

# ST. MERY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

# THE IMPACT OF SERVICE QUALITY ON COSTOMERS' SATISFACTION (THE CASE OF ATM SERVICES IN UNITED BANK S.C.)

BY
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June, 2019 ADDIS ABABA, ETHIOPIA

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A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINSTRATION (GENERALMANGEMENT)

> June, 2019 ADDIS ABABA, ETHIOPIA

# ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES DEPARTMENT OF GENERAL MBA

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# **DECLARATION**

I the undersigned declare that this thesis is my original work, prepare under guidance of Assistant Professor ZemenuAynadis. All source of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted ether in part or in full to any other higher learning institution for the purpose of earning any degree.

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# **Endorsement**

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#### **ACKNOWLEDGEMENTS**

First of all, I would like to thank to GOD gave me a strength throughout the time all i have done., and my advisor AtoZemenuAynadis (Ass prof), who helped me in all my thesis work by sharing his accumulated experience, his scholarly and excellent professional guidance and advisory to bring this thesis work to the chapter of the earth. Next, I would like to thank to appreciate the cooperation of my husband, AtoKinfemichaelOuma for his unreserved treatment and provision of the very important data at their disposal. Additionally, my deepest appreciation goes to my family my mom and big sister for their moral and psychological support throughout my study. Finally, I would like to thanks and want to give greetings, appreciation and best wishes to, Staffs of UB and Moreover, also all my families.

# **Acronyms**

ATM: Automatic teller machine

E-business: Electronic business

E-Recs-QUAL: Electronic recovery service quality

E-S-QUAL: Electronic service quality

E-service quality; Electronic service quality

SERVQUAL: Service Quality

Techno-based: Technology based

UB: United Bank S.C.

VIF- ...... Variation of Inflation Factor

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# **Abstract**

Currently the banking service is well equipped with innovations and as the application of the technology in the banking industry is becoming so significant. Thus the objective of the study was to examine the effect of ATM Service quality dimensions on customer satisfaction of ATM in the case of UB. With a high emphasis, a quantitative approach based on a convenience sampling technique was used, in which a structured survey questionnaire was employed to collect data from the customers. Also with less emphasis a qualitative method which is a structured interview was used to collect data from the bank. For data analysis a descriptive and inferential statistics were used while to aid computation SPSS was applied. The results of the study reveal that the effect of service quality dimensions on customer satisfaction of ATM is direct and significant. Also the results show that the effect of customer satisfaction ATM is direct and significant. More than 60% of respondents signed on positively showing that customers have interest and found out convenient to use the banking technology instead of having interaction with human tellers. It also allows customers to transact their banking service quickly, it saves time, their personal information is not misused by their bank, and support service is good. Hence it can be concluded that the overall application of UB ATM banking has a bright future in the Ethiopian banking industry and UB has a chance to mobilize the potential customers and reap more profits through provision of quality service using the banking technology as an interface. To improve the service delivery and thereby standardize the service offering the bank has to work hard more on the technology based banking.

**Keywords**: ATM-banking, customer satisfaction, ATM service quality, techno-based banking service and E-banking, SERVQUAL

### CHAPTER ONE

#### INTRODUCTION

# 1.1 Background of the Study

Automated Teller Machine is a computerized telecommunications device that provides the customers of a financial institution with access to financial transactions in a public space without the need for a human clerk or bank teller (Adelowo, 2010). Automated teller machine was first introduced in Ethiopia in 2001, with the Commercial Bank of Ethiopia (CBE) being the pioneers of this service to the banking sector (Gardachew, 2010).

The history of banking is that till the industrial error, banking services were rendered on manual basis characterized by; ledger keepers at back office, cashiers providing front desk service, ledger cards, cash registers among others. This is not only tedious, but also strenuous and slow besides providing inaccurate and unreliable information on a regular basis because of the human error. The limitations of manual banking highlighted above in most cases results to customer complaints, slowness in service provision, long queue and high operational costs etc. These limitations reduce reliability of financial services as regards to accuracy and completeness. Relying on such information results into managers making decisions that lead to costs and administration problems as evident by the closure of banks. This is because manual records had been altered by back staff to defraud it.

Customer satisfaction has been an essential concept in the literature of marketing and for customer focused firms, it is both a" goal and a tool". And yet there are factors that affect customer satisfaction such as friendly employee, service quality and competitive pricing (Angelova and Zekiri, 2011). The challenge is as the environment endures drastic changes and increased awareness with technological advancement, how firms can manage service quality and hence satisfy customers, is what motivated the student researcher to focus on the topic area which is contemporary and dynamic.

Several technology based models have been proposed to measure the service quality which has a direct relationship with customer satisfaction. The technology provides arrays of opportunities to

customers such as checking balance, transferring funds and thereby reduces time and costs. Also it enables service providers to customize their offering and make available with superior delivery. And yet studies show that the economy of most developing countries including Ethiopia is still cash driven and the monetary transactions are performed via the exchange of bank notes, and coins for goods and services. To curve this and arm itself with such technology CBE introduced for the first time ATM, in 2001. The data obtained from UB's e-payment department shows that UB ATM 99 automated teller machine stations found in Addis Ababa and outline branches. According to the e-payment department office the number of UB ATM card holders are more than 100,000.00.

However, despite UB's effortless attempts in the last one decade about the ATM banking, studies show that its service is still with different problems and challenges including low level of infrastructure development ,frequent power interruption, broken and slow Internet connections which have adverse effects on the service quality and customer satisfaction.

By appreciating the actions taken by the UB in adopting the technology such as a full-fledged ATM and others to move the bank to the "world class" commercial bank, based on the above premises it seems high time to examine the impact of ATM service quality dimensions on customer satisfactions to maintain the momentum and accelerate its growth in such a way that to do its level best to turn over the shortcomings and challenges into better opportunities. Simply put, to provide more insights regarding the pertinent issues in association with the service quality delivery via ATM, the study opts to put in place a model which will be comprehensive enough so that it can be employed to measure the impact of ATM service quality and its thereof on customers satisfaction. The study was conducted on the UB ATM card holders with convenient sampling technique to get input into the different factors utilized while conducting the assessment of the ATM service quality. In so doing the study is vindicated as it presents a model which integrates the main dimensions that need to be examined in measuring the impact of the service quality of ATM on customer satisfaction in UB. It is essentially paramount and significantly valuable in providing comprehensive insights to the marketers and practitioners in general and to the bank in particular, regarding the essential issues related to the ATM and thereby presenting the cue about customers' needs, quality service customer satisfaction.

### 1.2Statement of the problem

Research will concentrate on the dimensions of ATM service quality, has been identified for develop the conceptual framework using literatures and its effect on customer satisfaction. The study is motivated by the challengers confronting by the banks regarding their ATM machines and the customers which are often under-reported. Service quality has become a major area of academic research and research in this area point out that service quality is an important indicator of customer satisfaction. There are operating inconveniences of ATM machines and regularly there are issues faced by customers while using the ATM machines such as not dispensing the cash, debit transaction when cash is not dispensed, card stuck in the ATM, unable to withdraw cash with located ATM etc. Hence it is important to identify the problems that make a barrier between customer and ATM service. For that it is necessary to identify the factors which could motivate the customers to use ATM machines. Therefore the problem encounters will be: "What are the importances of factors which influence on customer satisfaction with relation to the ATM service"

The bank is not utilized its capacity related with the updated technology that other international banks uses the upgrading technology that are exchanging of foreign currency in to local currency, locating the ATM machine in safe and secure places, less awareness for those customers how to use the ATM machine, limitation of withdrawal using ATM machine, insufficient ATM machine located to access easily and so on.

Currently the banking service is well equipped with innovations, postulating the quality service as the de facto of the digital era using technology as an interface. The world at large including some African nations is enjoying the technology. For instance, studies show that in Singapore the digital economy is legally established and bank notes and coins have sent to archives for historical memorandum. However, a review on the extant literatures shows that most of the studies have been done in the developed world such as USA, UK, Australia and in Asian countries such as Singapore, Pakistan, India and a few in African nations .For instance, Khan(2010) in Pakistani banks identified reliability, convenience ,efficient operation ,security and privacy, responsiveness as dimensions of ATM service quality. Dilijonasetal.(2009)

identified dimensions of ATM including sufficient number of ATMs, search locations, user friendly ,ATM functionality and conveniently located in the Baltic states.

In Ethiopia however, banking service is underdeveloped and cash note is still the dominant medium of exchange (Gardachew, 2010). There are lots of researches that have made conducted to ATM related to customer satisfaction. Also, to the best of the student researcher's studies that have been conducted on the challenges, problems and prospects of e-banking in Ethiopia and determinants of customers' adoption of e-banking in Ethiopia and mobile banking and yet, the techno- based service quality studies have become increasingly significant as the preference of customers is shifting towards techno- based self service. Based on the above fact the researcher tried to reflect the issues that are not yet practiced on such area. So this is also another research gap that needs empirical studies. Thus from the aforementioned premises, the focus or the problem study is, the impact of automated teller machine service quality on customer satisfaction in the case of United Bank S.C.

# 1.3.1Prospects of ATM in the case of the United Bank S.C.?

Researches on the impact of service quality on customer's satisfactionhave been numerous. In this connection the bank may face the following problem:

What is the effect of ATM service quality dimensions on customer satisfaction?

What is the relationship between ATM service quality dimensions and customer satisfaction?

Does ATM has adequate and competent personnel?

# 1.4Objective of the Study

The objective of the study classified into general objective and specific objective

# 1.4.1General objective

The general objective of this study is to the impact of service quality on customers' satisfaction based on perceived perception of the UB ATM card holders.

# 1.4.2Specific objective

In addition to the above general objective the study was focused on the following specific objectives

To assess the effect of ATM service quality dimensions on customer satisfaction.

To examine the relationship between ATM service quality dimensions and customer satisfaction.

To determine ATM has adequate and competent personnel

Based on the study model and content entertained the following hypotheses are demonstrated:

- Ho1: Easiness has no direct and significant effect on customer satisfaction.
- Ho2. Assurance has no direct and significant effect on customer satisfaction.
- Ho3. Security has no direct and significant effect on customer satisfaction.
- Ho4 Customization has no direct and significant effect on customer satisfaction.
- Ho5 Comprehensiveness has no direct and significant effect on customer satisfaction.
- Ho6 Convenience has no direct and significant effect on customer satisfaction.
- Ho7 Support service has no direct and significant effect on customer satisfaction
- Ho8 Employee knowledge has no direct and significant effect on customer satisfaction.

# 1.5Limitation of the Study

Despite the appropriateness, applicability and suitability of the model adapted, there are limitations. For instance, the study used a convenient sampling technique; as a result the convenience sampling technique itself may have some bias effect as there was no equal chance of selection. As convenient sampling enables a researcher to take what he or she prefers, minimizing such bias might be difficult. And yet to minimize such bias the student researcher tried to increase the number of ATM stations from where the data was being collected. That is the number of samples taken were designed out in such a way that to include enough number of representative stations and with that intent 30 ATM stations were selected. So bias was minimized via increasing number of stations. Also to reduce bias the sample was taken from 99 ATM machines in Addis Ababa of the bank in which geographic and district wise consideration were take into account to include a representative sample in so doing balancing was done and bias is reduced.

### **1.6Delimitation of the Study(Scope)**

The study used extensively a quantitative research method in which it confines itself to questionnaire survey on customers of UB ATM card holders that are in Addis Ababa city within those 99 ATM stations. Also the study with less emphasis used a qualitative research method namely a structured interview questions to collect data from the bank. After a wider range of assessment was done on existing literature a structural model which was developed by Mojoodietal.(2013) was adapted as a conceptual frame work of the study which is generic model that can handle a given study regardless of the type of technology used. The SERVQUAL model cannot be used in the technology based banking service for the service content and the channel of delivery of techno-based banking are different. In the techno-based banking service technology is the interface. The results of the research would be in a position to address the problem areas of all UB ATM stations across Ethiopia, if it had been conducted on larger scale. However, as including all UB ATM a user in this study is practically impossible the study delimited itself to UB ATM card holders who are in Addis Ababa city only.

# 1.7Significance of the Study

It will help the management to understand the cause of the problem. The studies also create awareness on the party that involve in automated teller machine and brings a considerable change on the profitability of the business. In addition to this, the assessment helps to identify the bottlenecks and challenges that hinder or slow the growth of ATM activities process throughout the bank. Therefore, the study's findings and recommendations are very important to higher officials because it draws their attention to point out some deviations that need to be corrected. The finding of the research paper will be an important input for those who want to study in this area and a reference for the management of the bank.

# 1.80rganization of the Study

The study is organized into five chapters.

**Chapter One**: deals with back ground of the study statement of the problems stating, generaland specific objectives, research questions, limitation, delimitation, significance and ethics. **Chapter Two:** the nucleus of study discusses the extant literature such as theoretical framework of service

quality and technology, prospects and challenges of ATM, diverging views on e-service quality dimensions and the conceptual model.

**Chapter Three:** methodology: including research design,research method, sampling method,data collection methods, data analysis,validity and reliability issues.

**Chapter Four** is about results and discussions including factor analysis, uni-variate analysis, correlation analysis, regression analysis, and discussion of results and summary.

**Chapter Five**: about conclusion, recommendations, implications and suggestions for further study.

# 1.90perational Definitions

**ATM**: "an automatic teller machine which is used to save the cost and reach-ability of a bank; by satisfying customer needs" (Vasumathi and Dhanavanthan, 2010:469).

**E-Service quality** is any banking service which is rendered by employing computer -controlled systems based on the application of IT without involvement of banks usual branch Allen and Barr (1996) cited in Zaman and Chowdhury (2012).

**Internet banking**: a type of banking service delivery by using networked computers viainternet.

**Mobile banking**; is a type of banking service delivery thorough the application of mobile phone.

**Traditional service quality** -means the quality of all non- electronic based customers that haveinteractions and expectations with companies (Parasurmanetal. ,2005)

# **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1Theoretical Framework

### 2.1.1 Service Quality Theoretical Framework

### 2.1.1.1Service Quality

Service quality has been described as a form of attitude by many researchers (Cronin& Taylor,1992). Narteh (2013) identifies the dimensions of ATM service quality and evaluates customers' perceptions of the relative importance of these dimensions. It provides a theoretical basis for conceptualizing ATM service quality and he identified five dimensions of the "ATM quality" model. These dimensions are reliability, convenience, responsiveness, ease of use and fulfillment. Joseph and Stone (2003) found that among the customers convenient location, secure services, special services for the disabled, user friendliness, and personalization were the dimensions of ATM servicequality. Al-Hawari, Hartley and Ward (2005) study that secured places, user friendliness, convenient location and proper functioning as the key dimensions of ATM service quality. Mobarek (2007) found speed of operations and waiting time as the important predictors of ATM service quality. Dilijonas, Kriksciuniene, Sakalauskas and Simutis (2009) categorized the factors that determine ATM service quality into essential resources such as adequate number of ATM, convenient and secure locations and user friendly system, important dimensions of operation of ATM, maximum speed, minimum errors, high uptime and cash back and value-based aspects such as reasonable cost, offering to cover maximum needs of customers as the major dimensions of ATM service quality.

According to the Al-Hawari, (2005) banks should look at availability by time of day, or peak transaction times. If the network is at 90% available, but at peak transaction times you are operating at more than 99%, then an erroneous conclusion could be drawn that serious performance issues need to be addressed if you look at only at overall availability (Kumbhar, 2011). The issue of security is of paramount importance because all over the world, there is an increasing use of ATM and so the risks of hacking turn to be a reality more than ever before.

Wang (2003) Expresses the research view that nowadays ATM with magnetic strip authenticated only by inserting password on the ATM machine. Subha and Vanithaasri (2012) proposed ATM access with biometric security system which is highly authenticated to the client. Asabere, Baah and Odediyah (2012) identified in another case study of Botswana relating to ATM service quality established Speed of operation, and Waiting time as the important predictors of ATM service quality. The study revealed that the critical features that influenced customers' choice of banking products and their adoption were Convenience, Reliability, Security, Flexibility, Time saving and Ease of use. According to Bradley and Stewart (2003) the entry of technology and the use of electronic banking had a great impact and revolutionized the operating style of many public sector banks by way of introducing anywhere banking and anytime banking to meet the customer expectations. ATM offer real-time service specific information when compared to the traditional banking services. According to Kumbhar (2011) cost effectiveness of ATM service was positively and significantly correlated with the customer satisfaction in ATM service. It shows that cost effectiveness of the ATM service were core service quality dimension and significantly affecting customer satisfaction. Banks are using technology to reduce cost and enhance the efficiency. According to Rosmaini, Aliyu, Gafar, Abubakar, Lame and Takala (2013) cost is one of the main concerns reported by the respondents which influence service delivery in ATM banking. When the needs of the customers' are not satisfied then the customers are dissatisfied due to the bank charges (cost). The study of Rosmaini et.al has proven that the constructs cost has a strong evidence of customer satisfaction vie ATM banking. Idris (2014) conducted imperative for banks' stakeholders not to restrict their service quality only on the ease of use and access but also to improve their service quality on security of the ATM. He has identified the ATM services quality has a direct effect on both perceived ease of use, perceives accessibility and perceived security. He has taken three independents variables that measures the ATM customers perception towards satisfaction, these includes ease of use, accessibility and security. Ease of use is an optimum convenience for customers to interact with a given system. It is also affirmed that the factors affecting to the customer satisfaction are determined by the ease of use of ATM. Previous research conducted on ATM service quality revealed that ease of use directly influence on customer satisfaction level. It refers to how clear and easy the system is in conducting banking transactions. The study of Adeniran and Junaidu (2014) covers the major factors affecting customers' satisfaction in Nigeria such as ease of use. The positive impact

implies that the more the improvement of the ATM services in terms of their ease of use, more the satisfaction of customers in the use of ATM service. Ease of use of the ATM services will change the customer satisfaction positively. Customer satisfaction and different demographic factors are the key elements of the retained customer base. Afzal, Saeed and Lodhi (2013) found that customer satisfaction and demographics are highly inter related. Afzal et.al (2013) under their study has converted the demographic factors into segments such as age, gender and qualification. According to them the crucial demographic factor that has an impact on customer satisfaction level was age. The study has a significant relation of impact of customer demographics on customer satisfaction level was found. Customer satisfaction and different demographics are crucial elements for building loyalty among customers of banking industry.

### 2.1.1.2. Characteristics of Service and service quality

Services can be defined as " any activity or benefits that one part can offer to another that is essentially intangible and dose sot necessarily result in the ownership of anything". That is " services are a form of product that consist of activities, benefits or satisfactions offered to, for sale that are essentially intangible and does not result in the ownership of anything" including banks, hotels, airlines(Kotler and Armstrong, 2006:233)

Service quality has three unique features namely: intangibility, heterogeneity, and inseparability of production and consumption and in the absence of objective measures, an appropriate assessment of the service quality of a firm is to measure consumers' perceptions of quality (Parasuraman et al., 1988; cited in Angelova and Zekiri, 2011). There are four basic characteristics of service offerings. Services are "performances or actions" and cannot be touched, tasted, felt or seen. For instance, health care services are actions that will be carried out by the service providers and directed toward patients including surgery and diagnosis treatment. According to this characteristic in one hand, it is quite difficult for service providers to readily display or easily communicate to customers the service which is**intangible**, on the other, it is quite challenging for customers to assess the quality of theservice being delivered (Zeithmal and Bitner,2004).

The second characteristics of service are **heterogeneity**. Because services are performances that are performed by humans, there is little chances where two services being performed for two customers will be exactly alike. Moreover, it is a hard fact that there is no way that two customers are exactly alike, as they have their own peculiar experience and performances and

evaluate the services being offered to them uniquely in their own ways and perspectives. For instance, a bill collector of "Keffya Financial Technology" PLC in Addis Ababa city may render a different service experience to two different customers on the same day based on their individual needs and personalities and on whether the bill collector is entertaining them when he or she is fresh in the morning and or tired of in the after-noon. It is "impossible for service industry or individual seller of services to standardize output" (Stanton,1985:35). For instance, the service quality being rendered by a given Airline might not be the same on each trip. Hence, because heterogeneity is not consistent across time,organization and people,ensuring consistent service quality is usually quite challenging to the service providers.

The third characteristics of services are the "simultaneous production and consumption of services". Unlike the most goods which can be produced first then sold and consumed,most services are sold first and produced at the same time. For instance, a techno mobile can be produced in Bahrdar, shipped to Addis Ababa, sold after some days later and used for some years. However, services which are intangible such as Hotel services have different experiences from that of tangibles goods. Basically, services can't be rendered until they have been sold and the dining experience is actually produced and consumed once at the same time. Moreover, most of the time the customer is present in the moment of the service is being performed and observe and may also sometimes take part or show up in the process of producing the service (Zeithmal and Bitner,2004). Also "services often cannot be separated from the person of the seller" and most services should be created and dispensed at the same time(Stanton,1985:37).

Hence, due to the fact that services are performed and consumed simultaneously, entertaining mass production is quite difficult. Because of this the quality of service rendered and customersatisfaction would be essentially influenced by the actions of service providers and the interactions between service providers and customers.

The fourth characteristics of services are **perish-ability**. "Perish-ability refers to the fact that services cannot be saved, stored or returned". For instance, a seat in Ethiopian airlines from Addis to London or a bed room in Raddsion BLU hotel, or telephone line capacity not utilized in Ethio-telecom cannot be reclaimed and used or resold at another time. So since it is not possible to store, or resale the services in the latter time, demand forecasting and making creative planning to make available capacity utilization are quite challenging for service providers (Zeithaml and Bitner ,2004:22).

#### 2.1.1.3. Dimensions and Determinates of Service Quality

Gronroos(1984)cited in Seth etal.(2004) in his technical and functional quality model states that to compete successfully a firm need to have a comprehensive understanding regarding customers perceptions of the quality and the way the service quality is being delivered is influenced. He contends that managing service quality means the service provider should match the expected and perceived service to each other in such a way that customer satisfaction will be attained. He further identified that the three components of service quality including technical, functional and image. Technical quality is the quality of what customer really gains following her or his interaction with the service provider and is so essential to her or his evaluation regarding the quality of service. The functional quality refers to how a customer gets the technical outcome, which is so essential to her or his views of the service being delivered to her or him. Finally the image is quite significant to the service provider, by which it can built mostly through technical and functional quality of service including the other factors such as word of mouth, pricing and public relations. Accordingly Gronroos(1984) pointed out that the process of functionality quality shows "how" the service delivered whereas technical quality or outcome meant that "what" customers receive, the benefits of the service being delivered.

#### 2.1.1.4Traditional Service Quality and SERVQUAL

Traditional service quality, Parasurmanetal.(2005) meant that the quality of all non-electronic based customers that have interactions and expectations with companies. Comparatively the traditional banking system is accompanied by tiresome authentication and verification procedures which are time consuming and forcing customers to incur costs by visiting a firm now and then in person (Saleem and Rashid, 2011). Service quality denotes the difference between customers' expectations of how a firm need to carry out and the service performance which customers perceive(Alanezietal.,2010). To entertain such practices (measuring service quality) there are many models that have been developed by different scholars, of which some are intended to focus on expectations and marginalize importance, for instance, SERVQAL.

In light of the traditional service quality measurement setting customer satisfaction was measured using the SERVQUAL model (Parasuramanetal., 1988) by adopting Expectancy-Disconfirmation Model, Performance only Model/SERVPERF( Cronin and Taylor,1992) or American ASCI(Angelova and Zekiri, 2011). Among these the most extensively employed

instrument to assess quality service being delivered which influences customer satisfaction in the traditional service settings was the SERVQUAL model.

However, despite SERVQUAL's wider range of applications criticism came out to surface because of its dimensionality, lack of universality and fall short of generalizations (Cronin and Taylor 1992; Brown etal., 1993) cited in Gupta and Bansal (2012). For instance, the SERVQAUL model(Parasuramanetal., 1985, 1988)) shows that customers' perception of service quality was influenced by series of expectations-performance gaps. However, for SERVQUAL Model to be properly functional expectations should be constant but Carman (1990) cited in Joseph etal. (1999) came out with the notion that expectations do actually change with familiarity of service. To overcome the shortcomings of SERVQUAL Cronin and Taylor(1992) came out with a new scale called SERVSERF to measure the service quality cited in (Gupta and Bansal ,2012;Seth etal.,2004). These two scholars in their study of performance only model tried to examine the conceptualization and measurement of service quality and its association with consumer satisfaction and purchase intentions. They have made a comparison by computing the difference scores with perception and came out with a conclusion that, perceptions only are better predictor of service quality. Furthermore, following the shortcomings of the framework of SERVQUAL, with respect to conceptualization and measurement of service quality Cronin and Taylor (1992) cited in Seth etal.(2004)proposed performance only measurement of service quality (SERVPERF). Most importantly, they argued that it is Performance rather than "Performance-Expectation" which can determine the service quality, proposing that service quality is evaluated by perceptions only regardless of expectations and importance weights. Generally studies show that in assessing service quality SERVQUAL is not appropriate for conceptualizing the service quality construct, due to the inadequacy of expectation /performance gap model that underlines the conceptual development of the SERVQUAL scale, showing that the underlying framework of SERVQUAL is not appropriate enough.

The basic difference between the two is that SERVQUAL dimensions conceptualize service quality by comparing the perceptions of the service being received with expectations whereas SERVSERF entertains only the perception of service quality, the performance only. Seth etal. (2004) findings' show that service quality relies on technical quality, functional quality and corporate image of the organization in consideration which is consistent with prior findings such as (Gronroos, 1984). They further state that service quality is an antecedent of consumer

satisfaction and may have a better effect on purchase intentions."Service quality is an antecedent of consumer satisfaction, which has a significant effect on purchase intentions" (Cronin and Taylor, 1992) cited in Seth etal.(2004:920). Accordingly they have made an attempt to make an assessment regarding the various service quality models ranging from conventional personalized services to the internet-enabled services including the organizational and behavioral aspects.

#### **2.1.1.5.** Customer Satisfaction

The relationship between service quality and customer satisfaction has received considerable attention. Many researchers have operational customer satisfaction by using multiple item scale. Service quality and customer satisfaction are ultimate goals of service providers. Customer satisfaction with the services is based on the encounters of the customers. According to Sureshchandar, Rajendran and Anantharaman (2002) as cited in Scheuing (1995) customer satisfaction is considered a prerequisite for customer retention and loyalty and helps in realizing marker share, return on investment, profitability etc. According to Singh and Komal (2009) examines the customer satisfaction level in banks with special reference to problems faced, responses about the fee charged and post purchase behavior of the consumers after using ATM. It also examines the relationship between various ATM facilities, factors affecting the choice of ATM and its interplay with customer satisfaction. The customer satisfaction level has been analyzed in two terms by Singh & Komal (2009). Material customer satisfaction (MCS) level and abstract customer satisfaction (ACS) level are those customer satisfaction levels. Customer satisfaction in material sense denotes the aggregate position of the banks in terms of fee charged, frequency with which problems are faced and post purchase behavior of the customers. In abstract sense, customer satisfaction level denotes the position of the banks in terms of post purchase behavior, the efficiency of facilities provided and the example of others using the ATM of the same bank.2.1.2 Technology Based Theoretical Framework

# 2.1.2.1. Technological Background

As of the mid of 1990's, a radical shift has been made in the banking industry regarding the channel of delivery through the implementation of self service channels, that is via e-banking such as ATM and internet banking (Musiime and Ramadhan, 2011). Following such radicalshift in the banking industry channel of delivery, customers as well have made a shift from traditional banking to the online transaction system (Qureshietal. 2008) cited in Musiime and

Ramadhan(2011). The basic driving force behind such shift is related to perceived usefulness, perceived ease of use, security and privacy (Musiime and Ramadhan, 2011).

Kotler and Armstrong (2006) state that the "technology boom" has created various ways which enable firms to learn about and track customers. Most importantly, to create products and services which are finely tailored to the individual customer needs, they state that the technology is providing a valuable support business companies in such a way that they are in a position to reach out their products and services more efficiently and effectively than ever before. In this way technology has brought new ways of communication and tools which enables companies to reach out their targeted customers at ease. For instance, through e-commerce customers have arrays of opportunities to learn regarding the design, order and payment for the products and services of their choices directly from home without visiting the showrooms physically.

So in today's competitive environment where "knowledge is king" a well-designed technology is quite essential in order to extend human capabilities so that organizational competitiveness can be enhanced (Goetsch and Davis, 2000). Studies show that technological advancement is shaping the field and influencing the practices of service marketing and significantly changing the nature of the services which results in to tremendous potential, for the new service offering. This means the technological development profoundly changing the way services are delivered, putting both customers and service providers on the better position in order to get and render more efficient and customized services respectively. Most importantly, the technological development facilitates the global reach of services which had been historically tied to the home locations (Zeithamal and Bitner, 2004). In this case, the development of technological innovations, have created opportunities for organizations to provide superior services to improve customers satisfactions. The number of bank customers having performance in using self service delivery mode is also increasing which is attributed to the increase in technological innovations in executing the transactions (Omar et al., 2011). Accordingly technology has been the basic force behind services innovations which we havenow taken it for granted, including innovations automated voice mail, ATM, online banking and electronic banking (Zeithamal and Bitner, 2004).

Besides rendering opportunities for new service offerings the technology is making available vehicles to deliver existing services in more accessible, convenient and efficient manners. For instance, technology such as ATM facilitates the basic customers service functions including bill

paying, checking account records, tracking orders, transaction and information seeking, applying for loans and shift money among accounts without visiting branches. In short technology has changed once and for all the customer service approach. Above all, through self-service technologies customers are in a position to serve them in more effective and efficient manner which has never been imaginable in the "old days". Joseph and Stone (2003) state that the installment of customer friendly technology such as ATM , telephone and internet banking as a means to deliver the traditional banking and thereby to maintain customer loyalty and increase market share. Because of these crucial importance banks make huge investment in technology with the aim of controlling cost, attracting potential customers and meeting the convenience and technical expectations of the existing customers (Joseph and Stone, 2003).

The beauty of the technology is that for employees it can render a valuable support in making them more effective and efficient to deliver the required service to the intended customer at the right time. Above all, employees will be in a position to customize the service they render in such a way that, their offerings can fit individual customer needs. Hence the technology has come out in the potential for reaching out to customers across the globe. That is, "Advances in communication technology have made people from all over the world electronic neighbors and electronic customers" Goetsch and Davis(2000:25).

#### 2.1.2.2. Technology Adoption Theory

According to Lee etal.(2008)cited in Mulugeta(2013) there are theoretical approaches of consumers' adoption of technology namely the diffusion of Innovation(DI) model and the technology acceptance (TAM)model. Accordingly they state that the focus of DI is on consumer characteristics which are related to the amount of time it takes to adopt whereas TAM assesses consumer technology adoption through predispositions including overall feeling, attitudes and perceptions. Also according to Fishbein and Ajzen (1975) cited in Eid(2011) the theory of reasoned action (TRA) explains the relationship between attitudes, intentions and behaviors. Accordingly they state that the TRA model posits that human beings make rational decisions in light of the information available to them, and the best immediate determinant of a person's behavior is intent. Also the TRA model shows that an individual's belief towards a behavior is an immediate determinant of his or her intention to carry out a behavior. The Technology Acceptance Model (TAM) Davis (1989) cited in Eid(2011) contends that the intention to accept or use a new technology is determined by its perceived usefulness and perceived ease of use.

Expectation-Confirmation Theory (ECT) which was proposed by Oliver (1980)cited in Eid(2011)also states that consumers firstly form an initial expectation prior to purchase, and then build perceptions about the performance of the consumed product/service after a period of initial consumption. Eid(2011) states that then consumers will decide on their level of satisfaction based on the extent to which their expectation is confirmed through comparison of the actual performance of the product/service against their initial expectation of the performance.

Scholars such as Burke(2002) states that there are many factors affecting consumer adoption and use of the technologies such as interactive shopping technologies may provide extensive product selections, powerful search and screening tools, and volumes of information. Hoyer and MacInnis(2010)classify those factors that affect adoption of the technology including perceived value, uncertainty, consumer learning requirements, social relevance legitimacy and adaptability and social factors. Perceived ease of use and usefulness are the perception of consumers regarding the innovation in question(Davis, 1989) cited in Mulugeta(2013).

#### 2.1.2.3.E-service Quality

Studies show that the age of e-business has been breaking out unconventional way of performing business and one of such astonishing techno-based service delivery(e-business) is ebanking. Accordingly studies pointed out that the advent of such e-business which has been accompanied with technological innovations and globalization is urging firms to rethink and redefine their business operations in light of value chain reengineering and restructuring business models. Worldwide, e-banking such as ATM banking service has emerged in the 1990s as one of the fastest means of service delivery in the service industry such as banks(Saleem and Rashied, 2011). According to Allen and Barr(1996) cited in Zaman and Chowdhury (2012) e-service quality/techno-enabled self-service is any banking service which is rendered by employing computer -controlled systems based on the application of IT without involvement of banks usual branch. The trend in the banking industry has undergone through various economic revolutions, passing from cash economy to cheque economy and converted to plastic and card economy(Pahwa and Saxena, 2011). Some call the present globalised era a "digital economy". Accordingly in the past decade the banking industry has been highly affected by the advancement of information and communication technology by which banks and otherfinancial institutions have made improvement on their services through the implementations and

application of IT. In so doing technology has become as one of the essential tool which facilitates banks' organizational structures, business strategies, customer's services and related functions (Zaman and Chowdhury, 2012). One of the imputes of such technological advancement in the banking industry is its ability in bringing distant customers come closer (Howcraft and Drukin, 2003) cited in Zaman and Chowdhury (2012).

And yet studies show that measuring the quality of e- service quality is quite difficult and complicated. The reason behind the difficulties and complication of measuring the quality of e-service quality in light of e-retailing is that unlike the traditional retailing, e-retailing is not a single uniform marketing activity (Francis and White, 2004). Voss(2003)states that e-retailing based service systems differ from the traditional one in terms of channel delivery, service content and product type cited in (Swaid and Wigand, 2009).

#### 2.1.2.4. ATM Service Quality

#### 2.1.2.4.1 ATM and its benefits

Studies show that the technological revolution came to surface in the banking industry in the 1950s with the implementation of the automated book keeping machines at banks and the history of ATM dates back to the 1960s, the time at which the first ATM was invented by John Shepherd-Barron. The machine was implemented for the first time in the banking industry by Barclays bank in 1967, Wikimedia E-encyclopedia cited in Kumbhar(2011). The first ATM which has been implemented in US in 1968 came out with only a cash dispenser(Zaman and Chowdhury, 2012).

ATM is "an electronic device which allows a bank's customers to make cash withdrawals and check their balances at any time without the need for human teller"(Islam etal.,2005: 3) They state that ATM is an innovation which can mechanically accept deposits ,transfer funds between accounts and collect bills. Also ATM is defined as "an automatic teller machine which is used to save the cost and reach-ability of a bank;by satisfying customer needs"(Vasumathi and Dhanavanthan, 2010:469). They state that ATM service can be taken as an indicator for the development of IT in the banking sector. Accordingly, there are two types of ATMsnamely: the branch ATM and the out branch ATM. In the branches ATM, the branches are in a position to take care the ATM which is located in their respective branches where as the out of branch ATMs such as those located in department store will be entertained by cash centers.

ATM has several contribution to the banking industry, on one hand it add values to customer satisfaction in terms of giving quality services, on the other it enables, the bank to gain more competitive advantage over their rivals through the provision of superior service delivery (Gbandeyan and Gbonda, 2011;Omar etal.,2011). According to Khan (2010) the use of ATM has rendered new ventures regarding the service quality dimensions and banks are delivering new choices and channel alternatives to their customers. ATM, which is the most commonly utilized electronic distribution channel, allows customers to carry out their foremost banking transactions, such as deposits and withdrawals, 24 hours a day (Davies et al., 1996) cited in AL-Hawarietal. (2005). Cabas(2001) cited in Khan(2010) pointed out that investment opportunities, cost reduction, customers satisfaction and competitiveness are taken as the basic motives behind the installation and addition of new ATM to the existing network. This is because technological developments such as ATM have devised ways to organizations in order to offer superior services for customers' satisfaction (Surjadajaetal. 2000) cited in Khan (2010). Moreover, Moutinho(1992) pointed out that ATM facilities came out in speed of transactions and saved time of customers.

#### 2.1.2.4.2. Dimensions of ATM Service Quality

The review of literature shows that there are different models and dimensions of ATM service quality and different scholars have proposed and developed various ATM service quality dimensions. For instance AL-Hawarietal.(2005)proposed five items of ATM service quality dimensions including sufficient number of ATM, secure locations, user friendly system, conveniently location and ATM functions. Khan (2010) identified convenience, efficient operation, security and privacy, reliability and responsiveness as the dimensions of ATM service quality. Lovelock(2000) cited in Khan(2010) singled out that secure, convenient location, adequate number of ATM, user friendly system and functionality of ATM are the dimensions of ATM service quality. Dilijonas, etal. (2009) identified five ATM dimensions namely: sufficient number of ATMs, search locations, user friendly. Convenient locations and ATM functionality such as withdrawal, money transfer and balance checking. Ganguli and Roy (2010) came out with four dimensions namely customer service, technology security and information quality, technology convenience and technology usage easiness and reliability.

#### 2.1.2.4.3Service Quality, Customer Satisfaction, and Dissatisfaction in ATM

Customer satisfaction has been a central concept in the literature of marketing and a goal of firms to attain. The primary focus of marketing is to connect with customers by building a strong customer relationship so that they can meet customers' expectations and for customer focused firms, customer satisfaction is both a "goal and a tool "(Angelova and Zekir, 2011). The changing business environment following the emerging technology is creating challenges and opportunities to business firms and the change of customers' perceptions about quality service is intensifying the challenge. (Lewis, 1994) cited in (Khan, 2010). This means, the development of technological innovations have created a conducive opportunity for organization to provide superior services to improve customer satisfaction and the number of customers having preferences in using self service delivery mode is increasing and the preference is attributed to increase of innovations in executing the transactions(Omar etal., Sureshchandaretal.(2002) indicate an existence of two- way relationship between satisfaction and service quality cited in (Mosahab etal., 2010) while Mohammad and Alhamadani (2011) state that customer satisfaction is highly influenced by customers perceptions of the quality of service being delivered.

Pahwa and Saxena's(2011) findings show that customers are highly satisfied with availability of cash in ATMs ,quality of currency notes in the ATMs as primary criteria by customers and also equally satisfied with promptness delivery of ATM cards and correctness of cash withdrawal made from the ATM. However, on the other side of the coin their findings showthat features such as non-availability of compliant books, location issues and insufficient number of ATMs as well as the failure of not having power back up in case of power break dawn were the source for the dissatisfaction with the service being delivered. Hokanson(1995) cited in Angelova and Zekiri(2011) identifies factors that affect customer satisfaction including friendly employees, accuracy of billing, competitive pricing and service quality. Angelova and Zekiri(2011) show that factors such as service quality and perceived value are the essential constructs which affects the customer satisfaction with electronic or mobile service.

The findings of Malhotra and Galletta(1999) cited in Saleem and Rashid(2011)shows that the technological advancement has made by firms leads to increase in customer's ease and usage, which in turn increased the level of satisfaction. Saleem and Rashid(2011)contend that to make certain and ensure that customers adopt the technology, it need to be efficient, quick, and easy to

understand and use by customers at ease. Chmielar(2002)cited in Saleem and Rashid(2011)states that functional diversification, service quality, versatility and efficiency of customer inquire service are the key factors in measuring customer satisfaction. According to Levessque and McDougall(1996) cited in Sangeetha and Mahlingam(2011) high service quality comes out with customers satisfaction and loyalty, greater willingness to share to somebody else, minimization of complaints and enhanced customer retention rates

Service quality is an essential tool in order to measure customer satisfaction(Pitt etal.,1995) cited in Paul(2013). Accordingly there exist a close relationship between service quality and customer satisfaction and it is usually taken as the critical prerequisite and determinant of competitiveness for launching and sustaining, satisfying relationships with customers(Rasheed and Latif 2011) and it is an essential indicator of customer satisfaction (Spreng and Machoy, 1996) cited in Rasheed and Latif(2011).

Studies show that service quality has direct link with customer satisfaction (Parasuramanetal., 1988) cited in Khan (2010). Hallowell(1996) states that in the long term customer satisfaction and loyalty has been perceived as the paramount performance for the firms' performance. Due to globalization and liberalization, which affect economies of both developed and developing nations across the globe, the focus areas of organizations are shifted from profits maximizations to maximize profits via increased customer satisfaction.

Customer satisfaction in the online environment known as "E-satisfaction" (Gupta and Bansal, 2012). "Customer satisfaction is influenced by customers' perceptions of quality "(Zeithaml and Bitner, 2004:87) while "Service quality is an antecedent of the broader concept of customer satisfaction" (Gotlieb et al. ,1994; Buttle, 1996; Zeithaml and Bitner, 1996; Lee et al., 2000). "The relationship between service quality and loyalty is mediated by satisfaction" (Caruana, 2002; Fullerton and Taylor, 2002) cited in Mohammad and Alhamadani (2011:4).

Khan (2010) concluded that banks need to proactively monitor customer preferences in relation to the channel alternatives for effective responsiveness. Most importantly, he contends that banks need to focus on essential aspects such as security and privacy and efficient operation of ATM and augment and diversify their service offering through ATM in such a way that to build strong, long lasting and sustainable relationship with customers.

Studies show that there is significant correlation between ATM service quality and ATM satisfaction level and service quality is taken as an antecedent of customer satisfaction(Oliver 1993; Sprent and Mackoy, 1996).

Dilijonasetal(2009) found out that more than 50% of respondents agreed that the use of ATM is convenient and time saving as it allows them free movement in providing cash acting like mini, banking to those customers who are in need of cash. Moreover, despite the restriction and limitations of amount of cash withdrawal, it fulfills the need of the customers. Accordingly theauthors suggest that banks need to pay attention to essential aspects such as user-friendliness, ATM functionality and availability of transaction receipts, security and privacy, regular monitoring and maintenance of ATMs.

From the aforementioned literatures that have been conducted by different scholars across the globe the student researcher has understood that some customers are welcoming the emerging technology while others do not. The very reasons for such like and dislike of use of ATM by customers are enormous. Customers prefer ATM for it is time saving, avoid long queue in banks, easy to use, readily available and can be accessed from anywhere without personal contact of bank's employees. Khan(2012) on his part suggests that the youth prefer to use innovative and technology based service offering such as ATM while the olds don't make use of it, due to the perceived risk of failure complexity , security and absence of personalized service (Moutinho,1992) cite in Khan(2010). Also some customers are in favor of technologybased self service instead of traditional service as it is easy to use and avoid interaction with human-teller(Meuteretal. 2000) cited inDabholkar(1996).

Dissatisfaction is the main reason for why customers switch banks (Manrai and Manrai, 2007) and the most essential determinant of customer satisfaction is service quality being perceived by clients (Titako etal., 2012).

#### 2.1.3.1 Opportunities for ATM Banking Service

Studies show that the banking industry claims that through the application of the emerging new banking technology, they will be able to improve customer service level and tie their customers closer to the bank (Hasan etal.,2010)cited in Zaman and Chowdury(2012). One of such essential implications of technological advancement in banking is that it makes distant customers come closer (Howcroft and Durkin, 2003; Zaman and Chowdury,2012). This shows that as long as the stated owned bank, UB determined to work hard and armed itself with such emerging banking

technology to reach out its customers the future of banking system with such astonishing technology is so bright and sustainable. Actually, according to the interview which was held with the UB E-payment department business solution section the bank is in plan to introduce new banking technologies and add new financial services, which will play a vital role in bringing efficiency to the techno-based banking customer service which in turn enhance the service level being delivered to the level of customers demand and thereby enable to reap the return to be gained from such a practice.

In this regard Chandrasekhar and Sonar (2008) and Ali(2010) cited in Zaman and Chowdury(2012) state that banks will be in a position to reap the benefits of IT as long as they pay due attention to technological progress and efficiencies on the input and output sides. On the other hand, Lynch (1996) cited in Zamn and Chowdury(2012) state that the technological benefit is twofold: firstly it is in a position to reduce the cost of production of financial services whereas secondly, it enables to reduce the cost of delivery of the services to the customers. This means the technology is in position to maintain a lower cost by addressing population of certain area at a time, which was not totally attainable in the past through manual branch networking (Huda etal., 2007)cited in Zaman and Chowdury(2012). And yet the implementation of such emerging new technologies are not an easy task and Howard and Moore (1982)cited in Zaman and Chowdury(2012) state that customers should be aware of the new brand before adoption and which in turn urges the bank to create awareness on such astonishing technology based banking service to the consumers. Thus, it is imperative for banks in Ethiopia, UB in focus to have understanding how to best design, manage and promote such technology in such a way that to improve the chance of customers acceptance.

Regarding the opportunities available to the electronic banking in the Ethiopian banking industry Gardachew(2010) pointed out the following issues. There are opportunities provided by the ICT through e-learning program such as school net to increase the awareness of the public about the technology. Being the later adopter, the benefits of utilizing the already well established softwares that have been tested and their weakness singled out elsewhere across the board are so significant. There are supporters that have the experience and expertise and financial wise to develop better strategies such as (UNECA, world bank and UNCTAD (UNCTAD, 2004) cited in Gardachew(2010). Finally, there is commitment from the government side as it has initiated the

commendable ICT policy frameworks and many e-government projects such as the WoredaNet project(ITU4D, 2006) cited in Gardachew(2010).

#### 2.1.3.2 Challenges of ATM Banking Service

According to (Adeepoiu, 2010)the modern contemporary era has changed traditional monetary instruments from that of paper and metal based currency to "plastic money" in the form of credit cards ,debit cards ,which has come out in the increasing utilization of ATM across the globe. He further states that now-a -days the application of technology based banking service as a medium of communication is practiced by both developing and developed world. Particularity, businesses in the advanced economy have understood that without the application of the emerging technology being a leader and survive in the market is a night mere. As a result organizations are striving to be armed with such technology and track technological changes (Nwabounu,2011). Also following the ever changing of the globe, which undergoes drastic move, our lives have over-whelmed with financial products and services. To overcome such drastic move the services provided should maintain its pace with the demand of the intended customers (Singal,2012).

And yet ,as the world is becoming a small village and the digital network is making business so easy and life style is getting simpler in the banking industry ,the future prospects of such astonishing technology is confronting a serious challenges. For instance, Nwabounu(2011) argues that despite its valuable benefits,ATM is not without challenges. One of such challenge is fraud which is highly accelerating in West African nations such as Nigeria and this threat can be comes out as a factor of losing customers. Also,Zaman and Chowdry(2012)state some of the challenges of the future prospects of the banking technology including legal barriers and inappropriate policy and legatorial frame work of a country, inefficient and inadequate knowledge of the bank's management regarding the issue of technology driven banking service, high costs incurred in establishing the technology driven banking system and inadequacy of the back and front office management.

As the usage of the technology such as ATM is increasing, it is exposed to issues of security threat and fraudsters (Adepoiu,2010). In this regard UB need to be aware enough such alarming financial crisis which has a serious impact on customer satisfaction and future practice of the techno-based banking service. The fraud type may differ from country to country. For instance, Adepoiu(2010) in Nigeria identified ATM card theft, skimming, pin theft card reader techniques, PIN pad techniques force withdrawal.

#### 2.1.4.Divergent Views Regarding E-service Quality Dimensions

After a wider range of assessment was done on the extant of the relevant literatures on the research topic area, it is identified that presently there is no generally accepted model to measure the e-service quality such as ATM service quality. Moreover, most of the research studies that have been done and instruments developed so far as well employed in the traditional service setting. Regarding technology based banking though efforts have been madethe development is still in its early stage and the researches that have been done so far across the globe are mainly on internet and banking and lesser studies on ATM banking.

Wolfinbarger and Gilly(2003) cited in Hongxiuetal.(2009) state that, though studies regarding service quality and e-service quality have been conducted and various scales have already been in place for the purpose of measuring e-service quality, the extant study on e-service quality has been a fragmented one. Above all some models are limited in their focus and others marginalize one or few channels and ignore the attributes of the others. For instance, Zeithaml(2002) cited in Alanezietal.(2010) by modifying the SERVQUAL scale in such a way that to fit to the online setting, came out with eleven dimensions including access, ease of navigation, efficiency, flexibility, reliability, customization /personalization, security /privacy,responsiveness, assurance/trust, site aesthetics and price knowledge.Based on these eleven dimensions Parasuramanetal.(2005) developed a multiple item scale (E-S-QUAL) to measure the service quality provided through websites by which customers entertain shopping online.

Gefen(2002) cited in Amirzadeh and Mousavi(2011) contends that in the process of evaluating the online service quality, the five traditional dimension of SERVQUAL model(Parasuraman etal.,1985,2988) should be collapsed into three tangibles, combined dimension of responsiveness, reliability and assurance, and empathy before employing to measure the e-service quality. Accordingly he tried to examine and find out the links among the dimensions of e-service quality, perceived risk, trust and cost to switch and the variable of customer loyalty. Santos(2003) cited in Amirzadeh and Mousavi(2011) came out with a model including: ease of use, appearance, linkage, structure and layout and content and the active dimensions consist of reliability, efficiency, support, communication, security and incentives. Broderick and Vachirapornpuk(2002) cited in Seth etal.(2004) by using participant observation and narrative analysis of UK internet web site community have explored the perception of internet banking

customers. Alanezietal.(2010) state that because of the differences between the methods of measuring service quality in e-government and the physical market services (traditional service), there is a need to reword and modify the SERVQUAL scale items before employing these scales to measure the online context. Unlike the traditional service quality, the dimensions of the electronic banking system are new and different than the traditional service quality model. Accordingly Amirzadeh and Mousavi(2011:102) state that many models are in traditional service quality setting such SERVQUAL, whereas there are different models of the electronic service quality in which many different dimensions are taken into account and "insights from studies dealing with people- technology interactions imply that customer evaluation of new technologies is a distinct process". As a result to measure the e-servicequality dimensions new instrument dimensions and a comprehensive framework need to be in place to identify the dimensions of e-service quality (Hongxiuetal. 2009). Studies show that customers prefer using a combination of automated service channels (Al-Hawari., 2005).

Even there are divergent views among the scholars regarding the use of ATM and its service quality measurement. For instance, Dilijonasetal.(2009) in the Baltic States assessed the five most dominate lever for ATM delivery channels service quality improvement that can be articulated in terms of sufficient number of ATMs, secure locations, system user friendly, convenient locations, and ATM functionality.

Thus it is imperative to assess the effect of ATM service quality dimensions on customer satisfaction, as customer's preference to the use of the techno-based service is increasingly alarming. A few studies identify problems, challenges and opportunities of the e-banking in the Ethiopian banking context and one thesis entertain the adoption of e-banking in Ethiopia and the other thesis assess the ATM banking service quality dimensions. And yet, no one came out with the impact of the ATM service quality on customer satisfaction in the case of UB. Hence, the purpose of the study was to examine empirically the most pertinent dimensions of the ATM service quality and it's thereof on the customer satisfaction in the case of UB.

The other reason for adapting this model over others is, it incorporates the possible factors that may shape customer perceptions of ATM banking. To entertain those dimensions a generic technology instrument (Ganguli and Roy, 2010) was adapted, unlike others such as E-S-QUAL

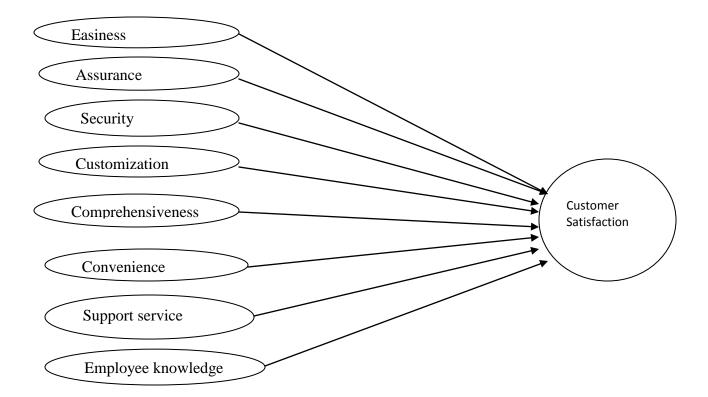
which emphasizes the websites, this instrument includes the three pillars of the technology interface (ATM, Internet and mobile banking) service quality dimensions.

Thus the outcome of this study is essentially paramount and significantly valuable in providing comprehensive insights to the practitioners in general and to the bank in particular, regarding the essential issues of ATM and thereby presenting the cue about customers' needs, quality service and customer satisfaction which enables the bank to make available the right services at the customers' desire state and hence satisfy and even delight them.

# 2.2 Conceptual Framework

The conceptual framework for this study is based on Mojoodietal.(2013) structural model which has eight dimensions. The effect of each of these dimensions on customer satisfaction and was assessed. In summing up the discussions so far entertained, this study posits that the impact of ATM service quality on customer satisfaction is based essentially on those stated eight dimensions.

Based on the study model and content entertained the following hypotheses are demonstrated:



## **CHAPTER THREE**

#### RESEARCH METHODOLOGY

The aim of this study was to examine the effects of ATM service quality on customer satisfaction. To achieve such objective, the research design, research method, data Collection tools, data collection methods, sampling, target population, sampling frame and data analysis methods were briefly discussed which are the essential components for the study.

## 3.1 Research Design

The research is cross-sectional descriptive survey design in its nature. The study employed with high emphasis of a quantitative research method, which involves the utilization of structured questionnaire for the purpose of collecting data to address the research questions of interest at a given point in time and descriptive and inferential statistics for data analysis. It also employed with less emphasis a qualitative approach namely structured interview questions to collect data from the bank. The study was primarily designed out with the purpose to find out from a cross-section of customers of UB ATM card holders in those 30 of the bank's ATM station, which were selected based on convenience sampling, regarding the perceived effect of ATM service quality on customer's satisfaction of ATM. Thus the data type of the study are both from quantitative and qualitative and the data sources are both primary and secondary data.

The structural model was adapted which is composed of eight dimensions to carrying out the examination of the impact of ATM service quality on satisfaction of customers' of UB ATM card holders. To entertain those eight dimensions an instrument was adapted from Ganguli and Roy(2010)

## 3.2 Population and sampling techniques

## 3.2.1 Sampling Design

The type of sample design that was employed for the population of this study is single stage non-probability sampling procedure. The reason behind such selection is the merit of the non-probability convenience sampling will provide to the study while collecting the required data. One of such merits is, it is straightforward and quick to conduct the data collection at ease (David,2011) and less expensive to conduct the data collection. Also it is feasible to this study as it is difficult to get respondents if another method is employed, for it makes use of theavailable sample (Rubin and Babbie, 2010). The single-stage sampling procedure is a procedure by which a researcher is in a position to reach out all names in the population and can sample the people or other elements directly (Creswell, 2012). That is it is simple as it enables a researcher to use the available data and can directly access without clustering further such available data into sample groups unlike the multistage (Creswell, 2012).

# 3.2.2 Population of the study

The target population of this study was all 99 automated teller machine stations found in Addis Ababa and outline branches. Out of the total population which the researcher took 30 ATM stations located in Addis Ababa branches only as sample of the study using convenience sampling technique. The researcher prefers this sampling technique because it is fast, inexpensive, easy and the subjects are readily available

Any person who is currently using UB ATM card banking in the 99 ATM stations of the bank across Ethiopia has been taken as the target population of this study. According to the data obtained from the UB ATM e-payment department office the total number of ATM card holders in those 99 ATM stations of the bank across Ethiopia are more than 100,000. From the total 99 ATM stations, the researcher has taken 30 of the bank's ATM stations as the target population of this study.

## 3.2.3 Sampling Frame

Those 30 ATM stations of the bank were taken as the sampling frame of this study and accordingly the sample size of the study with convenient sampling strategy was taken from UB ATM card holders who are in the city of Addis Ababa. The sample size of this study was 99 ATM stations which were conveniently drawn from those ATM machines located all over in Ethiopia. To collect the data of interest from these card holders who are in Addis Ababa city thirty ATM stations with convenient sampling procedure were selected. Accordingly as the sampling strategy is convenient sampling, those customers who are outside Addis Ababa city were systematically excluded from the study.

# 3.2.4 Sampling Techniques

The type of sample design employed for selecting individuals in this study was based on two criterions namely the representation and element selection technique. In light of representation the convenience sampling procedure. The reason behind such selection is the merit of the convenience sampling which is straightforward and quick to conduct the data collection at ease (David, 2011) and less expensive. Also it is feasible to this study as it is difficult to get respondents if another method was employed for it enables to use the available sample (Rubin and Babbie, 2010). In light of the element selection technique the unrestricted sample was employed, this is due to the fact that the unrestricted sample will facilitate the data collection activities. Accordingly to identify the sample of ATM-banking customers included in the study convenience sampling technique was preferred among the sampling technique because of difficulty of getting individual customers who are UB ATM card holders.

# 3.2.5 Sampling Size/Sampling Procedure

To obtain a comprehensive sample, convenience sampling technique was applied for the purpose of primary data collection .So a sample of thirty ATM stations from those 99 stations, which are situated in the city of Addis Ababa, was selected with convenience sampling methods. The selected thirty UB ATM stations altogether have made available a total sample size of 240 customers. The reason for these branches selection was these stations were more suitable for the student researcher to collect the data.

# 3.3 Types of Data and Tools/Instruments Data Collections

#### 3.3 .1 Data Collection Methods

In this study both primary and secondary data were used.

#### 3.3.1.1. Secondary Data

Secondary data from the bank were consulted to have a prior understanding about the subject matter.

## 3.3.1.2 Primary Data Sources

The primary data were self-administered questionnaire. After the secondary data had been exhaustively assessed, to examine questions that were not answered by secondarydata, the primary data sources were entertained. According to Fin cited in Creswell(2002) there are different types of data collection forms such as: self-administered questionnaires; interviews; structured record reviews to collect financial, medical, or school information; and structured observations. From these self-administered questionnaires and interview were used. The rationale behind for choosing self-administered questionnaire is four folds. The first one is strength and weaknesses of the type of data collection type. Second the costs associated with this type of data collection forms. Third one is the availability of the data and fourthly their convenience in the process of data collection. The rationale for selecting a structured interview was, it was easy to make clarification, probing and prompting with respondents directly (Burton, 2000).

Respondents were not required to write their name on the questionnaire and the letter attached to the questionnaire shall explain the objectives and assure the anonymity of respondents. The data was collected from April 2019 to May 2019.

#### 3.4Procedure of Data Collection

The items for measuring the ATM service quality dimension were adapted from Ganguli and Roy (2010). In collecting the data the student researcher was personally approached customers and asking their willingness and then prompts whether they are using ATM-banking and if they are user questionnaire were distributed to be filled out.

After questionnaires filled out customer service managers collected and handed it to the researcher. Also in some branches "lobby persons" helped the researcher in distributing questionnaires to customers. Also data were collected from customers of UB ATM users who are working in different working areas. In the questionnaire respondents were asked about their perceptions towards the ATM and its quality. Also a structured interview was conducted with the bank to know what it would say about its service delivery via the UB ATM.

#### 3.4.1 Data Collection Tools

In this study the ATM service quality on customer satisfaction including easiness, security, assurance, customization, comprehensiveness, convenience, support service and employee knowledge have been entertained as independent variables, whereas customer satisfaction is dependent variable.

## 3.5 Data Analysis Methods

For the analysis of quantitative data both descriptive and inferential statistics were used the descriptive statistics (Frequency distribution) was used to examine customer's perceptions toward ATM service quality dimensions, the level of the customer satisfaction and The relationship and effect of the ATM-banking service quality dimensions and customer satisfaction were analyzed by using inferential statistics, in particular correlation and multiple regressions to aid computation a Statistical Package for Social Science (SPSS) version 20 was employed.

#### 3.6 Ethics

This study like other academic researches abides by ethical issues, moral conducts and commercial confidentiality to the bank's data and for the privacy of respondents. The questionnaires were designed out in such a way that respondents are not required to write their names and reveal their personal information on the questionnaire and the confidentiality of the data being collected is handled with due care and used for academic purpose only.

# **CHAPTER FOUR**

#### **RESULT AND DISCUSSION**

#### 4.1 Data Analysis

In this chapter data editing and coding, response rate, results of test of normality of data, reliability testing, the demographic profile would be briefly detailed. Furthermore, uni-variate analysis, correlation and regression analyses, interview questions, discussion of the results and summary of the thesis would be discussed in details.

## 4.1.1. Data Editing and Coding

Once the primary data was collected, prior to the analysis the questionnaire was reviewed and this is to certify that if questionnaires were filled out appropriately. Any incomplete or missing response was discarded from the subsequent analysis. The steps which were stated in the data analysis section such as Coding, eliminating coding and data entry errors, known as " clearing the data" (Rubin and Babbie, 2010) were performed were used.

# 4.1.2 Response Rate

From the total questionnaire distributed to 240 UB ATM card holders 185 questionnaires were collected and the remaining 55 were lost. Out of these due to incompleteness and missing values only 174(72.5%) were usable for further analysis and the remaining 11(4.6%) were discarded. According to Rubin and Babbie(2010) a response rate of 70% is "very good" for further assessment. So 72.5 % is significant.

# 4.1.3. Results of Test of Normality of Data

To avoid multi-collinearity, in the correlation matrix(R-matrix) the value of the determinant should be greater than 0.0001(Field, 2006). Accordingly due to the value of the determinant was 0.000 variables that cause multi- collinearity were eliminated and value of determinant (0.001) was obtained. Also tolerance is expected not to be less than 0.01 and VIF should not be greater than 10(Tewodros, 2012) and tolerance and VIF are within the range. Also the auto correlation was tested by using Durbin Watson value and the values for all variables are within the recommended range(Khan, 2010).

# 4.1.4 Validity and Reliability

Reliability"is the degree to which the measure of a construct is consistent or dependable" (Bhattacherjee, 2012:57), while Validity refers "to the extent to which a measure adequately represents the underlying constructs that is supposed to measure" (Bhattacherjee, 2012:59). The model of this study (Mojoodi etal., 2013) is revised, accepted and published under the African - Eurasian Network for Scientific Information (AENSI) publisher and the validity's and reliability's of all eights dimensions have been testified and within the acceptable range. Also the instrument employed to collect the primary data to address the stated dimensions of interest (Ganguli and Roy, 2010) is revised, Thus as the statements have been generated from previous studies were extensively reviewed by the scholars in other cultural settings, its validity is assumed to hold good instrument and valid.

**Table 1: Reliability testing results** 

Dimensions within factors	N of Item	&RQEDFK¶©SKD
Convenience	4	.736
Comprehensiveness	4	.705
Easiness	6	.786
Assurance	5	.779
Employee knowledge	5	.783
Security	4	.745
Customization	3	.763
Support Service	4	.754
	Convenience Comprehensiveness Easiness Assurance Employee knowledge Security Customization	Convenience 4 Comprehensiveness 4 Easiness 6 Assurance 5 Employee knowledge 5 Security 4 Customization 3

Source: own survey(2019)

# 4.1.5. Survey Analysis

#### 4.1.5.1: Analysis of demographic profile of respondents

The data was collected based on the background of the respondents (Table2). Demographic variables including gender, age, monthly income, period for which respondents are customers of their, usage pattern or frequency of monthly usage were examined.

**Table 2: Demographic profile of Respondents** 

S.NO	Variable	Categories	N	Response in %
1	Gender	Male:	123	70.5%
		Female:	51	29.5%
	,	174	100%	
2	Age Groups:	20 years and less	23	13.5%
		21-30 years	74	42.3%
		31-40 years	61	34.8%
		Greater than 40 years	16	9.4%
		174	100%	
3	Monthly Income:	Less than br2,500	11	6.5%
		Between br.2,500-br4,500	19	10.9%
		Between br.4,500-br 9,500	112	64.3%
		Greater than br. 9,500	32	18.3%
		Total	174	100%
4	Period for	Less than 6 months	29	16.5%
	respondents are	Between 6-12 months	27	15.3%
	customers of their	More than 1-up to 3 three years	58	33.7%
	bank	More than three years	60	34.5%
		Total	174	100%
5	Frequency of	Up to five times	57	33.0%
	monthly usage	More than 5-up to 10 times	83	47.7%
		More than 10-up to 20 times	27	15.3%
		More than 20 times	7	4.0%
		Total	174	100%

Source: own survey (2019).

#### 4.1.5.2Uni-variate Analysis

#### 4.1.5.2.1. Analysis of ATM service quality dimensions

#### A. Comprehensiveness

Table3: technology accessible beyond regular business hours

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	7	4.1		
Disagree	23	12.9		
Neutral	34	19.7		
Agree	88	50.3		
Strongly Agree	22	13.00	3.15	1.05
Total	174	100.0		

Table 3 shows that more than 60% of respondents signed on that the bank's technology is accessible beyond regular business hours (50.3% for agree and 13% for strongly agree). And yet there are respondents that are neutral (19.7%) and negatively responded one such as disagree (12.9%) and strongly disagree (4.1%)respectively and the mean score 3.15.

Table 4: more convenient to use technology than interacting with branch employees

	Frequency	Percent	Mean	Standard deviation
Strongly	7	4.1		
Disagree				
Disagree	16	9		
Neutral	42	23.9	3.15	1.05
Agree	79	45.7		
Strongly Agree	30	17.3		
Total	174	100		

Table 4 more than 60% of the respondents signed on positively showing that customers have interest and found out convenient to use the banking technology instead of having interaction

with human tellers. However, there are still some respondents who are neutral (23.9%), disagree (9%) and strongly disagree (4.1%) to the stated statement and mean score 3.15.

#### **B.** Convenience dimension

Table5: technology allows complete transactions quickly

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	6	3.5		
Disagree	18	10.2		
Neutral	38	21.9	3.22	.987
Agree	89	51.1		
Strongly Agree	23	13.3		
Total	174	100		

Table 5More than 60% of the respondents signed on positively while customers who are neutral (21.9%) and who responded negatively such as disagree (10.2%) and strongly disagree(3.5%) and the mean score 3.22.

Table 6: technology save lot of time especially when pressed for time

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	4	2.5		
Disagree	12	6.9		
Neutral	40	23.1	3.375	.905
Agree	80	45.8		
Strongly Agree	38	21.7		
Total	174	100		

Table 6 shows more than 60% of respondents their bank's technology as it saves time particularly during tight time. There are some neutral (23.1%) respondents and a few number of respondents who reacted negatively disagree(6.9%) and strongly disagree (2.8%)respectively and mean score 3.375.

#### C. Easiness Dimension

Table 7: The technology provided by bank is easy to use

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	10	5.8		
Disagree	30	17.1		
Neutral	42	23.9	2.66	1.31
Agree	82	47.3		
Strongly Agree	10	5.9		
Total	174	100		

Table 7shows that more than 50% of respondents signed on that the technology of UB is easy to use(47.3% for agreed and 5.9% for strongly agree). And yet there is some neutrality (23.9%) and there are respondents who signed on for disagree 17.1% and for strongly disagree 5.8% respectively and mean score 2.66.

Table 8: The technology provided by bank is user-friendly

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	8	4.5		
Disagree	35	20.4		
Neutral	43	24.9	2.51	1.39
Agree	82	46.9		
Strongly Agree	6	3.3		
Total	174	100		

Table 8 shows that about 50% of respondents show up positively (46.9% for agree and 3.3% for strongly agree), suggesting that the technology through which the banking service is being delivered is user-friendly. Here again some of respondents show up some neutrality (24.9%) and the remaining are 20.4% signed on for disagree and 4.5% for strongly disagree respectively and the mean score 2.51.

Table 9: The technology provided by bank works accurately and is error free

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	19	11.2		
Disagree	33	19.1		
Neutral	55	31.8	1.9	1.73
Agree	59	33.6		
Strongly Agree	8	4.3	1	
Total	174	100		

Table 9 shows that as there is no flawless banking service with the application of technology enabled service such as ATM banking service, respondents shown up for agrees (33.6%) which is strongly persuaded by neutrality (31.8%). Also there are negative responses, specifically about 19.1% signed on for disagree and 11.2% for strongly disagree respectively and mean score 1.9.

#### **D:** Assurance Dimension

Table 10: bank's technology is reliable.

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	5	3.1		
Disagree	25	14.5		
Neutral	29	16.5	3.3	.912
Agree	104	59.8		
Strongly Agree	11	6.1		
Total	174	100		

Majority of the respondents favored to sign on for agree (59.8%) in their reaction, though on the other side of the coin there are some neutrality (16.5%). Only 6.1% of respondents signed on for strongly agree while there are respondents who reacted 14.5% for disagree and 3.1% for strongly disagree respectively and the mean score 3.3.

#### **E. Support Service Dimension**

Table 11: personal information exchanged while using technology is not misused by bank

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	5	2.7		
Disagree	17	9.8		
Neutral	46	26.5	3.05	1.143
Agree	92	53		
Strongly Agree	14	8		
Total	174	100		

Table 11 shows that more than 60% of respondents positively contended that their personal information is not misused by their bank (53% signed for agree and 8% for strongly agree). And yet there are a strong neutrality (26.5%) and negativity in which some respondents signed on for disagree (9.8%) and strongly disagree (2.7%) respectively and mean score 3.05.

Table 12: contact bank's customer service calls are always answered promptly

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	12	6.7		
Disagree	44	25.1		
Neutral	32	18.3	2.495	1.399
Agree	77	44.5		
Strongly Agree	9	5.4		
Total	174	100		

Table 12 shows that about 44.5% respondents signed for agree and 6.7% for strongly agree. There are 18.3% that are neutral respondents. The rest are those customers who responded negatively with 25.1% for disagree and 6.7% for strongly disagree. The result shows that the majority of customers are happy with service being offered and yet others need due attention for their consent may have effect on the future course of action and mean score 2.495.

Table 13: bank resolves complaints quickly

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	7	4.1		
Disagree	36	20.9		
Neutral	40	23	2.6	1.37
Agree	78	44.7		
Strongly Agree	13	7.3		
Total	174	100		

According to table 13 about 52% are responded positively(44.7% signed on for agree and 7.3% for strongly agree). There are neutral (23%) and negatively reacted respondents such as 20.9% signed on for disagree and 4.1 % for strongly agree and mean score 2.6.

Table 14: bank offers a fair compensation for its mistakes

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	15	8.7		
Disagree	36	20.6		
Neutral	34	19.4	2.565	1.376
Agree	76	43.6	1	
Strongly Agree	13	7.7	1	
Total	174	100		

Table 14 shows that more than 50% of respondents reacted positively and 19.4% signed on neutrally. On the other hand about 29.3% of them reacted negatively and the mean score 2.565.

#### F. Employee Knowledge Dimension

Table 15: contact bank's customer service (e.g call center either via phone or online) requests are always anticipated properly

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	6	3.7		
Disagree	35	20.1		
Neutral	61	35.2	2.05	1.581
Agree	63	36.1		
Strongly Agree	9	4.9		

Table 15 shows that only 41% of respondents are responded positively. However, there are some respondents that are neutral (35.2%) followed by negative responses such as disagree (20.1%) and strongly disagree (3.7%) and mean score 2.05.

Table 16: When there are problems bank's customer service people are sympathetic and reassuring

	Frequency	Percent	Mean	Standard deviation
Strongly	7	4.1		
Disagree				
Disagree	34	19.5	1.705	1.842
Neutral	74	42.3		
Agree	49	28.1		
Strongly Agree	10	6		
Total	174	100		

Table 16 indicates that about 42.3% of respondents are neutral and only 34.1% respondents are those who responded positively(28.1% signed for agree and 6% for strongly agree). Also there are about 23.6% of respondents who reacted negatively and mean score 1.705

#### **G.Security Dimension**

Table 17:bank's technology is personalized

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	14	8.1		
Disagree	30	17		
Neutral	66	38.1	1.84	1.798
Agree	49	28.3		
Strongly Agree	15	8.5		
Total	174	100		

Table 17 shows that only 28.3% of respondents signed on for agree and 8.5% for strongly agree and yet most of the respondents are neutral with 38.1%. The remaining reacted negatively with 17% disagree and 8.1% strongly disagree and the mean score 1.84.

Table 18:bank's technology provides the precise information needed

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	5	3.1		
Disagree	28	16.3		
Neutral	65	37.5	2.16	1.51
Agree	63	36		
Strongly Agree	13	7.1	1	
Total	174	100		

Table 18 shows that about 43.1% of respondents signed on that their bank's technology provides them the precise information they needed(36% for agree while 7.1% for strongly agree). And yet there are more of neutrality (37.5%) and negatively responded customers(16.3% signed for disagree and 3.1% for strongly disagree) and mean score 2.16.

#### **H.** Customization Dimension

Table 19: bank's technology provides sufficient information

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	3	2		
Disagree	32	18.3		
Neutral	39	22.5	2.86	1.253
Agree	87	49.9		
Strongly Agree	13	7.3		
Total	174	100		

Table 19 shows that more than 50% of the respondents signed on that the bank's technology is in a position in providing sufficient information they (49.9% for agree and 7.3% for strongly agree). And yet there is some neutrality (22.5%) and negative responses such as disagree (18.3%) and strongly disagree (2%) respectively and mean score 2.86.

Table 20: bank's technology provides the reports needed

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	2	1.3		
Disagree	27	15.5		
Neutral	38	22	3.06	1.121
Agree	82	46.9		
Strongly Agree	25	14.3		
Total	174	100		

Table 20 shows that more than 60% of the respondents signed on for positive response (46.9% for agree and 14.3% for strongly agree). On the otherhand, there is neutrality (22%) and negative responses such as disagree(15.5%) and strongly disagree(1.3%) and the mean score 3.06.

Table 21: bank's technology gives more freedom of mobility

	Frequency	Percent	Mean	Standard deviation
Strongly	6	3.2		
Disagree		3.2		
Disagree	25	14.1		1.198
Neutral	42	24		
Agree	80	45.7	2.935	
Strongly	23	13		
Agree				
Total	174	100		

According to table 21 about 45.7% respondents signed on for agree and 13% for strongly agree. There is that neutral(24%) and negatively responded customers(14.1% for disagree and 3.2% for strongly disagree) respectively and 2.935

#### 4.1.5.2.2. Customer Satisfaction Analysis

Table 22: Overall satisfied with bank

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	7	4.1		
Disagree	18	10.6		
Neutral	49	27.9	2.87	1.241
Agree	84	48		
Strongly Agree	16	9.4		
Total	174	100		

Table 22 shows that about 48% signed on for agree and 9.4% for strongly agree while (27.9%) neutral and 10.6% for disagree and 9.4% for strongly disagree negatively and mean score 2.87.

Table 23: did the right thing when chose this bank

	Frequency	Percent	Mean	Standard deviation
Strongly	4	2.5		
Disagree		2.3		
Disagree	14	8.3	2.97	
Neutral	52	29.9	2.71	1.07
Agree	82	47.1		
Strongly Agree	21	12.2		
Total	174	100		

Table 23 shows that more than 50% of respondents agreed that the decision they made in selecting UB as their preferred bank is the right thing(47.1% for agree and 12.2% for strongly agree). However, despite such momentum there are some respondents who are neutral (29.9%) and responded negatively disagree (8.3%) and strongly disagree (2.5%) and the mean score 2.97.

Table 24: Bank's services expectations

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	10	5.6		
Disagree	44	25.5		
Neutral	51	29.1	2.00	1.589

Agree	61	35	
Strongly Agree	8	4.8	
Total	174	100	

According to Table 24 about 35% signed for agree and 4.8 for strongly agree which is strongly persuaded by neutrality (29.1%) and disagree (25.5%) respectively while only about 5.6% are responded strongly disagree and the mean score 2.00.

Table 25: delighted with bank

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	7	4.1		
Disagree	17	9.8		
Neutral	78	44.7	2.07	1.57
Agree	56	32		
Strongly Agree	16	9.4		
Total	174	100		

Table 25 shows 44.7% of respondents are reacted neutrally and only about 41.4% are who responded positively. Also about 13.9% of respondents are those who responded negatively and mean score 2.07.

Table 26: consider this bank as my bank in the future

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	7	3.9		
Disagree	25	14.2		
Neutral	44	25.3	2.83	1.131
Agree	72	41.2		
Strongly Agree	27	15.4		
Total	174	100		

According to Table 26 More than 56% of respondents signed on positively and the remaining are that are neutrally(25.3%) and who responded negatively such as disagree (14.2%) and strongly disagree (3.9%)respectively and mean score 2.83.

Table 27: Expect to do more business with the bank in the future

	Frequency	Percent	Mean	Standard deviation
Strongly Disagree	6	3.5		
Disagree	16	9.1		
Neutral	49	28.4	2.95	1.1
Agree	72	41.1		
Strongly Agree	31	17.9		
Total	174	100		

According to Table 27 about 59% of respondents agreed that they would continue to do business with UB being as active customer in the future. About 28.4% of customers are neutral and 12.6% are reacted negatively and mean score 2.95.

# 4.1.6: Correlation Analysis

Pearson correlation was conducted to know the relationship between the ATM service quality dimensions and customer satisfaction of ATM. Correlation coefficients show the magnitude and direction of relationships, in which the magnitude is the degree to which variable goes either in unison or opposition. Correlation analysis gives insights to gain the direction and strength of relationship (Cooper and Schindler, 2008). The correlation coefficient takes the value between -1 and 1. The value of -1 meant the variables are negatively and perfectly correlated and when one increases, the other decreases by a proportionate amount whereas coefficient value +1 meant that the correlation is perfectively positive, so as one increases the other increases by a proportionate amount. The coefficient value 0 shows that there is no correlation or linear relationship at all between variables and sign of correlation coefficient(-,+)show the direction of the relationship(Field,2006). The value of correlation coefficients ±0.1 represent small effect, ±0.3 represent medium effect and ±0.5 represent large effect respectively (Field,2006).

# 4.1.6.1. ATM Service Quality dimensions and Customer Satisfaction.

Table 28. Correlation Analysis between 8 Dimensions, Customer Satisfaction

		Eas	Ass	Sec	Com p	Cust	Conv	Empkm	supse	Custom	FPRO
eas	P.cor.	1	.323**	.310*	.209* *	.408* *	.244**	.259**	.389**	.374**	.344**
	Sig(2-ed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
ass	P.cor.	.323**	1	.321*	.429* *	.450* *	.499**	.401**	.445*	.518**	.499**
	Sig(2-ed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
sec	P.cor.	.310**	.321**	1	.350* *	.565* *	.391**	.343**	.490**	.372**	.391**
	Sig(2-ed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
comp	P.cor.	.209**	.429**	.350*	1	.527* *	.538**	.336**	.402**	.455**	.538**
	Sig(2-ed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
cust	P.cor.	.408**	.450**	.565*	.527* *	1	.532**	.442**	.560**	.496**	.532**
	Sig(2-ed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
conv	P.cor.	.244**	.499**	.391*	.538* *	.532* *	1	.450**	.448**	.647**	.740**
	Sig(2-ed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
empkm	P.cor.	.259**	.401**	.343*	.336* *	.442*	.450**	1	.574**	.359**	.305**
	Sig(2-ed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
supse	P.cor.	.389**	.445**	.490* *	.402* *	.560* *	.448*	.574**	1	.577**	.448**
	Sig(2-ed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Custom	P.cor.	.374**	.518**	.372*	.455* *	.496* *	.647**	.359**	.577**	1	.508**
	Sig(2-ed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

FPRO	P.cor.	.344**	.499**	.361*	.538*	.532*	.740**	.305**	.448**	.508**	1
				*	*	*					
	Sig(2-ed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	518(2 00)										

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Source: Own Survey (2019)

To examine the relationship between perception of customers of ATM service quality dimensions and their satisfaction, correlation analysis was conducted. The correlation between dimensions and customer satisfaction is positive and the effect can is medium (EmpKw. = 0.359) and large or strong (Conv.=0.647) respectively.

From the eight dimensions convenience has the strongest and significant relation (Conv=.647) while the weakest one is employee knowledge (EmpKw=.359) with customer satisfaction. The result shows that convenience allows customers to complete transactions quickly and saves their time. The second and the third strongest and significant relations are observed between support service (SupSe.=0.577) and customer satisfaction, Assurance (Ass.=0.518) and customer satisfaction respectively. The remaining dimensions have a positive and moderately strong and medium relation with value of (Cust.=0.496, Comp.=0.455, Eas. =0.374 ,Sec.=0.372 and EmpKw. =0.359) respectively with customer satisfaction. For instance, customization (Cust=0.496) and comprehensiveness dimension (Comp.=0.455) have moderately strongly relation with customer satisfaction whereas easiness (Eas.=0.374)and security(Sec=0.372)dimensions have medium relation with customer satisfaction.

# 4.1.7. RegressionAnalysis

To examine the relationship between the ATM service quality dimensions and customer satisfaction multiple linear regressions was employed.

#### 4.1.7.1ATM service quality dimensions and Customer satisfaction

Multiple linear regressionswere used to model the value of a dependent scale variable; in relation to one or more of the independent variable which shows to what extent the dependent variable is affected by the independent variables. The dependent variable (criterion) was customer satisfaction while the independent variable (predictors) was the ATM service quality dimensions. The coefficient of determination (R Square) and regression coefficients (Beta

coefficient) for the p-value for the significance of each relationship is analyzed (annexed as Table 29).

							95.0%			
		Unstanda	rdized	Standardized			Confid	dence		
Model		Coefficie	ents	Coefficients			Interva	l for B	Collinearity Statistic	
						Sig	Lower	Upper	Tolerance	
		В	Std. Error	Beta	T		Bound	Bound	e	VIF
	(Constant)	.506	.138		3.672	.000	.235	.777		
	Comp	.153	.163	.184	1.714	.000	017	.176	.619	1.655
	Conv	.375	.243	.396	2.742	.000	.220	.460	.548	1.825
	Eas	.031	.030	.047	1.026	.306	029	.091	.776	1.288
	Ass	.337	.043	.236	1.803	.000	.252	.422	.643	1.556
	EmpK									
	w	.057	.055	.044	1.067	.295	041	.139	.713	1.933
	SupSe	.259	.054	.254	4.396	.000	.132	.346	.497	2.012
	Sec	.022	.045	.021	034	.973	090	.087	.630	1.587
1	Cust	.143	.071	.138	1.729	.000	.143	.163	.355	2.379

Table 29Regression Analysis between ATM service quality dimensions and Customer satisfaction

#### Coefficients

a. Dependent Variable: Customer satisfaction

#### F=41.424, Sig. =.000. Adjusted R Square=.536

The overall Multiple Regression models of Customer Satisfaction with ATM Service Quality Dimensions will be: y=a+b1x1+b2x2+...+bnxn+e

y = 0.506 + 0.153 Comp + 0.375 Conv + .031 Eas + .337 Ass + .057 EmpKw + .259 SupSe + .022 Sec + 1.43 Cust + .138 Where:

y=overall, Comp=Comprehensiveness, Conv.=Convenience, Eas=Easiness, Ass=Assurance, EmpKw=Employee Knowledge, SupSe=Support Support, Sec= Security, Cust=Customizatione= Error Term

#### **Hypothesis**

**Ho1**; Comprehensivenesshas no direct and significant effect on customer satisfaction.

**Ho2**; Convenience has no direct and significant effect on customer satisfaction.

Ho3; Support service has no direct and significant effect on customer satisfaction

**Ho4**; Assurance has no direct and significant effect on customer satisfaction.

Ho5; Customization has no direct and significant effect on customer satisfaction.

**Ho6**; Easiness has no direct and significant effect on customer satisfaction.

**Ho7**; Security has no direct and significant effect on customer satisfaction.

**Ho8**; Employee knowledge has no direct and significant effect on customer satisfaction.

On the other hand, according to table 29 the remaining three dimensions and in turn their hypotheses namely security with (Beta value=.021), employee knowledge with (Beta value=.034) and easiness with (Beta value=.047) have no statistically significant (p>0.05) relationship with customer satisfaction. Thus hypotheses **Ho6**, **Ho7** and **Ho8** areaccepted. The result of easiness may happen because as the banking technology is new and arecent phenomenon, the easy to use the technology might not be adaptable by users. Security might be so risky as some ATM stations are not secure enough especially during the night.

Regarding the employee knowledge dimensions except in case of things go bad there is no personal contact with employee and it may not have significant impact.

# 4.1.8 Analysis of Structured Interview Questions of UB

The structured interview questions which was conducted with UB E-Payment department business solution section(bank) regarding the UB ATM banking service (UB reliable visa card) was briefly discussed follows.

The UB e-payment department business solution section (or bank) said that UB reliable visa card (UB ATM) banking service in view of the bank's customer is very good. The bank is improving its banking service of reliable visa card from time to time and gaining more customers and the

reaction of customers is positive and in good shape. Accordingly, the bank confirmed that the result of the assessment was encouraging and more will be done in the future. Customer's feedback tracking is done in two ways. First customer's feedback is done when there are complaints from customers. This is to know whether the solutions given to the complaints are really addressed the issue and the complaints are satisfied with the solutions. The other tracking is done via the bank's communication and business development section to know about the newly launched products or services status and get their feedbacks and reactions towards such newly launched products and services. Concerning the measures that to be taken the bank said that in the past appropriate measures had been taken to and encouraging results were obtained. As the service delivery is a continuous process the bank takes appropriate measures in the future. According to the bank the issue of the standard time period for delivering the UB reliable visa card (UB ATM) to new customer was fifteen days in the past while currently as the bank acquired latest machines and the process of authorizing the card for individuals customers and the delivering process by respective branches to customers is improved, the time period is highly minimized. For instance, in Addis Ababa it is less than three days while for those branches out of Addis about seven days. In light of customersatisfaction, according to the bank the previous time period was longer and relatively the current time period is short, though it is still demanding to reduce the time of card delivery. To encourage it sends SMS message to those who were registered to hold the UB reliable visa card to come and take the card.

According to the bank the reason for having a centralized card production department is twofold: firstly it is so cost effective, as the cost of the newly card production machine is so expensive. Secondly the bank is so advantageous in terms of skilled man power, security and accountability by employing such centralized card production system. To gain more customers, enhance the quality of service delivery and improve satisfaction of its customers and sustain the future prospects the bank has plans to be carried out. One is acquiring new banking technologies in such a way that to improve the banking service delivery which will be reliable, easy and convenient for its customers. To be armed with the banking technology the bank has changed its previous core banking services in such a way that to maintain the compatibility of the new banking technology and its core banking. The change was done by taking into account the convenience and preference of customers. Secondly to use the existing potentials and sustain the future prospects the bank has developed new products and services such as customer's

segregation. The customer segregation includes interest free and Sheba mail service, in which the UB reliable visa card can be used by different groups. For instance, ainterest free UB reliable visa card is issued only for Muslim customers only while the normal oneand Sheba mail is accessible by all customers.

Regarding the quality of the service delivery the bank said that apart from the external factors such as power breakdown and unavailability of network connection, the quality of the service delivery is in good shape. Moreover, to improve the service delivery quality and enhance customer satisfaction and thereby to develop and foster long term relationship the bank is working with high commitment.

Generally the UB ATM banking service (reliable visa card) provides various services such as cash withdrawal, fund transfer, balance enquiry and etc. It also provides mini-statements services including balance transaction and PIN changes. To excel the service features and enhance service quality of its reliable visa card banking, thebank has launched recently a UB "visa classic" reliable card which can put its card in a position to provide diversified banking services.

#### 4.2. Discussion of the Results

The intent of this study was to examine the effect of ATM service quality dimensions on customer satisfaction in the case of UB. The model adopted is a structural model with dimensions including easiness, assurance, security, customization, comprehensiveness, convenience, and support service and employee knowledge. It was developed as a generic model which can entertain a given study regardless of the type of technology being used. To entertain these technologies based service quality dimensions the instrument was adapted from Ganguli and Roy (2010) which was developed and used for dimensions of generic technology service quality. The structural model is intended to examine how the ATM service quality dimensions affect customer satisfaction. The study attempted to present a model that can explain how the aforementioned dimensions essentially affect customer's perceptions towards the service quality of ATM and to what extent these dimensions influence customer satisfaction. The results of the structured questionnaire survey rendered strong empirical support for the stated hypothesized relationships between the given constructs. The discussion on the empirical results of the study isentertained as follows.

The central issue which was given an emphasize in this study was the impacts of the ATM service quality dimensions that are perceived by users as essential elements in the service delivery and to what extent these dimensions are influential on customer satisfaction. Through a wider range of the extant literature analysis about eight dimensions have been identified. Accordingly the results of this study revealed that dimensions such as convenience, support service, customization, assurance, and comprehensiveness have a significant and direct influence on customers' satisfactions in UB. Among these dimensions convenience is the strongest dimension which has a significant and direct effect on customer satisfaction. This is in turn in line with earlier scholarly findings such as (Khan, 2010; Joseph and Stone 2003; Santos 2003.). For instance, Khan (2010) states convenience dimension as an ease of use and a service which is to be accessible at all times. Gerrard and Cunningam(2003)cited inKhan(2010) pointed out that customers prefer a service which is flexible enough that enables them to attain their financial needs at any time, which in turn affects their perception regarding ATM service quality. The result is consistent with this finding in which the bank's technology is accessible beyond regular business hours, provides more freedom of mobility and enables to complete transactions quickly and customers are happy with flexibility and convenience of the technology. The result is also consistent with prior findings such as ATM facilities came out in speed of transactions and saved time of customers (Moutinho, 1992). Dilijonasetal. (2009) found out that more than 50% of respondents did agree that the use of ATM is convenient and time saving as it allows them free movement in providing cash acting like mini banking and the result of this study is consistent with such findings.

Support service is the second strongest dimension which has a significant and direct effect on customer satisfaction. This is consistent with findings such as Gaguli and Roy (2010) in which the service delivered through the banking technology determines customer satisfaction. Also customization, comprehensiveness and assurance are the next dimensions that have effect on customer satisfaction. Joseph and stone(2003) state that accurate ATM and e-banking, customer service, secure and flexible service, easy and convenient banking and personalized service as the essential dimensions of technology based banking service. The result of this study is consistent with such findings as customers prefer to have a banking technology which enables them to carryout transactions quickly, save time, provide personalized service and keep confidential information and yet, in this study easiness, security and employee knowledge have no significant

effect on customer satisfaction. However, the results of easiness and security are contrary or inconsistent with prior findings. For instancee, Amirzadeh and Mousavi's (2011) findings show that security and privacy is the most indicators of the ATM users while suitable place of ATM and integrated interbank network are the essential factors which are in a position to increase the level of customer satisfaction. Raigaga(2000)cited in Haqueetal.(2009)states that the concern of security have been the main factors which is challenging and hindering the banking sector from expansion of the emerging technology. Result of employee knowledge of this study on customer satisfaction is contrary to previous studies such as Mojoodietal. (2013) in which their study shows that the value was (Betha =0.450) in which the employee knowledge has effect on customer satisfaction while the result of this shows no effect (Betha value = 0.054). This is an academic research and all researches should not be necessarily come out with same results. Also there might be difference of cultural difference of customers and also there will be difference during collection. Also the result of this study might be consistent with Zeithmal and Bitner 's (2004) view of SERVQUAL dimensions' relevancy to the techno- based banking system. They contend that in a remote encounter such as ATM banking services empathy might not be relevant dimensions, in which among the SERVQUAL dimensions, there is variation in relevancy to the e-banking (Zeithmal and Bitner, 2004). By the same token in ATM banking, technology is the interface in which the service accessed from remote area and except special personnel that are needed for assistance when things go bad; the interaction of employee is minimal.

The results of this study for customization and comprehensiveness is different from that of Mojoodietal.(2013)in which they concluded that customization and comprehensiveness have enduring effects on customer satisfaction whereas in this study both dimensions have positive effect on customer satisfaction. The results also revealed that service quality dimensions have effect on customer satisfaction which is consistent with prior findings. For example, Swaid and Wignad(2009) found out that the perception of reliability and assurance are the essential factors which have effect on favorable customer satisfaction aspects including repurchase intentions ,communicating positive word of mouth and loyalty. Similarly Levessque and McDougall (1996) cited in Sangeetha and Mahlingam(2011) state that high service quality comes out with customer's satisfaction, greater willingness to share to somebody else, minimization of complaints and enhanced customer retention rates.

Hurley and Estelmi(1998) cited in Gupta and Bansal(2012) singled out that whereas service quality and satisfaction are distinct constructs, a causal relationship exists between the two, and that perceptions of service quality affects feelings of satisfaction which are influential on future purchase behavior in which the result of this study is strongly consistent. Mojoodietal. (2013) finding shows with betha value (0.750) customer satisfaction has effect on customer satisfaction and the present study's result is consistent with it.

Fornell(1992)cited in Singh(2006) pointed out that high customer satisfaction will come out with increased customers satisfaction will be less overwhelmed from competitors while Anton(1996) cited in Singh(2006)states that satisfaction is positively related to repurchase intentions, a possibility of recommending a product or service and profitability.

# 4.3 Summary of Findings

The study was descriptive in type and yet inferential statistics as well such as correlation and regression analysis were used. The objective of the study was to examine the effect of ATM service quality dimensions on customer satisfaction in today's such vibrant technology based banking service in the Ethiopian banking industry, UB in focus.

Technology based models have been proposed to measure the ATM service quality dimensions which have a direct relationship with customer satisfaction. After a wider range of the extant literature was analyzed despite the divergence views regarding the e- service quality dimensions the structural model was adapted as the conceptual model for this study which was developed and used by (Mojoodi etal.,2013)with eight dimensions namely easiness, security ,support service, comprehensiveness, convenience, assurance, employee knowledge and customization. To entertain these eight dimensions regarding customer's perceptions on the UB ATM banking service an instrument which was developed by Ganguli and Roy(2010) was employed. Accordingly, after the data were get collected and subsequent analyses were performed the following results or findings were obtained.

Generally the result shows that about 58.7% of respondents are satisfied with the bank's technology which is convenient, support service is good and accessed beyond regular business hours and provides more freedom of mobility. This shows that there is a direct and significant relationship between ATM banking service quality dimensions and customer satisfaction. From the eight dimensions convenience and support service dimensions are the dominant predicators of

customer satisfaction and followed by assurance, comprehensiveness and customization. On the other hand, the remaining three dimensions namely security, easiness and employee knowledge have no direct and significant on the overall customer satisfaction.

The results generated from the data which were collected from both sides namely customers and the bank show that except on some areas the service delivery is in good shape and customers are satisfied. And yet in some dimensions such as employee knowledge and security customers are neutral and not happy with the bank's service though the bank says in every aspect the service delivery is good and customer's reaction is positive. The following table 30 shows the results of regression analysis of hypotheses.

Table 30: results of hypotheses

Hypotheses and their Statements	<b>Customer Satisfaction</b>
Easiness has no direct and significant effect on:	Accepted
Assurance has no direct and significant effect on	Rejected
Security has no direct and significant effect on:	Accepted
Customization has no direct and significant effect on	Rejected
Comprehensiveness has no direct and significant effect on:	Rejected
Convenience has no direct and significant effect on	Rejected
Support service has no direct and significant effect on:	Rejected
Employee knowledge has no direct and significant effect on	Accepted

#### **CHAPTER FIVE**

#### SUMMARY OF CONCLUSION AND RECOMMENDATIONS

It deals with conclusion, recommendation, Implications and suggestions for future research.

#### 5.1 Conclusion

The study has introduced an area of research that has crucial practical and theoretical implications to the Ethiopian banking industry UB in focus. Technology is dramatically altering the way business is conducted and its speed and effect is increasingly significant to the business firms. In the traditional service setting such the interface was employee -customer while in the technology based banking service the interface is shifting into technology-customer through the application of self-service technologies. Accordingly the purpose of the study was to make an original contribution to the body of knowledge in the service sector such as the banking industry by examining the impact of ATM service quality dimensions on customer satisfaction of ATM in the case of UB. It contributes to the service marketing management discipline in finding out the role of the technology based banking such as ATM in enhancing customer satisfaction.

Accordingly factors pertaining to convenience, security, easiness, customization, comprehensiveness, assurance, support service and employee knowledge were a central constructs of the study as they have an influence on customer satisfaction

A high quality technology based service is the determinant factor toward the success of the banking industry and by understanding the characteristics of technology based services that enhance customers satisfactions business firms can screen out where and how to invest essential resources in providing techno-based banking service quality. The study as well may create awareness among techno- based service managers to pay more attention to technology based service quality, as well as assisting them to improve e-service performance and competitiveness.

The results of the postulated hypotheses answered the designed out research questions and which in turn answered the specific objectives. Thus the research questions were answered in which the effect of ATM service quality dimensions on customer satisfaction were direct and significant. Accordingly the designed specific objectives were achieved. Specifically the specific objectives which dealt with the exploration, assessment and determination of the effect of ATM service quality dimensions on customer satisfaction of ATM. Hence, the objective designed out by the

student researcher to be achieved by the study was with remarkable and significance importance was achieved.

The most respondents signed on positively showing that customers have interest and found out convenient to use the banking technology instead of having interaction with human tellers. It is also allows customers to transact their banking service quickly, it saves time. Their personal information is not misused by their bank, support service is good. However, there are still some respondents who are neutral, disagree and strongly disagree to the stated statement.

Thus from the results it can be concluded that the effect of ATM service quality dimensions have direct and significant effect on customer satisfaction of ATM. Furthermore it can be concluded that as the overall result is positive the application of UB ATM banking has a bright future in the Ethiopian banking industry. And yet UB has to work hard to exceed and go beyond the expectations of customers in such a way that it can retain its customers and develop long lasting relationship and attract more potentials customers and thereby reduce theswitching cost and takes the lead from the vigorous privately owned. Finally the research outcome of this study also revealed some vital implications for bank managers and academicians as it is shortly briefed in the implication part of this study.

#### 5.2. Recommendations

The study reveals that as the quality of services being delivered to customers is enhanced, customer satisfaction of techno-based banking will be increased and willingness of customers toward techno-based banking is increased. Thus the following recommendations are forwarded:

Enhancing ATM banking service facilities in such a way that to speed up the machine to save the customer time and enable customers transacts banking service at ease.

Providing sufficient security and making the ATM stations area secure enough especially during night time to increase safety of customers.

Promoting and fostering the culture of techno- based banking services usage and informing and encouraging customers to use the service which is delivered via the technology.

Increasing features and improving the facilities of the technology based banking service in such a way that customers can receive a wider range of financial services. Specifically providing simple, differentiated customer-focus services based on changing and growing customer behavior and preferences.

Improving the customer experience in using the technology based services and facilitating awareness creation ventures in such a way that customers may learn and get aquatinted with the technology and the use of techno- based banking will be availed by the general public.

The results show that the effect of ATM service quality dimensions on customer satisfaction of ATM is direct and significant. So the bank has to pay attention to the ATM dimensions and create conducive environment and increases facilitates and features so that to reap more profits.

Now-a-days the banking technology is totally revolutionized the banking industry and drastically challenging the bricks and, mortar banking system and it is a hard fact that it is impossible to be successful and remain competitive without the technology and hence UB is not exceptional from such influence and the bank should pay utilize the results which may help to fill the gaps.

To improve the service delivery and thereby standardize the service offering the bank has to work hard more on the technology based banking such as ATM in such a way that it can bring standardization of offerings and create more conducive technology based banking environment which is convenient and accessible with more freedom mobility.

As the results of the study show convenience and support service are the most important dimensions so the bank has to pay attention on these areas for more achievements.

More than 60% of the respondents signed on that convenient to use the banking technology instead of having interaction with human tellers, allows to transact their banking service quickly, it saves time, their personal information is not misused by their bank ,support service is good. However, the results show that on dimensions such easiness, security and employee knowledge customers are not satisfied. Particularly on employee knowledge for instance there are respondents who are neutral and negative responses from customers to the stated statements. This implies that technology based banking customer service of employee knowledge needs improvements and UB has to improve employee's knowledge that renders service required by customers to be efficient and according to customer's desires.

Moreover, as customer's preference in using the technology is increasing, the bank need to diversify and increase features and augment its service delivery through the application of ATM so that it is possible to suit customer's desire.

# 5.3 Implications and Suggestions for Future Research

#### **5.3.1 Implications**

As the use of technology in Ethiopia, UB in focus is a new dimension and the model studied in this study is generic which can assess the banking service regardless of the type of technology being employed, there are some practical implications:

The results reveal that as the model is a generic technology which can handle a study regardless of the type of technology employed and the instrument is generic and not yet practiced in Ethiopia, UB in focus, it will provide the theoretical foundation for future researchers to build on it and enables to draw more insights about customer's perceptions.

The research outcome will aid managers to rectify the observed problems regarding the UB ATM banking service delivery.

Also the study provides more insights regarding customers' needs and wants which is Essential for managers to learn customer's needs and delivery the required service accordingly to fill that need and hence satisfy them.

# **5.3.2 Suggestions for Further Studies**

Studies show that customers prefer to use in combination the E-banking (ATM, internet and mobile banking) and yet the focus of this study was only on ATM. So further research may assess the three pillars of the technology interface so that more insights will be generated.

As the use of the technology based banking service is get accustomed by customers and its application is fully employed in the future, the behavioral intentions such as loyalty, tendency to switch, barriers to switch and other similar issues can be examined.

Finally as the study is cross-sectional in its nature and only the influence between relationships instead of the causal direction was addressed, future studies can use the longitudinal studies to show the confirmation of causality.

#### References

AdepojuAdelowoSolomon(2013)Challenges of Automated Teller Machine (ATM)Usage and Fraud Occurrences in Nigeria: A Case Study of Selected Banks in Minna Metropolis. Journal of Internet Banking and Commerce 15(2).

Ahmad AlaeddinMohdKhalaf and Ali Al-Zu'bihasan(2011) *E-banking Functionalityand Outcomes of Customer Satisfaction: An Empirical Investigation.* International Journal of Marketing studies 3(1).

Al-Hawari, Mohammed Hartley Nicole and Ward Tony(2005) *Measuring Banks' Automated Service Quality: A confirmatory Factor Analysis Approach.* Marketing Bulletin 16, Article 1.

Ali M.M.(2010)*E-Business and on line banking in Bangladesh: An Analysis,AIUB Business and Economics Working Paper Series.* unpublished.

Annual report of United bank S.C (2017/18) Addis Ababa.

Anton J.(1996) Customer Relationship Management: Making Hard Decisions with Soft Numbers. Upper Saddle River: Prentice-Hall.

Berkley B.J. and Gupta A.(1994)3PSURYLQJ VHUYLFH TXDOLW\ZLWK LQWHIFKQYKCRQ\ International Journal of Information Management14: 109-21.

BhattacherjeeAnol(2012)Social science research: Principles, methods and, 2ndtiedn.

Broderick A.J. and Vachirapornpuk S.(2002) THUYLFH TXDOLW\LQ LQWHUQHW EDQNLQJ WI importaQFHRIFXWRPHUUROM fixeting Intelligence and Planning20(6):327-35.

Burke Raymond R.(2002) *Technology and the Customer*InterfactWhatConsumers Want in the Physical and Virtual Store. Journal of the Academyof Marketing Science 30(4): 411-32.

Buttle .F(1996)"SERVQUAL: review, critique, research agenda". European Journal of Marketing 30(1): 8-32.

Carman J.M. (1990)&RQVXPHU SHUFHSWLRQV RI VHUYLFHotixa@OdfW(Retailing 66: 33-55.

Chmiealr W.(2002)"Profitability aspects of electronic banking applications for smallcompanies". Poland: 1578-1588.

Clow E. Kenneth and Kurtz L.David(2003) *Service marketing: Operation, managementand strategy*, 2nd edn. Bitanatra publisher.

Collier J.E. and Bienstock C.C. (200 PE PAGE)

-**6**04EPX**1**0456.{

Service Research 8(3): 260-75.

Cooper R.Donald and Schindler S. Pamela(2008) *Business Research Methods*, 10th edn. McGraw Hill/Irwin Series.

Creswell J. W. (2012) Research design: Qualitative, quantitative, and mixed methods approaches,4thedn. Thousand Oaks, CA: Sage Publication.

Cronin J.J. and Taylor S.A. (1992) OHDVXULQJVHUYLFHTXDOLW DUHHDPLQDWLRQDQGHWHQVL Journal of Marketing 6: 55-68.

Cronin J.J. and Taylor S.A. (1994)6(593(5) YHUV us SERVQUAL: reconciling performance-based and perception-minus-expectations measurement of VHUKFHTDOLW ournal of Marketing 58(1): 125-31.

Dabholka P. A(1994)Technology based service delivarilyances in Services Management 3:241-71.

Dilijonas, D. Kriksciunien, D. Sakalauskas V. and Simutis R. (2009) XVWDLQDELOLWEDVHGVHUYLFH TXDOLWDSSURDFKIRUDXWRPDWHGWHOOHUPDFKLQHQHWZRUN′

Eid Mustafa I.(2011) *Determinants of E-Commerce Customer Satisfaction, Trust, and Loyalty in Saudi Arabia*. Journal of Electronic Commerce Research 12(1).

Field Andy(2006) Discovering statistics using SPSS, 2nd edn.

Fullerton G. and Taylor S. (2002) OHGLDWLQJLQWHUDFWLYHDQGOROr effects inservice quality DQGDWLVIDFWLRQZWKHUKFHVUHChhadhark Journal of Administrative Sciences 19(2):124-36.

Furey T.R. (1991) RZ LQIRUPDWLRQ SRZHU FDQ LPSURYH VHUYLF**H** Wiew. 19(3):24-6.

GanguliShirshendu and Roy SanjitKumar(2010)Generic technologysed servicequality dimensions in banking: Impactusation and logyadiayInternational Journal of Bank Marketing 29(2):168-189.

Gardachew, Worku (2009) *Electronic Banking in Ethiopia: Practices, Opportunities and Challenges*. Journal of internet banking and commerce 15(2).

cted banks in Sierara Leone. Australian Journal ofBusiness and Management Research 1(4).Gefen D. (2002) XVWRPHU ORDOW\ LTQRPPHUFH Journal of the Association for Information Systems 3(2):27-51.

Goetsch David L and Davis.BStanley(2000) *Quality Management : Introduction toTotal quality management for production processing and services*, 3rd edn. NJ:Prentice Hall.

Muyeed Md. Abdul (2012) Customer Perception on Service Quality in Retail Bankingin Developing Countries - A Case Study. International Journal of Marketing Studies 4(1).

Ndamnsa and Hamde(2013) *Using the SERVQUAL Model to assess Service Quality and Customer Satisfaction*: An Empirical study of grocery stores in Umea. Unpublished.

Nwabounu Gabriel Odachi(2011)*ATM technology and banking system in west Africansub Region: Prospects and challenges, African research review.* Aninternational Multi -Disciplinary Journal ,Ethiopia 5(2)(19):104-114.

Parasuraman, A ZethmalV and Berry (1985)A conceptual model of service quality andits implication for future research. journal of marketing 49(41/50).

Power JD and Associates R (2009) *Customer Commitment to Retail Banks Continues Decline*. World Wide Web:http://bankmarketingnews.org/2009/05/20/PualSabita(2013) ATM: The New Horizon of E- Banking , Science, Technology and ArtsResearch.

Qureshi, TahirMasoodZafar Muhammad Khaqan Khans Muhammad Bashir (2008) Customer Acceptance of Online Banking in Developing Economies. Journal of Internet Banking and Commerce (13(1).

Rahaman, Mohammad Abdullah Mizenur and RahmanAtaur(2011) *Measuring ServiceQuality using SERVQUAL Model: A Study on PCBs (Private Commercial Banks) in Bangladesh.* Business Management dynamics 1(1):01-11.

RasheedMehvish and Latif Abdul (2011)Dose Technology -Enabled Service Qualityaffect Organizational Competence? Journal of Public Administration and Governance, Macrothink Institute 1(2).

Rust R.T. and Lemon K.N. (2001) -VHULFH DQGWN FRQVRHUMternational Journal of Electronic Commerce 5(3):85-101.

Saleem and Rashid(2011)Relationship between Customer Satisfaction and Mobile Banking Adoption in Pakistan. International Journal of Trade, Economics and Finance 2(6).

Thomas, GlaessnerKellermann Tom McNevinValerie(2002)"Electronic Security:Risk Mitigation In Financial Transactions".Public Policy Issues, The World Bank.

Titko, Jelena Lace NataljaKonzlavoskisKonstantis(2012) Service quality in banking development and testing measurement instrument with Lativan data LXI(2):507-515.

# **Appendix**

THE IMPACT OF SERVICE QUALITY ON COSTOME56\\$,6)\\$\217+(\\$\(2)\\$0 SERVICES IN UNITED BANK S.C.)

LULIT MEHERET

A THESIS FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENTS OF MASTER OF ARTS IN GENERAL MANAGEMENT.

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MANAGEMENT POST GRADUATE PROGRAM

#### Dear UB ATM-banking customers,

I am a post graduate student in St. Mary's University in general management department. First of all I would like tothank you for your cooperation in filing out this questionnaire. It is considered as part of the research thesis for the partial fulfillment of the requirements of Master of Arts in general Management department which is designed for gathering information on how you feel about the quality service of the ATM-banking service of the UB.

As your responses to the statements below have great bearing to my thesis work, thus I kindly request you to fill it out carefully and genuinely. This information is going to be used just only for academic purpose and apart from that your responses will be treated with great confidentiality.

For further information please contact the student researcher telephone: +2510923501024 and email:

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LULIT MEHERET: Candidate of MA Degree

#### **General Instruction:**

There is no need to write your name

I thank you for your participation in advance

Part one	
I. Please tick in the box of your response for the	e following questions.
1. Gender: Male Female	
2. Age: 20 years and less21-	
31-40 years Greater than 41	
3. Monthly income:	
Less than Br 2,500	Between Br 2,500- Br 4,500
	66

Between Br 4,500- Br 9,500Greater than Br 9,500
4.Period for which respondents are customers of their bank:
Less than 6 monthsBetween 6-12 on this
More than 1 – up to 3 yearsMore n 3 years
5.Frequency of monthly usage:
Up to 5 timesMore than 5 – up to 10 times
Up to 5 timesMore than 5 – up to 10 times  More than 10 – up to 20 times More in 20 times
Part Two
1. Survey Questions
Based on the experience you have as an ATM-banking user, please assess your perceptions regarding
The service rendered with UB ATM. A list of statements are given below and the student researcher is
Interested in a number that indicates your feeling concerning the perceptions of the ATM-banking of the
United bank on a scale of (1-5).
Each statement is ranked in the following ways:
Strongly Disagree (1) Dis-Agree (2) Neutral (3) Agree (4) Strongly Agree (5)
II. Please tick on the number of your response for the following questions

S. No.	Question	1	2	3	4	5
	EASINESS					
1	The technology provided by my bank is easy to use	Г	Г		Г	
2	The technology provided by my bank is user-friendly					
3	The technology provided by my bank works accurately and is error-free					
	ASSURANCE					
4	My .bank's technology is reliable					
5	I feel safe using my bank's technology					
6	My personal information exchanged while using technology is not misused by mybank					
	SEURITY					
7	My bank's technology is personalized					
8	My bank's technology provides the precise information I need					
	CUSTOMIZATION					
9	My bank's technology provides sufficient information					
10	My bank's technology provides the reports I need					
11	My bank's technology gives me more freedom of mobility					
	COMPRHENSIVENESS					
12	I find it more convenient to use technology than interacting withbranchemployees					
12	i find it more convenient to use teenhology than interacting withoramenemployees					

13	My bank's technology is accessible beyond regular business hours			
	CONVINENCE			
14	My bank's technology allows me to complete transactions quickly			
15	My bank's technology saves me a lot of time, especially when I am pressed for time			
	EMPLOYEE KNOWLEDGE			
16	When I contact my bank's customer service, I am offered proper explanations			
17	When I contact my bank's customer service, the representatives are supportive			
	When there are problems, my bank's customer service people are sympathetic			
	andreassuring			
	My bank employees are knowledgeable enough to resolve the problems			
	SUPPORT SERVICE			
18	When I contact my bank's customer service, the representatives offer personalizedinformation			
19	When I contact my bank's customer service, my calls are always answeredpromptly			
20	My bank resolves my complaints quickly			
21	My bank offers a fair compensation for its mistakes			
	When I contact my bank's customer service (e.g. call center either through phone or online), myrequests are always anticipated properly			

#### 2.Satisfaction( pleasetick the number of your answer)

Strongly Disagree ..... (1) Dis-Agree.... (2) Neutral..... (3) Agree.... (4) Strongly Agree.... (5)

S. No.	Question	1	2	3	4	5
1	Overall I am satisfied with my bank					
2	I think I did the right thing when I chose this bank					
3	My bank's services meet my expectations					
4	I am delighted with my bank					

#### 3. Future Prospects(please tick the number of your answer)

Strongly Disagree ..... (1) Dis-Agree.... (2) Neutral..... (3) Agree.... (4) Strongly Agree.... (5)

S. No.	Question	1	2	3	4	5
1	I would recommend my bank to others					
2	I will always consider this bank as my first choice					
3	I expect to do more business with my bank in the future					

# Appendix B: Structured Interview Questions Conducted with UB

1. How do you assess the UB ATM banking service in view of your customer's reaction?

2. Do you track customers' feedback regarding UB ATM banking service?
3. Based on your assessment ,what measures need to be taken by the UB to put things at the right spot?
4. The standard time period for delivering the UB ATM card to a new customer is about 15 days, how do you see its suitability in attracting new customers?
5.In light of customer satisfaction, how do you evaluate such a time period as customers prefer an immediate card delivery?
6. Card issuing is exclusively done by the UB E-Payment department, why UB preferred such a long chain process, instead of granting to branches?
7. To gain more customers and enhance the quality of service delivery and maintain the momentum
and thereby to improve satisfaction of its customers and sustain the future prospects what is planned by UB?
8. How do you evaluate the quality of service being delivered via UB ATM banking?