



ST MARY'S UNIVERSITY  
SCHOOL OF GRADUATE STUDIES

**EFFECT OF ATM SERVICE QUALITY ON CUSTOMER SATISFACTION  
THE CASE OF UNITED BANK S.C. ADDIS ABABA BRANCHES**

BY

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ID NO. SGS/0033/2009A

MAY, 2018  
ADDIS ABABA, ETHIOPIA

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A THESIS SUBMITTED TO ST MARY'S UNIVESITY, SCHOOL OF  
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ST MARY'S UNIVERSITY  
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## DECLARATION

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

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Signature

May, 2018

## 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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Advisor

St. Mary's University, Addis Ababa

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Signature

May, 2018

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## LIST OF ACRONYMS AND ABBREVIATIONS

ANOVA	Analysis of Variance
ATM	Automated Teller Machine
CBE	Commercial Bank of Ethiopia
CPU	Central Processing Unit
E-Banking	Electronic Banking
ICT	Information and Communication Technology
ISOs	Independent Sales Organizations
IT	Information Technology
PIN	Personal identification number
POS	Point of Sale
PSS	Premier Switch Solution
SERVPERF	Service performance
SPSS	Statistical Package for Social Science
UB	United Bank S.C

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## ABSTRACT

*The research paper focuses on studying the effect of ATM service quality on customer satisfaction in United Bank Addis Ababa branches. The research objective was to examine the effect of service quality dimensions i.e. courtesy, communication, credibility, completeness, security and reliability, responsiveness and convenience on customers satisfaction. Sample of 398 were taken using purposive sampling techniques, from which 374 samples were considered valid. Explanatory and descriptive research designs and mixed research approach were used to analyze the data collected from customers. The researcher used primary data through questionnaire and interview and secondary data from Untied Bank IT and card payment department published and unpublished materials. Those collected data were analyzed using descriptive and inferential statistics. Descriptive result shows overall customer satisfaction is lower to ATM customers. In addition inferential result of this study shows all service quality dimensions have positive significant relationship except courtesy which has positive but insignificant relationship with the dependent variable customer satisfaction. Regarding the effect of service quality on customer satisfaction all dimensions have positive effect towards it, especially convenience has high effect followed by security and reliability and completeness. The researcher recommends that further improvements has to be done on ATM service quality by providing efficient and sustainable network system, maximizing number of ATMs in convenient areas for service and considering high progress on service quality dimensions included in this study.*

**Keywords:** *ATM, Service quality and customer satisfaction.*

# CHAPTER ONE

## INTRODUCTION

### 1.1. Background of the Study

Internet has transformed the current pattern of business. Technological advancements are happening everyday but not all advancements has been welcomed and adapted by financial sectors. Financial sectors that enjoy advantages of this new mode of service delivery have adopted the e-banking phenomenon starting from its introductory. (Abu Shanab, Michael Pearson and Andrew Setterstrom, 2010)

E-banking is a process through which banking consumers manage their banking transaction without even visiting a bank branch. Electronic banking services have benefits for both banks and customers. For banks, electronic banking is conceded as strategy weapon which helps them to achieve competitive advantage, save the cost of resources and increase their market share. (Jayawardhena and Foley, 2000) From the customers' point of view, electronic banking provides faster, easier and more reliable services to customers. So the banks are investing more on providing new technologies through e-banking, PC banking, mobile banking, automated teller machine (ATM), Point of Sale (POS), electronic funds transfer, account to account transfer, paying bills online, online statements, credit cards and others. Electronic commerce can be seen as a consequence of such competition. (Aladwani, 2001)

The number of bank customers preferring to use self- service delivery systems is on the increase. This preference is attributed to increased autonomy in executing the transactions. Banks are increasing their technology-based service options to remain competitive. One of the channels of banking service delivery is through ATMs of which the traditionally and primary use was to dispense cash upon insertion of a plastic card. ATM is such type of innovation that can mechanically accept deposits, issue withdrawals, transfer funds between accounts and collect cheques. (Kadir, Rahmani and Masinaei, 2011)

ATM facility resulted in speed of transactions and saving time for customers. (Moutinho, 1992) Secured and convenient location, adequate number of ATMs, user-friendly system, and functionality of ATM are the important factors for the customer satisfaction. The judgment of high and low service quality depends on how a customer perceived the actual service in context of reliability, responsiveness, completeness, access/convenience, courtesy, communication, credibility, security and understanding/knowing the customer. (Lovelock, 1994)

The rapidly growing information and communication technology is knocking the front-door of every organization in the world, where Ethiopian banks would never be exceptional. In Ethiopia, however, cash is still the most dominant medium of exchange, and electronic payment systems are at an embryonic stage. The appearance of ATM in Ethiopia goes back to the late 2001, when the largest state owned, Commercial Bank of Ethiopia (CBE) introduced the first ATM machine to deliver service to the local users. (Gardachew, 2009)

ATM was introduced to enable customers to have a 24 hour access to their money and hence improve customer satisfaction. Cash machines are relatively new to Ethiopia, but their number is growing quickly recently, while other banks as well eager to apply so as to create ease of access for their customers. (Getachew, 2010)

United bank started ATM banking since July, 2012. The bank has joined premier switch solution (PSS) since it's introductory in 2009. The bank currently has 80,913 Cardholders and 95 ATM machines available for services from which 81 of it is located in Addis Ababa. United bank is pioneer in providing money send/receive service and has started rendering master card, Visa and china union card services. (United bank E-banking department, 2017)

Therefore the purpose of this study is to examine the effect of ATM service quality on customer satisfaction in United Bank Addis Ababa branches using courtesy, communication, credibility, completeness, security and reliability, responsiveness and convenience as service quality dimensions.

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

The use of ATM is a new way of accessing banking services necessitated by customers' business needs and is enabled by fast changing technology like Internet. Due to achievements brought about by increased utilization of Information and Communication Technology (ICT) in society, the banking industry has introduced ATM. ATMs provide a new method of dispensing customer services which are expected to increase efficiency, sales performance, and enhance customer satisfaction (Mboma, 2011)

Customer satisfaction holds the potential for increasing an organizations customer base, increase the use of more volatile, customer mix and increase the firm's reputation. Consequently, obtaining competitive advantage is secured through intelligent identification and technology acquisition must be based on actual needs and the proven ability to deliver customer friendly solutions. (Timedry, 2012)

Although ATM is providing efficient service to customers, currently customers are observed to be unsatisfied with the service they are receiving form the machine. This is raised from low service quality related with; insufficient cash supply, less follow up at the service terminals and continuous network connection problems. (Gardachew, 2010)

Customer satisfaction on a given service of a bank will secure customer's loyalty to the bank which will result in high preference and favorableness and the dissatisfaction will also imply the reveres. So banks have to be careful on the quality of service they provide for use not to lose the good image they have on their customers mind.

Based on United bank E-Banking department report from 2006-2009 the bank's ATM transaction reflects large number of suspected, rejected, pended and incomplete customer requests which seems to be increasing from year to year. Number of dispute handling reports referring to double deduction and un-dispensed cash transactions are



also frequently observed. ATM incomplete transaction report for the past 5 years is attached in the appendix.

There are many research conducted on service quality of ATM in relation to customer satisfaction regarding quality issues like insufficient cash supply, lower follow up management and network problems in many banks branches. But upon the researcher's knowledge there are no similar studies done related to ATM service quality and its effect on customer satisfaction at United Bank using Lovelock (1994) service quality measurement dimensions.

Therefore the main theme of the study is focused on the effect of ATM service quality in relation to customer satisfaction of United Bank and enhance its vision of becoming the preferred Bank in Ethiopia.

### **1.3. Basic Research Questions**

The study is customized to answer the following research questions formulated on the problems.

- Does ATM Service courtesy and communication manner affect customer's satisfaction?
- To what extent does ATM Service credibility and completeness affect customer's satisfaction?
- How ATM Service security and reliability affects customer's satisfaction?
- Does ATM Service responsiveness and convenience affects customer's satisfaction?

### **1.4. Objectives of the Study**

#### **1.4.1. General Objective**

The general objective of the study is to examine the effect of ATM service quality on Customer's satisfaction in United Bank.

### **1.4.2. Specific Objectives**

The specific objectives are;

- To examine the effect of ATM Service courtesy and communication manner on customer's satisfaction.
- To analyze the effect of ATM Service credibility and completeness on customer's satisfaction
- To study the effect of ATM Service security and reliability on customer's satisfaction
- To examine the effect of ATM Service responsiveness and convenience on customer's satisfaction.

### **1.5. Hypothesis of the Study**

In order to find out the relationship and effect of ATM service quality on customer satisfaction the following hypothesis are proposed depending on the objective of the study.

H1: ATM Service Courtesy has no positive and significant effect on customer satisfaction.

H2: ATM service Communication has no positive and significant effect on customer satisfaction

H3: ATM service Credibility has no positive and significant effect on customer satisfaction

H4: ATM service Completeness has no positive and significant effect on customer satisfaction

H5: ATM service Security and Reliability has no positive and significant effect on customer satisfaction

H6: ATM service Responsiveness has no positive and significant effect on customer satisfaction

H7: ATM service Convenience has no positive and significant effect on customer satisfaction

## **1.6. Definition of Terms**

Under this topic conceptual definition of terms used in this study are presented.

**ATM** (automated teller machine): is an electronic computerized telecommunications device that allows customers to directly use a secure method of communication to access their bank account, cash withdrawals, and order of cash transfer and check their account balances without the need for a human bank teller. (Kumbhar, 2011)

**Service Quality:** defines as the difference between customer expectation of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfaction and hence customer dissatisfaction occurs. (Jain and Saakshi, 2009)

**Customer Satisfaction:** Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under or over-fulfillment. (Oliver 2010)

## **1.7. Significance of the Study**

The study aimed at examining the effect of ATM service quality on the customer satisfaction. It is significant due to the proliferation of the bank and to investigate the effectiveness of investments on quality technologies on the bank on its customer's satisfaction and in making future decision on improving the service quality and investing more on up-to-date technologies. The finding of the study is greatly importance to managements of United Bank to investigate effect of ATM service quality on planned objectives of the bank.

It will enlighten other private and government owned banks and financial institutions in adopting technologies in service sector in general. The study will also be important for policy makers and regulatory bodies in assessing the legal frameworks affect implementation and objectives of the services.

In addition, the study will have a great significance in providing information for external stakeholders such as foreign banks who will be planning to join the industry in the near future by transferring their state of art to Ethiopian banking industry. National Bank of Ethiopia which regulates the sector will be highly beneficial from the findings of study which will provide important information whether the implementation of the service achieves its objectives of improving the performance of the bank and quality service delivery to the public. In addition, the study is believed to have an immense contribution by laying the ground for future researches to be conducted on these recent phenomena.

### **1.8. Delimitation/Scope of the Study**

The primary aim of this study was to examine how service quality of Automatic Teller machine (ATM) affects customer's satisfaction in United bank S.C. The study is limited to only one bank which is United Bank selected ATM machines locations in Addis Ababa area. Questioners have been developed for purposively selected customers of ATM on those twelve selected ATM machine and interview for only Card payment Assistant manager of the bank while external stake holders such as customer relationship managers and the banks employees for their experience on the area of ATM are not included. In addition the study only uses limited service quality measurement dimensions selected based on referred literatures there are also other factors of service quality that may affect customer satisfaction.

### **1.9. Organization of the Research Report**

The is organized in the following form: The first chapter contain introductory which consists of general background, statement of the research problem, basic research questions, objectives of the study, definition of terms, significance of the study and delimitation/ scope of the study, The second chapter provide summary of related literat5454ure review of theoretical and empirical studies on previously made researches on ATM service quality and its effect on customers satisfaction. Chapter

three is Methodology part; containing design of the report, subjects/participants of the study, sources of data collection and methods of data analysis. Chapter four devoted on Results and Discussion; which summarize the results/findings of the study and/or discuss the findings using descriptive and inferential analysis. Finally, chapter five summarizes the findings from the results discussed under chapter four; conclude the study and forward relevant recommendations.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

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

ATM (Automatic Teller Machine) to the customers which is the need of general public and easy access to general public without any human resources like cashier, clerks and manager. In 1960 Johan shepherd Arron which was the managing director De La Rue instruments introduce the first automated teller machine. ATM performed such functions like cash withdrawal, cash transfer, cash inquiry and payment of utility bills (khan, 2010).

##### **2.1.1. What is ATM (Automatic Teller Machine)?**

ATM is typically made up of the Central Processing Unit (CPU) for controlling the user interface and transaction devices, magnetic or Chip card reader for identifying the customer, display which is used by the customer for performing the transaction, function buttons usually close to the display or a Touch screen used to select the various aspects of the transaction and a record printer which provides the customer with a record of a transaction (Cronin, 1997). Most ATMs are connected to interbank networks, enabling people to withdraw and deposit money from machines not belonging to the bank where they have their account or in the country where their accounts are held thus enabling cash withdrawals in local currency (Maxwell, 1990), and they are often identified by signs above them indicating the name of the bank owning them.

Automated Teller Machine (ATM) is the most modern computerized telecommunication electronic device that enables customers“ to conduct financial transactions generally outside the normal banking hours without the need of a human clerk or a bank teller. To ensure security, safety, privacy and accuracy the banking authority gives to their customers a plastic ATM card with a magnetic strip that

contains a unique card number and Personal Identification Number (PIN). Security is provided by the customer entering a personal identification number (PIN), (Adepoju&Alhassan, 2010). ATMs are offering 24 hours banking services to bank customers“ like cash withdrawal, funds transfer, balance inquiry, card to card transfer, bill payment, accept deposits etc. (Kumbhar, 2011). As far as the customer satisfaction is concerned with regard to e-banking services, ATM services play an important role as they make easy of banking transactions for customers“ (Premalatha&Sundaram, 2012).

ATMs are placed not only near or inside the premises of banks, but also in locations such as shopping centers/malls, airports, grocery stores, petrol/gas stations, restaurants, or any place large number of people may gather. These represent two types of ATM installations: on and off premise. On premise ATMs are typically more advanced, multi function machines that complement an actual bank branch’s capabilities and thus more expensive. Off premise machines are deployed by financial institutions and also independent sales organizations (ISOs) when there is usually a straight need of cash. (Steve, 2002)

### **2.1.2. Evolution of ATM**

ATM is said to have evolved from early cash dispenser and is said to have first been introduced in the early 1970s. The dispensers were operated by a token inform of a punch card. This enabled a customer to withdraw as sachets of suitable values of bank notes. These sachets processed and then returned the card to the customers. Another source has it that ATM concept was started around 1967, and that it was first installed in Enfield town, on the London Borough of Enfield by Barclays Bank (Thomas, 1996).

This is said to have been accredited to John Shepherded Baron, although George Simon registered patent in New York and Don Wetzel and two other Engineers from Docatel Company also registered patent in April 1973 (Brendan, 1996). In the second generation, it was improved to the extent that made it possible to count proved money.

### **2.1.3. ATM in Ethiopia**

In Ethiopia Commercial bank of Ethiopia introduced ATM service for local users in 2001 with its fleet of eight ATM machines located in Addis Ababa. Then Dashen bank has worked aggressively to maintain its lead on electric payment system and become the first Ethiopian Bank to acquire E-commerce and mobile merchant transaction. Then after other private banks have accepted this new mode of service delivery and apply it to their banks. Although, Dashen bank technology is one step ahead it allows transfer of funds from one's account to others, the younger United Bank was the first to introduce telephone and mobile banking including text messages (SMS). By the end of 2008 in the same year Wegagen bank has signed n agreement with Technology Associates, a Kenyan based IT firm, for the development of the solutions for the payment system and installation of a network of ATM. (Gardachew, 2010)

### **2.1.4. Purpose of ATM**

Singh (2009) described ATM as 'Avoid Travelling with Money' or 'Any Time Money' but certainly it implies both. He asserts that Slim ATM cards are fast replacing compounding withdrawal form as a convenient way of getting your money from banks. A smart person no longer needs to carry a wallet-full of paper money on his person. All he needs to do is fish-out an ATM card inserts it in the slot, punch in a few details and go home with hard cash.

Today ATM machine is just like a boon for everyone. This is one of the best services provided by the banking industry to everyone having an account in a bank. ATM provides 24 hours service, meaning that ATMs provide service around the clock. The customer can withdraw cash up to a certain limit during any time of the day or night (Akrani, 2011).

Similarly, ATM banking is a product/service that has attributes/features that meet implicit and/or explicit needs of bank customers. To achieve customer satisfaction the attributes have to deliver service quality to customers' expected threshold. Therefore



before customer satisfaction is delivered through ATM banking, managers ought to understand the features/attributes of ATM banking that provide service quality because these are the factors that influence performance superiority to influence customer satisfaction (Poretla and Thanassoulis, 2005)

ATM is convenient, enables people to withdraw money any time, allows people to make purchases and enables them to pay bills. Steve further argues that, a major advantage of an ATM is that it allows the user to access money at any time. In addition to withdrawing money, an ATM offers other banking services. With an ATM, the user can readily move funds between accounts at the same bank or deposit checks at any time of day. ATMs also allow patrons to conduct balance inquiries. By using an ATM, the user can find out how much money is in the account without wasting time on hold or waiting in line at the bank. (Steve, 2012)

ATM is very beneficial to travelers – ATMs are of great help to travelers. They need not to carry large amount of cash with them. They can withdraw cash from any city across the country and even from outside the country with the help of ATM (Khan, 2010).

Utility bills can be paid through ATMs. ATM patrons can register their water, electric, and phone accounts with their bank. Then, users can view utility bills at an ATM and have their monthly charges deducted from their bank account. Patrons are able to get a receipt showing their utility bill has been paid from an ATM (Lovelock, 2011).

#### **2.1.5. Customers Satisfaction**

Customer satisfaction is how a given products or service satisfy the customer and fulfill their expectations. It can be defined that performance of the organizations products according to the customer's want. Whenever products performance is not in accordance with customer's satisfaction it results in customer confidence decrease on product performance. But on the other hand when performance of the product or service goes in accordance with the standard of the customer, then loyalty increases.

Traditionally major flaws in banking system during operating hour's handles number of transactions and customer requests. The bank branches cannot fulfill the demand of the customer during 8 hours especially payment of cash and payment of utility bills. During holidays also problem in payment of bills and withdrawals of cash .so, it was the need to satisfy the customer with quality service (Ahmad, 2011).

Customer satisfaction can be defined as the state of mind that customers have about a company when their expectations have been met or exceeded over the lifetime of the product or service. (Cacioppo, 2000) Customer satisfaction is fulfilled response. It is a judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumption related fulfillment. (Oliver,1997)

According to Biyaki (2010) increased customer expectations have created a competitive climate whereby the quality of the relationship between the customer and bank has taken on a greater significance in some cases than the product itself. Krishnan et al (1999) point out that, the banking industry strives to succeed by putting the topic of rapid and changing customers needs to their agenda. This can be achieved through good customer care and offering attractive services or products that other competitors may not offer. Therefore, customer satisfaction is seen as a key performance indicator within a business.

In service provision, there are some factors, which are considered by customers as a benchmark for appreciating a service being offered. With regard to ATM, Ramora and Sundaram (2012) mentioned a list of factors considered by customers as important for their service satisfaction. Such factors include tangibility, reliability, convenience, assurance, accuracy, safety, ease of use, and responsiveness. They posited that, each of these factors is very important for customer satisfaction for the service being provided. The service should be reliable, in that the service has to be available every time the customer needs it. The service should be user friendly, meaning that a customer will be loyal to the service he/she is able to use with ease. Customers are satisfied when the service they are receiving is executed accurately, and they are always sensitive to their safety when receiving any service of their choice.

According to Nwaizugbo and Nnabuko (2010) a firm wishing to satisfy its customers must determine the level of customer service it has to provide. There are three levels of customer services that are essential for a customer to be satisfied. This is pre-transaction level, transaction level and post transaction level.

**Pre-transaction level** further explains, contains the services the customer expects to benefit from even before the actual transaction.

**Transaction level** is the level of satisfaction a customer is expected to have during at the time of service receiving.

**Post-transaction level** is the services the customer expects to benefit from and be satisfied after the transaction.

#### **2.1.6. Service**

Before directly going to service quality we have to define what service and quality is independently.

Services are economic activities offered by one party to another. In exchange for money, time, and effort, service customers expect value from access to goods, labor, professional skills, facilities, networks, and systems; but they do not normally take ownership of the physical elements involved. (Lovelock&Wirtz, 2011).

A service occurs when an interaction is established between customers and service providers and/or the physical component of the service and/or the systems through which the service is delivered (Shahin&Janatyan, 2011).

A service is a commodity with no physical existence, usually created and consumed at the same time. Gronroos (2001) described a service as a process resulting in an outcome in a partly simultaneous production and consumption process. This definition points to the fact that service provision and consumption are simultaneous activities.

## **Characteristics of Services**

It is generally accepted that services have four main characteristics that differentiate them from goods: intangibility, inseparability, variability, and perishability. Armstrong & Kotler (2011) mentioned the following characteristics that create unique challenges for services.

**Service Intangibility** refers to the fact that services cannot be seen, tasted, felt, heard, or smelled before they are bought. For this reason, customers try to evaluate the quality of a service by looking at tangible components such as the place, people, price, equipment, and communications apparent.

**Service Inseparability** refers to the fact that services cannot be separated from their providers, whether the providers are people or machines. This means that the employee providing the service becomes part of the service, in most cases, the customer is also present at the time of providing the service. Therefore, the provider-customer interaction becomes important in determining the outcome of the service

**Service Variability** refers to the fact that the quality of services depends on who provides them as well as when, where, and how they are provided. This means that the quality of a service provided is not just determined by the company but by the service provider too. Therefore, understanding the role of service providers is crucial to understand perceptions of service quality.

**Service Perishability** refers to the fact that services cannot be stored for later sale or use, although Lovelock and Wirtz (2011) argue that “not all service performances are perishable”. One problematic situation that accompanies this characteristic is when demand exceeds supply. This can be applied to the banking sector when there is traffic at the counters and not enough service providers, thus the service in that case cannot be stored for later use. In this case, banks should think of better ways to match the service supply with the demand. For this reason, understanding perishability of services is important in the context of this study.

### **2.1.7. Quality**

According to Juran(1974), there is no sole definition for quality. For some quality is Performance to standards while for others it is meeting or satisfying the customer's needs. The Quality of a product or service is the fitness of that product or service for meeting or exceeding its intended use as required by the customer.

Quality can be defined as Conformance to specifications; Fitness for use, Value for price paid, Support services or Psychological criteria based on the service consistency, responsiveness to customers request and complains courtesy, time, reliability and convenience.

### **2.1.8. Service Quality**

Quality is defined as “fitness for use” (Juran, 1974) in user based approach and “conformance to requirements” (Crosby, 1979) in manufacturing based approach. Generally quality means innate excellence it is a mark of uncompromising standards and high achievement, universally recognizable, and recognized only through experience. Quality is compared with satisfaction. The high quality means the best satisfaction of consumers' preference.

*“Satisfaction is the consumer's subjective evaluation of a consumption experience, based on some relationship between the consumer's perception and objective attributes of the product” (Klaus, 1985, p.22)*

Service can be divided in to two elements: the actual functional service received and the manner in which the service is performed or delivered. Service quality is a term that encompasses both elements, although it is most frequently used to refer to the actual functional service where the service performance and outputs are most easily measured. From a client point of view, satisfaction with a service is a function of both the functional and performance delivery elements. (Czepiel, 1986),

Boone and Kurtz (1998), define product and service quality as the ability of a good or service to meet or exceed buyer needs and expectations. They also see quality as

determined by the consumer rather than the producer to be a necessary condition for customers' satisfaction.

Service quality is the most important goal of service industries going by studies that linked customer satisfaction with good service quality. They also see the enlargement of the quality of services provided to uphold customer satisfaction as the alternative to retaining and expanding the customer base, sustaining customer satisfaction they further argue, is crucial to banks continuous existence since no bank can long survive without loyal customers. (Saha, Hassan &Uddin ,2014),

Service quality is derived from the interaction between customers and service providers and classifies it into process quality and output quality, adding that process quality is the customers' subjective remark on services while output quality refers to customer measurement of service achievement.(Lethinen&Lethinen ,1991) Dimensions used by consumers to measure service quality include Tangibles, Responsiveness, Empathy, Assurance and Reliability. (Oladele ,2016)

The judgment of high and low service quality depends on how a customer perceived the actual service in context of Reliability, responsiveness, Completeness, access/convenience, courtesy, Communication, Credibility and Security. (Lovelock, 1994)

#### **2.1.8.1.Service Curtsey and Communication**

Curtsey involves politeness, respect, consideration, and friendliness of contact personnel (including receptionists, telephone operators, etc.). Curtsey also includes the manner of communication from greeting to ending of the service. Service providers are expected to be polite and respectful while presenting the service.

Service delivery has to be well communicated between the service provider and receiver to whom the service is given. Communication in service needs to keep customers informed in language they can understand and listen to them. Service provider has to be able to adjust its language for different customers. Common

understanding and user friendly procedure are highly expected on self serve machines. (Parasuraman, 1985)

#### **2.1.8.2. Service Credibility**

Credibility involves trustfulness, believability, honesty, and generally having the customer best interest at heart. Identifying elements of credibility is important because a high score on one or two elements does not guarantee high credible rating. The five credible elements in services are named as integrity, competence, sound judgment, relationally sensitiveness which includes knowing how to ask questions to listen with empathy to pull people together and likable (koizes, 2003)

#### **2.1.8.3 Service Completeness**

Completeness is all about better finalizing of service with the standard contents. Incomplete services are never claimed as service. (Johnston R, 1995)

#### **2.1.8.4. Service Security and Reliability**

Confidentiality is the main issue of security in ATM service. Unique four digit code (PIN) will be secretly given to every single customer that is confidentially prepared to secure customer wealth from being stolen and lost. In a secure service customers expect to have a freedom from danger, risk or doubt measurable safety and protection for the users has to be emphasized. Banking industry is highly sensitive and confidential regarding customer background and assets.

Reliability represents the capacity of a system to accomplish the specified functioning demands in environmental and demanding conditions, in a defined functioning, and in a preset period of time. Reliability can also be expressed as the probability of the system to accomplish the functions which it was designed for with a certain performance and with no flaws, in a certain period of time and in given functioning conditions. Reliability is Ability to perform the promised service dependably and accurately.

Wolfenbarger and Gilly, (2003) argue that service reliability is the strongest predictor of customer satisfaction. Reliability refers to the ability to deliver expected standard at all time, how the organization handle customer services problem, performing right services for the first time, providing services within promised time and maintaining error free record. In regards to ATMs services, Jay and Barry (2014) noted that the reliability of machine parts or product parts is considered as consistently good in quality or performance which is able to be treated at any time. For ATM environment condition and technical reliability are equated to reliable design that is functional.

Reliability is fundamental criterion of superior electronic service quality. (Stiakakis and Georgiadis, 2009) Reliability consists of accurate order of fulfillment, accurate record, accurate quote, accurate billing, and accurate calculation of commissions which keep the service promising to the customer. (Yang and Fang, 2004)

#### **2.1.8.5. Service Responsiveness**

Responsiveness is willingness to help customers and provide prompt service. Responsiveness is defined as the ability to respond to customer requirements timely and flexibly. Responsiveness includes responding quickly, promptly, rapidly, immediately and instantly.

Responsiveness is providing speed and timeliness of service delivery supported by willingness and readiness of employees to provide service. It concerns ability to provide appropriate information to customers when a problem occurs. It includes prompt response, prompt services and quick problem solving. (Mariappan, 2006)

#### **2.1.8.6. Service Convenience**

The concept of convenience first appeared in the marketing literature in relation to categories of products. Classification of consumer products includes convenience goods: intensively distributed products that require minimal time and physical and mental effort to purchase. Time place and cost are the main issues raised in context of service convenience. (Feldman et al, 1981)



Customers perceive time and effort costs associated with service purchase or use decisions (decision convenience), initiating service delivery (access convenience), experiencing the core benefits of the offering (benefit convenience), finalizing the transaction (transaction convenience), and re-establishing subsequent contact with the firm (post-benefit convenience). This conceptualization reflects a multistage, experiential consumption process in which evaluations of convenience vary at each stage.

## **2.2. Empirical Review**

Numerous studies have been conducted on customer satisfaction and ATM services are reviewed and explained under this section.

Chi Anh and Phong Tuan (2015) has conducted a study on impact of service quality on customers satisfaction of ATM machine service the case of private commercial joint stock bank in Vietnam using 5 components of service quality using SERVPERF model which are Tangible, Reliability, Responsiveness, Assurance, and Empathy. The researchers' selected 250 samples using random and convenient manner. Data is collected from the surveys of customers coming to the Bank branches using questionnaires and direct interview. Samples were tested by using SPSS software 16.0 through descriptive analysis, factor analysis and regression analysis. The researchers finding shows that two factors that have impacts on ATM service quality of the Bank, which are assurance and tangibles, in which assurance has the strongest effect on customer satisfaction. The researchers concludes that the higher assurance and tangibility brought the more satisfaction customers get. More specifically, in terms of assurance, customers highly appreciate the thorough knowledge about expertise and professionalism of banking officers in contact with customers, which requires the affability, courtesy and politeness, thus building up the trust and credibility for customers.

Akinmayowa J.T. and Ogbeide D.O (2014) also have studied on Automated Teller Machine Service Quality and Customer Satisfaction in the Nigeria Banking Sector. The researchers' uses Convenience, Efficient Operation, Security & Privacy,

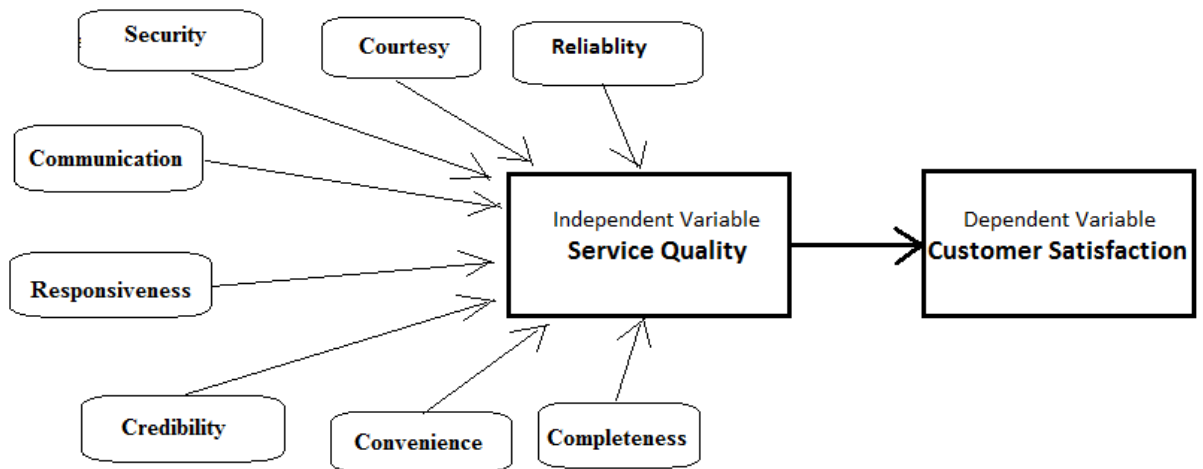
Reliability and Responsiveness as dimension to measure ATM service quality. Questionnaire was developed and used to collect information from the study sample. The structured questionnaire was administered to 350 respondents giving 87% response rate. Data collected were analyzed using SPSS 20.5. Correlation results indicate that convenience, efficient operation, security and privacy, reliability and responsiveness are significant dimensions of ATM service quality and that ATM service quality has a positive and statistically strong relationship with customer satisfaction. It is therefore recommended that banks need to constantly up-date and differentiate their ATM service quality dimensions to ensure continuous satisfaction and retention of customers.

Charles Mwatsika (2016) studied Factors Influencing Customer Satisfaction with ATM Banking on all banks in Malawi deploy Automated teller machines (ATMs) making ATM banking the second most popular access channel to banking products/services. Therefore, to continue achieving competitive advantage through ATM banking, bank managers need to know the key features of ATM banking whose performance greatly influence customers' satisfaction. 353 ATM card users rated the performance of ATM banking in 25 service quality attributes and further rated their perceived satisfaction with ATM banking. The regression analyses of the performance of the 25 ATM banking attributes and customers' satisfaction first reveal that the 25 attributes adopted from empirical studies provide a perfect model for predicting customer satisfaction. Secondly, reliability and responsiveness are the key service quality dimensions of ATM banking and thirdly, the analyses revealed 12 key attributes that influence customers' satisfaction with ATM banking and these are: ATM fees charged, ATMs not out of order, cleanliness of ATMs and ATM stations, accuracy of ATM transactions, ease of access to ATMs, readable slips, convenient location, employee accessibility to solve ATM problems, privacy at ATM stations, employee speed in solving ATM issues, ease of application process for ATM cards and cash availability in ATMs.

### 2.3. Logical Frame Work

Based on previous research outcome the researcher developed the following conceptual frame work to analyze the positive relationship between dependent and independent variables. Dependent variable under this study is customer satisfaction and the independent variables are determinant factors of service quality which are presented below.

**Figure 1:** Logical Framework



Source: Lovelock, 1994

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **Introduction**

This section explores the methodology and research design used in data collection and their justifications. It covers research approach, research design, area of study, population, sample size and selection methods, data collection tools and methods, data management, data processing, method of data analysis, level of significant, reliability analysis limitation of the study and ethical considerationis presented.

#### **3.1. Research Approach**

The study has used qualitative and quantitative approach. The qualitative approach enabled respondents to be intensively engaged in responding to the questions geared towards the objectives of the study and through interview questions presented to concerned management. According to Kumar (2005) Qualitative analysis is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. Quantitative research approach is also used to analyze data measurements that can be quantified in the form of numbers using SPSS version 20.

#### **3.2. Research Design**

The study follows explanatory and descriptive type of research design. According to Kothari (2004) research design is a plan or strategy used to get the expected study results. As a result the researcher chooses the above research design to attain the primary aim of this study which is to examine the effect of ATM service quality on customer satisfaction of United Bank. Explanatory research is used to examine the effect of ATM service quality on customer satisfaction of United Bank. Studies that establish casual relationship is termed as explanatory study and this paper seeks to identify the causal relationship between customer satisfaction and service quality

dimensions i.e. courtesy, communication, credibility, completeness, security, reliability, responsiveness and convenience.

Descriptive research is applied to define the character of customers in relation to satisfaction. From data collected using distributed questionnaire and interview presented.

### 3.3. Population and Sampling Techniques

The target populations of the study were United Bank ATM user customers in Addis Ababa. As per the report of United Bank (2017) the number of ATMs operating as of November 30, 2017 reached 95 with total number of 80,913 ATM cardholders, from which 81 machines and 71,380 cardholders are presented in Addis Ababa.

The researcher purposively select sample of 12 ATM Machines located in Addis Ababa based on their large number of daily ATM transactions. Then a purposive sampling method were applied again to select respondents from united bank customers ATM users from other bank card users which are presented at those selected ATM area for service. From a total number of 71,380 populations sample size will be selected using formula developed by Taro (1967). In the sample determination 95% confidence interval is used.

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

Where: n is the sample size

N is the population size,

E is the level of precision or sampling error = (0.05)

$$n = \frac{71,380}{1 + 71,380 (0.05^2)} = 398$$

Thus, sample size of **398** customers is selected from the population of 71,380.

Total respondent of 398 samples were alienated equally to selected 12 ATM areas due to their approximate transaction amount. The selected united bank ATM areas are Megenagna, Beklobet, Hilton, Bole, Kality, Lideta, Hayahulet (Misrak), Tana, YereBer, MehalArada, Gullele and CMC.

### **3.4. Sources and Tools of Data Collection**

In this study both primary and secondary data are gathered for analytical purpose. Questionnaire is used as a primary source for data collection in order to examine the effect of ATM service quality on customer satisfaction. Semi-structured interview were also presented to Card payment Assistant manager of the bank 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.

In addition, secondary data from published and unpublished documents of United Bank card payment department were collected from constant ATM related reports which shows completed, rejected, suspected and pending transactions, dispute handling requests that are reported from different branches. Secondary data were referred to check the existence of service quality problem in United Bank.

### **3.5.Procedures of Data Collection**

In order to carry out the research, the researcher employed questionnaire as research instrument to collect primary data from ATM users of the bank who are the primary concern for the subject matter. Structured questionnaire were distributed to sample respondents containing different parts and types of questions in which the first section intends to obtain general information, the second part intends to obtain additional information and the last part of the questionnaire containing 5 scale likert measurement tool i.e. 1-strongly disagree 2-disagree 3-neutral 4-agree and 5-strongly agree (Likert, 1932) classified under eight service quality dimensions mentioned in specific objective of the study intends to obtain additional information regarding service quality of ATM and its effect on customer's satisfaction. The researcher

preferred Likert scale to allow degree of option for respondent and to obtain quantitative data from the result.

Questionnaire were distributed to selected 12 ATM terminals to reach sample respondent and collected within three weeks with the help nearby located branches of the bank. The questions were designed & translated in Amharic and English to maintain simplicity and to reduce misunderstanding and uncertainties on the questions by the respondents.

Furthermore semi-structured interview were also presented to card payment Assistant manager with pre-resized questions in order to support the results collected from the questionnaires reflected under general findings and recommendation of the paper.

The secondary data were collected from card payment department ATM reports and dispute handling reports from different branches of United Bank covering time span of five years starting from 2012 to 2017 since launching of the services up to date.

### **3.6.Methods of Data Analysis**

The tools used in the study are descriptive, correlation and regression analysis.

Descriptive analysis is used to analyze effect of ATM service quality on customer satisfaction by using qualitative analysis. Descriptive analysis statistical results were presented by table, figures, frequency distribution and percentage to give a condensed picture of the data. This was achieved through summary statistics including mean and standard deviation values. Mean value below average which is 3 are variables with low performance, value equals to average is rated as medium and mean value above average are rated as good performing. The data collected through interview and different organizational documents were also summarized, coded and presented in a way that communicates the finding of the study.

Inferential statistics using correlation analysis is carried out to determine the relationship between dependent variable with independent variable i.e. customer satisfaction with service quality dimensions using Spearman's correlation coefficient.

And linear regression analyses were also used to examine to what extent ATM service quality affects the dependent variable customer satisfaction.

### 3.7. Model Specification

Data analysis was done using Statistical package for social science (SPSS) software version 20.0 to present the collected data through. Multiple regression models were used to test the effects of ATM service quality on customer satisfaction.

First order linear regression model was used as:

$$y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \dots + \beta_kx_k + \mathcal{E}$$

Because of its simplicity and suitability with the empirical data that have been collected, the study will adopt to use the first order model.

Where:

Y = the dependent variable

$\beta_0$  = the constant term/intercept

$x_1, x_2 \dots x_k$  = the independent variables

$\beta_1 \beta_2 \dots \beta_k$  = the slope coefficient of continuous variable

$\mathcal{E}$  = Random error/ residual term

### 3.8. Validity and Reliability

Validity indicates the degree to which an instrument measures what it is supposed to measure. It refers to the degree to which a statistical instrument measure and emphasis on the accuracy of the measurement (Kothari, 2004). The researcher measurement variables were all selected from valid source i.e. Lovelock (1994) and the study were done under continuous supervision of my advisor.

Reliability is an instrument that measures the extent to which data yield consistent result when the characteristic being measured has not been changed. (Leedy and Ormrod, 2005)



**Table 1:** Reliability Statistics

Cronbach's Alpha	N of Items
.738	27

*Source- Own Survey (2018)*

Before proceeding to collecting data the researcher has made reliability analysis presented on table 1 using Cronbach's coefficient alpha which measures internal consistency by establishing if certain items measure the same construct. The researcher takes 30 sample respondents set of statement and found 0.738 which is higher than the threshold value of 0.7. The result is presented above in tabular form.

Beside the researcher believed that this study is reliable since the sample respondents were selected based on sampling formula and questionnaires were collected with high level of response rate.

### **3.9. Ethical Considerations**

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

In this research ethical issues were given a special consideration. The research purpose were briefly explained and discussed with respondents on the first page of the questionnaire during collecting data. In addition the respondents were assured that their responses will only be used for the purpose of the research. The findings of the research were presented without any deviation from the outcome of the research. In addition the researcher gave full acknowledgments to all the reference materials used in this study.

## CHAPTER FOUR

### DATA PRESENTAION, ANALYSIS AND INTERPRETATION

Under this chapter presentations and discussions of the findings derived from the analysis of data are elucidated. Both descriptive and inferential techniques of data analysis are employees to see the characteristics of the sample and also identify and discus the relationship between dependent and independent variables.

#### 4.1. Response Rate

The study targeted a total number of 389 questionnaires distributed 96% or 374 questionnaires were filled and returned with valid response. According to Pallant (2005) a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent; therefore the response rate is adequate for analysis and reporting with excellent response rate. The data was analyzed using SPSS version 20.

#### 4.2. Demographic Information

In order to generally describe the characteristics of the respondent gender, age, educational back ground (qualification), monthly income, ATM card use in years and frequency of ATM use per month were asked. The results obtained from the structured questionnaires are presented on the table below.

**Table 2:** Demographic Characteristics of Respondents

<b>Demographic characteristics</b>	<b>Alternatives</b>	<b>Frequency</b>	<b>Percent</b>
Gender	Male	225	60.2
	Female	149	39.8
	<b>Total</b>	<b>374</b>	<b>100.0</b>

Age	18-25	167	44.7
	26-35	113	30.2
	36-45	56	15.0
	46-55	30	8.0
	56-65	8	2.1
	<b>Total</b>	<b>374</b>	<b>100.0</b>
Educational Background	12 Complete and below	76	20.3
	Diploma	109	29.1
	Degree	96	25.7
	Masters and above	93	24.9
	<b>Total</b>	<b>374</b>	<b>100.0</b>
Monthly income	Less than 2,000	4	1.1
	2,000-4,999	95	25.4
	5,000-11,999	152	40.6
	12,000 and above	123	32.9
	<b>Total</b>	<b>374</b>	<b>100.0</b>
ATM card use in years	Less than one Year	79	21.1
	1-2 Years	145	38.8
	3-4 Years	117	31.3
	5-6 Years	33	8.8
	<b>Total</b>	<b>374</b>	<b>100.0</b>
Frequency of ATM use	4 or less times per month	168	44.9
	5-8 times per month	113	30.2
	9-12 times per month	75	20.1
	13 or more times per month	18	4.8
	<b>Total</b>	<b>374</b>	<b>100.0</b>

*Source- Source- Own Survey (2018)*

The result obtained from demographic characteristics of the respondents shows that 60.2% are males and the rest 39.8% are females this shows that ATM card is largely preferred by males than female. The result also shows more than 74.9% of ATM

users age ranges from age 18–35 indicating that this banking channel is more preferred by younger societal groups. Respondent's educational status shows: 20.3% are 12 complete and below, 29.1% have diploma, 25.7% have Degree and 24.5% have masters and above.

Monthly income of the respondents were observed as 1.1% earning less than 2,000, 25.4% earning 2,000-4,999, 40.6% earning 5,000-11,999, and 32.9% earning 12,000 and above. From this we can conclude that ATM is not preferred by low level income societies this may be because of the charge it has while withdrawal or any other reason.

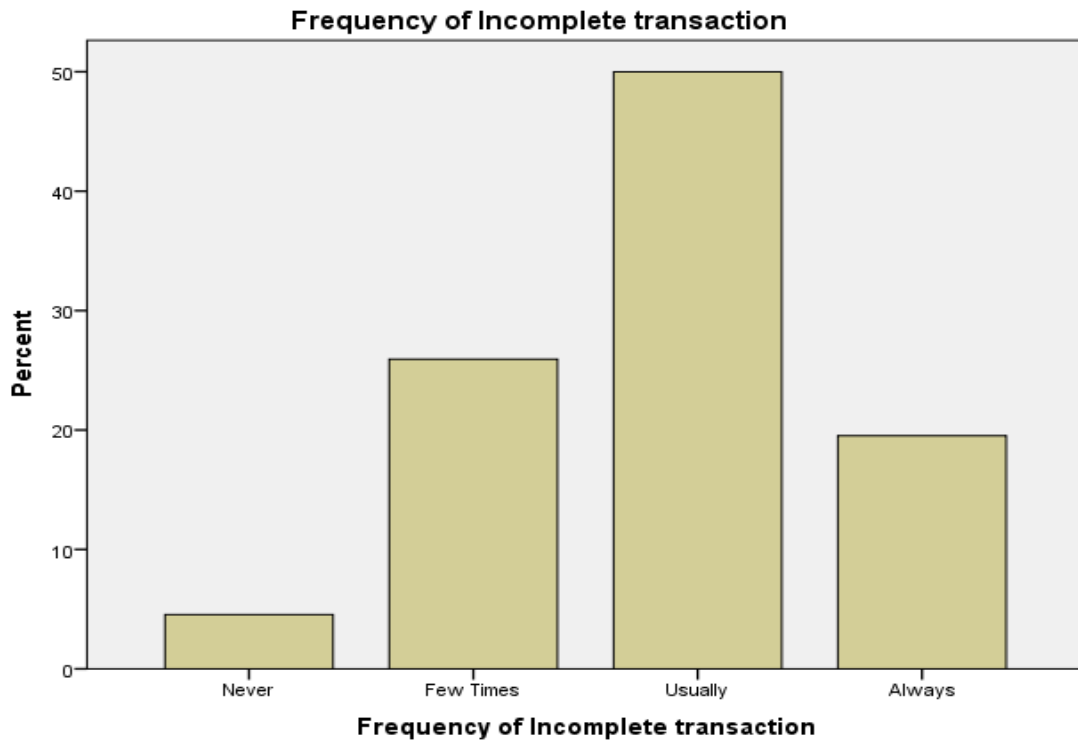
In addition, number of years in using United bank ATM was shown as 21.1% of respondents have used United bank ATM for less than a year, 38.8% have used ATM for 1-2 years, 31.3% have used ATM for 3-4 years and 8.8% have used ATM for 5-6 years. This shows that numbers of ATM users are relatively increasing since the past four years. Regarding frequency of ATM use per month 44.9% of respondents uses ATM 4 or less time per month, 30.2% uses 5-8 time per month, 20.1% 9-12 times per month and only 4.8% uses ATM 13 or more times per month.

### **4.3. Data Analysis**

The researcher used three types of analysis techniques which are descriptive analysis to interpret result from questionnaire and interview using frequency table and figure by from result reflected in mean and standard deviation, Correlation analysis to check and understand the relationship between dependent variable Customer satisfaction and independent variable ATM service quality and finally Regression analysis is also carried out to identify the type of effect independent variable has on the dependent variable and understand the level of effect it can apply.

#### **4.3.1. Descriptive Analysis**

Descriptive analysis is used to summarize the result obtained from questionnaires collected from sample of United Bank ATM users and interview results obtained from United Bank Card payment Assistance manager.



**Figure 2:** Frequency statistics in percent for ATM incomplete transaction.

*Source- Own Survey (2018)*

From the statistics above, respondents on frequency of incomplete ATM transaction shows 4.5% have never faced incomplete ATM transaction the remaining 25.9% has faced few times, 50% faced usually and 19.5% faced incomplete ATM transaction always. This implies that from a total number of 374 respondents only 17 have never had incomplete ATM transaction. This shows the reliability of ATM is very low that there is a high chance of an incomplete transaction to happen. From this we can understand that completeness as one of service quality dimension is not well served by United Bank ATM machine. Those customers who almost receive incomplete transaction always are highly discouraged to use the machine unless they lost another option. This finding also supports the problem statement which is reflected by disputes with suspected, incomplete and rejected transactions.

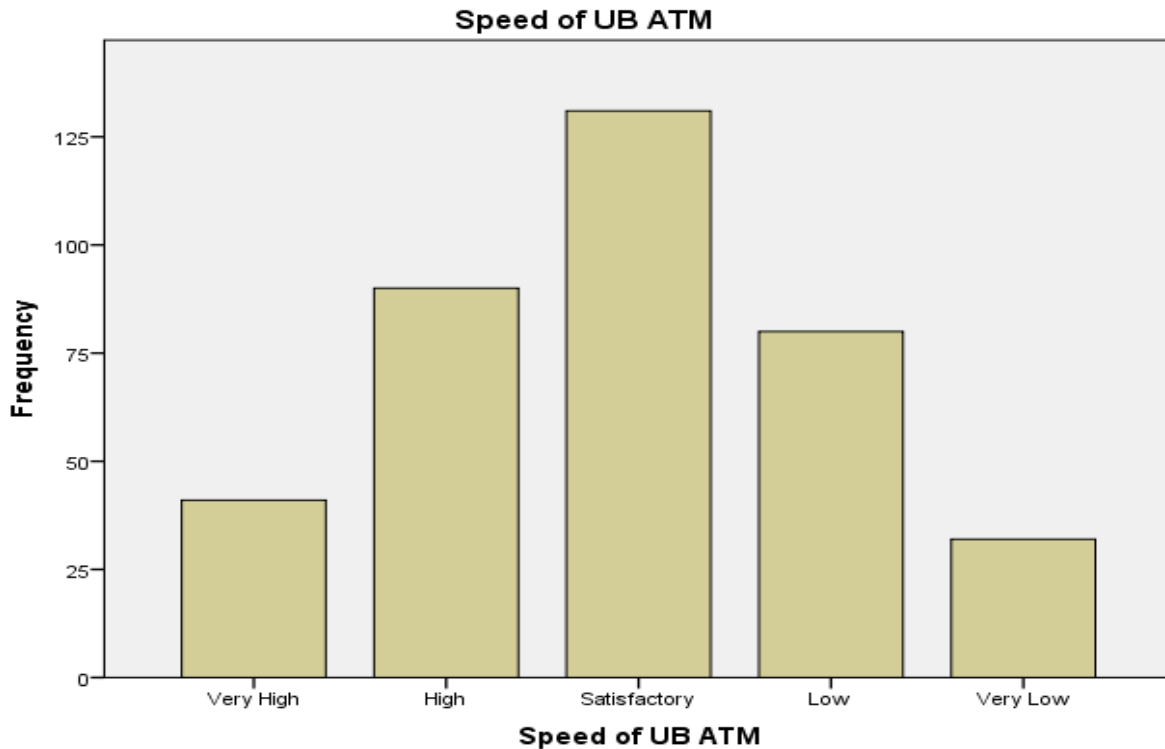
As per the data collected through questionnaire Mostly reflected customer complain regarding ATMs are in related to dispute handling and incomplete transaction happen due to system disconnection while once request is processing; at that time the balance from the customer account is deducted but cash will not be dispensed. Even if the system will continue immediately the machine will be restarted and be ready for the next request forgetting the previous incomplete transaction. The customer's money will be returned after 4-5 days if only UB customer were using UB ATM machine (On-Us transaction) but if the ATM machine is other banks (Off-Us transaction) minimum of 15 days will be required to make reconciliation and return the customer's money. Now United Bank starts training to empower all branch managements on handling their branches dispute for on-us transactions and reverses dispute transactions within one day. But for off-us transaction solutions are still on discussions to minimize the longer time taken by other banks

Most of the ATM problems are happening due to external factors which cannot be directly controlled by the bank managements. For instance network problems happen as a result of telecom port transfer continuous ups and down. As a solution United Bank tries to use wireless network substitutions but still it cannot avoid disputes happen because wireless network only be used when the Telecom network is down so in between any transaction could be incomplete.

Continuous network failure is also happening on branches and ATM network modems which result in high customer dissatisfaction and unreliability on the system we have. These lead customers to return their card or not using it by preferring to go to bank in person.

The second most complains are regarding new ATM card and existing card and PIN replacement delay. These delay happen because cards are collected from PSS (Premium switch Solution Company). PSS Company which handles every card and PIN related request preparation for every member bank of PSS is handled under a single roof which results in delay of customer request. But still the bank is requesting

outsiders to install a system in which the bank can prepare its own card and PIN requests with a very short period of time.



**Figure 3:** Frequency statistics using rating scale for ATM speed.

*Source- Own Survey (2018)*

In addition the ATM machine speed was rated by respondents as 11% very high, 24.1% high, 35% satisfactory, 21.4% low and 8.6% as very low. The result obtained shows that speed of United Bank ATM machine to serve one’s request is relatively fair and satisfactory.

The result obtained from descriptive statistics on ATM service quality dimensions and customer satisfaction is reflected in the below table using mean and standard deviation. Mean represents the sample results with a single value that represent central of the data. Standard deviation determines how spread out the data is from the mean. A higher standard deviation value indicates greater spread in the data.

Likert scale analysis for service quality dimensions results showing mean value with low values below average value 3 are those in which customers have perceived as low quality and needs more work on that area for improvement.

According to Zaidaton & Bagheri (2009) mean value score below 3.39 is considered as low, mean value from 3.40 up to 3.79 is considered as moderate and mean score above 3.8 is considered as high.

If we observe the mean value for the response collected from respondents the data reflects courtesy (3.36), security and reliability (3.08) scoring above average medium mean value implying that this dimensions are relatively better perceived by customers but still have low value. The remaining service quality dimensions scored lower mean value below average i.e. communication (2.94), Credibility (2.66), Completeness (2.75), responsiveness (2.82) and Convenience (2.81) this is due to the service in this regards are perceived by customers in a very low value. The result implies that more quality improvement has to be done on dimensions with lower mean results.

The result can also be presented in summary as presented in the below table.

**Table 3: Descriptive Statistics of summarized service quality dimensions**

	N	Mean	Std. Deviation
Customer satisfaction	374	2.6711	1.29191
Courtesy	374	3.3636	.78019
Communication	374	2.9432	.63464
Credibility	374	2.6578	.90381
Completeness	374	2.7500	.89981
Security and Reliability	374	3.0797	.62324
Responsiveness	374	2.8185	.64439
Convenience	374	2.8097	.43351

*Source- Own Survey (2018)*



In addition, customer satisfaction on the overall United Bank service quality is also reflected to be lower with mean value 2.67 which implies that United Bank customers are not satisfied on the services they receive from the bank, which makes importance on the main reason of doing this research.

#### **4.3.2. Correlation Analysis**

The correlation between dependent and independent variables along with the causal effect was analyzed using Statistical Package for Social Science (SPSS). The researcher believed that Relationship between service quality dimensions and customer satisfaction has to be identified before directly analyzing the effect on one another. The correlation matrix presented below using Spearman's results shows correlation between dependent variable customer satisfaction and the independent variable ATM service quality measurement dimensions: courtesy, communication, credibility, completeness, security and reliability, responsiveness and convenience used in the questionnaire.

Correlation result lies between +1 and -1. The sign of the correlation coefficient indicates the direction of the relationship, while the magnitude of the correlation showing the strength of the relationship.

According to Zaidaton & Bagheri (2009) correlation result coefficient below 0.2 implies very weak relationship, coefficient from 0.2 - 0.4 shows weak relationship, coefficient from 0.4 – 0.6 implies moderate relationship, coefficient from 0.6 – 0.8 implies strongly relationship and coefficient result above 0.8 implies very strong relationship between dependent and independent variables.

**Table 4: Spearman’s correlation between service quality dimensions and customer satisfaction**

		Courtesy	Communication	Credibility	Completeness	Security & reliability	Responsiveness	Convenience	Customer Satisfaction
Courtesy	Correlation Coefficient	1	-.271**	-.240**	.136**	-.184**	-.126 **	.534**	.071
	Sig. (2-tailed) N		.000 374	.000 374	.008 374	.000 374	.015 374	.000 34	.169 374
Communication	Correlation Coefficient	-.271**	1	.043	.166**	.416**	.248**	.282**	.354**
	Sig. (2-tailed) N	.000 374		.409 374	.001 374	.000 374	.000 374	.000 374	.000 374
Credibility	Correlation Coefficient	-.240**	.043	1	.306**	.087**	-.259**	.111**	.245**
	Sig. (2-tailed) N	.000 374	.409 374		.000 374	.092 374	.000 374	.032 374	.000 374
Completeness	Correlation Coefficient	.136**	.166**	.306**	1	.388**	-.191**	.275**	.651**
	Sig. (2-tailed) N	.008 374	.001 374	.000 374		.000 374	.000 374	.000 374	.000 374
Security & reliability	Correlation Coefficient	-.184**	.416**	.087	.388**	1	.246**	.346**	.545**
	Sig. (2-tailed) N	.000 374	.000 374	.092 374	.000 374		.000 374	.000 374	.000 374
Responsiveness	Correlation Coefficient	-.126 **	.248**	-.259**	-.191**	.246**	1	-.146**	.116**
	Sig. (2-tailed) N	.015 374	.000 374	.000 374	.000 374	.000 374		.005 374	.024 374
Convenience	Correlation Coefficient	-.499 **	.282**	.111**	.275**	.346**	-.146**	1	.383**
	Sig. (2-tailed) N	.000 374	.000 374	.032 374	.000 374	.000 374	.005 374		.000 374
Customer satisfaction	Correlation Coefficient	.071	.354**	.245**	.651**	.545**	.116**	.383**	1
	Sig. (2-tailed) N	.169 374	.000 374	.000 374	.000 374	.000 374	.024 374	.000 374	

\*\*Correlation is significant at the 0.05 level (2-tailed)

Source- Own Survey (2018)

From table 4 correlation result for all service quality measurement dimensions have positive relationship with customer satisfaction. The finding supports the result of Akinmayowa J.T. and Ogbeide D.O (2014) Correlation results indicating that

convenience, efficient operation, security and privacy, reliability and responsiveness are significant dimensions of ATM service quality and that ATM service quality has a positive and significant relationship with customer satisfaction. From the correlation result courtesy has value of .071 with insignificant range of P-value (.169).

The result implies Courtesy and responsiveness has relatively weak correlation with customer satisfaction. The significant level of Courtesy is above the acceptable range; whereas Completeness, Security and reliability has relatively high correlation with customer satisfaction.

If observe the correlation between independent variables there are some results implying a negative significant value. This implies that one independent variable may not be significantly related to other independent variable or inversely related to it. Since the researcher only wanted to identify the relationship between the dependent and the independent variable the highlighted values are the only important values to be used for the research.

#### 4.3.3. Regression Analysis

Regression analysis is carried out under this sub title to identify the effect of ATM service quality on customer satisfaction. The result from correlation indicates there is a positive relationship between customer satisfaction and service quality dimensions selected by the researcher. 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.

**Table 5:** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.813 <sup>a</sup>	.661	.655	.75914

a Predictors: (Constant), Convenience, Security and Reliability, Credibility, Responsiveness, Communication, Completeness, Courtesy

*Source- Own Survey (2018)*

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable (customer satisfaction) due to changes in the independent variable service quality dimensions. From the above table 5 the value of adjusted R squared was 0.655 indicating that there was variation of 65.5% on customer Satisfaction (dependent variable) due to changes in ATM service quality dimensions Courtesy, communication, credibility, completeness, security and reliability, responsiveness and convenience (independent variables) at 95% confidence interval. While the rest 34.5% customer satisfaction is affected by other external variables that are not included under this study.

**Table 6: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	411.626	7	58.804	102.039	.000 <sup>b</sup>
	Residual	210.922	366	.576		
	Total	622.548	373			

a. Dependent Variable: customer satisfaction

b. Predictors: (Constant), Convenience, CRED11, RESPONEW, Communication, COMPLET, SECNEW, Courtesy

*Source- Own Survey (2018)*

From the ANOVA statics in table 6 above, the processed data which is the population parameters, had a significance level of 0% which shows that the data is ideal for making a conclusion on the population's parameter as the value of significance (p-value) is less than 5%

**Table 7: Coefficients<sup>a</sup>**

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-7.807	.603		-12.939	.000
Courtesy	.488	.068	.295	7.184	.000
Communication	.273	.071	.134	3.868	.000
Credibility	.342	.049	.239	6.980	.000
Completeness	.616	.057	.429	10.760	.000
Security & Reliability	.325	.081	.157	3.988	.000
Responsiveness	.643	.071	.321	9.047	.000
Convenience	.932	.127	.313	7.329	.000

a. Dependent Variable: I am satisfied with the overall ATM service of United Bank

*Source- Own Survey (2018)*

As reflected on Table 7, the variable test shows all significant value for service quality dimensions and constant value has value of .000 which is p-value < 0.05 resulting positive significant relationship with the dependent variable customer satisfaction.

The model of the regression is stated as follows

$$Y = -7.807 + 0.488X_1 + 0.273X_2 - 0.342X_3 + 0.616X_4 + 0.325X_5 + 0.643X_6 + 0.932X_7$$

The values of the Standardized Beta Coefficients ( $\beta$ ) indicate the effects of each independent variable on dependent variable. The values of the Standardized Beta Coefficients in the Beta column on the above Table indicated sign implies the direction of the relationship between the dependent and independent variables. From the multi regression result all independent variables have positive coefficient values with acceptable level of significance. This implies the increase in every independent variables (service quality dimensions) result in increase on customer satisfaction.

From the equation constant value represents the dependent variable which is customer satisfaction. When all independent factors or service quality dimensions are zero the value of the dependent variable will be **-7.807**. This means that with the absent of all quality dimensions customers are dissatisfied with a negative value within the significant level.

The coefficients for Convenience (0.932), Responsiveness (0.643) and Completeness (0.616) have the highest positive value implying that the increase in this variables will highly affect customer satisfaction and there has to be given a high emphasis on their performance because a decrease on their performance will at the same time decrease customer satisfaction highly. The other variables also have positive effect on customer satisfaction positively.

#### **4.4. Hypothesis Testing**

Under this sub title the research hypothesis will be tested as per the research finding

**Hypothesis 1:** ATM Service Courtesy has no positive and significant effect on customer satisfaction.

Courtesy affects customer satisfaction positively with beta coefficient .488 with 0.000 significant value. This implies that an increase in courtesy will affect customer satisfaction positively. This Hypothesis is not accepted.

**Hypothesis 2:** ATM service Communication has no positive and significant effect on customer satisfaction.

Communication affects customer satisfaction positively with beta coefficient .273with 0.000 significant value. This implies that an increase in Communication will affect customer satisfaction positively. This Hypothesis is not accepted.

**Hypothesis 3:** ATM service Credibility has no positive and significant effect on customer satisfaction.

Credibility affects customer satisfaction positively with beta coefficient .342 with 0.000 significant value. This implies that an increase in Credibility will affect customer satisfaction positively. This Hypothesis is not accepted.

**Hypothesis 4:** ATM service Completeness has no positive and significant effect on customer satisfaction.

Completeness affects customer satisfaction positively with beta coefficient .616 with 0.000 significant value. This implies that an increase in Completeness will affect customer satisfaction positively. This Hypothesis is not accepted.

**Hypothesis 5:** ATM service Security and Reliability has no positive and significant effect on customer satisfaction.

Security and reliability affects customer satisfaction positively with beta coefficient .325 with 0.000 significant value. This implies that an increase in both security and Reliability affects customer satisfaction positively. This Hypothesis is not accepted.

**Hypothesis 6:** ATM service Responsiveness has no positive and significant effect on customer satisfaction.

Responsiveness affects customer satisfaction positively with beta coefficient .643 with 0.000 significant value. This implies that an increase in Responsiveness will affect customer satisfaction positively. This Hypothesis is not accepted.

**Hypothesis 7:** ATM service Convenience has no positive and significant effect on customer satisfaction.

Convenience affects customer satisfaction positively with beta coefficient .932 with 0.000 significant value. This implies that an increase in Convenience will affect customer satisfaction positively with relatively highest value. This Hypothesis is not accepted.

**Table 8: Summary of Hypothesis**

<b>Hypotheses</b>	<b>Beta coefficient</b>	<b>P value</b>	<b>Status (Accepted/Rejected)</b>
H1: ATM Service Courtesy has no positive and significant effect on customer satisfaction.	.488	.000	Rejected
H2: ATM service Communication has no positive and significant effect on customer satisfaction.	.273	.000	Rejected
H3: ATM service Credibility has no positive and significant effect on customer satisfaction.	.342	.000	Rejected
H4: ATM service Completeness has no positive and significant effect on customer satisfaction.	.616	.000	Rejected
H5: ATM service Security and reliability has no positive and significant effect on customer satisfaction.	.325	.000	Rejected
H6: ATM service responsiveness has no positive and significant effect on customer satisfaction.	.643	.000	Rejected
H7: ATM service Convenience has no positive and significant effect on customer satisfaction.	.932	.000	Rejected

*Source: Own Survey (2018)*



## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION**

The aim of this chapter is to summarize the overall finding of the research, conclude on the findings and finally recommend the possible solutions that could solve the main problems discussed on the above chapters.

#### **5.1. Summary of Findings**

In this section basic findings which are collected from the analysis part will be discussed. Based on the data collected through questionnaire and interview the following findings are summarized as follows.

- The bank's ATM user satisfaction on the overall service quality result shows mean value 2.665. The result implies ATM service is not satisfying customers need and the service is perceived by customers at a very low level.
- Regarding the speed of ATM machines majority customers have rates as satisfactory and high. The result comparatively shows the ATM speed is performing better.
- ATM incomplete transactions are rated as usually occurring problems by customers with 187 number or (50%) of sample respondents. This shows that the ATM accuracy is reflected to be lower.
- Survey result indicates that Courtesy (3.36), Security and Reliability (3.08) and are presented with comparatively better with medium mean result. The other service quality dimensions are perceived lower below average by customers.

- From the interview conducted disputes due to incomplete ATM transaction, delay in new 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 in PSS Company which handles every card and PIN related request preparation for every member bank of PSS 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 low which needs improvement.
- Currently the bank is working hard to solve primary customer needs and provide answers for customer complains. After this next step will be evaluating the service quality under the supervision of external consultants to upgrade the system the machines are connected to and to advance the available options the ATM can implement. This will lead to moderate banking system with high level of customer satisfaction. With this the bank can achieve the planed income from the machine and change the previous trend of caring cash around for payments.
- Correlation analysis was carried out to understand the relationship nature between the dependent and independent variable. The result shows that there is a positive and significant relationship between customer satisfaction and service quality dimensions (Courtesy, communication, credibility, Completeness, security and reliability, responsiveness and convenience). To relatively compare Completeness, Security and reliability have high correlation with customer satisfaction. Except Courtesy has insignificant P-value of .169 more than the acceptable range or 0.05.
- Regression analysis has been carried out to know the effect of the independent variables on the independent variables. The result in model summary's

adjusted R square is 0.655 referring that 65.5% change in customer satisfaction exists due to service quality dimensions contained under this study where as the remaining 34.5% change is as a result of other factors not included in this study. ANOVA value indicates .000 significant values and the coefficient for the regression result shows Convenience (0.932), Responsiveness (0.643) and Completeness (0.616) have the highest positive value; Courtesy (0.488), Communication (0.273), Credibility (0.342) and Security and reliability (0.325) with relatively low values. Implying that all result have positive coefficient reflecting positive effect on customer satisfaction.

## **5.2. Conclusion**

This study aims at investigating the effect of ATM service quality on customer satisfaction the case of united bank Addis Ababa branches. This section will conclude on the finding by considering the literature and the data collected through questionnaire and interview.

The survey result shows that communication, credibility, completeness, responsiveness and convenience are perceived by customers with low mean value below average and other dimensions of service quality; security and reliability and courtesy have medium mean value. The result also reflects the overall customer satisfaction by the bank service is also lower, since adjusted R square result reflects 65.5% of customer satisfaction is measured by the dimensions included under study. The result implied that more work has to be done on those lower perceived dimensions.

The study confirmed that most of the respondents from selected samples are not much satisfied with the service provided by the bank. As the result shows all of the service quality dimensions have positive relationship with customer satisfaction. And they also have positive and significant effect on the customer satisfaction which implies direct relationship to it. In addition the result implies that convenience,

responsiveness and completeness affects customer satisfaction comparatively higher than the other variables.

Generally the result reflected that service quality measurement dimensions of ATM are not adequately served by the bank.

### **5.3. Limitation of the Study**

The limitations of this study can arise from the scope of the study. This study mainly focus on the effect of ATM service quality on customers satisfaction but other factors beyond service quality that affect customers satisfaction on ATM cannot be addressed by this study. Moreover, this study focused only on United Bank particularly on Addis Ababa branches. The study does not include other users from premier switch solution (PSS) card members and other private banks. As a result the finding of the study shall be accepted considering the above limitations.

### **5.4. Recommendations**

Based on the above problems and analysis made from primary and secondary data collected, the researcher has provided the following solutions are recommended by consider it as useful.

- The bank has to work harder to bring the number of available ATM machines in to a highest number so that availability and accessibility to customers will enhance. This will also create convenience for card holders and will lead to increment in ATM card user satisfaction. In addition to this POS has to be distributed to business institutions like café, hotel, entertainment centers and shopping areas in order to encourage the uses with discount. And discourage the culture of carrying cash around or visiting bank branches for every single payment
- Large number of incomplete transaction is observed from the survey result. Since completeness is the main determinant for service quality. It has to be given a high emphasis. For instance the bank has to maintain a procedure to

reverses On-Us transaction disputes right on its existence so that customers will not be affected by incomplete transaction resulting with high attraction in competitive banking industry and build high trust on its customers' mind.

- Continuous follow up is required by the bank/ branches for issues related to network problems, cash shortage in machines, available denomination and other day to day activity requests. Since these problems can be internally controlled, researcher believed that each branch needs assigned officer for the purpose of controlling ATM related issues. From the companies structure ATM related problems are handled at head office level. In branches ATM is a responsibility for all staffs. But the researcher has suggested centralizing the controlling system of ATM service quality.
- United Bank ATM services alternatives have limited applicable options, cash withdrawal and balance enquiry are the only service provided. As the researcher observe from the machine, options like fund transfer to other account holder and walking beneficiary are listed as service to be provided but the services does not work. The researcher recommends the bank to work on modifying the available services provided by the machine and add more additional features on it to enhance customer satisfaction.
- Customers has to be announced well on the benefit and security management policy of the bank ATM regarding high confidential value given to it. Also every customer has to be informed about the risk associated with putting the card and the PIN together and to literally damage the PIN and change it after the first login. Although the money withdrawal limit sated per day is mainly to prevent the risk of losing or misplacing PIN and card at the same time the limit shall be increase by verifying further step of user authorization to increase customer convenience.
- Generally United bank has to make continuous assessment using research and development to upgrade the service quality to advance level and to feel the gap between the market and customers need. Specific staffs shall be assigned

for every branch named as customer relationship manager mainly involved in connecting the customer needs with the banks offer and make the necessary follow up to sustain the banks good image against continuous technological advancements

- Furthermore the researcher recommends further study on the subject matter to analyze other factors that measure ATM service quality which will have effect on customer satisfaction.

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# **Appendixes**



5. How long have you used United Bank ATM card?

Less than one year [ ]      1-2 years [ ]  
 3-4 years [ ]      5-6 years [ ]

6. How frequently do you use ATM card?

4 or less times a month [ ]      5 to 8 times a month [ ]  
 9 to 12 times a month [ ]      13 or more times a month [ ]

**Section II: General questions**

7. How frequently have you received incomplete transaction from United Bank ATM?

Never [ ]      few times [ ]  
 Usually [ ]      always [ ]

8. How do you rate speed of ATM machine to serve one's request

Very high [ ]      High [ ]      Satisfactory [ ]  
 Low [ ]      Very Low [ ]

No.	Factors	(1) Strongly disagree	(2) Disagree	(3) Neutral	(4) Agree	(5) Strongly agree
<b>Courtesy</b>						
1	United Bank ATMs communicates with polite and respectful words.					
2	The ATM machine is welcoming and friendly					
<b>Communication</b>						
3	The ATM language is easy to select					
4	The ATM language is easy to understand					
5	The available service provided by the machine is easy to find and use					
6	Wrong messages from the ATM machines are easily understandable					
<b>Credibility</b>						
7	Cash is always Available in ATM					
8	Notes of good Quality are available in UB ATM					

		(1) Strongly disagree	(2) Disagree	(3) Neutral	(4) Agree	(5) Strongly agree
<b>Completeness</b>						
9	United Bank ATMs always provide complete transaction					
10	ATM services has all the needed alternatives/options					
<b>Security and Reliability</b>						
11	Stations to use ATM machines are secured					
12	PIN code provided from the bank is confidential					
13	Cardholder's information are secured					
14	Money received from ATM is reliable in amount					
15	I feel secure in using ATM card					
<b>Responsiveness</b>						
16	United banks is responsive to ATM machine network problems quickly					
17	New cards are delivered to customers on time					
18	Card/PIN replacements are delivered to customers on time					
19	ATM disputes from UB cardholder occurred on UB machine (on-us Dispute) are responded quickly.					
<b>Convenience</b>						
20	United Bank's ATM machines are fairly distributed in Addis Ababa					
21	ATMs are presented in convenience locations for use					
22	UB ATMs are always connected to network and ready for service					
23	ATM cash withdrawal limit per day is appropriate and enough					
24	All needed denominations are available in UB ATM					
25	The ATM is serving the purpose of avoiding going to banks for services.					
<b>customer satisfaction</b>						
26	I am satisfied with the overall service of United Bank					

**Thank You For your willingness!**

**ቅድስት ማርያም ዩኒቨርሲቲ**  
**የድህረ ምረቃ ትምህርት ክፍል**  
**በህብረት ባንክ ኤቲኤም መክፈያ ካርድ ተጠቃሚዎች የሚሞላ መጠይቅ**

ውድመላሾች፡- በቅድሚያ ጊዜዎትን ሰውተው መጠይቁን በታማኝነት፤ በፈቃደኝነት እና በተበባሪነት ስለመሰሉልኝ አመሰግናለሁ።  
 አላማው

ይህ መጠይቅ የኤቲኤም አገልግሎት ጥረት በህብረት ባንክ አዲስአበባ ቅርንጫፍ ካርድ ተጠቃሚዎች እርካታ ላይ ተፅዕኖ ለመገምገም የተዘጋጀን ጥናታዊ ዕሁፍ ለማጠናከር ታስቦ የተሰራ ነው።

ለመጠይቁ የሚሰጡት ምላሽ በንግድ አስተዳደር የሁለተኛ ዲግሪ ማሟያ ዕሁፍ ላይ በመጀመሪያ ደረጃ መረጃነት ያገለግላል።

በመሆኑም የእርሶ ትብብር ለጥናቱ መሳካት ትልቅ ፋይዳ ያበረክታል። በመጠይቁ ላይ የቀረቡትን ጥያቄዎች በሙሉ በጥንቃቄ እና በግልፅነጽ እንዲመልሱልኝ በትህትና እጠይቃለሁ። በተጨማሪም ምላሽ ለጥንታዊ ዕሁፍብቻ የምጠቀምበት እና ሚስጥራዊነቱ የተጠበቀ መሆኑን አረጋግጣለሁ።

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እስከዳር አበበ ስልክ : +251910 608065

ጠቅላላ መመሪያ

- በመጠየቂያ ቅፁ ላይ ስሞትን መፃፍ አይጠበቅብትም
- ትክክለኛ መልስ ያለበት ሳጥን ላይ ይህን ምልክት ( ) ያስቀምጡ

ክፍል 1 ግላዊ መረጃ

1. ሦታ ወንድ [    ] ሴት[    ]
2. እድሜ 18-25 [    ] 26-35 [    ] 36-45 [    ]  
46-55[    ] 56-65 [    ] 65 ወይምበላይ[    ]
3. የትምህርት ደረጃ 12 እና ከዛባታች [    ] ዲፕሎማ [    ]  
የመጀመሪያ ዲግሪ [    ] ሁለተኛ ዲግሪና ከዛባላይ [    ]
4. ወርሃዊ ገቢ( ቡብር) ከ2000 ብር ያነሰ [    ] ከ2000-4999 [    ]  
ከ5000-11999 [    ] 12000 እና ከዛ በላይ [    ]
5. የህብረት ባንክ የክፍያ ካርድ (ኤቲኤም) ለምን ያክል ጊዜ ተጠቅመዋል ከ1አመት ያነሰ ጊዜ [    ] 1-2 አመት[    ]

3-4 አመት [ ]

5-6 አመት [ ]

6. የህብረት ባንክ የክፍያ ካርዶች (ኤ.ቲ.ኤም) በምን ያክል ጊዜ ተጠቅመዋል;

በወር ውስጥ 4 ጊዜ እና ከዛቦታች [ ]

በወር ከ5-8 ጊዜ [ ]

በወር ውስጥ ከ9 እስከ 12 ጊዜ [ ]

በወር 13 ጊዜ እና ከዛቦላይ [ ]

7. በህብረት ባንክ የክፍያ ማሸኖች ላይ ምን ያክል ያልተጠናቀቁ (የተቋረጡ)

አገልግሎቶች ያጋጥሞታል።

አጋጥሞኝ አያቅም [ ]

በአብዛኛው ጊዜ [ ]

ጥቂት ጊዜያት [ ]

በተደጋጋሚ ያጋጥመኛል [ ]

8. የህብረት ባንክ የክፍያ ማሸኖች ላይ አንድ አገልግሎት ለማግኘት ያለው ፍጥነት ምን ያህል ነው;

በጣም ፈጣን [ ]

ፈጣን [ ]

መካከለኛ [ ]

ዝግያለ [ ]

በጣም ዝግያለ [ ]

ተ.ቁ	መመዘኛ	(1) በጣምአቃ ወማለሁ	(2) እቃወማ ለሁ	(3) አይታወቅ ም	(4) እስማ ማለሁ	(5) በጣም እስማማለሁ
<b>አቀራረብ</b>						
1	የህብረት ባንክ የክፍያ ማሸኖች የሚጠቀሙት ቃላት አክብሮት የተሞላባቸው ናቸው።					
2	የመክፈያ ማሸኖቹ ለመጠቀም የሚጋብዙ ናቸው					
<b>ተግባሮች</b>						
3	ከማሸኑ ላይ ቋንቋ መምረጥ ቀላል ነው።					
4	የማሸኖቹ ቋንቋ ለመረዳት ግልፅ ነው።					
5	ማሸኖቹ የሚሰጧቸውን አገልግሎቶች አግኝቶ ለመጠቀም ቀላል ነው።					
6	ያልተሳኩ (ስህተትን የሚገልፁ) መልእክቶች በግልፅ መረዳት ይቻላል።					
<b>አስተማማኝነት</b>						
7	ሁልጊዜ በማሸኖቹው ስጥገን ዘብብ ይኖራል።					
8	ከማሸኑ ውስጥ የሚቀበሉት ገንዘብ ገንጹ ህእና ያልተቀዳደደ ነው።					
<b>የተጠናቀቀ (የተሟላነት)</b>						
9	የህብረት ባንክ መክፈያ የተጠናቀቀ እና የተሟላ የገንዘብ እንቅስቃሴ ያደርጋል።					
10	የህብረት ባንክ ማሸኑ ላይ መጠቀም የሚፈልጉት የአገልግሎት አይነት ሁሉ ይገኛል።					



		(1) በጣም እቃወማለሁ	(2) እቃወማ ለሁ	(3) አይታወቅ ም	(4) እስማ ማለሁ	(5) በጣም እስማማለሁ
<b>ተአማኝነት እና እርግጠኛነት</b>						
11	ማሸኖቹ የሚገኙበት ስፍራ ከተለያዩ ችግሮች የተጠበቀ ነው።					
12	ባንኩ የሚሰጠው የሚስጥር ቁጥር ሚስጥርነቱ የተጠበቀ ነው።					
13	የባለካርዱ መረጃ ሚስጥራዊነቱ የተጠበቀ ነው።					
14	ከማሸኖቹ የሚቀበሉት የገንዘብ መጠን ስህተት የለባቸውም።					
15	የመክፈያ ማሸኖችን ስጠቀም ከስጋት ነጻ ሆኜ ነው።					
<b>ምላሽሰጪነት</b>						
16	የባንኩ ቅርንጫፍማሸኖች ላይ ለሚፈጠሩት ችግሮች ቅርንጫፎች ፈጣን እርምጃዎቻችን ይሰጣሉ።					
17	አዳዲስ ካርዶች በጊዜ ለተጠቃሚዎች ይደርሳሉ።					
18	ለነባር ካርዶች/ ሚስጥር ቁጥሮች ምትክ በጊዜ ይደርሳሉ።					
19	የባንኩ ማሸኖች ከባንኩ ደንበኞች ሂሳብ ገንዘብ ቆርጦ ሳይከፍል ቢቀር ባንኩ ፈጣን መልስ ይሰጣታል።					
<b>የአገልግሎት አመቺነት</b>						
20	የህብረት ባንክ የክፍያ ማሸኖችን በአስፈላጊው ቦታ ማግኘት ይቻላል።					
21	የህብረት ባንክ የክፍያ ማሸኖች ለመጠቀም አመቺ ቦታዎች ላይ ይገኛሉ።					
22	የህብረት ባንክ የክፍያ ማሸኖች ሁል ጊዜ ለአገልግሎት ዝግጁ ናቸው።					
23	በቀን ማውጣት የሚፈቀደው የገንዘብ መጠን በቂ እና ተገቢ ነው።					
24	የሚያስፈልጉ የገንዘብ ዝርዝሮች በሙሉ ማሸኑ ውስጥ ይገኛሉ።					
25	የባንኩ የክፍያ አገልግሎት ባንክ መሄድ ማስቀረት የሚለውን አላማ ተግባራዊ አድርጎልኛል።					
<b>የተጠቃሚ እርካታ</b>						
26	በአጠቃላይ ከህብረት ባንክ በማገኘው አገልግሎት እረካለሁ።					

ስለ ትብብር አመሰግናለሁ።

## **Appendix B:**

### **Interview Questions**

1. What are frequently observed problems from customers?
2. Why do you think is the reason for the problems mentioned above?
3. Comparing the ATM service provided by United Bank with other banks in Ethiopia and Abroad what level are we in?
4. What is the next plan of the bank regarding ATM service quality?
5. Do you think no, of ATM machines available for service are enough in no? If yes, How?
6. Regarding the security of using ATM machines do you think it is safe?

## Appendix c:

### Descriptive statistics on Service quality dimensions

	N	Mean	Std. Deviation
<b>Courtesy</b>			
United Bank ATMs communicates with polite and respectful words.	374	3.1738	.96271
The ATM machine is welcoming and friendly	374	3.5535	1.17666
<b>Communication</b>			
The ATM language is easy to select	374	3.2888	1.37657
The ATM language is easy to understand	374	3.1471	1.02373
The available service provided by the machine is easy to find and use	374	2.6364	1.24971
Wrong messages from the ATM machines are easily understandable	374	2.7005	1.22798
<b>Credibility</b>			
Cash is always Available in ATM	374	2.6203	1.24492
Notes of good Quality are available in UB ATM	374	2.6952	1.26433
<b>Completeness</b>			
United Bank ATMs always provide complete transaction	374	2.8329	1.35991
ATM services has all the needed alternatives/options	374	2.6671	1.28802
<b>Security and reliability</b>			
Stations to use ATM machines are secured	374	2.8302	1.34470
PIN code provided from the bank is confidential	374	3.3048	1.41918
Cardholder's information are secured	374	3.6176	1.07659
Money received from ATM is reliable in amount	374	2.7420	1.32146
I feel secure in using ATM card	374	2.9037	1.40139
<b>Responsiveness</b>			
United banks is responsive to ATM machine network problems quickly	374	3.4652	1.15669
New cards are delivered to customers on time	374	2.1364	1.24272
Card/PIN replacements are delivered to customers on time	374	2.6377	1.28943
ATM disputes from UB cardholder occurred on UB machine (on-us Dispute) are responded quickly.	374	3.0348	1.45214

<b>Convenience</b>			
United Bank's ATM machines are fairly distributed in Addis Ababa	374	2.8102	1.23783
ATMs are presented in convenience locations for use	374	3.2594	1.42351
UB ATMs are always connected to network and ready for service	374	2.2674	1.26963
ATM cash withdrawal limit per day is appropriate and enough	374	2.8743	1.37879
All needed denominations are available in UB ATM	374	2.9759	1.46156
The ATM is serving the purpose of avoiding going to banks for service	374	2.6711	1.29191
<b>Customer Satisfaction</b>			
I am satisfied with the overall ATM service of United Bank	374	2.6711	1.29191
Valid N (list wise)	374		