaki, 2010). In addition, by automating services that were previously completed manually, ATMs reduce the costs of serving bank customers. These potential benefits are multiplied when banks share their ATMs, allowing depositor of other banks access their account through a bank's Automated Teller Machine. Balunywa (2003) discovered that the adoption of ICT in banks has produced largely positive outcomes such as improved customer services, more accurate records, ensuring convenience in business time, prompt and fair attention and faster services to induce customer satisfaction.

The achievements, goals, profit and attainment of banking sector depends largely on the proper management and technology such as ATM adoptability in the banking activities. It's upon this basis that efficiency, effectiveness of banking sector induce customer satisfaction. The impact of ATM on the performance of banking institutions to induce customer satisfaction is not yet established and there have been near lack of empirical research efforts on the effect of ATM use on customer satisfaction banking sector in Ethiopia, however, the most revolutionary electronic innovation in this country has been the ATM. In Ethiopia, financial institutions with ATM have been networked and have increased the utility to customers. The ATM has been the most successful delivery medium for consumer banking in the country. Thus, call for investigation on the effect of Automated Teller Machine (ATM) use on customer satisfaction in Dashen bank in Ethiopia.

Dashen Bank S.C is one of the biggest private commercial banks in our country with a network of over 758 branches and which was established on September, 1995 according to the Ethiopian commercial code of 1960 and the licensing and supervision of banking business proclamation no. 84/1994. Up on securing license from National Bank of Ethiopia, Dashen opened its doors for service on the 1st of January 1996 with eleven fully fledged Branches. Dashen Bank coined its name from the highest peak in Ethiopia, Mount Dashen, aspires to be unparalleled in banking services. Headquarter in Addis Ababa located around in front of Radio Fana; the bank is among the biggest private bank in Ethiopia. It operates through a network of more than 758 branches, ten dedicated Forex Bureaus, 400 ATMS and more than 1500 Point of sale (POS) terminals (at merchant location & branches) spread across the length and breadth of the nation. It has established correspondent banking relationship with 462 banks covering 70 countries and 170 cities across the world. E-Banking Services Department established in May, 2006 by being principal member of VISA card associations and starts acquiring Int'l VISA cards and issuing VISA debit local card. By using international VISA, Master Card, Union Pay and American Express, cardholders are able to get cash and effect payments by accessing their account.

Apart from the conventional baking, Dashen Bank also offers Shaira compliant interest free banking dubbed "SHARIK". The banks also works in partnership with leading brands in the electronic payment industry (AMEX, VISA, Master, Shark and Anisa Card) and prominent money transfer operators (Western Union, Money Gram, Ezremit, Transfast, WorldRemit and Ria).

1.2 Statement of the problem

Automated Teller Machine (ATM) technology has improved access to bank services in Ethiopia with customers' ability to make transactions outside banking hours. ATM has diverse merits but customers still complain of shortfalls on the use of the system such as; break downs of ATMs, long queues at ATM service points, taken away of customers cards, limited knowledge on the use of ATM cards, fraudulent transactions and its operation in just a few languages. ATM technology in banking industry has caused a customer dissatisfied with an ATM machine deducts the customer account without dispensing cash and became a source of worry to users. It has become a money spinner for fraudsters, who have found new heaven in compromising innocent people's personal identification numbers (PIN). ATM behavior can change during what is called "stand-in" time, where the bank dispensing the cash is unable to access databases that contain account information possibly for database maintenance, that is, when there is network problem. ATMs at times can also deduct money from the account without actually dispensing money, sometimes dispensed cash without deducting from customer accounts and these other related factor are the bane of these money dispensing machines. With all the problems and incompetence of this money dispensing machine in Ethiopia; we can say it has recorded some success.

Now a day banks in Ethiopia formed a central switching system Called Eth switch. The system enables customer of one bank can use ATM and POS of other bank using their ATM cards whereas there are some factors which affect customer satisfaction and service quality in ATM banking service in most banks in general and in Dashen Bank in particular using this system . The ATM could be old, out of service, run out of cash, failure to provide printing statement, card get blocked, frequent breakdown of ATM service, lack of sufficient technician for maintenance of the breakdown of ATM machine, lack of sufficient alternative system which substitute ATM service for the customer when temporary problem happen in the machine, interruption of network, and cash deducted from customer account without paying by ATMs and longtime taken to get their cash back reversing a transaction and refund is not possible and hardly do people talk about problems of these services. Besides, lack of fair distribution of ATMs in all banks in Ethiopia. As result of various factors mentioned above and observing the situation happening around ATM now and then forced me to understand and search the problems.

Accordingly previous research studies on similar concepts undertaken on ATM service related issues and customer satisfaction on limited attributes which is a solution to the problem under study. For instance, a study conducted by Philipos Lamore (2013) about customer satisfaction and electronic banking service on three selected banks of Ethiopia and others offer some insights on the major problems ATM customers experience and ATM attributes that satisfy customers. However, most of the studies conducted on ATM service and customer satisfaction were undertaken at early adoption of the ATM were only few banks give the service, using their own ATM and before introduction of centralized switch system (Eth-switch), that allow all cardholders of any bank existed in the country to enjoy ATM service including cash withdrawal from any ATM, irrespective of the bank. In view of this, it makes it difficult to accept that customers respond to ATM use is the same in as early adoption and after introduction of a centralized switch system, hence the need to investigate into it.

The increase in using ATM service and the implementation of Eth switch in the country increase the complexity of services, so it is important to know the customers perception and their thinking about its various features and their problem while using ATM service and also know what are the important dimension of ATM service quality significantly affect customer satisfaction. And therefore, due to varying in variables used and methodological gap, it is very important to re-examine the present ATM quality of service delivering by Dashen Bank to confirm whether it gratifying the customers level of satisfaction and its impact on future behavioral intentions.

1.3 Objective of the study

The study has general and specific objectives

1.3.1 General objective

This is to examine the major effect of ATM service quality dimensions on customer's satisfaction in the case of Dashen bank.

1.3.2 Specific objectives

Guided by the general objective, the specific objective is emphasizing on the following aspects.

1. To analyze the effect of ATM service convenience on customer satisfaction in DB
2. Systematically examine the challenges that customers face in using Dashen ATM

3. To identify the primary ATM service quality dimension according to the perception of cardholder of Dashen Bank using other bank ATM.
4. Analyze the impact of service quality on customer satisfaction.
5. To assess the satisfaction level of customer of Dashen bank on ATM service quality.
6. To suggest strategies of strengthening customer satisfaction at ATM point of Dashen bank.

1.4 Research Question

This study is guided by the following research questions:

- How does convenience in ATM service affect customer satisfaction?
- What are the challenges DB customers face with respect to the use of ATM?
- What are the major ATMs service quality dimensions which are critically significant to customers in Addis Ababa?
- Are customers satisfied with ATMs service quality offered by Dashen Bank in Addis?
- What is the perception of customers towards ATM banking service on Dashen bank?
- What is the relationship between ATM service quality dimension (convenience, efficiency, responsiveness, security & privacy and reliability.....) and customer satisfaction?
- What are the strategies of strengthening customer satisfaction at each ATM point of Dashen bank?

1.5 Scope of the study

The study is delimited of geographically, conceptually, methodologically. Geographically, the study considers ATM which only found in Addis Ababa because the ATM services offered by DB are concentrated in Addis Ababa and the number of DB customers who have access to ATM services and who frequently use ATM is significant in Addis Ababa than in an outlay branches. Conceptually, the study was conducted to assess the effect of ATM service quality on customer satisfaction based on the eight service quality dimensions. Methodologically, among the types of non-probability sampling the researcher was used convenience sampling technique to select each respondent. Hence the study of this research was limited to ATM service quality and the satisfaction obtained from the services on those customers who use the ATM card's of Dashen Bank that are located in Addis Ababa.

1.6 Limitation of the study

The limitation of this study includes; the study only covers the capital city of Addis Ababa, the existence of language barrier and non-cooperation of respondents in filling questionnaire and the study was limited to Dashen bank card holder customer.

1.7 Significance of the Study

The outcome of this study will be of immense benefit to the management of Dashen Bnk, since it will help to identify most of the challenges faced by the banks as well as the complaints raised by the customers. Solutions will then be given on theses identified challenges. This will go a long way to help the bank achieve its stated objectives, and in the long run increase shareholder's wealth. Furthermore, the study would enable banks executives and indeed the policy makers of the banks and financial institutions to be aware of electronic banking system as a product of electronic commerce with a view to making strategic decisions. And also study provides the following importance:

- The study will inform the management to aware why always complaint arise from a customer in the first place.
- The study will add up to existing knowledge on the level of ATM service quality in the Ethiopian banking sector.
- It services as guideline for the bank management on formulation solution of service quality gaps policies in line with ever-changing customer demand taking actions to close the gaps.
- It enables the bank to identify the dimensions which need critical attentions to find out short term solution and management attentions.
- The study creates awareness and initiates the interest of the other researchers to carry out a further study in a wider scale.

1.8 Organization of the Paper

The study comprise of five chapters. The first chapter presents introduction of back ground of the study, problem statement, objectives of the study, significance of the study, limitation of the study, organization of the paper and the second chapter contains review of literatures followed by the third chapter that discusses the methodology used to undertake the in study. The fourth

chapter deals with the data presentation analysis and interpretation of the research study. The fifth chapter has summary, conclusion and recommendation based on data collected and analyzed.

1.9 Operational definitions

Below here presented are the definition of concepts/terms or variables from the theoretical perspective.

- **Automated teller machines (ATMs)** is a machine that allows customers to access banking services such as withdrawals, transfers, balance inquiries, requests for cheque books, account statements, direct deposits, foreign currency exchange etc without the need for human involvement 24/7 in a week 356 days in a year.
- **Customer satisfaction** is a person's feelings of pleasure or disappointment resulting from comparing products perceived performance in relation to his or her expectations.
- **EthSwitch:** owner and operator of the national e-payment switch.
- **ET Switch;** - a centralized switch system which integrate all real-time and online payment systems in Ethiopia.
- **Switch Member:** the Ethio-pay member Bank operating with own or shared switch for interbank retail card payments with other member banks.
- **Debit card:** is a type of card whereby the cardholder is made to access his/her deposit account at the bank.
- **Credit cards:** a line of credit will be provided to the customer wherein he/she would access this credit line using a plastic card.
- **An ATM dispute:** is when a cardholder requests money from our ATM and claims the ATM didn't dispense the money, even though the amount was still debited from the cardholder's account and credited to the ATM's vault cash account.
- **Online :** happened when both flex and b24 is live
- **Offline :** when the core banking is down-hence protection Manually BBF balance is loaded twice on b24 to protect overdraw while flex is down.

CHAPTER TWO

2. LITRATURE REVIEW

In this chapter, the study try to review relevant literature connected to the topic .The study discuss issues on meaning of e-banking, ATM service quality, customer satisfaction, and define relevant concepts in order to enhance the understanding of the topic and provide answers to research questions. Summarily, this theoretical framework would enable to build a conceptual model that would be the road map for my empirical observations

2.1 Theoretical Review

This section outlines the concepts that this study is grounded to underpin the foundation of Automatic Teller Machine service quality and customer satisfaction. Customer satisfaction is defined as "the number of customers or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals (Kumbhar, 2011). Davies and Curry (2014) examine the factors that influence customers" satisfaction about ATM service quality. These factors include costs involved in the use of ATM, and efficient functioning of ATM. Joseph and Stone (2013), through focus group study in the United States, found that easy access to location, user-friendly ATM and security, are important factors that influence majority of bank customers" perception of ATM service quality which led to customer satisfaction.

Among the different theories on ATM and customer satisfaction, "Dissonance Theory" tries to conceptualize satisfaction as an overall psychological state that reflects the evaluation of a relationship between the customer or consumer and a company, environment, product or service. Satisfaction involves one of the following three psychological elements: cognitive (thinking/evaluation), affective (emotional/feeling), and behavioral.

Dissonance Theory 1965 suggests that a person who expected a high-value product and received a low-value product would recognize the disparity and experience a cognitive dissonance (Cardozzo, 1965). That is, the disconfirmed expectations create a state of dissonance or a psychological discomfort (Yi, 1990). According to this theory, the existence of dissonance produces pressures for its reduction, which could be achieved by adjusting the perceived disparity like the services expected from use of ATM. This theory holds that post exposure

ratings are primarily a function of the expectation level because the task of recognizing disconfirmation is believed to be psychologically uncomfortable. Raising expectations substantially above the product performance and failing to meet customer expectations may backfire, as small discrepancies may be largely discounted while large discrepancies may result in a very negative evaluation although it establishes a basis for offering services to meet continuous needs of customers. Thus, ATM users are posited to perceptually distort Expectation-discrepant performance to coincide with their prior expectation level. The study conceptualizes Dissonance Theory to relate the ATM customer expectations and the actual perceived expectations which requires Dashen bank to strive and raise ATM services quality to meet customer expectations in order to obtain a higher product evaluation to induce customer satisfaction.

2.1.1 Concept of the ATM

ATM is a machine where cash withdrawal can be made over the machine without going in to the banking hall. It also sells recharge cards and transfer funds; it can be accessed 24 hours/7 days with account balance enquiry (Fenuga OJ, 2010). Globalization has brought major changes to banking with respect to resources, markets, processes, and business strategies. This situation has led to a paradigm shift in operations. ICT (information communication technology) application has become strategic for supporting investment and operational decisions (Banker, Bardhan, Lin, & Chang, 2006). Over the years ICT has grown its support role to banking activities. At first, banking activities performed using computers were the very few simple ones, but presently, ICT supports almost all activities through the financial service cycle, including product design, development and marketing chain. E-Payment is a specific area of banking where ICT has found wide application. One area where ICT application has helped the operational environment of banking is the use of Automated Teller Machine.

ATM systems which integrate all licensed banks into a network, thereby reducing or eliminating the limitations of traditional branch-based nature of banking and making the promised real time-on-line concept of globalized banking a reality. According to Howells (2008), ATMs were first introduced in 1967 in UK and the first machine was installed at Barclays bank in London. However, at the beginning they faced resistance from users as they did not trust them. The resistance faded as young people especially college students accepted the services with open

hands. The use of this device has now become the way of life worldwide. It has been observed by the Congressional Budget Office that technological advances have made the ATM machines more functional, cheaper and easier to accommodate. Hence all ATM users worldwide enjoy the ATM services.

Automated Teller Machine (ATM) has been considered as the prominent amongst the most critical segments of e-managing an account framework. ATM is a terminal conveyed by a bank or any money related establishment which empowers the clients to withdraw money, make offset enquiries, request bank statements, exchange stores furthermore store money. The ATMs are essentially self-overhauled saving money terminals and are gone for giving quick and advantageous administrations to the bank's clients (Rasiah, 2010). Basically, it is an electronic terminal which gives clients the chance to acquire managing an account administration at whatever time. To withdraw money, make stores or exchange trusts between records, a purchaser needs an ATM card and an Individual Personal Identification Number (PIN). Rose (1999) as cited in Abor, describes ATMs as follows: —an ATM combines a computer terminal, database system and cash vault in one unit, permitting customers to enter the bank's book keeping system with a plastic card containing a PIN or by punching a special code number into the computer terminal linked to the bank's computerized records 24 hours a day.

ATM offers a great deal of banking services to clients. They are mostly situated outside the banks. They were introduced initially to serve as cash dispensing machines. However, as a result of the rapid increase in technology, ATMs go to the extent of given accounts balances and bill payments. Banks use this electronic banking device, to gain competitive advantage. The combination of automation and human tellers gives more productivity for the bank during banking hours. It additionally spares time in customer service delivery as customers do not queue in banking halls, and along these lines can invest such time spared into other productive activities. ATMs are efficient method for yielding higher profitability as they accomplish higher efficiency per duration of time than human tellers (a normal of around 6,400 exchanges for every month for ATMs contrasted with 4,300 for human tellers (Rose, 1999).

So an ATM has to automate the duties of a bank teller which subsequent remove the “face to face” interaction between the customer and the bank teller.

2.1.2 Meaning E-banking service

The revolution of e-payment as captured by Cheng (2006) in his work —Evolution of Electronic Payment started in 1918, when the Federal Reserve Bank first moved currency via telegraph. However, it was not until the Automated Clearing House was set up by the U.S Federal Reserve in 1972 that electronic currency became widespread. This provided the U.S treasury and commercial banks with an alternative to processing cheque. Daniel (1999) defines electronic banking as the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television.

Electronic banking can also defined as the application of computer technology to banking especially the payment (deposit transfer) aspects of banking with the help of tele-communication network which permits online processing of the same day credit and debit transfers of funds between member institutions of a clearing system (Anyawaokoro, M.1999).

According to the United Nations Conference on Trade and Development (UNCTAD), E-banking refers to the deployment over the Internet of retail and wholesale banking services. It involves individual and corporate clients, and includes bank transfers, payments and settlements, documentary collections and credits, corporate and household lending, card business and some others (UNCTAD, 2002).

The Electronic banking has been around for some time but in form of Automatic Teller Machines (ATMs) and telephone transactions. More recently, it has been transformed by the Internet and mobile technologies, the new delivery channels for banking services with benefits to both customers and banks. Access is fast, convenient, and available around the clock, whatever the customer's location. Additionally through Electronic banking, the banks are able to provide services more efficiently and at substantially lower costs. For example, a typical customer transaction costing-about \$1 in a-traditional- "brick and mortar" bank branch or \$0.60 through a phone call costs only about \$0.02 online (Crane, 1996).

According to Klingebiel, (2002), Electronic banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. Electronic banking is usually done in following forms: ATMs, personal computer (PC) banking, Internet banking, virtual banking, online banking, home banking, remote electronic banking, and phone bank. PC banking and Internet or online banking is the most

frequently used designations. It should be noted, however, that the terms used to describe the various types of electronic banking are often used interchangeably. PC banking is a form of online banking that enables customers to execute bank transactions from a PC via a modem. In most PC banking ventures, the bank offers the customer a proprietary financial software program that allows the customer to perform financial transactions from his or her home computer. The customer then dials into the bank with his or her modem, downloads data, and runs the programs that are resident on the customer's computer.

Currently, many banks offer PC banking systems that allow customers to obtain account balances and credit card statements, pay bills, and transfer funds between accounts (Crane, 1996). E-banking especially Internet banking is not limited to a physical site; some Internet banks exist without physical branches. According to industry analysts, electronic banking provides a variety of attractive possibilities for remote account access, including: Availability of inquiry and transaction services around the clock; worldwide connectivity; Easy access to transaction data, both recent and historical; and direct customer control of international movement of funds without intermediation of financial institutions in customer's jurisdiction (Crane, 1996).

E-banking is a generic term for delivery of banking services and products through electronic channels, such as the telephone, the internet, the cell phone, etc. The concept and scope of e-banking is still evolving. It facilitates an effective payment and accounting system thereby enhancing the speed of delivery of banking services considerably (R.K. Uppal & R. Jatana, 2007).

The concept of electronic banking has defined in many ways; Abid and Noreen, (2006) define electronic banking as any use of information and communication technology and electronic means by a bank to conduct transactions and have interaction with stakeholders. Magembe, B A S and Shemi A P (2002) defined electronic banking (e-banking) is nothing but e-business in banking industry. According to Allen (2001), E-banking refers to the supply of information or service by banks to customer via computer or television Basel committee on banking Supervision (BCBS) define electronic banking as “e-banking includes the provision of retail and small value banking product and service through electronic channels as well as large value electronic payment and other wholesale banking service delivered electronically” (BCBS,1998).

2.1.3 Types of E-banking

A. Internet banking

Richard Sullivan, ZhuWang (2013) define Internet banking as a bank providing a website that allows customers to execute transactions on their accounts. Internet banking refers to systems that enable bank customers to get access to their accounts and general information on bank products and services through the use of bank's website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations. The history of internet banking can be traced back to 1995. When Wells Fargo first allowed its customers to access account balances online and the first Internet-only bank, Security First Network Bank, started.

B. Mobile banking

Mobile banking is a service provided by bank or other financial institution that allows its customer to conduct a range of financially transaction remotely using mobile device such as mobile phone, tablet and using software, usually called app. (Wikipedia). Dermish,(2011),define mobile banking as Branchless banking refers to a distribution channel that allows financial institutions and other commercial sectors to offer financial services outside traditional, brick and mortar bank premises. Branchless banking technologies come in the form of smart cards or mobile phones services that can be used to conduct transactions.

C. POS

Point of sale (POS) also sometimes referred to as point of purchase (POP) or checkout is the location where a transaction occurs. A "checkout" refers to a POS terminal or more generally to the hardware and software used for checkouts, the equivalent of an electronic cash register. A POS terminal manages the selling process by a salesperson accessible interface. (Shittu O., 2010)

D. ATM (Automated Teller Machine)

Automated Teller Machine (ATM) is a machine where cash withdrawal can be made over the machine without going in to the banking hall. It also sells recharge cards and transfer funds; it can be accessed 24 hours/7 days with account balance enquiry (Fenuga, 2010).

Globalization has brought major changes to banking with respect to resources, markets, processes, and business strategies. This situation has led to a paradigm shift in operations. ICT (information communication technology) application has become strategic for supporting investment and operational decisions (Banker, Bardhan, Lin, & Chang, 2006). Over the years ICT has grown its support role to banking activities. At first, banking activities performed using computers were the very few simple ones, but presently, ICT supports almost all activities through the financial service cycle, including product design, development and marketing chain. E-Payment is a specific area of banking where ICT has found wide application. One area where ICT application has helped the operational environment of banking is the use of Automated Teller Machine. ATM systems which integrates all licensed banks into a network, thereby reducing or eliminating the limitations of traditional branchbased nature of banking and making the promised real time- on-line concept of globalised banking a reality.

According to Howells (2008), ATMs were first introduced in 1967 in UK and the first machine was installed at Barclays bank in London. However, at the beginning they faced resistance from users as they did not trust them. The resistance faded as young people especially college students accepted the services with open hands. The use of this device has now become the way of life worldwide. It has been observed by the Congressional Budget Office that technological advances have made the ATM machines more functional, cheaper and easier to accommodate. Hence all ATM users worldwide enjoy the ATM services.

Automated Teller Machine (ATM) has been considered as the prominent amongst the most critical segments of e-managing an account framework. ATM is a terminal conveyed by a bank or any money related establishment which empowers the clients to withdraw money, make offset enquiries, request bank statements, exchange stores furthermore store money. The ATMs are essentially self-overhauled saving money terminals and are gone for giving quick and advantageous administrations to the bank's clients (Rasiah, 2010). Basically, it is an electronic terminal which gives clients the chance to acquire managing an account administration at whatever time. To withdraw money, make stores or exchange trusts between records, a purchaser needs an ATM card and an Individual Personal Identification Number (PIN).

Rose (1999) as cited in Abor, describes ATMs as follows: —an ATM combines a computer terminal, database system and cash vault in one unit, permitting customers to enter the bank's

book keeping system with a plastic card containing a PIN or by punching a special code number into the computer terminal linked to the bank's computerized records 24 hours a day. It offers a great deal of banking services to clients. They are mostly situated outside the banks. They were introduced initially to serve as cash dispensing machines. However, as a result of the rapid increase in technology, ATMs go to the extent of given accounts balances and bill payments. Banks use this electronic banking device, to gain competitive advantage. The combination of automation and human tellers gives more productivity for the bank during banking hours. It additionally spares time in customer service delivery as customers do not queue in banking halls, and along these lines can invest such time spared into other productive activities. ATMs are efficient method for yielding higher profitability as they accomplish higher efficiency per duration of time than human tellers (a normal of around 6,400 exchanges for every month for ATMs contrasted with 4,300 for human tellers (Rose, 1999).

Transactions of ATM could be processed in the following ways according to commercial banking in Ethiopia:

i) My bank to others bank [off us transaction]

A customer of a bank uses other banks ATM [Dashen bank uses Zemen ATM].

ii) Others bank to my bank (on us transaction)

Other banks customer uses ATM of Bank Asia.

iii) My bank to my bank; a customer uses its own bank ATM machine.

2.1.4 Benefit of ATM

ATM has several contribution to the banking industry, on one hand it add values to customer satisfaction in terms of giving quality services , on the other it enables, the bank to gain more competitive advantage over their rivals through the provision of superior service delivery (Gbandeyan , Gbonda, &Omar,2011). According to Khan (2010) the use of ATM has rendered new ventures regarding the service quality dimensions and banks are delivering new choices and channel alternatives to their customers. ATM, which is the most commonly utilized electronic distribution channel, allows customers to carry out their foremost banking transactions, such as

balance inquires, transfer funds, withdrawals 24 hours a day. Davies et al.(1996) cited in ALHawari et al.(2005). Cabas(2001) cited in Khan(2010) pointed out that investment opportunities, cost reduction, customers satisfaction and competitiveness are taken as the basic motives behind the installation and addition of new ATM to the existing network. This is because technological developments such as ATM has devised ways to organizations in order to offer superior services for customers' satisfaction (Surjadaja et al;2000 cited in Khan;2010).

Moreover, Moutinho(1992) pointed out that ATM facilities came out in speed of transactions and saved time of customers.

Benefit with the Dashen bank using Green & Gold card, you can access your money 24*7*365, without limitation for bank working hours; operate multiple accounts with a single card, withdraw up to 25,000 and 50,000 birr per day at each area bank per card from ATM which is subjected to the balance in your account respectively. By using Green and Gold card withdrawal cash of up to 15,000 and 30,000 per day at ATM locations respectively. (Dashen bank S.C intranet portal).

2.1.5 ATM Networks

The ATMs of a bank are connected to the accounting platform of the bank through ATM switches. Inter-bank ATM networks are created by setting up apex level switches to communicate between the ATM switches of different banks. The inter-bank ATM networks facilitate the use of ATM cards of one bank at the ATM(s) of other banks for basic services like cash withdrawal and balance enquiry. Banks owning the ATMs charge a fee for providing the ATM facility to the customers of other banks. The ATM deploying bank from the card issuing banks recovers this fee referred to as „interchange fee“. However the interchange fee is not fixed across banks and depends on the terms of bilateral / multilateral arrangements. Banks with larger ATM network treat interchange fee as an important stream of revenue. Sultan and komal (2009)

2.1.6. Service

Kotler(2000) defined service as any activity or benefit that one party offers to another which is essentially intangible and does not result in the ownership of anything, and it may or may not be tied to a physical product similarly, Gronroos (1984) defined service as an activity or series of activities of more or less intangibles nature that normally, but not necessarily, take place in interactions between the customer and service employees and/or physical resources or goods and or systems of service provider, which are provided as solutions to customer problems.

2.1.7 Service quality

There are many researchers who have defined service quality in different ways. For instance Bitner, Booms and Mohr (1994, p. 97) define service quality as ‘the consumer’s overall impression of the relative inferiority/ superiority of the organization and its services’. While other researchers; Taylor and Cronin(1994) view service quality as a form of attitude representing a long-run overall evaluation, Parasuraman, Zeithaml and Berry (1985, p. 48) defined service quality as ‘a function of the differences between expectation and performance along the quality dimensions’. Nowadays, with increased competition, service quality has become a popular area of academic investigation and has been recognized as a key factor in keeping the competitive advantage and sustaining satisfying relationships with customers (Zeithmal et al., 2000).

Some prominent definitions include “conformance to requirements” (Crosby, 1984), ‘fitness for use’ (Juran,1988) or ‘one that satisfies the customer’ (Eiglier and Langeard, 1987) and Service is defined as —any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product (Kottler, 2003). Quality has come to be recognized as a strategic tool for attaining operational efficiency and improved business performance (Anderson and Zeithaml, 1984; Babakus and Boller, 1992; Garvin, 1983; Phillips, Chang and Buzzell, 1983). Several authors have discussed the unique importance of quality to service firms (e.g., Normann, 1984; Shaw, 1978) and have demonstrated its positive relationship with profits, increased market share, return on investment, customer satisfaction, and future purchase intentions (Anderson, Fornell and Lehmann1994; Boulding et al., 1993; Buzzell and Gale, 1987; Rust and Oliver, 1994).Most researchers found that service quality is the antecedent of customer satisfaction (Parasuraman et

al., 1988). Quality customer service and satisfaction are recognized as the most important factors for bank customer acquisition and retention. Service quality is considered as one of the critical success factors that influence the competitiveness of an organization. A bank can differentiate itself from competitors by providing high quality service. Service quality is one of the most attractive areas for researchers over the last decade in the retail banking sector (Johnston, 1997). Despite the recognized importance of service quality, there have been methodological issues and application problems with regard to its functioning. Quality in the context of service industries has been conceptualized differently and based on different conceptualizations, alternative scales have been proposed for service quality measurement

According to Edvardsson, Thomsson and Ovretveit (1994), service quality is a service that fulfils the expectations of customers and satisfies their needs. On the other hand, Lewis and Booms (1983), service quality is a measure of how well a service delivered matches the customers' expectations (It is said that service quality is best defined by the consumer of the service thereby making it subjective in the sense that two persons could perceive service quality delivered different.

Parasuraman, Zeithaml and Berry (1988) defined service quality as a global judgment, or attitude, relating to the superiority of the service', and explicated it as involving evaluations of the outcome (i.e., what the customer actually receives from service) and process of service act (i.e., the manner in which service is delivered). Those scholars argue that service quality as a difference between consumer expectations of 'what they want' and their perceptions of 'what they get'. For the reason that, existence of difference in definitions on service quality by different scholars; different scales for measuring service quality have been put forward. Service qualities and customer satisfaction are closely related researches have shown that service quality is a necessary condition for customer satisfaction.

According to Gronroos (1994) there are three types of service quality outcome, the technical quality, the function quality and the corporate image:

1. The technical quality, which involves what the core service received by customer from the service delivery.
2. Functional quality, which involves the manner in which the service is delivered. This concerns the psychological interaction between the buyer and the seller perceived in a very subjective way, and would include elements such as: Attitudes and behavior of

employees, approachability of service personnel, accessibility of service, appearance and personality of personnel, relationship between employees and interrelationships between employees and customers.

3. Corporate image dimension of quality is the result how consumers perceive the firm, and it is expected to be built up mainly by the technical and functional quality of its services and will eventually affect service perceptions.

Similarly, Lehtinen, u. and Lehtinen J.R (1991) offered another model with three dimensions of service quality: physical, interactive and corporate. Physical quality is about the quality of physical products involved in service delivery and consumption. Interactive dimension refers to the interaction between the customers and the service organization employees. Corporate quality refers to the corporate image as perceived by the customer. Parasuraman et al. (1985) suggested the —Gap Model in order to serve as a framework for further research.

2.1.7.1 Service quality dimensions

Quality is a multi-dimensional phenomenon. Thus, reaching the service quality without distinguishing the important aspects of quality is impossible. Gronroos (2000) refers to three dimensions of output technical quality, service performance quality, and organization's mental picture. The primary researcher on service quality dimension was Parasuraman et al., 1985, (p.41-50) developed a conceptual model of service quality where they identified five gaps that could impact the consumer's evaluation of service quality in four different industries (retail banking, credit card, securities brokerage and product repair and maintenance). These gaps were;

Gap 1: Consumer expectation - management perception gap

Service firms may not always understand what features a service must have in order to meet consumer needs and what levels of performance on those features are needed to bring deliver high quality service. This results to affecting the way consumers evaluate service quality.

Gap 2: Management perception - service quality specification gap

This gap arises when the company identifies what the consumers want but the means to deliver to expectation does not exist. Some factors that affect this gap could be resource constraints, market conditions and management indifference. These could affect service quality perception of the consumer.

Gap 3: Service quality specifications – service delivery gap

Companies could have guidelines for performing service well and treating consumers correctly but these do not mean high service quality performance is assured. Employees play an important role in assuring good service quality perception and their performance cannot be standardized. This affects the delivery of service which has an impact on the way consumers perceive service quality.

Gap 4: Service delivery – external communications gap

External communications can affect not only consumer expectations of service but also consumer perceptions of the delivered service. Companies can neglect to inform consumers of special efforts to assure quality that are not visible to them and this could influence service quality perceptions by consumers.

Gap 5: Expected Service – perceived service gap

From their study, it showed that the key to ensuring good service quality is meeting or exceeding what consumers expect from the service and that judgment of high and low service quality depend on how consumers perceive the actual performance in the context of what they expected.

Parasuraman et al., (1988), later developed the SERVQUAL model which is a multi item scale developed to assess customer perceptions of service quality in service and retail businesses. The scale decomposes the notion of service quality into five constructs as follows: Tangibles, Reliability, Responsiveness, Assurance and empathy. It bases on capturing the gap between customers expectations and experience which could be negative or positive if the expectation is higher than experience or expectation is less than or equal to experience respectively. Zeithaml et al. (1996) have referred to ten dimensions of service quality but in their further researches, they found a strong correlation among those dimensions. Thus, they combined these dimensions and applied the fivefold dimension of Reliability, Responsiveness, Assurance, Empathy and Tangibles as a basis for making a tool for testing the service quality, known as SERVQUAL. Cronin and Taylor (1992) in their empirical work controverted the framework of Parasuraman, Zeithaml and Berry (1985, 1988) with respect to conceptualization and measurement of service quality, and propounded a performance-based measure of service quality called 'SERVPERF' illustrating that service quality is a form of consumer attitude. They argued that SERVPERF was an enhanced means of measuring the service quality construct. Their study was later replicated and findings suggest that little if any theoretical or empirical evidence supports the relevance of the E-P= quality gap as the basis for measuring service quality.

Leveling maximum criticism against SERVQUAL scale, Cronin and Taylor (1992) provided empirical evidences across four industries viz. fast food ,pest control, dry cleaning and banking to support the superiority of their ‘performance only’ scale over SERVQUAL scale retaining the same items as had been proposed by the Parasuraman, Zenithal and Berry (1988).

2.1.7.2 Service quality measurement

Measuring quality in the service sector is more comprehensive than measuring quality of the manufacturing sector because quality evaluations are not made solely on the outcome of a service; they also involve evaluations of the process of service delivery. One of many service quality research models often used in the world nowadays is SERVPERF proposed by Cronin and Taylor (1992). This scale was based on the SERVQUAL scale (Parasuraman et al. 1985, 1988) which assessed service quality through the gaps between customer expectations and perceptions.

2.1.8 Customer satisfaction

Kotler defined customer satisfaction as the extent to which a product’s perceived performance matches a buyer’s expectations. If the product performance falls short of expectations, the buyer is dissatisfied. If performance matches or exceeds expectations, the buyer is satisfied or delighted (Kotler et al. 2005). Customer satisfaction is conceptualized as been transaction-specific meaning it is based on the customer’s experience on a particular service encounter, (Cronin & Taylor, 1992). Giese & Cote, (2000) clearly state that there is not generic definition of customer satisfaction and after carrying a study on various definitions on satisfaction they came up with the following definition, “customer satisfaction is identified by a response (cognitive or affective) that pertains to a particular focus (i.e. a purchase experience and/or the associated product) and occurs at a certain time (i.e. post-purchase, post consumption). Satisfying customers is one of the main objectives of every business.

Satisfaction could be the pleasure derived by someone from the consumption of goods or services offered by another person or group of people or it can be the state of being happy with a situation. Satisfaction further leads to customer retention which leads to repeat purchase and increased the extent for relationship building and positive word of mouth (Jenet, 2011).

Several factors affect customers’ satisfaction that is the kind of products that banks offer to its customers can cause customer satisfaction or dissatisfaction. Consumers do not buy a product or

service for their own sake. Customers bought product to acquire benefits that the product offers. They bought it to satisfy a need. Products therefore exist for what they fulfill in terms of consumer needs. Vijay (2011) states that it is the essential feature of benefit that the buyer expects to receive from savings account is not buying a passbook, or a card, the customer is buying a safe deposit that earns an interest and so comparatively, when the interest rate offered by one bank in relation to other banks is low, it will cause dissatisfaction to that customer.

Quality of service is one of the major determinants of the customer satisfaction Parasuraman, Zeithaml and Barry (1985), (1998), (Cronin & Taylor, 1992). Many researchers and experts mentioned that, service quality can be enhanced by using advanced information and communication technology (ICT). “e-customer is an individual or corporate one who are using e-portals to purchase, ordering, receiving information and paying price / charges through various types of e-channels” i.e. internet banking, mobile banking, ATM, POS, credit cards, debit cards and other electronic devices. Customer is a stakeholder of an organization who provides payment in exchange for the offer provided to him by the organization with the aim of fulfilling a need and to maximize satisfaction. So therefore, to make certain customer satisfaction businesses must pay attention on service quality, and in an online banking context, e-service quality is the focus. Zeithaml, Parasuraman, and Malhotra (2000) developed e-SERVQUAL as an efficient version of the traditional SERVQUAL model to quantify electronic service quality in the setting of the Internet. This multi-item scale has eight dimensions; efficiency, reliability, fulfillment, privacy, responsiveness, compensation, and contact.

2.1.8.1. Factors Affect Customer Satisfaction

Matzler and Sauerwein (2002) classify factors that affect customer satisfaction in to three factor structures:-

1. Basic factors: - these are the minimum requirements that are required in a product to prevent the customer from being dissatisfied.
2. Performance factors: - these are the factors that lead to satisfaction if fulfilled and can lead to dissatisfaction if not fulfilled. These include reliability and friendliness.
3. Excitement factors: - these are factors that increase customers’ satisfaction if fulfilled but does not cause dissatisfaction if not fulfilled which include project management.

2.1.8.2 Relationship between Service quality and customer satisfaction

Parasuraman stated that there is a distinction between service quality and customer satisfaction: perceived service quality is a global judgment or attitude relating to the superiority of the service, whereas customer satisfaction is related to a specific transaction (Parasuraman et al. 1988). However, many researchers have investigated the relationship between service quality and customer satisfaction. Cronin, Taylor (1992) tested this relationship and concludes that perceived service quality leads to customer satisfaction.

The other studies also conclude that service is the antecedent of satisfaction. Sureshchandar et al. (2002) used a factor specific approach to test the relationship between service quality and customer satisfaction of different banks in India. These critical factors used are

1. Core service or service product,
2. Human element of service delivery,
3. Systematization of service delivery: non-human element;
4. Tangibles of service capes,
5. Social responsibility

Questionnaires comprising 41 items in total were distributed to 452 customers from 51 different banks, and then 277 completed questionnaires from 43 banks were obtained. Analysis results revealed that correlation statistics between service quality and customer satisfaction are reasonably high which demonstrated high relationships between service quality and customer satisfaction.

Anber et al. (2011) conducted a research about service quality perspectives and customer satisfaction in commercial banks working in Jordan. The research examined the level of service quality as perceived by 260 customers and its effect on customer satisfaction with the questionnaire survey including 20 items to measure 5 dimensions of service quality (Reliability, Responsiveness, Empathy, Assurance, and Tangibles) and 5 items to measure customer satisfaction. The results indicated that these 5 dimensions of service quality have significant influence on customer satisfaction when 26.1% of customer satisfaction can be explained by them.

Jha et al. (2014) attempted to find out the satisfaction level of customers in ATM services in Bihar, India. For this purpose, primary data was collected from 100 respondents of different bank ATM users of Bihar. This paper suggested Tangible component and customer satisfaction have a

positive relationship reliability component and customer satisfaction have a positive relationship. Responsiveness component and customer satisfaction have a positive relationship assurance component and customer satisfaction have a positive relationship. Empathy component and customer satisfaction have a positive relationship.

2.1.8.3 ATM service Quality and customer satisfaction

Automated Teller Machine (ATM) is one type of innovation that can mechanically accept deposits, issue withdrawals, transfer funds between accounts, and collect bills. ATM service Quality is defined as the customer's overall evaluation of the excellence of the provision of services through electronic networks such as Automated Teller Machine (ATM). Chi Anh, (2015) Literature review indicates different dimensions of ATM service quality and analysis their impact on customer satisfaction.

Lovelock (2000) identified secure and convenient location, adequate number of ATM, user-friendly system, and functionality of ATM as essential dimensions of ATM service quality.

Joseph and Stone (2003) examined the United States customers' perception of ATM quality and found that user-friendly, convenient locations, secure positions, and the numbers of ATM provided by the banks are essential dimensions of ATM service quality.

Kani kavera(2014) The major objective of the study to identify the various aspects affecting customer satisfaction in ATM services and compare the satisfaction level of ATM service in Public and private commercial bank in India. On the basis of weighted mean and ranking of promptness in delivering card, location of ATMs, clear direction for operating the ATM services, processing time, availability of cash, quality of notes, grievances settlement within stipulated time, safety & security, behavior of ATM guard, working condition, availability of complaint book at ATM centers, facility of power backup / generator / inverter and overall satisfaction, the performance of public sector bank is much better than the private sector bank, which indicates that the customers of public sector bank are satisfied as compared with the satisfaction level of customers of private sector bank for the above said factors. While for the remaining factors like availability of ATM center at useful places, working keypad, ATM slip shows updated balance, sufficient numbers of ATMs, the performance of private sector bank is much better than the

public sector bank. The findings reveals that ATM services of public sector bank are providing more satisfactory services as compared to public sector bank in the study.

Chi Anh Phan, Phong Tuan Nham (2015) apply the hypothesize that indicate the relationship among service quality dimensions which is Tangible, Reliability, Responsiveness, Assurance and Empathy on perception customer satisfaction; the result finds out service quality dimension have a positive impact on customer satisfaction.

Mohammed Shakhawat Hossain, Aminul Haque Russel & Lakkhan Chandra Robidas(2015) used the customer satisfaction as the dependent variable and others dimensions of ATM service quality are namely – [Cost of services of ATM, ATM network, Maximum withdrawal limit per day, Location of ATM Centers, Security in transactions of ATM, Sufficient number of ATMs, Screen language of your ATM, Processing of transaction, Keypad of ATM machine, Number of withdrawal limit per day, Quality of Notes (Currency), The behavior of ATM personnel or guard, Instruction clarity to operate ATM, Availability of Power Back up / Generator / Inverter] as the independent variables and the result shows ATM services quality and these are significantly affecting the overall customers satisfaction of ATM service provided by banks.

2.2. Factors Contributing to Poor ATM Services

Dysfunction of ATM due to network

A failure of network isn't good for business, for IT and for employees. Every network administrator knows that much. down time impact on productivity, disrupts business services and causes financial crises .There are different reason for failure of networks in ATM from those the majors are faults ,errors or discards in network devices ,mismanagement of devices ,server hardware failure ,power outage etc....(vinod, 2013).

Electric power interruptions

A power outage (also called a power cut ,a power blackout ,power failure) is a short term or long term losses of electric power to a particular area. There are difference causes of power outage some are:-

Weather: is probably the most well known reason for power outage .if the weather condition is not suitable for a given country occurrence of power interruption is high.

Power supply: - limited power supply is responsible for a service disruption in nationwide.

Planned outage:-in order to provide routine maintenance to electricity infrastructure power will be out in advance. Those causes that listed out above have a negative impact on ATM service, this may lead dissatisfaction on service of ATM. (Sanpatrici cio,2013).

Delivering pin and ATM card without user awareness

Missing of awareness to customers create a fraud of ATM in different categories. In general ATM fraud can include any deliberate criminal technique which involve the use of ATM to obtain something of value to the performer. The most common types of ATM fraud include card theft, accessing pin of others and cash trapping.(kennickelletal.,1997).

Lack of adequate cash in ATM

Rohan ven katarmakishnan published, on Feb 22, 2017 why ATM does not have cash? the reason is because of “overdraw “mean peoples withdrawing more money than they have and also there is lack of follow up regarding balance of ATMs from system to load a cash.

In addition to the above factors the following also have significant role for poor ATM services; Unable to get ATM in the nearby location(shortage of number of ATMs),Capture of Card by ATM and failure to deliver the captured card to the customer timely, The Banks incompetence to keep promises(reliability problem),Lack of dispute handling problem such as customers may not get cash timely after the ATM deducts money from the customers“ account, The core banking system and the ATM system are not parallel (offline/disconnection between the core banking and ATM systems),There is no online support available to customers through technological channels and Notification is not given to the customer when ATMs are down due to bank“s system failure also contribute for weak services of ATM.

2.3 Conceptual Framework

The conceptual framework (Figure 2.1) explains the underlying process, which is applied to guide this study. As discussed above, in the objective of the study the aim is to measure the ATM service quality in perception of Dashen Bank Card holder. Based on most empirical study made discussed above the study will apply SERVPERF model is suitable for measuring ATM

service quality which independent variable and customer satisfaction in bank which is dependent variable measure the service quality in the perception of on customer. In this regard the study will use the elements of service quality dimension to measure which are suitable for ATM (Convenience, Efficiency, Responsiveness, Security & Privacy, assurance and Reliability). The conceptual framework diagram is depicting below.

ATM service quality Dimensions

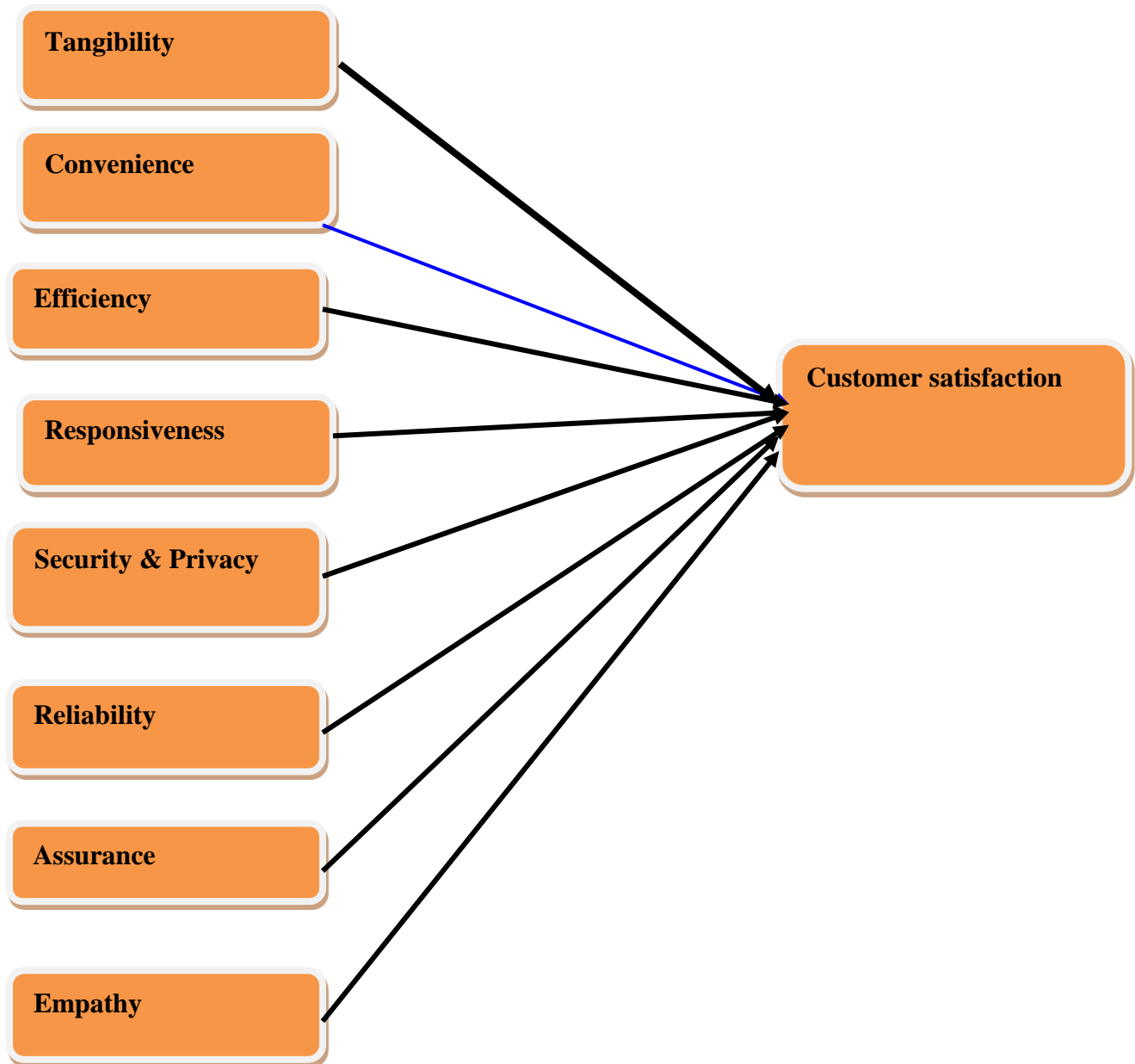


Figure 2.1 Conceptual frameworks Diagram (Hongxiu.L. and Reima.S.(2009) “E-S-QUAL”)

Tangibility

Parasuraman et al. (1985) defined tangibility as the appearance of physical facilities, equipment, personnel, and materials that can be perceived by the five human senses. It refers the Outlook of physical equipment and communication resources.

Convenience

As the ATM offers an alternative way of conducting banking transaction outside the banking halls, location convenience of the ATM site is also an important quality determinant. Location convenience refers to the site at which the ATM is located. Most ATMs are located in bank branches, or off sites such as in shopping malls and college campuses. Sometimes, the bank's ATM card is compatible with other banks ATM platforms and this makes it possible for customer to withdraw money from other ATMs at a small fee. Convenience also involves "an all-day all-night" availability of the service to the customers. If the ATMs are conveniently located, the inconvenience in moving long distances in order to carryout transactions will be minimized (Narteh and Owusu-Frimpong 2011). The convenience dimension refers to ease of use and accessibility of the service at all times. The customers prefer flexibility to meet their financial needs at all times, which affect their perception of the ATM service quality (Gerrard & Cunningham, 2003).

Efficiency

As ATMs are dominated by machine-customer interaction, one expects errors that occur during employee-customer interactions at the banking halls to be minimized. Efficient operation, relates to efficient and speedy operation of ATM. Efficiency in operations optimizes the resources for the customers (Akinmayowa, 2014).

Responsiveness

It is sometimes impossible to expect flawless ATM service delivery at all times to customers due to the fact that 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, and to response quickly to requests and suggestions and provide assistance to customers in case of problems. Effective service recovery has been shown to have a positive impact on customer satisfaction (Magnini et al., 2007).With ATMs, response or recovery quality deals with the banks' ability to handle customer complaints arising as a result of transactional

failures as well as compensating customers against losses incurred such as monies illegally withdrawn out of their accounts.

Security & Privacy

Security and privacy refers to perceived low-risk with use of ATM. The frequent vulnerabilities of ATM users have enhanced the risk associated with the use of this delivery channel (Akinmayowa, 2014).

Reliability

Within the traditional service quality research, reliability which has been defined as the “ability to perform the required service accurately and dependably” (Parasuraman et al., 1988.p.23), has emerged as one of the major determinants of electronic service quality. In the ATM environment, technical reliability may be equated to design reliability while functional reliability may also denote performance reliability.

Assurance

Parasuraman et al. (1985) defined assurance as knowledge and courtesy of employees and their ability to inspire trust and confidence. According to Sadek et al. (2010), in British banks assurance means the polite and friendly staffs, provision of financial advice, interior comfort, eases of access to account information and knowledgeable and experienced management team.

Empathy

Parasuraman et al. (1985) defined empathy as the caring and individual attention the firm provides its customers. It involves giving customers individual attention and employees who understand the needs of their customers and convenience business hours. It related to whether the organization cares for the user and assists him in an individualized manner, referring to the ability to demonstrate interest and personal attention. Empathy includes accessibility, sensitivity and effort in understanding the needs of users.

2.4 Empirical Review

Few studies have been conducted on the impact of 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. According to Lemma Belay (2016) while studied the effect of ATM service quality on customer satisfaction in Ethiopian commercial Banks in Debreworkos town using proportional stratified and simple random sampling technique and cross-sectional data collected from 190 customers of Ethiopian commercial banks, in Debreworkos town. The study used Statistical tools such as mean, standard deviation, correlation, and multiple regression models. The study indicated that except assurance, tangibility, reliability, responsiveness and empathy have positive and significant effect on customer satisfaction and the customers were mostly satisfied with the responsiveness dimensions of ATM service quality. Tirhas et al, (2017) —Assessment of Customer Satisfaction on Automated Teller Machine in Adigrat, Ethiopia“ in Adigrat town using systematic sampling. Since the customers approach the ATM machine in different time, the researcher was identified the skipping interval and consider those customers approach the machine in that interval. The study used descriptive research method. This study found that Promptness of card delivery, number transaction, quality of note and conveniently located were extremely satisfied the customer. The study also indicates lack of privacy in executing the transaction, reduction in balance without cash payment; Cards get blocked of ATMs and fear of safety was the major cause of concern for the customers.

Gezahegn Bacha (2015), made an attempt to —assessment of customer satisfaction with ATM banking; empirical evidence from selected commercial banks in Ethiopia. The study used descriptive statistics, correlation analysis and multiple regressions. The finding revealed that, out of 379 ATM card users where over half are fairly satisfied with ATM services from their respective bank. All ATM service quality attributes associated with technology have been perceived good performers, while all attributes associated with employee performance and management functionality have been perceived not so good in performance. The results have further found that all service quality significantly correlate with customer satisfaction except three items under responsiveness. Charles Mwatsika (2016) —Customer satisfaction with ATM Banking in Malawi. The study conducted on data collected from 353 ATM card users. The study adopted the importance performance approach (Fishbein and Ajzen, 1975) to measure customer

satisfaction. Measurement of satisfaction was based on performance only (SERVPERF). Descriptive and correlation analysis used to answer research questions. The result shows that all service quality dimensions significantly correlate with customer satisfaction and responsiveness was the list performing service quality dimension. The result further showed that, reliability is the most important dimension followed by responsiveness, empathy, assurance and tangibles are the least important dimension. With direct interview accompanied with surveys to collect data from a sample of 186 customers were chosen in a random and convenient manner who are using the Bank ATM, Software Package for Social Science (SPSS version 16.0), Phong Nham, Chi Phan (2015) examined the Impact of service quality on customer satisfaction of automated teller machine service: case study of a private commercial joint stock bank in Vietnam. The study applies SERVPERF framework to analyze the data collected from a questionnaire survey and found that Assurance and Tangibles factors significantly impact on the customer satisfaction.

CHAPTER THREE

RESEARCH METHODOLOGY

This section describes the methodology the researcher adopts in carrying out the study. It explains how information was gathered and analyzed. Furthermore, this chapter provides more information on the sampling methods used in this study, characteristics of the sample, the overall research design and procedures used for the gathering of the data. What's more, the procedure followed and the measuring instruments used to gather the data are discussed as well as the statistical techniques used to analyze data.

3.1 Research Design

A research design can be understood as the plan of what data to gather, from whom, how and when to collect the data, and how to analyze the data obtained. According to Kothari (2014) research design is a plan or strategy used gets the expected study result. It is a systematic plan or structured framework of how one intends to conduct the research process in order to solve the research problem. Research design usually constitutes the formation of a strategy to resolve a particular question, the collection and the recording of evidence, the processing and analysis of the data and their interpretation, and the publication of results. The research design employed in this research paper was descriptive type of research design,

3.2 Sources of Data

In this study data was acquired from both secondary and primary sources. The data acquired from secondary sources was obtained from various publications such as text book, journals and previous studies on ATM service quality on customer's satisfaction. The primary data was collected using structured questionnaires that distributed to Dashen bank staff, customer and the like. The secondary sources were used as instrumental to develop a quantitative measurement for customer's satisfaction and as a result quantitative research design for closed ended questions (multiple questions) and qualitative research approach to understand customer's behavior and requirement in open ended questions were used in this study.

Unstructured interview were also presented to E-banking department staff who has great exposure in the area of concern. The interview was conducted to answer basic interview questions developed with further questions for clarification based on the responds. secondary data from published and unpublished documents of Dashen bank card payment department as

well as reconciliation department were collected from constant ATM related reports which shows successful, completed, rejected, suspected and pending transactions, dispute handling requests that are reported from different branches. Secondary data in print form from Base 24 records and core banking system were referred to check the existence of service quality problem in Dashen Dank.

3.3 Study Population

A targeted population refers to the group of people one want to generalize to and the group from which a sample is taken for the study. In this study, the population from which a sample was drawn consisted of Dashen bank ATM service users in Addis Ababa irrespective of their gender, age, job grade or qualification. As per the report of Dashen bank (2022); and according to the information obtained from the Dashen's Electronic Banking Department, there were around 1,600,000 plus ATMs card holders in Dashen bank out these 700,000 card holders are found in Addis Ababa. Subsequently, the following formula was used to calculate the simple size:

Thus:

$$n = \frac{N}{1 + e^2 N} \quad \begin{array}{l} N = \text{saving customer, current account customer and loan customer} \\ N = 700.000 \end{array}$$

Where:

e = margin error

n= no. of sample size

N = total number of population under study

$$700,000 / (1 + (0.05)^2 * 700,000) = 399.77$$

Assume, a margin error (e) of 5%, a sample size of 400 was generated for the study population. However, considering customer's unwillingness to respond, the constraints of time and financial resources and invalid response, the sample size was reduced to 300.

Then, a formal request was submitted to Dashen bank E- banking department director to obtain permission to distribute the questionnaire for the Dashen bank ATM user customers. Upon receiving a formal permission, the questionnaires were distributed to DB ATM users who came to use DB ATM service at the time of data collection between March 01, 2022 and May 29, 2022. The questionnaires were completed by customers at twenty (20) different ATM stations in

Addis Ababa, namely Ayer Tena branch ATM station, Lideta branch ATM station, Golla ATM Station , Sar Bet branch, Lebu branch, Tana brach, Lancha branch ATM station, Dil Gebeya ATM, Amoudi ATM, Amist killo branh ATM station , Bethel ATM station, Welete ATM station ,Piassa ATM station, Wuha Limat ATM station, Sebategna ATM Station, Kolfe ATM Station Jemo ATM, Kera ATM station, kality and Alemgena ATM station. These branches were selected by the researcher purposively considering the high volume of ATM transactions. Including staff and card holder, thirty questionnaires were allocated to each ATM stations and the questionnaires were completed by customers who volunteered to complete the questionnaire on the spot.

3.4. Sampling Method

Sampling can be understood as the process by which some members of a population are selected for observation or to collect data. Convenience sampling was used to get information from Dashen bank. Convenience sampling is a type of non-probability sampling in which people are sampled simply since they are “convenient” source of data for the researcher.

And hence; from category of non-probability sampling, convenient sampling was employed for the purpose of this study. Convenient sampling refers to the collection of data from the general population who are easily accessible and conveniently available to provide the required information. In the context of the study population, convenient sampling is found to be advantageous practically as well as economically to access the sample population for the questionnaire.

3.5 Designing the Questionnaire

3.5.1 Questionnaire

Questionnaires were the primary data collection tools used in this study. A questionnaire is a set carefully formulated written questions to which respondents record the answers, usually within closely defined alternatives. Questionnaires are an efficient data collection method when the researcher knows exactly what is required and how to measure the variables of interest. For the purpose of this study, a questionnaire comprising of three major categories of questions were used to collect data from Dashen bank ATM service customers.

The first category comprises a set of questions regarding the demographic characteristics of respondents including their gender, age, marital status, occupational status, educational

qualification, frequency of ATM use, type of ATM service used and number of years as DB ATM service customer.

The second category, Non demographic characteristics and the third category, which is the main part of the questionnaire, consisted of a total of different items directly related to different aspects of ATM service. The different items were further categorized into eight major dimension of ATM service, namely tangibles, responsiveness, reliability, assurance, convenience, efficiency, security & privacy and empathy. Each category constituted five items on the basis of which the level of ATM service customers' satisfaction on each dimension is examined. The items in each dimension were presented customers to indicate the level of their agreement or disagreement using a five point Likert scale, where 1 strongly disagree, 2. Disagree, 3. Neutral, 4. Agree, and 5. Strongly agree was used. In short, the eight dimensions of ATM service quality are treated as independent variables which are believe to determine the dependent variable, which is the level of customers' satisfaction.

The third part of the questionnaire consisted of two open ended questions. These questions were offer opportunities for respondents to express their ideas freely that may not have been raised satisfactorily by the closed-ended items. The first open-ended question asks customers to state the major problems they usually encounter when using Dashen bank ATM services. The second asks customers to forward their suggestion that can improve the quality of dashen ATM service in the future.

3, 5.2 Interview

An Interview was made with the bank's higher position as well as officer in E- banking department for understanding purpose and to gather detail information about the topic under study. Interview questions were prepared in a flexible manner to make in-depth conversations and to see the general trends. These questions were added to offer opportunities for respondents to voice their concerns which may not have been raised satisfactorily by the questionnaire. The first interview question asks customers to state the major problems they usually encounter when using DB ATM services. The second asks managers to forward their suggestion that can improve the quality of Dashen bank ATM service in the future. And thus there were an interview question rises to senior managers and officer of E-banking department to obtain the desired outcome about ATM service issues.

3.6 Method of Data Analysis

The statistical package for the Social Science (SPSS) Version 21 was used to analyze, compute and present the findings of the research by considering the main research questions this study intended to answer at the outset. Descriptive statistics was used to present a descriptive summary of the quantitative data and a method for presenting quantitative descriptions in a manageable form, describing a single variable or the associations that connect one variable with another. Commonly, measures of central tendencies such as mean, mode and median are used to calculate frequency of distribution for different categories and the result is presented using tables, bar graphs, pie charts and histograms. This study uses tables to present a statistical description the quantitative data from the questionnaires. And then correlational research was used by using correlation analysis to analyze whether there is relation between each item of the eight ATM service quality dimension or not. Moreover, it is done to see the relation between the eight service quality dimension and customer satisfaction on ATM service delivery. Thirdly, ANOVA were used to determine whether there are any statistically significant differences between the means of independent variables.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter demonstrates the research investigation by interpreting the results obtained in the study and providing a detailed discussion of these results. The discussion summaries of descriptive statistics calculated for the study are presented in an outline of the characteristics of the sample with regards to the variables included in the study. This chapter, therefore, presents an analysis of the responses to the questionnaire. In the first part of the chapter data related to the questionnaire, return rates and demographic questions are analyzed. The discussion on the correlation analysis among basic variables and the regression results of various ATM service qualities are presented with summary result analysis.

4.1 Presentation and Analysis of Primary Data

The primary data was collection from E-banking staff, customer of Dahren bank and walking customers. These groups were selected by serving and present the opinion of these groups which is believed to be the most appropriate, relevant and meaningful to the study. Accordingly aggregate samples of 300 respondents were assumed and actually 200 respondents taken out of the sample. At the beginning of the questionnaire, the respondents were obtained an awareness regarding the objective of the study. Most of questions allowed the respondents to choose only from the alternative and some questions can be answered by explaining and for difficulty exist interview was incorporated. As a result the analysis is made on the valid numbers of respondents and the pertinent information of the respondents which include gender, age bracket, marital status and level of education of customer sampled at ATM point of Dahren Bank. These are presented using frequency distribution table and graph.

4.2 Background information about Respondent

This section presents the finding from the background information of the respondents which include gender, age bracket, marital status and level of education of customer sampled at ATM point of Dahren Bank. These are presented using frequency distribution table and graph.

4.2.1 Respondent by Gender

This shows the gender of participants for the study in terms of female and male.

Table 4.1 Gender distribution of respondents

Gender of respondents				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	140	70.0	70.0	70.0
female	60	30.0	30.0	100.0
Total	200	100.0	100.0	

Source: **own survey of SPSS version 21 result, 2022**

Table 4.1 revealed that 70 percent were male while 30 percent were female. The ATM service use is dominated by male and deemed to be the majority in the working population in Addis Ababa. So that Dashen bank has to promote on women to attract them on using ATM service. This implies that the majority of these sampled respondents were males in filling up the questionnaire.

4.2.2 Age distribution of respondents

This was focused on establishing the age brackets of the customers' sampled for the study at ATM point of Dashen bank in Addis Ababa branch.

Table 4.2 Age distribution of respondents

Age of the respondent				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 22-32	108	54.0	54.0	54.0
33-43	75	37.5	37.5	91.5
44-54	14	7.0	7.0	98.5
Greater than 54	3	1.5	1.5	100.0
Total	200	100.0	100.0	

Source: **own survey of SPSS version 21 result, 2022**

As show in Table 4, 2 majority 54% of the respondents were in the age bracket between 22-32 years, 37.5% of the respondents were between 33-43years of age, 7% of the respondents were in the age between 44-54 years and 1.5% of the respondent above the age of 54 years. Since 54% represent youngster population dominate in use of ATM than others. And thus; awareness creation needs in other age category specially those age category greater than 54 years; the bank has to make earnest promotion on these age groups since the least in use of ATM. This result implies that more respondents of this study were youngsters.

4.2.3 Respondents level of education

This was focused on establishing the level of education of the customers sampled for the study at ATM point of Dashen Bank at Addis Ababa branch.

Table 4.3 Educational level of the respondents

Educational level of the respondents				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Diploma	27	13.5	13.5	13.5
Degree	85	42.5	42.5	56.0
Masters	62	31.0	31.0	87.0
PhD	21	10.5	10.5	97.5
Others	5	2.5	2.5	100.0
Total	200	100.0	100.0	

Source: [own survey of SPSS version 21 result, 2022](#)

Table 4.3 presents a summary of the educational qualification of respondents. As can be seen from table more of the respondents, that is 42.5% had a qualification level of first degree, 31% of the respondents had educational level of Master's degree, 13.5 % of respondents had a qualification level of Diploma, 10.5% of respondents had a PhD and 2.5% of the respondent being others. Among the respondents, the highest percentage belongs to degree holders. From the table one can understand that level of education matters in easy to understand and use of the ATM machine. Since most of the customers had diploma and above which implies that respondents had justifiable knowledge to contribute to the study, can read and complete out the entire questions posed to them.

4.2.4 Respondents by marital status

This was focused on establishing the marital status of the customers sample for the study at ATM point of Dashen Bank in Addis Ababa branch.

Table 4.4 Marital status of the respondents

Marital status of the respondents				
	Frequency	Percent	Valid Percent	Cumulative Percent
single	79	39.5	39.5	39.5
married	114	57.0	57.0	96.5
Valid divorced	5	2.5	2.5	99.0
others	2	1.0	1.0	100.0
Total	200	100.0	100.0	

Source: [own survey of SPSS version 21 result, 2022](#)

As can be seen in Table 4.4 the frequency distribution of the respondents' marital status represent 57% married, 39.5% of the respondent represent single, 5% of the respondents represent divorced and only 1% represents others. This indicates that the majority of the respondents were married and more exercise the use of ATM machine than

Table 4.5 Experience of respondents in the organization

Experience of respondents in the organization				
	Frequency	Percent	Valid Percent	Cumulative Percent
less than 1 year	3	1.5	1.5	1.5
1 year to 6 years	52	26.0	26.0	27.5
Valid 7 years to 12 years	59	29.5	29.5	57.0
above 12 years	38	19.0	19.0	76.0
Others	48	24.0	24.0	100.0
Total	200	100.0	100.0	

Source: [own survey From SPSS version 21 result, 2022](#)

Table 4.5 clearly shows that 29.5% of the respondents have an experience age of 7-12 years, 26% of the respondents have an experience of 1-6 years, 24% of the respondents have no experience in the organization, 19% of the respondents have an experience of greater than 12 years and 1.5% of the respondents have an experience of less than one year. Proportionately those respondents with an experience in an organization use ATM machine 76% and those respondents can use an ATM without having experience.

Table 4.6 **Professional skill of respondents**

professional skill of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Student	9	4.5	4.5	4.5
Business	14	7.0	7.0	11.5
house wife	4	2.0	2.0	13.5
Valid self-employee	42	21.0	21.0	34.5
private employee	112	56.0	56.0	90.5
government employee	19	9.5	9.5	100.0
Total	200	100.0	100.0	

Source: [own survey from SPSS version 21 result, 2022](#)

Table 4.6 presents the frequency distribution of the occupation status of the respondents. Of the 200 respondents, the majority that is 56% of the respondents were private employees, 21% of the respondents were self-employees 9.5% of the respondents were government employees, 7% of the respondents were business men, 4.5% of the respondent were students and small proportion of the respondents were house wife.

Table 4.7 **Monthly incomes of the respondents**

Monthly income of the respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
less than 5,000	17	8.5	8.5	8.5
5,001-10,000	20	10.0	10.0	18.5
Valid 10,001-20,000	83	41.5	41.5	60.0
greater than 20,000	80	40.0	40.0	100.0
Total	200	100.0	100.0	

Source: [own survey from SPSS version 21 result, 2022](#)

From the frequency distribution in table 4.7, in terms of the salary distribution of the sample, the majority of the respondents, that is 41.5% earned between 10,000 – 20,000 birr per month, 40% earned between above 20,000 birr per month, and 10% earned between 5,000 – 10,000 birr per month and 8.5% of the respondents earned less than 5,000.

4.2.5 Duration of customers with Dashen Bank

This was when a customer visiting an ATM terminal point to get service at ATM point of Dashen bank.

Table 4.8 Customers ATM Use Status

Length of time to use ATM of Dashen bank				
	Frequency	Percent	Valid Percent	Cumulative Percent
less than a year	11	5.5	5.5	5.5
between 1 year & 4 years	41	20.5	20.5	26.0
between 5 years & 8 years	67	33.5	33.5	59.5
Valid above 8 years	48	24.0	24.0	83.5
Others	33	16.5	16.5	100.0
Total	200	100.0	100.0	

Source: [own survey of SPSS version 21 result, 2022](#)

As can be seen from the frequency distribution in table 4.8, regarding the length of time the respondents as Dashen bank customer and use ATM, the majority, that is 33.5% of the respondents were used an ATM for 5-8 years, 24% of the respondent used the ATM for above 8 years, 20.5% used the ATM for 1- 4 years, 16,5% the respondent categorized under others and 5.5% of the respondent used the ATM for less than one year. The majority of participants have been customers and ATM point users of Dashen for a period between five to eight years. This implies that participants have an experience to participant in the study, which guaranteed reliability of the data.

Table 4.9 the level of Customer satisfaction

the level of customer satisfaction with ATM				
	Frequency	Percent	Valid Percent	Cumulative Percent
extremely low	3	1.5	1.5	1.5
very low	8	4.0	4.0	5.5
Valid Low	37	18.5	18.5	24.0
High	132	66.0	66.0	90.0
very high	20	10.0	10.0	100.0
Total	200	100.0	100.0	

Source: [Own survey from SPSS version 21 result, 2022](#)

From the table 4.9 one can understand that 66% of the respondents were highly satisfied with the ATM service provision, 18.5% of the respondents satisfaction were represent very low, 10% of the respondent's satisfaction were very high, 4% of the respondent's satisfaction were very low and 1.5% of the respondent's satisfaction were extremely low in ATM service delivery.

4.3 Reliability Analysis

This quality criterion of the research refers to the consistency of a measure of a concept. This quality criteria deals with the question whether the results of a study are repeatable (Bryman and Bell, 2007). Cronbach's alpha is used in this study to assess the internal consistency (reliability of the instrument (questionnaire). Cronbach's alpha is a coefficient of reliability used to measure internal consistency of a test. Cronbach's alpha score ranges from 0 to 1. According to George & Mallery (2003) a Cronbach's alpha critical values if it is :

Greater than 0.90 = Excellent

Between 0.80 - 0.90 = Very good

Between 0.70- 0.80 = Good

Between 0.60 – 0.70 = Acceptable (for exploratory studies only)

Between 0.50- 0.60 = Poor

Lower than 0.50 = Unacceptable

Reliability Statistics

Cronbach's Alpha	N of Items
.944	29

Table 4.10 Overall reliability statistics from SPSS

Factors	Numbers of Items	Cronbach's Alpha value
Tangibility	6	.771
Convenience	2	.765
Efficiency	2	.757
Responsiveness	4	.772
Security	2	.770
Reliability	4	.781
Empathy	3	.757
Assurance	2	.768
Satisfaction level	4	.755

Source: **Own survey 2022**

As seen from table 4.10 the aggregate reliability of all variables are .944 which is very good Cronbach Alpha value. Each dimension possesses a value greater than .70 and less than .80 which is a good Cronbach Alpha score. Hence, it is logical to conclude that reliability of the scores of each dimension is acceptable and the internal consistency of each dimensions are also acceptable for the reliability coefficient of each.

4.4 Descriptive Statistics

This is presented in terms of study objectives include forms of customer satisfaction, challenges in the use of ATM and possible mechanism to strengthen customer satisfaction at ATM point of Dashen ATM branch. The survey was conducted on 200 respondents who are using ATM services of Dashen bank in Addis Ababa city. Respondents were asked about their perceived service quality on ATM service of the bank against the 20 ATM service quality attributes These ATM service quality attributes are classified into eight service quality dimensions that includes: tangibles, convenience, efficiency, responsiveness, security and privacy, reliability, assurance and empathy

Table 4.11 Descriptive Statistics

Descriptive Statistics			
	N	Mean	Std. Deviation
Tangibility	200	4.1308	.71415
Convenience	200	3.0475	1.37054
Efficiency	200	3.4000	1.15289
Responsiveness	200	3.1250	1.02144
Security	200	3.0550	1.26788
Reliability	200	3.3725	1.00000
Empathy	200	3.1933	1.05163
Assurance	200	2.5475	1.26471
Satisfaction level	200	3.5200	.77911

Source: [Own survey 2022](#)

Note: Mean value >3 high (agree) * mean=3 moderate/neutral * mean <3 low/disagree (Fred D.2017).

Table 4.11 demonstrates respondent's perception towards ATM service quality dimensions and overall customer satisfaction with the bank's ATM starting from lowest mean to highest. As clearly seen in the table, perception of respondents on each variables are vary in terms of mean score and more or less above three (3) except assurance which has smallest proportion (2.55) with mean score.

The mean perception of the customers on assurance score is 2.55. The mean score of assurance is less than three (3) which the respondents were marked as indifferent in the issues stated in the questionnaire about the help desk employees provide urgent response to any dispute arise regarding ATM problems and there is sufficient security at ATM stations

On the other hand, the mean perception of respondents' to ATM service quality dimension on the convenience and security are 3.05 and 3.06 respectively which is a little above the mean score (3.00) which means the customers were moderately agree that the ATM provides wide range of services, adequate number of ATM station in the city, the bank providing sufficient advice about ATM Usage plus Security and regarding about the pin were not hacked

The mean perception of respondent on responsiveness and empathy are 3.13 and 3.19 respectively which are more than the average score (3.00) and represent a good dimension. On

the two attributes respondents are fairly give response on card lost, about enough cash in ATM, card found in ATM, employee treatment and fees charged on ATM

ATM service quality perception of respondents on reliability scored 3.37 which were slightly above mean average score (3.00). Respondents are fairly satisfied with ATM functionality (order), accessible of ATM and the information they got after usage of ATM

Regarding efficiency of the machine (3.40), respondents give good feedback on the issues like speed of machine and fastness in execution of transaction.

The mean perception of the respondents on the tangibility is 4.13 which is the highest mean score relatively best dimension, this is above average mean score (3.00), which means that the respondents' somewhat agree that the bank is performing best in Tangibility dimensions area.

The mean score of overall customer satisfaction toward the bank ATM is 3.52, which is above average mean score. This shows that respondents' are marginally satisfied with the quality of services delivered by ATM of the bank.

Accordingly, among the variables, tangibility has the highest mean value and assurance has least mean value. Therefore, it may be concluded from descriptive statistics table that respondents are most satisfied with tangibility and highly dissatisfied with assurance.

4.5 Relationship between ATM Service Quality Dimension and Customer Satisfaction by Correlation Analysis

Correlation analysis estimates the extent of the relationship between any pair of variables. The correlation coefficient is a measure of the relationship and depends on the variability of each of the two variables. Because of covariance, correlation coefficient can take a number with + or – sign (Reimann et.al, 2008). One of the widely-used methods to calculate a correlation coefficient is the Pearson product moment correlation. This method result in a number between –1 and +1 that expresses how closely the two variables are related, ± 1 shows a perfect 1:1 relationship (positive or negative) and 0 indicates that no systematic relationship exists between the two variables . So correlation does tell how two variables could increase or decrease simultaneously, however does not tell the effect of one variable on other variables.

Table 4.12 Correlations between variables

Correlations									
	Tangibility	Convenience	Efficiency	Responsiveness	Security	Reliability	Empathy	Assurance	Satisfaction level
Tangibility	1								
Convenience	.594**	1							
Efficiency	.617**	.635**	1						
Responsiveness	.640**	.644**	.751**	1					
Security	.390**	.547**	.378**	.331**	1				
Reliability	.645**	.485**	.538**	.654**	.172*	1			
Empathy	.621**	.666**	.757**	.790**	.353**	.618**	1		
Assurance	.700**	.708**	.611**	.627**	.664**	.497**	.620**	1	
Satisfaction level	.592**	.401**	.463**	.547**	.079	.742**	.550**	.424**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Source: **Own Survey 2022**

Table 4,12 demonstrates that all ATM service quality dimensions have positive and significant correlation with customer satisfaction though the magnitude of the relationship differs among ATM service quality dimensions. In this regard each has varying degrees of correlation coefficient value depending on the type of service quality attributes and hence; reliability (.742) statistically strong, tangibility (.592) statistically significant, empathy (.550) statistically moderate, responsiveness (.547), efficiency (.463), assurance (.424), convenience (.401) and security (.079) respectively. The table used to know the linear association between the variables that exist as: significant, strong relationship with customer satisfaction.

The positive magnitude in all variables implies that as one variable increases, the other variable also increases and vice-versa. For instance the positive correlation between tangibility and reliability implies that as tangibility increases, reliability also increases and vice-versa.

When comparisons were made on Pearson's product moment correlations coefficient (r) between tangibility and convenience $r = .594$, $p < 0.01$, which shows strong correlation, between tangibility and efficiency, $r = .617$, $p < 0.01$, between tangibility and responsibility $r = .640$, $p <$

0.01, tangibility and security $r = .390$, $p < 0.01$ relatively moderate scale correlation, tangibility and reliability $r = .645$, $p < 0.01$, tangibility and empathy $r = .621$, $p < 0.01$, tangibility and assurance $r = .700$ $p < 0.01$ which was relatively strong relationship. Similarly, the correlation between empathy and responsiveness $r = .790$, $p < 0.01$ which was the strongest relationship and so forth.

4.6 Regression Analysis

Regression analysis statistically used to estimate the relationship between dependent variables and one or more independent variables. Regression analysis tells the effect of one of dependent variables on the independent variable. Thus it shows the effect of ATM service quality (independent variables): tangibility, convenience, responsiveness, security, reliability, empathy, and assurance on customer satisfaction (dependent variable). The researcher used multiple regression analysis to analyze more than one independent variable simultaneously and to explain variations in the dependent variable. Multiple regression analysis also minimizes the sum of the squared errors.

$$Y = a + bX + \epsilon \text{simple linear model}$$

Where:

Y – Dependent variable

X – Independent (explanatory) variable

a – Intercept

b _ Slope

ϵ – Residual (error)

$$Y = a + bx_1 + cx_2 + dx_3 + \epsilon \text{multiple linear regression}$$

Y – Dependent variable

X_1, x_2, x_3 – Independent (explanatory) variables

a – Intercept (constant term)

b, c, d - regression coefficient

ϵ – Residual (error term)

R – Correlation analysis, if it is zero (0), do not go to the next step

b/c do not fulfill the criteria , since no linear/ship.

The excluded variable – highly insignificant

Multiple Regression

The multiple linear regression studies the relationship between a dependent variable and two or more independent variables.

Before we use multiple regression; the following assumption should be satisfied.

- All the variables are continuous.
- The relationships between the dependent variable and the independent variables are linear.
- There are no outliers in the data series
- There is independence of errors (there is no relationship between the independent variables and the residual variables)
- The dependent variable has the same variance for all the value of the independent variables (the assumption of homoscedasticity)
- The residual variable is approximately normally distributed
- The independent variables are not strongly correlated with one another (we don't have important multi-collinearity)

The model summary table shows that the value of R is positive which signifies higher value correlation

Table 4.13 Regression **Model Summary^b**

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.985 ^a	.971	.970	.13441	1.350

a. Predictors: (Constant), Assurance, Convenience, Security, Empathy, Tangibility, Responsiveness, Reliability, Efficiency

b. Dependent Variable: Customersatis

The table above shows that the Durbin Watson result is normal based on Durbin model, states that if a value near 2 indicates non autocorrelation (data analysis is not abnormal), a value towards zero (0) indicates positive autocorrelation and a value towards 4 indicates negative autocorrelation (Field 2005)

From the model summary in table 4.13, the Value of R is .985 represent the correlation coefficient which shows strong relationship between variables (> .900) and R^2 is a measure of how much variability in the outcome is explained by the independent variables. This shows that $R^2 = .971$ percent which means 97.1 % of variation in customer satisfaction is explained or caused by E-banking service quality dimensions variables: Tangibility, Convenience, reliability, responsiveness, assurance, empathy , efficiency, and Security and Privacy. In other words, 2.90 % of the variation in customer satisfaction was not explained by these eight independent variables. The model is statistically significant so that the regression equation has a very high explanatory power.

Table 4.14 ANOVA^a

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	115.379	8	14.422	798.262	.000 ^b
	Residual	3.451	191	.018		
	Total	118.830	199			

a. Dependent Variable: Customersatis

b. Predictors: Assurance, Convenience, Security, Empathy, Tangibility, Responsiveness, Reliability, Efficiency

Source: **Own Survey 2022**

Table 4.14 on above, gives the ANOVA test on the general significance of the model. As p (significant value) is less than 0.05, the model is best fit to use and it is significant in explaining variation in the dependent variable. Thus, Tangibility, Convenience, Efficiency, Assurance, Reliability, Responsiveness, Empathy and Security and Privacy significantly predict the customer satisfaction (dependent variable). ANOVA tells us whether our regression model describes a significant amount of the variance. The large value of F statistic ($F=789.262$; $p<0.05$) here is depicting that model is significantly describing the variance. The analysis of variance table shows that the ANOVA's important part is sig. value being zero confirms no violation the assumption of regression, it is significant. Since the value of P ($P = 0$) which had significant to determine normality of data level .

The ordinal data that obtained from questionnaires were be converted to continuous data. Data transformation was done by using composite mean on spss.

Table 4.15 Regression Coefficients^a

Regression Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	-.177	.048		-3.695	.000		
Tangibility	.260	.051	.218	4.156	.000	.055	8.135
Convenience	.241	.048	.239	5.063	.000	.068	4.631
Efficiency	.051	.057	.050	.890	.015	.049	2.444
Responsiveness	.012	.051	.012	.235	.014	.061	6.500
Security	.111	.044	.109	2.522	.012	.082	2.237
Reliability	.082	.053	.082	1.538	.001	.053	8.800
Empathy	.112	.045	.108	2.508	.013	.083	2.117
Assurance	.211	.050	.197	4.223	.038	.070	4.322

a. Dependent Variable: Customer satisfaction

Source: [Own Survey 2022](#)

From the above table one can easily observe that the B value in unstandardized coefficients column shows in the first instance the constant term (intercept) amounts - .177 and the others are the coefficient of independent variables. And thus;

$CusSat = \alpha + \beta_1 Tan + \beta_2 Conv + \beta_3 Eff + \beta_4 Resp + \beta_5 Sec + \beta_6 Reli + \beta_7 Emp + \beta_8 ass + \varepsilon$ where:

β (beta) is coefficient of estimate, ε is the error term, α constant.

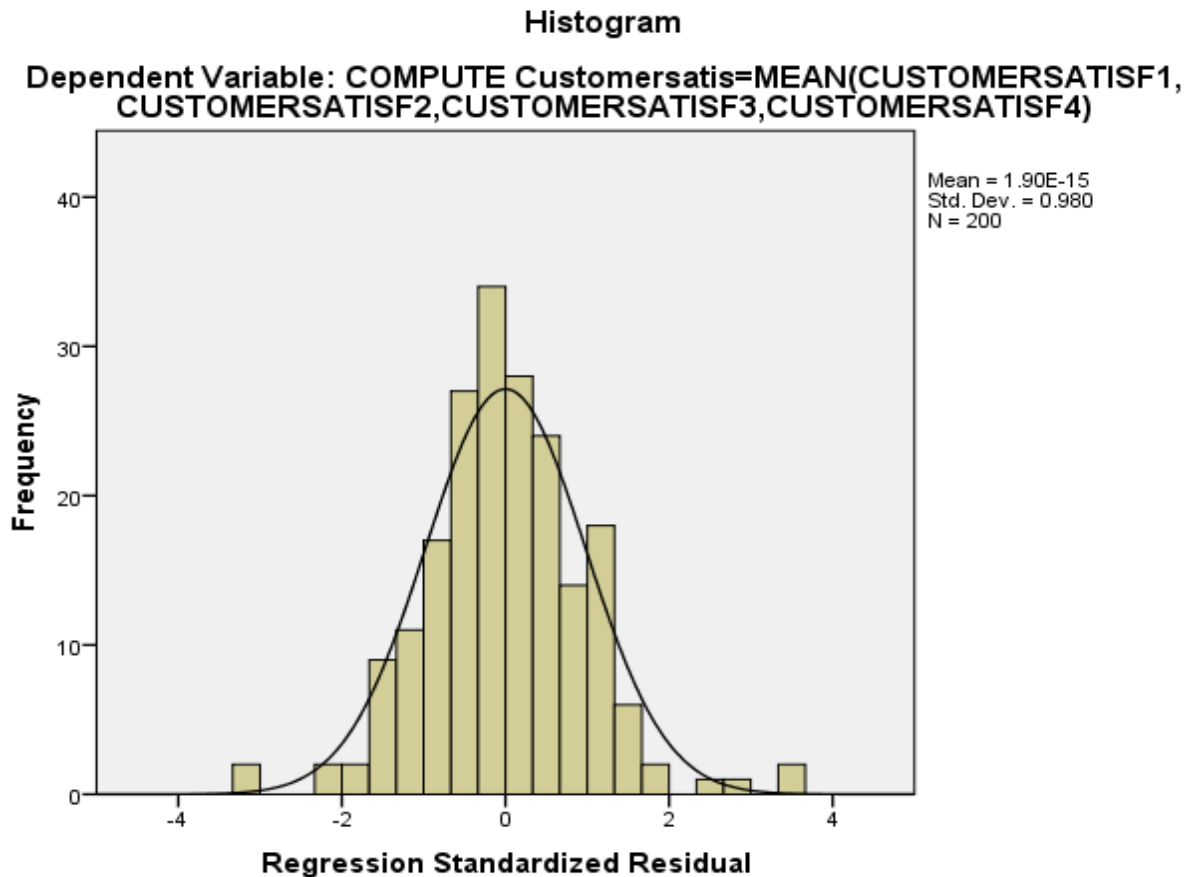
$CusSat = -.177 + .260Tan + .241Conv + .051Eff + .012Resp + .111Sec + .082Reli + .112Emp + .211Ass$. The sign between each independent variables show the relationship and influence of independent variables on the dependent variable. For instance, for every unit increase in convenience there is an increase in customer satisfaction keeping other independent variable constant as an interpretation. The positive sign signifies direct of relationship.

Normality Test

To check whether the residuals have a normal distribution, the normal probability plot or normal P-P of regression standard residual and histogram should be used. Scores on each variable should be normally distributed. This could be checked by inspecting the histograms of scores on each variable. Therefore, the scattered plots of residuals against each service quality dimensions and customer satisfaction dimension were analyzed and the test results of this study as illustrated on Figure 4.1 & 4.2 below show that the study's residuals were normally distributed.

Figure 4.1 Histogram of the dependent variable

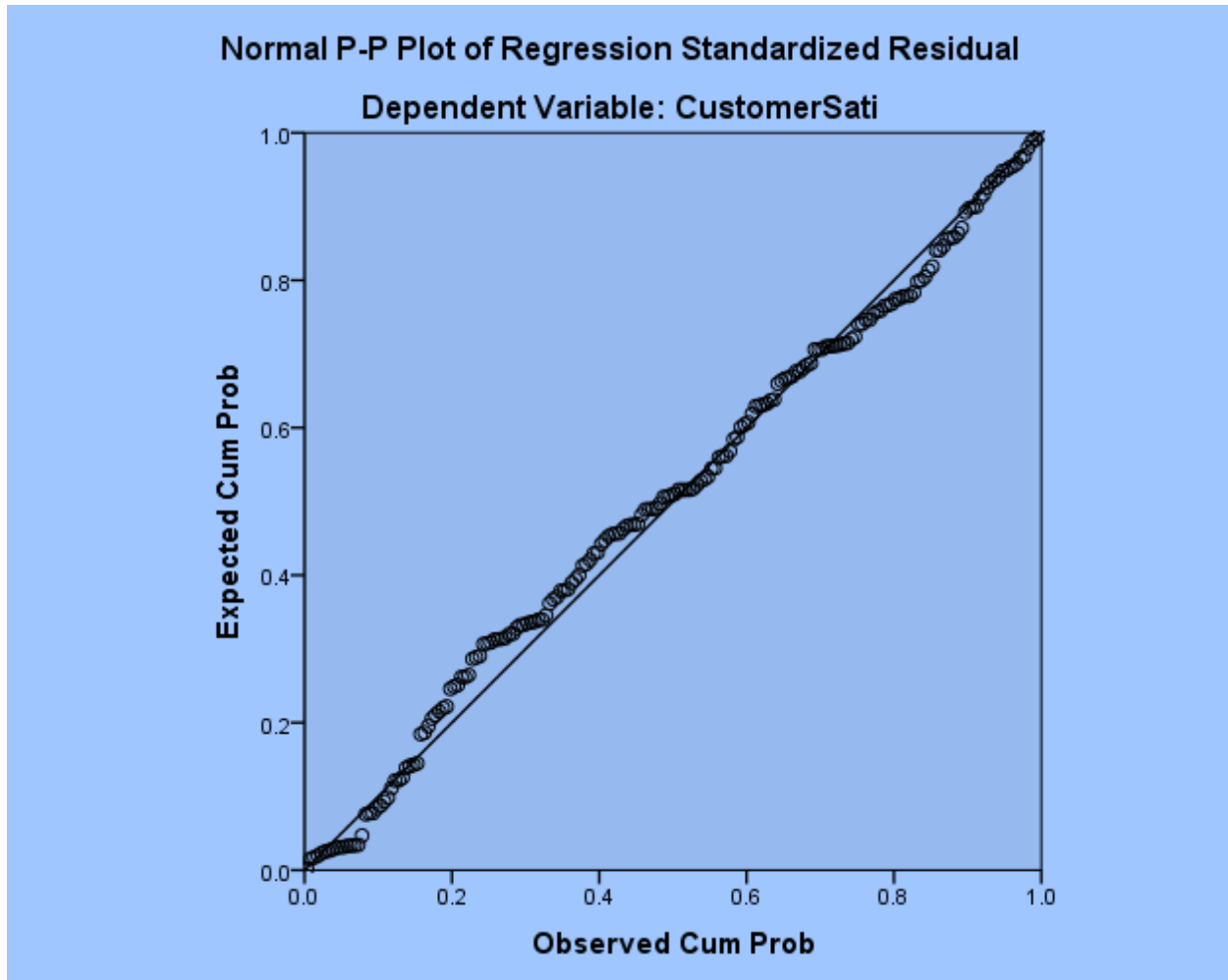
As seen in the normal distribution curve histogram, it depicted the normal distribution consists of asymmetrical bell shaped curve of the variables



Source: **Own survey 2022**

As seen in the normal distribution curve histogram, it depicted the normal distribution consists of asymmetrical bell shaped curve of the variables.

Figure 4.2 P-P Plot of regression standard of dependent variable



Source: [Own survey 2022](#)

The normality probability plot depicts graphical technique or assessing data set in approximately normally distributed. The data are plotted against a theoretical distribution in such a way that the point should form an approximate straight line. The relationship between the two variables should be linear. This means that when you look at a scatterplot of scores you should see a straight line (approximately), not a curve.

4.7 Findings obtained from Correlation & Regression

The findings of this study show that, customers of Dashen bank satisfied with the ATM service dimensions of tangibility, convenience, responsiveness, security, assurance, empathy, efficiency and security & privacy. However, in convenience (.401) and security (.079) of the ATM service dimensions were found to be low on customer's perception. The findings also show that all of the selected service quality dimensions have a significant and positive relationship with customer satisfaction.

The findings of this study show that customers of Dashen bank satisfied with the ATM service quality dimensions since the assumption multiple regression mention above were satisfied. However; the findings also show that all of the selected service quality dimensions have a significant and positive relationship with customer satisfaction.

Kumbhar (2011) conducted empirical study to identify key factors that have influence on customer's satisfaction in ATM service provided by public and private sector banks. He identified various dimensions of ATM service quality as; System Availability, Fulfillment and Efficiency, Security & Responsiveness, Easiness, Convenience, Cost Effectiveness and Problem handling and contact. Finally, the analysis showed that a cost effectiveness, easy to use and security and responsiveness in ATM service were most important factors affecting customer satisfaction and also have positive and significant relationship.

The findings of this study show that, customers of Dashen bank satisfied with the ATM service dimensions of Tangibility, convenience, security, assurance, empathy, accessibility and speed. However, in responsiveness and reliability of the ATM service dimensions were found to be low on customer's perception. The findings also show that all of the selected service quality dimensions have a significant and positive relationship with customer satisfaction.

Amha (2012) conducted service quality dimensions that influence for satisfaction in ATM in public bank, He identify various dimensions of service quality of ATM such as reliability, responsiveness, ease of use, convenience, fulfillment and security. According to the findings customers satisfy with the ATM service to be exceptionally easy to use, reliability, and fulfillment & highly secure from fraud. However, responsiveness and convenience of the ATM service were found to be low on customer's perception. The findings also show that all of the

selected service quality dimensions have a significant and positive relationship with customer satisfaction.

The above study is supported this study in security and responsiveness dimensions however, indifferent with reliability and convenience dimension because in the above study on reliability dimension of ATM service were found to be high on customer's perception and most customer dissatisfy in convenience dimension of ATM service additionally, both studies have positive and significant relationship in security, responsiveness, reliability and convenience dimensions.

The findings of this study show that, customers of Dashen bank are satisfied with the ATM service dimensions of Tangibility, convenience, security, assurance, empathy, accessibility and speed. However, in responsiveness and reliability of the ATM service dimensions were found to be low on customer's perception. The findings also show that all of the selected service quality dimensions have a significant and positive relationship with customer satisfaction.

Generally, according to the findings of this study, customers of Dashen bank are satisfied with the ATM service dimensions of tangibility, convenience, security, assurance, empathy and accessibility. However, in responsiveness and reliability of the ATM service dimensions were found to be low on customer's perception. The findings also show that all of the selected service quality dimensions have a significant and positive relationship with customer satisfaction.

4.8 Interview Results

In addition to questionnaire made, Interview was used as mechanism of collecting information. For the purpose of knowing the views of Dashen bank; unstructured interview (when the interview does not follow the formal procedures) was conducted with 2 Head office senior managers, 7 Branch Managers of the bank where quantitative data were collected from customers through questioner and the remaining two of them are head office organs that directly the service will concern (Director of E-Banking and Division Manager of Internet and Card Banking). All the interviews were conducted on March 14, 2022. The interview data were analyzed on the basis of Grounded theory analysis followed by generating a theory through the collection and analysis of data. Data analysis in Grounded theory happens as the same time as data collection. This type of analysis consists of a systematic coding (breaking down) of data according to a code list, in such a way as to identify (practically and theoretically) relevant patterns. The coded segments are then grouped and synthesized into (more general) categories, which in turn get linked to more general themes and (theoretical) concepts.

4.9 ATM Services Problems

As per the interview data, the major problems mainly encountered by Dashen bank ATM service users includes ATM running out of service due to frequent power disruption and network connection; ATM deducting money without dispensing cash; failure to promptly respond to customers when they encounter problems during ATM service use; ATM service overload due to insufficient number of ATM installed as compared to the number of ATM service users.

4.10 Sources of the ATM service problems

Discussion with senior Dashen bank managers has not only been useful to explore ATM service related problems but it also provided some insights on the sources of the problems observed in relation to ATM services. As per the interview data, the major sources of ATM service problems are;

Poor telecommunication infrastructure; Lack of infrastructure for telecommunications, Internet and online payments impede smooth ATM transactions in Ethiopia. The bank's ATM malfunctions mainly, due to ethio telecom's network failure or internal system failure. The ATM relies on the bank communication network hence when the bank communication network goes off line the ATM services become unavailable for customers use.

Frequent power disruption;-Interviewee claims that power disruption creates a lot of problems in ATM activities which are basically depending on power supply and force the banks to use generators resulting in high operational cost. Moreover, power disruption creates system failure which may deter the machine from dispensing cash or from issuing payment slips after transaction.

Negligence on part of staffs in replenishing cash with ATM; some branch didn't properly follow the available cash in ATM and do not replenish timely that result in customer dissatisfaction.

Customers lack of awareness about inter-operability of ATMs; many customers didn't have awareness about inter-operability of all banks ATMs with all others banks in the country and they went distant to get Dashen ATM and forced to wait long queue at ATM stations that will create inconvenience and dissatisfaction to customers.

Bureaucratic disputes handling among banks with regards to ATM problem; bureaucratic dispute handling among banks when ATM issue arise, it will take a very long time (eight days)

to refund to a customer account when ATM deducts the account of one customs' without dispensing cash while using ATM service using another banks ATMs. It is also stated that most of the time no support is offered for customers for technical failures or other ATM service related problems after working hours

4.11 Ways to improve customers' satisfaction

All interviewees acknowledged that the introduction of ATM service has been instrumental in increasing the satisfaction of Dashen bank customers. As per the interview data, ATM banking services has given more satisfaction than ordinary banking because customer can get 24 hour access to banking services, quicker and near to their residence. What's more, customers can check their balance at any time without any fee. They also noted that the introduction of ATM has reduced customers visit of the branch which could be seen from the transaction on ATM and even some customers have been even totally do not visit the branch after they take the personalized electronic card. It is stated that, the level of satisfaction intended to be provided by ATMs, however, is reduced by technological and processing failures due to various problems described earlier. The interviewees finally forwarded a number of measures that needs to be taken in order to enhance the satisfaction of ATM service users. Their suggestions by and large overlaps with the suggestions gathered via the survey questionnaires. The suggestions put forward by all interviewees include the following:

- Speeding up in handling ATM issues such as return of cash when ATM deduct customers account but fails to dispense cash, fast return of swallowed cards and quick replacement of lost cards and Passwords;
- ATM custodians need to be well trained in order to handle customer queries confidently and competently;
- Aware customers about the inter-operability of ATM machines in the country.
- Make employees in charge to solve of ATM service problems during working hours.
- To put effective ATM management and maintenance programs to keep ATMs in good working order.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This chapter is the final section which presents summary of findings, conclusion and recommendation of the study. The chapter reported summary for main findings of study as presented in result and discussion section. Then, conclusion and recommendations were made based on the findings. Then, as a result of limitation of the study, the researcher provided suggestion for future study.

Accordingly all banks in Ethiopia currently in stiff competing head-to head in order to win the heart and minds of bank customers. ATM service is one of the tools used for strategic battling against one another in the banking industry. Dashen Bank, as one of the competing banks, has started ATM banking to reach its customers beyond time and space limitation.

Any business organization needs an element that helps it to be competitive in the market. The most important thing that helps a business organization to be competitive in the market is to continuously improve its customer service. Likewise, any banking institution aims to ensure customer satisfaction and strengthen its relationships with customers. In order to achieve this, it is necessary to use any opportunity that can help to improve the quality of customer service. Modern technology plays an important role in maintaining customer competitiveness in the banking industry. Recently, the use of modern technology in the country's economy is growing. The banking industry is one of the few sectors where modern technology is increasingly utilized to modernize its operations. The banking sector is adopting new technologies to improve service quality, expand its market base and maximize its economic efficiency. Dashen Bank is one of the well-known private banks engaged in private banking services. The bank is contributed to the expansion of modern banking services in the country. The bank is investing in modern technology to improve its banking service to meet the demands of its customers. For example, the use of ATM and Amole banking service is an important component of this investment. It is a technology that allows the bank to provide efficient, accessible, flexible and affordable banking services to its customers. Dashen bank is developing its strategies to expand their market and offer competitive service to stay in the market. The use of advanced information technology is useful to provide competitive service, to improve their customer service and thereby strengthen their relationships. As the industry continues to grow, the competition between banks is growing.

The bank is required to provide a quality service to customers to cope up with the growing competition. The growing use of ATM banking service is a major change in the market. At present, ATM card users can withdraw cash and transfer money from any bank. The major challenge remains one step ahead in that the bank needs to cope up with the ever-growing demands of its customers by revolutionizing in the area of technology.

The purpose of this study was to investigate the level of Dashen bank ATM service quality and customer satisfaction in Addis Ababa. A survey questionnaire was distributed to two hundred customers to collect their opinion on eight dimensions of ATM service quality. In addition, unstructured interview was conducted with E-banking service department Director, two senior Dashen managers and officers to explore some issues in detail.

5.2. Summary of the Findings

The major findings of the study are the following: The descriptive analysis conducted with the aim of assessing the level of Dashen ATM service quality dimensions and its effect on customer satisfaction. On the base of the finding of mean value of all the dimensions of ATM service quality indicated in table-11, tangibility (4.1308) with best mean score followed by efficiency (3.4000) and reliability (3.3725) respectively. Assurance (2.5475) which possessed least mean score followed by Convenience (3.0475) that are below the average mean respectively. The mean score of overall customer satisfaction toward the bank ATM is 3.52, which is above average mean score. This shows that respondents are marginally satisfied with the quality of services delivered by ATM of the bank.

Correlation coefficient statistics shows that all ATM service quality dimensions; reliability (.742) statistically strong, tangibility (.592) statistically significant, empathy (.550) statistically moderate, responsiveness (.547), efficiency (.463), assurance (.424), convenience (.401) and security (.079) respectively have a positive and significant relationship with overall customer satisfaction. Hence, ATM service quality attributes perceived by customers does have significant influences on customer satisfaction, supporting the research model. Moreover, the finding also indicated that there is a positive and significant relationship among independent variables where in a relatively stronger correlation observed between empathy and responsiveness ($r = .790$), tangibility and assurance ($r = .700$) and tangibility & reliability ($r = .645$) with their coefficient value respectively. In the same way, correlations coefficient (r) between tangibility and reliability $r = .645$, tangibility and responsibility $r = .640$, tangibility and empathy $r = .621$,

tangibility and efficiency, $r = .617$ are possessed strong correlation coefficient. However; the correlation between, tangibility and convenience $r = .594$, tangibility and security $r = .390$ relatively possessed weak relationship. The one-way analysis of variance (ANOVA) table was to tested whether there was a statistically significant mean difference between groups of background variables

Descriptive data revealed that ATM users of the bank were marginally satisfied with ATM service of the bank, the interview response indicated at that the customers of the bank are not happy with some of ATM attributes like ATM out of service; ATM deducts money without dispensing cash, lack of promptly response, number of ATM and inaccessibility of ATM out of the city.

5.3. Conclusions

The study has examined the effect of ATM service quality on customer satisfaction in the case of Dashen bank in Addis Ababa. Based on statistical analysis made, it has been observed that customers are fairly satisfied with the ATM services that have been delivering by Dashen bank.

On the one hand, the expectation of customers is changing as a result of economic and technological changes; on the other hand the competition between banks is growing. This changes demands that banks to pay attention to improve consumer service qualities. Dashen bank has been investing in e-banking technologies which are of great value to satisfy the needs of its customers. Dashen bank has made great success in the improvement of technology, like better quality ATM and some advancement in this regard over a very short period of time. The number of ATM card users can be taken as a good example. Nonetheless, the main issue remains to be able to provide quality services that match customers' expectation. The question of how much the bank's ATM service quality satisfies its customers expectation is a question that needs to be answered. This study has attempted to answer this question. Thus, based on the findings of the study, the following conclusions can be made. The study concludes that:

- In general customer's level of satisfaction on Dashen bank ATM was slightly positive with mean score of 3.5200, which is above average mean score 3, but the result showed that the bank has much to do to improve its ATM service quality in the future.
- ATM service quality dimensions appears to be higher than average mean, except that the assurance dimensions of ATM service quality was relatively lower than the other dimensions and

below the average mean score. Therefore, it can reasonably be argued that the assurance service quality dimensions have significantly impacted on customer level of satisfaction.

- All the ATM service quality dimensions significantly associate with customer satisfaction and have an impact.
- The magnitudes and significant relationship among independent variables were correlated positively (direct) related.
- ATM related problems and the urgent solutions given to it were below the expectation of the customers.
- Dashen Bank should ensure that security at ATM points, especially those located outside the area banks need to be nicely securitized.
- From the interview conducted disputes due to incomplete ATM transaction, delays in providing new card as well as replacement of card/PIN and network failures are frequently reflected problems by customers. The delay in new ATM card request and existing replacement happens as a result of work overload and machine damage which handles every card and PIN related request preparation for every member bank is handled under a single roof which results in delay of customer request. Though these problems are external uncontrollable factors, the bank is still finding a way to provide permanent solutions. The interviewee also mentioned that the banks is at primary stage of implementing banking technologies and number of ATMs available for service is enough but needs improvement.

Dashen bank greatly nurtures the adaption and expansion technological advancement various areas especially in ATM over the past few years has helped Dashen to improve its customer's service. Except the structural and low response rate in handling dispute handling problems, the bank's ATM banking service quality is far from satisfactory. Although some of the problems customers experience can be beyond the capacity of the bank to address in the immediate terms, there are a number of problems that can be solved with the capacity of the bank and thereby improve its ATM service quality. The result of this study has shown that a lot needs to be done to improve the quality of the bank's ATM service. This research offers some suggestion that can help to improve the quality of Dashen ATM service quality.

5.4. Recommendations

ATM use is one of the latest technologies adopted by the banking industry to effectively serve the customer. ATM service has to become one of the most popular channels for accessing banking products/services behind branch banking. In spite of its numerous advantages there have been some challenges which hinder its optimum usage both to the customers and the bank themselves.

Based on the findings and conclusions of the study, the researcher forwards the following recommendations for the E-banking Service Department for study made in certain branches in Addis Ababa.

According to mean score of tangibility dimension, the research finding revealed that respondents' were most satisfied with physical appearance of the bank's ATM and got advice about ATM usage. Even though, the bank is performing relatively well with tangibility dimension, it needs continual improvement on other dimensions to be competent in the banking. Efficiency dimension is the next important factors influencing customer satisfaction in this research finding and respondents' were relatively not satisfied with assurance dimension. However; respondents are slightly satisfied with help desk employees regarding dispute handling and sufficiency of security at ATM stations. So, the bank should deploy safest ATM location in strategically selected areas. Furthermore, the bank should enhance the awareness level of customers about the inter-operability of all ATM machines in the country.

Based on correlation, reliability dimension is one of the most important factors influencing customer satisfaction in this research finding. However, the customers of the banks are slightly satisfied with some of reliability attributes, like ATM out of service and ATMs are easily accessed. So, to solve those issues the bank has to put effective ATM management and maintenance programs to keep ATMs in good working condition, and to have power back up to avoid sudden system failure that may deter the machine from doing well.

Next to reliability, tangibility dimension is one of the most important factors influencing customer satisfaction in this research finding. Though, the customers of the banks are less satisfied with most of tangibility attributes, like the ATM provides access of printing mini statement, currency birr note received from ATM, the ATM station areas are clean. To overcome those problems the bank should have to put effective ATM management and make

ATM to ready to provide slip up on withdrawal of cash, load good currency birr note and clean ATM station.

Empathy dimension is the third important factors influencing customer satisfaction in this research finding. However, the customers of the banks are less satisfied with some of empathy attributes, like ATM card application process was easy and the employees are friendly in dealing with customers. So, to solve those issues the bank have to put effective ATM management and maintenance programs to make ATM application process ease, and to give an expert advice and train employees.

Responsiveness dimension is the fourth important factors influencing customer satisfaction in this research finding. However, the customers of the banks are less satisfied with most of responsiveness attributes, like cash availability in ATMs, promptly replacement and return of lost and swallowed ATM cards and employee responsiveness to ATM problems. To overcome those problems the bank should have to put effective ATM management to avoid ATM out of cash, to place enough human resources and also improve the capabilities, knowledgeable, professional and equipped skill of accountable human resources. Simultaneously, the Bank staff should also have good service attitude, be polite, enthusiastic to meet customer's expectation and to have positive behavior and attitude in customer service among their employees. Therefore the Bank needs to train and equip its support employees related with ATM service in order to handle customer queries confidently and competently, because employees' effectiveness and speed in handling ATM issues will increase customer's confidence in the Bank.

Security dimension is one of the least factors influencing customer satisfaction of the bank in providing sufficient advice about ATM Usage and Security regarding about pin is not hacked. To solve this problem, the bank has to give equip and nice location of the ATMs area and assure customers by no means pin never be hacked through technology.

5.5. Recommendation for Future Research

ATM banking services have become one of the most popular channels for accessing banking products/services behind branch banking. In spite of it numerous advantages there have been some challenges which hinders its optimum usage both to the customers and the bank themselves. The challenges associated with ATM service are so large that a single study could not discover all. Again, due to limited resources and time, this study could only sample Dashen Bank s.c even though the study could have covered a wide setting.

In view of the above, the researcher recommends that funds be made available for the study to be replicated in the other banks since the findings of the current study indicated that there are varied challenges as well as advantages with ATM services. Recommendations from such a study would lead to a much better administration and patronage of electronic banking product for economic growth and development.

So that further study should have to be made on the following points:

- The rational of ATM use on the growth of Dashena bank
- The mechanism to improve dispute handling
- The reconciliation process in ATM and its settlement to be in branch rather than head office

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

Annex I: Self- administered questionnaire

St. Mary's University School of Graduate Studies Department of MBA in General Management

Dear Respondent,

This study will undertake to understand the effect ATM service quality on Customers Satisfaction in the case of Dashen Bank's customers who are currently using ATMs of the bank in Addis Ababa. I am conducting this research for Partial Fulfillment of the Requirements for the Award of the Degree of Masters of Business Administration of St. Mary's University and this questionnaire is designed to collect information from the respondents (customers) in connection with ATM Banking regarding with awareness of customers about what problem could exist in using ATM. Your active participation has an impact since the quality of this research result is depend on the accuracy of the information you provide to the researcher while filling out the questionnaire. The questions will ask about general information about you, performance of ATM, the problems you experiences while using the service, your views regarding the compliant response about ATMs and your general satisfaction level towards ATMs service quality of Dashen Bank. The questions will take few minutes to complete. 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.

THANKS

Mitiku Abera

MBA student at St. Mary's University

General guide line:

- There is no need to write your name.
- Please put (√) in the appropriate box

Part I. Demographic Characteristics of the Respondents

1. Gender Male ☐ Female ☐
2. Age
22-32 ☐ 33-43 ☐ 44 – 54 ☐ > 54 ☐
3. Marital Status
Single ☐ Divorced ☐
Married ☐ Others ☐
4. Education
Diploma ☐ Degree ☐ Master ☐ PhD ☐ others ☐
5. Experience in the organization
Less than 1 year ☐ 7 years to 12 years ☐ Other ☐
1 year to 6 years ☐ Above 12 years ☐
6. Profession
Student ☐ Business ☐ Private Employee ☐
House wife ☐ Self Employee ☐ Gov't Employee ☐
7. Monthly Income
Less than 5,000 ☐ 5001-10,000 ☐ 10,001-20,000 ☐ >20,000 ☐

II. NON DEMOGRAPHIC INFORMATION

8. Are you a customer of Dashen bank?
Yes ☐ No ☐
9. For how long have you been a customer in Dashen?
Less than a year ☐ Between 1 year and 4 years ☐
Between 5 year and 8 years ☐ Above 8 years ☐ others ☐
10. How do you use ATM services of Dashen bank?
Daily ☐ Biweekly ☐

Weekly ☐

Monthly ☐

11. How do you rate the ATM services quality of Dashen bank?

Very satisfactory ☐ Satisfactory ☐ Not satisfactory ☐

12. Overall how do you rate the level of satisfaction in using the ATM ?

Extremely Low ☐

High ☐

Very Low ☐

Very High ☐

Low ☐

III. ATM Service Quality

Listed below are a series of statements that represent ATM service quality with respect to your own feeling, please indicate the degree of your agreement or disagreement with each statement by putting a tick mark (✓) on one of the five point scale.

Strongly disagree1

Agree4

Disagree.....2

Strongly agree5

Neutral3

The following section contains ATM service quality dimensions

1. Tangibility dimensions

S.N	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
	Tangibility Dimensions (T)					
1	Key pad of an ATM easily seen and positioned					
2	Cash dispenser & card reader work in a very fast attempt					
3	Order messages displayed on the screen are clearly understandable					
4	I delight with currency denomination of bank ATM					
5	The bank has sufficient number of ATMs per ATM station.					

6	ATM Stations areas and ATMs are Clean					
7	ATM machines provide me readable Slips.					
	Convenience Dimensions (con)					
1	ATM machines are placed at convenient locations					
2	ATM machines issues clean Notes					
3	ATM provide me with wide range of services					
4	Sufficient cash are availability in ATMs					
5	ATM card application process were easy					
6	It is easy to operate an ATM by looking menu option					
7	Adequate number of ATM stations in the city					
S.N	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
S.N	Efficiency Factors (EF)	1	2	3	4	5
1	The Speed of ATMs are good					
2	Less waiting time at ATMs					
3	Key pad of all ATMs work properly					
4	Screen of ATM display message properly					
5	Execution of transaction is so quick					
	Responsiveness Factor (Rsep)					
1	Employee of the bank are easily accessible to Solve ATM issues					
2	Lost ATM cards were quick replaced					
3	DB provides timely support services in its help desk					

4	Swallowed ATM cards were returned quickly					
5	Employees are responding quickly & effectively in solving ATM problems.					
	Security and Privacy Dimension (S)					
1	Privacy at ATMs are good					
2	The bank provides sufficient advice about ATM Usage and Security.					
3	There is sufficient security at ATM stations					
4	Only authorized person allowed to enter a secure number / PIN in a bank ATM					
5	I am sure that my pin is not hacked					
S.N	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
S.N	Reliability Factors (Rel)	1	2	3	4	5
1	ATMs will not be out of order all the time					
2	ATM Transactions are accurate & consistent					
3	I never find system failure in bank ATM					
4	ATMs are easily accessed.					
	Empathy Factor (EM)					
1	Pertinent information about ATM service to users.					
2	I use bank ATM to transfer fund, for balance enquiries and order mini statement conveniently					
3	ATM fees are fair					
	Assurance Factors (AS)					
1	Dashen bank staff have the required skills and knowledge to carry out the service					

2	The employees act friendly in dealing with customers to provide help.					
3	ATM services are available 24/7 days					

IV Customer Satisfaction

Please indicate the degree of your agreement or disagreement with each statement by putting a tick mark (✓) on one of the five alternatives.

S. N	Customer satisfaction	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
1	I am satisfied with ATM service quality that is provided by the bank					
2	I am satisfied with ATM ability to perform the promised/ordered service dependable and accurate					
3	I am satisfied with the willingness of help desks and the very prompt and quick service of it.					
4	I am satisfied with the knowledge and courtesy of employees of the bank to convey trust and confidence.					
5	I am satisfied with accessibility, sensitivity and effort in understanding of my specific needs by the bank employee's					
6	I am satisfied with the physical facilities, modernity, easy to use and visual appearance of ATM service devices					

V. Part : Open ended question (other challenges and possible suggestion)

1. What are the three most frequently problem you face in using Dashen's ATM service?

2. What do you think needs to be done to improve the service you get through the ATM?

Thank you!!!!

Annex II- Interview questions for e-banking department director, senior manager.

1. What are the challenges/problems you face while providing ATM service in Addis Ababa?
2. What are the factors contributing to Dashen ATM service problems in Addis Ababa?
3. Does the bank think ATM service has given more satisfaction to customers than ordinary banking and does it reduced the frequency of branch visits?
4. What is the reason for persistent complaints from customers as regards ATM service in Addis Ababa?
5. What are the possible solutions to ATM service challenges in Addis Ababa?
6. How do you know whether your customer satisfied or 4not, how measure satisfaction of your customer?
7. How do you see your ATM service quality in relation to dispute addressed by customer regularly?

ፅላ መ□□ቅ

ቅድስተ ማርያም ዩኒቨርሲቲ የድህረ ምረቃ ትምህርት ክፍል

ውጤት ተሳታፊዎች

በዚህ መጠይቅ ላይ በመሳተፍ ተጠቃሚዎች ስለ ኤቲኬም አገልግሎት ጥራት በዳሽን ባንክ በአዲስ አበባ ቅርንጫፎች ካርድ ተጠቃሚዎች እርካታ ላይ ያላቸው አመለካከት ለመገምገም □□□□ ጥናታዊ ፅሁፍ ለማጠናከር ታስቦ የተሠራ ነው። የዚህ ጥናት ግኝት የተጠቃሚዎች አመለካከት □ ስለ ኤቲኬም አገልግሎት ጥራት ቅቡልነት ላይ ያለውን ተፅዕኖ ለመረዳት በግብአትነት ይውላል። በመጠይቁ ላይ የሚሰጡት ምላሽ በንግድ አስተዳደር የሁለተኛ □ፅር ማሟያ ፅሁፍ ላይ በመጀመሪያ ደረጃ ለመረጃነት የገለግላል። እርስዎ የሚሰጡት መርጃ ለመመረቂያ ፅሁፍ ለግብአትነት ብቻ ይውላል። □እርስዎ ማንነት እንዲሁም የሚሰጡት መረጃ ሚስጥራዊነቱ የተጠበቀ ነው። ስለሆነም የእርሶ ትብብር ለጥናቱ መሳካት ትልቅ ፋይዳ ስላለው በመጠይቁ ላይ የቀረቡትን ጥያቄዎች በሙሉ ትንሽ ጊዜ በመውሰድ በጥንቃቄ እና በፅሁፍ እንድመልሱ በትህትና እጠይቃለሁ። የእርሶ ምላሽ ለጥናቱ ውጤተማካነት ወሳኝ ስለሆነ በቻሉት መጠን በተሰጠው መመሪያ መሰረት ይሙሉ። ጊዜዎትን ሰውተው መጠይቁን በታማኝነት ፤ በፈቃደኝነት እና ለትብብር ከልብ አመሰግናለሁ።

ከምስጋና ጋር

ምትኩ አበራ

ሁለተኛ ዲግሪ በንግድ አስተዳደር

□ቅላላ መመሪያ፡

- በመጠይቁ ቅፅ ላይ ስሞትን መፃፍ አይጠበቅቦትም
- ትክክለኛ መልስ ላይ የሆነውን ሳጥን ይህን ምልክት (✓)

ቅል 1: ፅላዊ መረ

1. ኖታ:

ወንድ ሴት

2. እትሜ:

22-32 33-43 44-54 54 በላ

3. የጋብቻ ሁኔታ:

አብ ብ ባታ ሌላ

4. ብምህርት ደረጃ:

ዲፕሎማ ዲግሪ ማስተርስ ፕሌ ሌላ

5. ሥራ ልምት:

ከአመት ያነሰ 1 እስከ 6 ዓመት 7 እስከ 12 ዓመት
ከ12 ዓመት ሌላ

6. ሙ:

ተማሪ ነጋዴ የግል ተቀጣሪ የመንግስት ተቀጣሪ
በራሱ የሚተዳደር የቤት እመቤት

7. ወርሃዊ ብ:

5000 ብር ያነሰ 5001-10000 10001- 20000 20000 በላ

ክፍል 2: ግላዊ ያልሆኑ መጠየቅ

8. የደሽን ባንክ ደንበኛ ኖት?

አዎ አይደለም

9. ለምን ያህል ጊዜ በደንበኝነት ቆይቷል?

ከዓመት ያነሰ 1 እስከ 4 ዓመት 5 እስከ 8 ዓመት
ከ 8 ዓመት በላይ ሌላ

10. የደሽን ባንክ ኤቲኤምን ስጠቀሙ ወጪ የሚደረገው በየስንት ጊዜ ነው?

በየቀኑ በየሳምንት ግማሽ በሳምንት በየወሩ
እንደአስፈላጊነቱ

11. የደሽን ባንክ ኤቲኤም አገልግሎትን እንዴት ያዩታል?

በጣም ተደስቼበታለሁ ተደስቼበታለሁ አልተደስትኩበትም

ቅል 3: ስላ ሳቂ ዎች:

ቀጣዩ ክፍል ስለ ኤቲኤም የአገልግሎት ጥራትን በተመለከተ የከዚህ በታች ባለው ዝርዝር መሠረት የደሽን ባንክ ኤቲኤም አገልግሎትን አንዴት መዝነው ያዩታል ?

በጠም አልስማማም1

አልስማማም2

መከከለኛ3

እስማማለሁ.....4

በፍጥነት እስማማለሁ.....5

ተ.ቁ	የኤቲኤም ጥራት መለኪያ	በፍጥነት አልስማማም	አልስማማም	መከከለኛ	እስማማለሁ	ምፍጥነት እስማማለሁ
		①	②	③	④	⑤
1	የኤቲኤም መተየቢያ በቀላሉ የሚታዩና ዓሩ አቀማመጥ ያላቸው ናቸው					
2	የኤቲኤም የማሳያ መስታወት መልዕክትን በደንብ ያሳያል					
3	ገንዘብ የሚሰጠው እና ቪዛ ካርት የሚያነበው ክፍል በፍጥነት ይሰራል					
4	ማሽኑን ላይ ያለውን መልዕክት በማየት በቀላሉ ማሽኑን መጠቀም ይቻላል					
5	ለትዕዛዝ የተቀመጡት መዘርዘሮች ለመረዳት ቀላል ናቸው					
6	ማሽኖቹ ክስተቶችን በፍጥነት ያከናውናል					
7	ባንኩ የሚሰጠው ሚስጠር ቁጥር በቀላሉ በሌላ ሰው አይወሰድም					
8	ወደ ማሽኑ ገብቶ ገንዘብ የሚያወጣው ሚስጠር ቁጥሩን ያወቀ ሰው ብቻ ነው					
9	በማሽኑ ውስጥ ባሉት የተለያዩ ብር ኖቶች ደስተኛ ነኝ					
10	የኔትዎርክ መጥፋት በባንኩ ማሽን አላጋጠመኝም					
11	ኤቲኤምን ብር ለማዘዋወር፣ ቀሪ ብር ለማወቅ፣ ገቢ ፍብ ስቴትመንት ለማግኘት እግጥ ቀምበታለሁ					
12	እንዴት ሚስጥር ቁጥር እንደሚቀየር፣ ቀሪ ብር ማወቅ፣ ስቴትመንት ማዘዝ አላቅም					
13	ማሽኖቹ 24 ሰዓት በየሳምንቱ ይሰራሉ					

ተ.	የደንበኞች በኤቲኤም አገልግሎት አርካታ	በፍጥነት	አልስማማም	መከከለኛ	እስማማለሁ	ምፍጥነት
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ቁ		አልስማማም				አስማማለሁ
		①	②	③	④	⑤
1	በቂ የሆነ ማሽኖች በየ ስቴሽኑ ይገኛሉ					
2	የኤቲኤም ማሽኖች በአመች ቦታዎች ይገኛሉ					
3	ማሽኖቹ የሚነበብ ደረሰኝ ይሰጣሉ					
4	ማሽኖቹ ንፁህ የብር ኖቶች ይሰጣሉ					
5	ኤቲኤም ያለበት አካባቢ እና ኤቲኤሙ ፅዱ ነው					
6	ማሽኖቹ ዘርፈ ብዙ አገልግሎቶች <input type="checkbox"/> ሰሰሉ					
7	ማሽኖቹ በትክክል ቀንሶ ገንዘብ ይከፍላሉ					
8	ማሽኖቹ ፍጥነታቸው ተመራጭ ነው					
9	ማሽኖቹ በብልሽት ከአገልግሎት ውጭ አይሆኑም					
10	ማሽኖቹን በቀላሉ ለአገልግሎት ማግኘት ይቻላል					
11	በየማሽኖቹ ውስጥ በቂ ገንዘብ ይገኛል					
12	የጠፋቦት ካርት ወ <input type="checkbox"/> ወ <input type="checkbox"/> <input type="checkbox"/> ተካል					
13	በየማሽኖቹ ብዙ ሰልፍ የለም					
14	በማሽኖቹ የሚወሰዱ ካርዶች ወዲያው ለደንኛ ተመላሽ <input type="checkbox"/> ረዷል					
15	የባንኩ ሠራተኞች ለሚፈጠረው የማሽን ችግር በፍጥነት መፍትሄ በመስጠት ውጤታማ ናቸው					
16	ማሽኑን ስንጠቀም በቂ ነፃነት አለ					
17	ባንኩ ስለ ኤቲኤም አጠቃቃምና ጥንቃቄ በበቂ ሁኔታ ምርጥ ለፅሶኛል					
18	በቂ የሆነ ጥበቃ በኤቲኤም አካባቢ አለ					
19	የባንኩ ሠራተኞች ከደንበኞች ጋር ጥሩ ተግባቦትና ግንኙነት አለቸው					
20	የኤቲኤም ማሽን አገልግሎት ክፍያ ተመጣጣኝ ነው					
21	ካርድ ለማውጣት ብዙ ወጣ ውረድ የለውም					
22	የባንኩ ሠራተኞችን ከኤቲኤም አገልግሎት ጋር ተያይዞ ለሚገጥመኝ ችግር ማንኛውም ቁጥር ማፅኘት እችላለሁ					