



**ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS**

**Effect of ATM Service Quality on Customers Satisfaction in Banking
Industry in Ethiopia:
(The Case of Oromia International Bank in Addis Ababa)**

By

Habte Ashenafi

Adviser

Mesfin Fikre (PhD)

**A Project Research Submitted to College of Business and Economics
Department of Management, Addis Ababa University in Partial Fulfillment of
the Requirement for the Degree of Executive Masters of Business
Administration.**

March, 2019

Addis Ababa, Ethiopia

DECLARATION

I am submitting this project paper in partial fulfillment of the requirements for the award of the Degree of Executive Masters of Business Administration and to the best of my knowledge it has not been submitted for qualifications of any degree or diploma at any university or other institutions of higher learning and that all references have been given acknowledgment for citation.

Habte Ashenafi

Name

Signature

Date

Mesfin Fikre (PhD)

Research Adviser

Signature

Date

Addis Ababa University
College of Business and Economics
POST GRADUATE EMBA PROGRAM

Effect of ATM Service Quality on Customers Satisfaction in Banking
Industry in Ethiopia:
(The case of Oromia International Bank in Addis Ababa)

By: Habte Ashenafi

Approved by the Board of Examiners:

Advisor

Signature

Internal Examiner

Signature

External Examiner

Signature

ACKNOWLEDGMENT

A number of individuals have provided invaluable support, encouragement, and constructive criticism when preparing this dissertation. First, I sincerely thank Dr. Mesfin Fikre for his constructive comments which made this work a reality, without his guidance, this study could not have taken its present form.

I also acknowledge all of the staff that has been working in Management Department at Addis Ababa University (AAU) for their essential cooperation with this study. I wish to thank OIB managements, staff, and all of the respondents for the cooperation that I enjoyed in due course of executing this research study.

Special thanks due to Mr. Ashenafi Tsegaye for providing continuous constructive suggestion and advice concerning this research study.

Furthermore, I am very thankful to all individuals that in one way or another facilitated my work in this study. Finally, I thank my lovely wife W/ro Meseret Lemessa for her support while I was preparing this dissertation.

DECLARATION	II
ACKNOWLEDGMENT	IV
GLOSSARY OF ACRONYMS AND ABBREVIATIONS	VIII
ABSTRACT	IX
CHAPTER ONE: BACKGROUND OF THE STUDY	1
1.1 Introduction	1
1.2 Emergence and Development of E-Banking Transactions in Ethiopia	3
1.3 Background of the Company	4
1.4 Statement of the Problem	5
1.5 Research Questions	7
1.6 Objective of the Study	7
1.7 Scope of the Study	7
1.8 Significance of the Study	8
1.9 Limitations of the Study	8
1.10 Organization of the Study	9
1.11 Operational definitions	9
CHAPTER TWO: LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Theoretical Review	10
2.2.1 E-Banking	10
2.2.2 Automated Teller Machines (ATMs)	12
2.2.3 Customer Satisfaction and Service Quality	13
2.2.3.1 Customer Satisfaction	13
2.2.3.2 Service Quality	14
2.2.3.3 Service Quality Measurement	16
2.3 Empirical Review	18
2.4 The Theoretical Framework	19
2.5 Research Gap	21
CHAPTER THREE: METHODOLOGY	23
3.1 Introduction	23
3.2 Research Design	23

3.2.1	Study Population.....	24
3.2.2	Sampling Method.....	24
3.2.3	Designing the Questionnaire.....	26
3.2.4	Method of Data Analysis	27
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION		29
4.1	Introduction	29
4.2	Survey Findings.....	29
4.2.1	Validity Analysis	29
4.2.2	Reliability Analysis	30
4.2.3	Return Rates.....	30
4.2.4	Demographic Information	31
4.3	Customers ATM Use Status	34
4.4	Descriptive Statistics	37
4.5	Correlation Analysis.....	41
4.6	Mean score difference among groups of background on dependent variables	43
4.7	Salient problems encountered by OIB ATM service users	52
4.8	Frequent Problems encountered by ATM customers of OIB.....	52
4.9	Interview Findings.....	55
4.9.1	Major problems related to ATM Services obtained from interview.....	55
4.9.2	Sources of the ATM service problems obtained from interview.....	55
4.9.3	Enhancing customers' satisfaction obtained from interview	56
CHAPTER FIVE: FINDINGS, CONCLUSION AND RECOMMENDATIONS.....		58
5.1.	Introduction	58
5.2.	Research Findings	59
5.3.	Conclusion.....	61
5.4.	Recommendations	62
5.5.	Recommendation for Future Research	63
Reference.....		65
Annex.....		i

List of Tables

Table 1-Cronbach’s Alpha (Reliability analysis).....	30
Table 2-Questionnaire Return Rates for Each ATM Stations.....	31
Table 3-Gender distribution of respondents.....	31
Table 4-Age distribution of respondents.....	32
Table 5-Educational Qualifications of respondents	32
Table 6-Marital status distribution of respondents	33
Table 7-Occupational status distribution of respondents	33
Table 8-Salary distributions of respondents.....	34
Table 9-Respondents Customer status distribution.....	34
Table 10-Frequency of ATM service use distribution of respondents.....	35
Table 11-Frequency distribution for ATM service use for cash withdrawal	35
Table 12-Frequency distribution for ATM service use for fund transfer	36
Table 13-Frequency distribution for ATM service use for balance Inquiry	36
Table 14-Frequency distribution for ATM service use for mini statement	37
Table 15- Descriptive Statistics of Service Quality Dimensions	37
Table 16-Overall satisfactions with OIB ATM service	39
Table 17-Respondent’s perception of OIB ATM service quality	40
Table 18-Correlation analysis	41
Table 19-Mean Difference between Groups of Background Variables on Tangibility	43
Table 20-Mean Difference between Groups of Background Variables on Reliability.....	44
Table 21-Mean Difference between Groups of Background Variables on Empathy	45
Table 22-Mean Difference between Groups of Background Variables on Responsiveness	47
Table 23-Mean Difference between Groups of Background Variables on Assurance	49
Table 24-Mean Difference between Groups of Background Variables on Overall Satisfaction..	51
Table 25-Frequent Problems encountered by ATM customers of OIB	53
Table 26-Summery of respondent’s suggestion to improve OIB ATM the service	54

List of figures

Figure 1-Research model	20
-------------------------------	----

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ANOVA- Analysis of Variance

ATM-Automatic Teller Machine

CBE-Commercial Bank of Ethiopia

CORE-Centralized online real-time and electronic

E-Banking-Electronic Banking

ICT -Information and Communication Technology

NBE-National Bank of Ethiopia

OIB-Oromia International Bank

PC-Personal Computer

PIN- Personal Identification Number

POS-Point of sale/Purchase

PSS-Premiere Switch Solutions

SERVPERF-Service Performance

SERVQUAL- Service Quality

SPSS-Statistical Package for Social Science

SQ- Service Quality

ABSTRACT

This study has been conducted with an objective to asses' consumer satisfaction on ATM in the Ethiopian banking industry. The analysis of this study was made based on a case study on OIB customers in Addis Ababa city. The study was conducted based on data collected from customers and management of the bank through questionnaires and unstructured interview. The questions were focused to evaluate the extent of customer satisfaction regarding ATM services of the bank in five service quality dimensions that included tangibility, reliability, responsiveness, assurance and empathy towards ATMs. Moreover, to achieve the research objective the research adopted a descriptive research design; using both qualitative and quantitative approach. The designed questionnaires were distributed to 200 ATM card users of the bank. Source of data was primary; primary data were collected by using 5-point Likert-Scale. The samples were selected from five different city branches location by purposively sampling technique. Using SPSS, descriptive statistics, correlation, one sample t-test and anova are used to analyze the data. The research finding shows that that OIB ATM customer's level of satisfaction was positive, even though, customers were not happy with some of ATM attributes like promptness in replacement of lost ATM cards, ATM out of order, return of swallowed ATM card, insufficient number of ATM, inaccessibility of ATM and employee to solve ATM related issues and inconvenience of ATM locations. Moreover, the survey result also implied that the management of the bank to pay attention for training and developing staffs' skill in using ATM services in addition to installing the ATM in appropriate and accessible places.

Keywords: ATM, Customer Satisfaction, Service Quality, Ethiopia

CHAPTER ONE: BACKGROUND OF THE STUDY

1.1 Introduction

Technology is making a tremendous impact upon service companies in general and the financial services sector is no exception. The application of information and communication technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamental importance and concerns to all banks and indeed a prerequisite for local and global competitiveness in banking industry. As a result of this technological improvement business environment in financial sector is extremely dynamic and experience rapid changes and demands banks to serve their customer electronically. The evolution of e-banking started from the use of Automatic Teller Machine (ATM) and Finland is the first country in the world to have taken a lead in e-banking (Mishra RK, & Kiranmai J, 2009).

E-Banking gives customers the opportunity to access banking services from the comfort of their homes and offices and also be able to do most of the transactions which would have been done in the banking halls. With the use of personal computer (PC) or even mobile phone with an internet connection, customers are able to carry out transactions such as cash withdrawals, payments of utility bills, transfers from one account to the other, viewing and printing of statements as well as request for cheque books on their traditional accounts (Dzogbenuku, 2013).

Today, almost all banks are adopting electronic banking as a means of enhancing service quality of banking services. They are providing electronic banking to their customers to increase customer's satisfaction in banking service (Shittu, 2010). A study by Kumbhar (2011) on customer satisfaction towards E-banking services of ICICI bank in Chennai City, India, which considered factors affecting on customers' satisfaction: an empirical investigation of ATMs service and examined that the cost effectiveness of ATM service were core service quality dimension and it was significantly affecting on overall customer satisfaction in ATM service provided by commercial banks.

Literature shows that ATM banking has received customer preference to become the second most popular channel for accessing banking products/services behind branch banking.

Now, Ethiopia banks are investing money in ICT Infrastructure to provide e-banking services to their customers. It provides various alternative e-channels to using banking services e.g. ATM, Point of sale, internet banking, mobile banking, electronic fund transfer, electronic clearing services etc. However, as per Ethiopia e-banking scenario, ATM is most acknowledged e-banking channel as compared to other e-channels.

Although ATM systems have high fixed costs, they have lower variable transaction processing costs according to research. With that proficiency ATMs could be substituted for employees that provide services on demand deposits accounts thereby be able to reduce the number of transactions processed by human tellers. That would allow banks to reduce direct customer service employment (Kantrow, 1989). According to Rose (1999), ATMs are efficient method for yielding higher profitability as they accomplish higher efficiency per duration of time than human tellers (normal of 6,400 exchanges for every month for ATMs contrasted with 4,300 for human tellers). Moreover, ATMs have a huge potential to reach unreachable society through its machines sales outlets. ATMs have therefore become strategic technology in the banking sector in delivering banking products/services and are expected to offer competitive advantage to banks investing in ATM technologies over those that do not.

Therefore, to continue achieving competitive advantage through ATM banking, bank managers need to know the key features of ATM banking whose performance greatly influence customers' satisfaction and factors contributing to customer dissatisfaction with regard to ATM service.

Oromia International Bank (OIB here after) is one of the major competing private banks in the Ethiopian banking industry. Like other banks, OIB is investing on e-banking services to enhance its capacity to deliver quality banking service to its customers. It is hoped that the adoption of new technologies such as e-banking, have a positive impact on the quality of service and hence the satisfaction of customers. In contrast, new technologies, for various reasons, face challenges and hence may become a source of dissatisfaction. Understanding the possible sources of discontents is very important to address the challenges and thereby enhance the positive impacts of new technologies on customer's satisfaction and consequently the competitiveness of the bank.

1.2 Emergence and Development of E-Banking Transactions in Ethiopia

The emergence of E-banking in Ethiopia goes back to the late 2001, when the largest state owned, Commercial Bank of Ethiopia (CBE) introduced ATM service in the country with eight ATMs machine and followed by Dashen Bank S.C. CBE has had Visa membership since November 14, 2005. But, due to lack of appropriate infrastructure it failed to reap the fruit of its membership. Despite being the pioneer in introducing ATM based payment system and acquired visa membership, CBE Lagged behind Dashen bank, which worked aggressively to maintain its lead in E-payment system. As CBE continues to move at a snail's pace in its turnkey solution for Card Based Payment system, Dashen Bank remains so far the sole player in the field of E-Banking since 2006 (Gardachew, 2010).Currently, all most all banks in Ethiopia are providing e-banking service partly or fully in Addis Ababa.

Before few years back, due to the absence of system, that integrates and centralizes all banks' online real-time and electronic (CORE) banking solutions, bank ATMs are only for their own clients. The payment system is manually handled using papers that moves from banks to National Banks of Ethiopia (NBE).

Thus, on February 2009, the three private commercial banks; Nib International Bank S.C., Awash International Bank S.C., and United Bank S.C, have established separate entity under the name of Premiere Switch Solutions (PSS) with 165 million Br capital (Amanyehun, Addis fortune news paper, 2011). PSS has currently six member banks, including the Addis International Bank, Berhan International Bank, and Cooperative Bank of Oromia S.C. The main objective of PSS formation is for the common ATM operational function and control (PSS card user guide, 2011). The PSS is benefiting member banks and their clients by allowing customer through the use of different ATM machines by member banks more than other banks owning their own ATM only for their own client.

Later in 2011, company named "Eth-Switch" was established by 16 banks with 80.5 million capital. The company is established to connect all of existing switches and payment system in the national payment system and that enable clearing of cheques and using the ATM of any bank and use POS. That means it enables clients to transact money from ATMs of other banks not only the bank in which the account is maintained.

1.3 Background of the Company

Oromia International Bank S.C. (OIB) was established in accordance with the pertinent laws, regulations and the 1960 Commercial Code of Ethiopia, by the Monetary and Banking Proclamation No. 83/1994 and by the Licensing and Supervision of Banking Proclamation No. 592/2008. Accordingly, on September 18, 2008, OIB obtained a banking business license. At the time of its establishment, OIB's authorized capital was Birr 1.5 billion, whereas its subscribed capital was Birr 279.2 million, and its paid-up capital Birr 91.2 million. OIB began operation on October 25, 2008 by opening its first branch at the Dembel City Centre. More specifically, its branch was named Bole Branch.

Thus, OIB has various types of scheme for customer like deposit service, credit/lending service, international banking service, international money transfer service, interest free banking service and electronic banking service.(Source; broacher of the company)

According to Manager of Planning and Performance Management Division of the bank as of March 31, 2018, the total number of branches reached 236, the total asset has grown to Birr 21.24 billion, Paid up Capital has reached 1.3billion, deposit balance has grown to Birr 17.4 billion, Loans and Advances reached 11.8 billion and it is total staff reached 3,226.

To catch up with the proliferation of new technologies, almost all branches of the Bank are networked by core banking system. Electronic banking services are now operational. Card, mobile and agent banking are now in full swing with round-the-clock services while Internet banking is under implementation. According to the annual report of the bank for the period 2017/18 as of June 2018, OIB have 22,000ATM card holders, 36 Agents, 3,199 Mobile banking accounts and 40 ATM machines were installed at selected business location.

According to Director of Electronic Banking Department, OIB currently has 47ATMs Machine of its own; and ATM sharing arrangement with all banks in the country. So, holder of ATM card of the bank can obtain cash from any ATM machine of any bank in the country. The service the bank provides through ATM include; withdrawing cash from one's account, transferring funds from one account to another, making balance enquiries, printing and viewing mini statement etc.

1.4 Statement of the Problem

According to Addis fortune news published on June 13, 2018, the number of transaction done by ATMs through Eth-Switch has reached six billion Birr that makes that ATM, has received customer preference to become the second most popular channel for accessing banking products/services behind branch banking.

It is generally believed that e-banking service offers a wide range of advantages for both the bank and the customers. For example, Daniel (1999) and Mols (1998) claim that compared to ordinary banking system electronic banking is providing the competitive advantage by lowering the cost and providing best satisfaction of customer needs. ATMs provide bank customers with 24 hour access to banking products/services; they are easy to use and are faster than human tellers in the banking halls. ATM systems are believed to have improved the operational efficiency of banks and customer service in the banking sector (Banker and Kauffman, 1988; Glaser, 1988; Laderman, 1990).

However, Ayo, C. K., Adewoye, J. O. & Oni, A. A. (2010): Aminu and Arhin (2011), showed that irrespective of all these attributes of the ATM service delivery, bank customers still underutilized the ATM service capacity by queuing in the banking halls to make cash withdrawals even when the amount may be withdrawn from the ATM and it has become a source of worry to users and providers (banks), because the function it was meant to provide has been seriously eroded. ATM behavior can change during what is called “stand-in” time, where the bank dispensing the cash is unable to access databases that contain account information (possibly for database maintenance), that is, when there is network problem. ATMs at times can also deduct money from the account without actually dispensing money; According to Eth-switch annual report (2016/17), on the average 42% of the ATM transactions processed by Ethswitch had been declined by Issuer Banks in the 2016/17 fiscal year and the major reasons of the declined transactions were attributable to three reasons which are considered as technically controllable by Issuer Banks. Those are time out, issuer inoperative and do not honor. For instance, While a card holder using an ATM card of other banks ATM machine to withdraw cash, sudden system failure may deter the machine from dispensing cash even though the system deduct money from customer’s account that will create frustration and disappointment. Moreover, according to Eth-switch internal procedure,

it takes on average eight up to thirteen days to re-credit such account. These, among others, are the annoyance of these money dispensing machines.

Despite the above challenges, OIB is expanding on the availability of ATM services in many parts of the country. As a result the number of OIB ATM service customers is increasing enormously over the past few years, most importantly in the capital city Addis Ababa. Given this growth in the number of ATM customers, the level of customers' satisfaction with the bank's ATM services has a serious implication on the overall customers' satisfaction, customer retention and profitability. So far, the bank has not developed a framework to assess the level of ATM customers' satisfaction and the challenges they face. Understanding the level of customer's satisfaction and the problems they experience is vital to improve the quality of ATM services and hence boost customer's satisfaction.

Research undertaken on the level of ATM customer's satisfaction in the country is limited as compared to other countries. For instance, a study conducted by Philipos Lamore (2013) about customer satisfaction and electronic banking service on three selected banks of Ethiopia and Tirhas G/tsadkan, Fasil Damtew and Addis Beyene (2017), on "assessment of customer satisfaction on ATM in Adigrat town", offer some insights on the major problems ATM customers experience and ATM attributes that satisfy customers. However, most of the studies conducted on ATM service and customer satisfaction were undertaken at early adoption of the ATM were only few banks give the service, using their own ATM and before introduction of centralized switch system (Eth-switch), that allow all cardholders of any bank existed in the country to enjoy ATM service including cash withdrawal from any ATM, irrespective of the bank. In view of this, it makes it difficult to accept that customers respond to ATM use is the same in as early adoption and after introduction of a centralized switch system, hence the need to investigate into that. Beside this, most of the studies conducted in our country relied on quantitative method developed by researchers in other countries as a result, little is known about the level of ATM service customer's satisfaction and the factors contributing to their dissatisfaction based on qualitative and quantitative methods.

Thus, this study aims to contribute to existing knowledge on the status of ATM service customer's satisfaction in the country by systematically examining the level of OIB ATM service customer's satisfaction in Addis Ababa; the problems customers experience during ATM services uses; and the factors contributing ATM service problems.

1.5 Research Questions

This study is guided by the following research questions:

- What is the level of OIB ATM service customer satisfaction in Addis Ababa?
- Is there any relationship between service quality dimensions perceived by customers and customer satisfaction in ATM banking services?
- Is there a significant difference in level of customer satisfaction for ATM service quality dimensions across different age, gender, educational levels, occupation and salary?
- What are the factors contributing to OIB ATM service problems in Addis Ababa?
- What can be done to improve the quality of OIB ATM service in Addis Ababa?

1.6 Objective of the Study

General objective

The general objective of this study is to:

- Assess consumer satisfaction on ATM in Banking Industry in Ethiopia.

Specific objectives

- Systematically examine the level of OIB ATM service customer satisfaction in Addis Ababa;
- Explore, if any relationship between service quality dimensions perceived by customers and customer satisfaction in ATM banking services.
- To determine if there is a significant difference in level of customer satisfaction for ATM service quality dimensions across different age, gender, educational levels, occupation and salary.
- Critically examine problems experienced by OIB ATM service customers in Addis Ababa;
- Investigate the factors contributing to OIB ATM service problems in Addis Ababa;
- Provide possible remedies to improve the quality of OIB ATM service in Addis Ababa;

1.7 Scope of the Study

The study of this research is limited to services of ATM and on those customers who use the ATM cards of OIB that are located in Addis Ababa. A number of factors are considered to

limit the boundary of the study to Addis Ababa. First, the ATM services offered by OIB are concentrated in its branches in Addis Ababa. Secondly, the number of OIB customers who have access to ATM services and who frequently use ATM is significant in Addis Ababa than in other areas. Third, the researcher is not only an employee of OIB, but currently working in the OIB head office in Addis Ababa, which is advantageous to access and collect data. Furthermore, time and financial limitations are also considered in determining the boundary of the study area.

In short, the study will try to consider sample OIB customers in Addis Ababa for the study. Different factors will be considered to cluster OIB branches found in Addis Ababa which offer e-banking services, before questionnaires are distributed to informants.

1.8 Significance of the Study

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

1.9 Limitations of the Study

The basic limitation of this study was that it only considers customers perspective of e-banking service provided via ATM and it doesn't consider the other e-banking products. Moreover, it has not taken in to consideration bank customers who do not use the current ATM which would help to compare the attitude of e-banking users and nonusers towards e-banking. Second it was also limited to OIB customers only. Thirdly, customers of other banks who are using OIB ATM were not considered in the study. Last but not least the study only covers the capital city of Addis Ababa.

1.10 Organization of the Study

This research paper consists of five chapters. The first chapter contains the background of the study, statement of the problem, objective of the study, significance of the study, limitation of the study, and organization of the study. The second chapter contains literature review of the study. The third chapter deals with research design and methodology. The fourth chapter with the data presentation analysis and interpretation of the research study. The fifth chapter has summary, conclusion and recommendation based on data collected and analyzed.

1.11 Operational definitions

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

- **Automated teller machines (ATMs)** is a machine that allows customers to access banking services such as withdrawals, transfers, balance inquiries, requests for cheque books, account statements, direct deposits, foreign currency exchange etc. (Fenuga, 2010).
- **CORE banking-Centralized on line real-time banking:** is networking of branches, which enables customers to operate their accounts, and avail banking services from any branch of the bank on core banking solution network, regardless of where he/she maintains his/her account.
- **Customer satisfaction** is a person's feelings of pleasure or disappointment resulting from comparing products perceived performance in relation to his or her expectations. (Kotler, 2003).
- **ET Switch;** - a centralized switch system which integrate all real-time and online payment systems in Ethiopia.
- **Electronic Banking;** the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The impact of ATMs on customer satisfaction in the context of banking sector is a widely discussed topic in the literature. This section targets popular journals, magazines and various text books that contain fruitful information on various general overviews of E-banking, ATM, Service quality, Service Quality Measurement and Customer Satisfaction.

2.2 Theoretical Review

2.2.1 E-Banking

The revolution of e-payment as captured by Cheng (2006) in his work “Evolution of Electronic Payment” started in 1918, when the Federal Reserve Bank first moved currency via telegraph. However, it was not until the Automated Clearing House was set up by the U.S Federal Reserve in 1972 that electronic currency became widespread. This provided the U.S treasury and commercial banks with an alternative to processing cheque.

Daniel (1999) defines electronic banking as the delivery of banks' information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television. Electronic banking can also defined as the application of computer technology to banking especially the payment (deposit transfer) aspects of banking with the help of tele-communication network which permits online processing of the same day credit and debit transfers of funds between member institutions of a clearing system (Anyawaokoro, M.1999). According to the United Nations Conference on Trade and Development (UNCTAD), E- banking refers to the deployment over the Internet of retail and wholesale banking services. It involves individual and corporate clients, and includes bank transfers, payments and settlements, documentary collections and credits, corporate and household lending, card business and some others (UNCTAD, 2002).

The Electronic banking has been around for some time but in form of Automatic Teller Machines (ATMs) and telephone transactions. More recently, it has been transformed by the Internet and mobile technologies, the new delivery channels for banking services with

benefits to both customers and banks. Access is fast, convenient, and available around the clock, whatever the customer's location. Additionally through Electronic banking, the banks are able to provide services more efficiently and at substantially lower costs. For example, a typical customer transaction costing-about \$1 in a-traditional- "brick and mortar" bank branch or \$0.60 through a phone call costs only about \$0.02 online (Crane, 1996).

According to Klingebiel, (2002), Electronic banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. Electronic banking is usually done in following forms: ATMs, personal computer (PC) banking, Internet banking, virtual banking, online banking, home banking, remote electronic banking, and phone bank. PC banking and Internet or online banking is the most frequently used designations. It should be noted, however, that the terms used to describe the various types of electronic banking are often used interchangeably. PC banking is a form of online banking that enables customers to execute bank transactions from a PC via a modem. In most PC banking ventures, the bank offers the customer a proprietary financial software program that allows the customer to perform financial transactions from his or her home computer. The customer then dials into the bank with his or her modem, downloads data, and runs the programs that are resident on the customer's computer. Currently, many banks offer PC banking systems that allow customers to obtain account balances and credit card statements, pay bills, and transfer funds between accounts (Crane, 1996).

E-banking especially Internet banking is not limited to a physical site; some Internet banks exist without physical branches. According to industry analysts, electronic banking provides a variety of attractive possibilities for remote account access, including: Availability of inquiry and transaction services around the clock; worldwide connectivity; Easy access to transaction data, both recent and historical; and direct customer control of international movement of funds without intermediation of financial institutions in customer's jurisdiction (Crane, 1996). E-banking is a generic term for delivery of banking services and products through electronic channels, such as the telephone, the internet, the cell phone, etc. The concept and scope of e-banking is still evolving. It facilitates an effective payment and accounting system thereby enhancing the speed of delivery of banking services considerably (R.K. Uppal & R. Jatana, 2007).

2.2.2 Automated Teller Machines (ATMs)

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

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

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

Automated Teller Machine (ATM) has been considered as the prominent amongst the most critical segments of e-managing an account framework. ATM is a terminal conveyed by a bank or any money related establishment which empowers the clients to withdraw money, make offset enquiries, request bank statements, exchange stores furthermore store money. The ATMs are essentially self-overhauled saving money terminals and are gone for giving quick and advantageous administrations to the bank's clients (Rasiah, 2010). Basically, it is an

electronic terminal which gives clients the chance to acquire managing an account administration at whatever time. To withdraw money, make stores or exchange trusts between records, a purchaser needs an ATM card and an Individual Personal Identification Number (PIN).

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

2.2.3 Customer Satisfaction and Service Quality

2.2.3.1 Customer Satisfaction

Customer satisfaction is one of the frequently researched concepts in marketing. Customer satisfaction is an ambiguous and abstract concept and the actual manifestation of the state of satisfaction will vary from person to person and product/service to product/service. Satisfaction is a person’s feeling of pleasure or displeasure appointment resulting from comparing a product perceived performance in relation to his or her expectation (Kotler and Keller, 2006). It can also be said that, Customer satisfaction is the measure of how well products, service, support and engagement are able to meet the customer expectations. Satisfaction could be the pleasure derived by someone from the consumption of goods or services offered by another person, group of people, or an organization; or it can be the state of being happy with a situation.

Customer satisfaction is defined as the extent to which products perceived performance matches a buyer's expectation (Kotler and Armstrong, 2005). It can also be said that, Customer satisfaction is the measure of how well products, service, support and engagement are able to meet the customer expectations. Satisfaction will also depend on product and service quality (Kotler and Keller, 2006).

According to Tse and Wilton (1988), customer satisfaction is defined as the consumer's response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product or service as perceived after its consumption. Giese and Cote (2002) stated that customer satisfaction is identified by a response (cognitive or affective) that pertains to a particular focus (i.e. a purchase experience and/or the associated product) and occurs at a certain time (i.e. post-purchase, post-consumption). This definition is supported by some other authors who think that consumer's level of satisfaction is determined by his or her cumulative experience at the point of contact with the supplier (Sureshchander et al, 2002).

Alternatively, Westbrook and Oliver (1991) define customer satisfaction as a mental state which results from customers' comparison of expectations prior to a purchase with performance after a purchase. Halstead et al (1994) states that customer satisfaction is a transaction specific effective response from customers' comparison of product performance to some pre-purchase standard. Enhancing customer satisfaction is the key to become successful in the long run and to stand out in a crowd of extreme competition specially in banking sector because competitors are offering here somewhat similar product here.

According to Fornell (1992) in Balogun, Ajiboye and Dunsin (2013), customer satisfaction holds the potentials for increasing an organization's customer base, increases the use of more volatile customer mix as well as the firm's reputation, thereby resulting in competitive advantage secured through intelligent identification and satisfaction of customer's needs better and sooner than competitors and sustenance of customer's satisfaction through better products/services.

2.2.3.2 Service Quality

Quality has been defined differently by different authors. Some prominent definitions include 'conformance to requirements' (Crosby, 1984), 'fitness for use' (Juran, 1988) or 'one that satisfies the customer' (Eiglier and Langeard, 1987) and Service is defined as "any activity or

benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product (Kotler, 2003). Quality has come to be recognized as a strategic tool for attaining operational efficiency and improved business performance (Anderson and Zeithaml, 1984; Babakus and Boller, 1992; Garvin, 1983; Phillips, Chang and Buzzell, 1983).

Several authors have discussed the unique importance of quality to service firms (e.g., Normann, 1984; Shaw, 1978) and have demonstrated its positive relationship with profits, increased market share, return on investment, customer satisfaction, and future purchase intentions (Anderson, Fornell and Lehmann 1994; Boulding et al., 1993; Buzzell and Gale, 1987; Rust and Oliver, 1994). Most researchers found that service quality is the antecedent of customer satisfaction (Parasuraman et al., 1988). Quality customer service and satisfaction are recognized as the most important factors for bank customer acquisition and retention. Service quality is considered as one of the critical success factors that influence the competitiveness of an organization. A bank can differentiate itself from competitors by providing high quality service. Service quality is one of the most attractive areas for researchers over the last decade in the retail banking sector (Johnston, 1997). Despite the recognized importance of service quality, there have been methodological issues and application problems with regard to its functioning. Quality in the context of service industries has been conceptualized differently and based on different conceptualizations, alternative scales have been proposed for service quality measurement (see, for instance, Cronin and Taylor, 1992, 1994; Dabholkar, Shepherd and Thorpe, 2000; Parasuraman, Zeithaml and Berry, 1985, 1988).

Service quality is a customer's overall impression of the relative inferiority or superiority of the organization and its services (Bitner, Hubbert 1994). According to Edvardsson, Thomsson and Ovretveit (1994), service quality is a service that fulfils the expectations of customers and satisfies their needs. On the other hand, Lewis and Booms (1983), service quality is a measure of how well a service delivered matches the customers' expectations (It is said that service quality is best defined by the consumer of the service thereby making it subjective in the sense that two persons could perceive service quality delivered different. Parasuraman, Zeithaml and Berry (1988) defined service quality as 'a global judgment, or attitude, relating to the superiority of the service', and explicated it as involving evaluations of the outcome (i.e., what the customer actually receives from service) and process of service act (i.e., the manner in which service is delivered). Those scholars argue that service quality as a

difference between consumer expectations of ‘what they want’ and their perceptions of “‘what they get’”. For the reason that, existence of difference in definitions on service quality by different scholars; different scales for measuring service quality have been put forward.

Service qualities and customer satisfaction are closely related researches have shown that service quality is a necessary condition for customer satisfaction.

2.2.3.3 Service Quality Measurement

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

The scale measure performance of five service quality components termed Tangible, Reliability, Responsiveness, Assurance, and Empathy (Parasuraman *et al.* 1988). There are three dominant approaches to the measurement of customer satisfaction (Fishbein and Ajzen, 1975; Parasuraman et al, 1985 and Cronin and Taylor, 1992).

The first approach is Importance-performance approach (Fishbein and Ajzen, 1975) proposes that customer satisfaction with a product or service is a combination of the following;

- (1) The perceived importance of a range of the product/service attributes or benefits and
- (2) The customers’ beliefs about the degree to which the product or service has each attribute.

The second measurement approach to customer satisfaction is the Expectations-performance disconfirmation by Parasuraman et al (1985). This approach is based on the proposition that customers evaluate or measure their satisfaction with a product/service by comparing pre-consumption expectations with post-consumption perceptions (performance). This is the basis of the SERVQUAL (Service Quality) measurement model by Parasuraman, et al (1988).

The SERVQUAL model allows customers to rate the product/service on a set of general attributes presented on a Likert scale to measure their expectations of and their perceptions of the performance of product/service attributes to measure customer satisfaction.

The third approach eliminated the element of expectations from Parasuraman et al (1988) SERVQUAL model to perceive that service quality and customer satisfaction is a form of attitude that performance only is an enhanced means of measurement. This led to the development of SERVPERF model which uses the same multi-dimension and multi-attribute scale as SERVQUAL but service quality is evaluated by measuring performance only without expectations (Parasuraman et al, 1988) or importance weights (Fishbein and Ajzen, 1975) being used as a standard of comparison.

Several researchers (Bolton and Drew, 1991; Boulding et al, 1993, Gotlieb et al, 1994) agree that assessment of service quality and customer satisfaction may depend solely on performance and that SERVPERF may have less bias than SERVQUAL in measuring service quality (Cronin and Taylor, 1992). Moreover, empirical studies evaluating validity, reliability, and methodological soundness of service quality scales clearly point to the superiority of the SERVPERF scale. The diagnostic ability of the scales, however, has not been explicitly explicated and empirically verified in the past. It is the SERVQUAL scale which outperforms the SERVPERF scale by virtue of possessing higher diagnostic power to pinpoint areas for managerial interventions in the event of service quality shortfalls.

According to study by, Juan and Gupta (2004) demonstrated the major managerial implication of the measurements:

- Because of its psychometric soundness and greater instrument parsimoniousness, one should employ the SERVPERF scale for assessing overall service quality of a firm. The SERVPERF scale should also be the preferred research instrument when one is interested in undertaking service quality comparisons across service industries.
- On the other hand, when the research objective is to identify areas relating to service quality shortfalls for possible intervention by the managers, the SERVQUAL scale needs to be preferred because of its superior diagnostic power.

However, one serious problem with the SERVQUAL scale is that it entails gigantic data collection task. Employing a lengthy questionnaire, one is required to collect data about

consumers' expectations as well as perceptions of a firm's performance on each of the 22 in our case 25 service quality scale attributes. Addition of importance weights can further add to the diagnostic power of the SERVQUAL scale, but the choice needs to be weighed against the additional task of data collection. Collecting data on importance scores relating to each of the 22/25 service attributes is indeed a major deterrent. However, less tiresome approach (SERVPERF), employed by the researcher to ease the data collection task and to successfully achieve our research objective.

2.3 Empirical Review

Few studies have been conducted on the impact of ATM services on customers' satisfaction in Ethiopia and other parts of the world, with a number of such studies specifically focusing on ATM usage and the level of satisfaction of banks' customers.

According to Lemma Belay (2016) while studied the effect of ATM service quality on customer satisfaction in Ethiopian commercial Banks in Debreworkos town using proportional stratified and simple random sampling technique and cross-sectional data collected from 190 customers of Ethiopian commercial banks, in Debreworkos town. The study used Statistical tools such as mean, standard deviation, correlation, and multiple regression models. The study indicated that except assurance, tangibility, reliability, responsiveness and empathy have positive and significant effect on customer satisfaction and the customers were mostly satisfied with the responsiveness dimensions of ATM service quality.

Tirhas et al, (2017) "Assessment of Customer Satisfaction on Automated Teller Machine in Adigrat, Ethiopia" in Adigrat town using systematic sampling. Since the customers approach the ATM machine in different time, the researcher was identified the skipping interval and consider those customers approach the machine in that interval. The study used descriptive research method. This study found that Promptness of card delivery, number transaction, quality of note and conveniently located were extremely satisfied the customer. The study also indicates lack of privacy in executing the transaction, reduction in balance without cash payment; Cards get blocked of ATMs and fear of safety was the major cause of concern for the customers.

Gezahegn Bacha (2015), made an attempt to “assessment of customer satisfaction with ATM banking; empirical evidence from selected commercial banks in Ethiopia”. The study used descriptive statistics, correlation analysis and multiple regressions. The finding revealed that, out of 379 ATM card users where over half are fairly satisfied with ATM services from their respective bank. All ATM service quality attributes associated with technology have been perceived good performers, while all attributes associated with employee performance and management functionality have been perceived not so good in performance. The results have further found that all service quality significantly correlate with customer satisfaction except three items under responsiveness.

Charles Mwatsika (2016) “Customer satisfaction with ATM Banking in Malawi” The study conducted on data collected from 353 ATM card users. The study adopted the importance performance approach (Fishbein and Ajzen, 1975) to measure customer satisfaction. Measurement of satisfaction was based on performance only (SERVPERF). Descriptive and correlation analysis used to answer research questions. The result shows that all service quality dimensions significantly correlate with customer satisfaction and responsiveness was the list performing service quality dimension. The result further showed that, reliability is the most important dimension followed by responsiveness, empathy, assurance and tangibles are the least important dimension.

With direct interview accompanied with surveys to collect data from a sample of 186 customers were chosen in a random and convenient manner who are using the Bank ATM, Software Package for Social Science (SPSS version 16.0), Phong Nham, Chi Phan (2015) examined the Impact of service quality on customer satisfaction of automated teller machine service: case study of a private commercial joint stock bank in Vietnam. The study applies SERVPERF framework to analyze the data collected from a questionnaire survey and found that Assurance and Tangibles factors significantly impact on the customer satisfaction.

2.4 The Theoretical Framework

The theoretical framework of this study was based on SERVPERF (Service performance) model (Cronin and Taylor’s 1992) to the measurement of customer satisfaction with ATM banking and customer satisfaction. It has been used in many researches (Zhou 2004; Hudson

et al. 2004; Pham, Nguyen 2007). There were a total of 25 ATM attributes adopted from the empirical studies. These ATM banking attributes fall within the five dimensions of service quality (Parasuraman et al, 1988) that include: tangibles, reliability, responsiveness, assurance and empathy.

Based on the above theoretical framework, the following model was developed by Charles Mwatsika (2016).

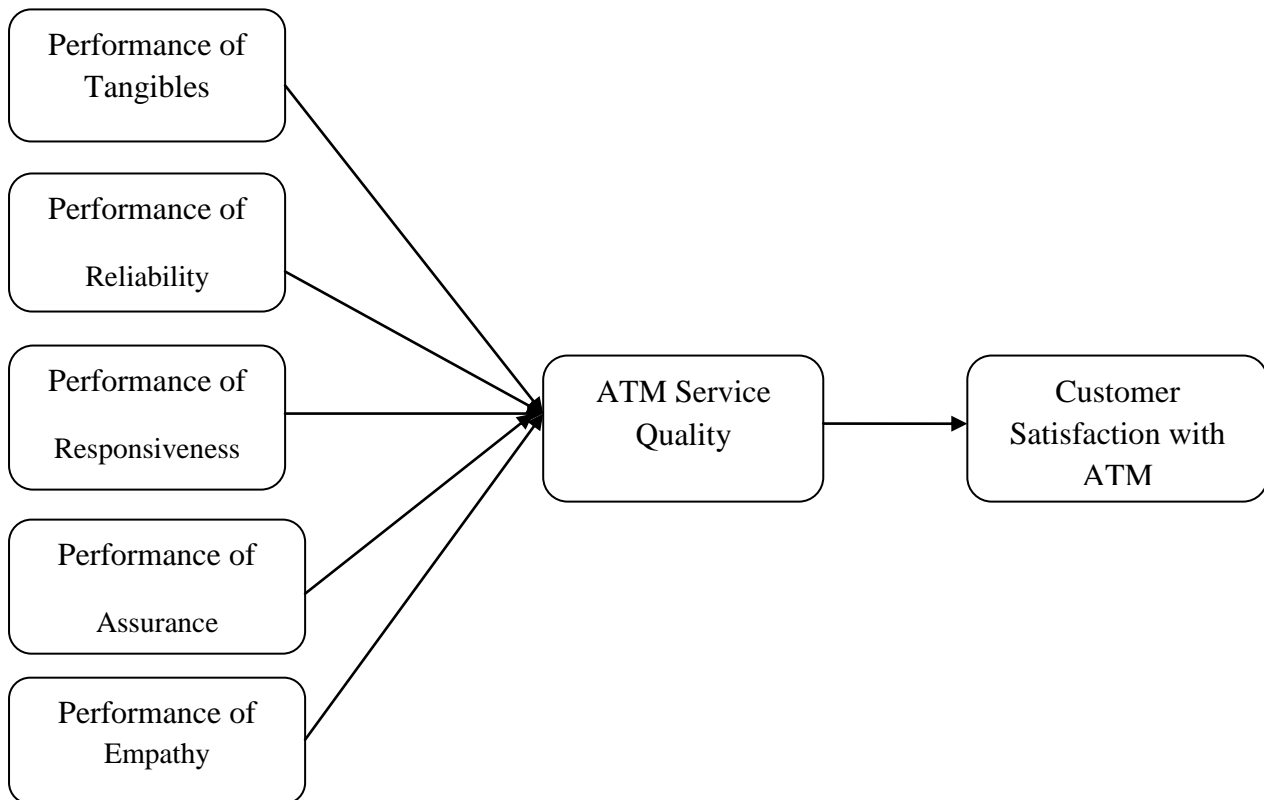


Figure 1-Research model

Source; Charles Mwatsika (2016), and modified by researcher

According to Parasuraman (1988), the above five dimension of ATM service quality have 25 attributes. Those are:

- **Tangibles** are the physical facilities, equipment as well as appearance of personnel; that comprised of; number of ATMs per ATM station, convenient location, and corporate brand appearance on ATMs, readable ATM slips, issuing of clean notes and cleanliness of ATMs and ATM stations.
- **Reliability** is the ability to perform the promised service dependably and accurately; that comprised of; range of services at ATMs, accuracy of ATM transactions, speed of ATMs, ATMs not out of order, ATM system usability and ease of access to ATMs

- **Responsiveness** is willingness to help customers and offer prompt service; that comprised of; cash availability in ATMs, quick replacement of lost ATM cards, waiting times at ATMs, fast return of swallowed ATM cards, employee speed in dealing with ATM problems, and employee effectiveness in solving ATM problems
- **Assurance** is knowledge and courtesy of employees and their ability to inspire trust and confidence; that comprised of; privacy at ATMs, ATM usage and ATM security advice, and security at ATM stations.
- **Empathy** is caring, individualized attention the firm provides its customers. That comprised of; employee friendliness, ATM fees, eases of ATM card application process, and employee accessibility to solve ATM issues.

The study analyzed the performance of these ATM banking attributes within the five dimensions on how they affected customers' satisfaction with ATM banking.

2.5 Research Gap

The empirical evidences made available in the country such as Tirhas et.al, (2017), Lemma (2016) and Gezahegn (2015) were done before introduction of centralized switch system (Eth-switch), that allow all cardholders of any bank existed in the country to enjoy ATM service including cash withdrawal from any ATM, irrespective of the bank and some of the studies were conducted outside of the capital city were few users are available and less infrastructure as compared to Addis which didn't reflect the true picture of ATM service rendered in the capital city.

Besides, this study differs from Tirhas et.al, (2017) methodologically with the study conducted by at Adigrat town on Commercial bank. They used quantitative data, personal observation and very few sample size (40). The variables they used to measure customer's satisfaction toward ATM were only five attributes (promptness of card delivery, number of transactions, the quality of notes currency, conveniently and language and information content) which is different from the researches attributes 25.

Despite various studies conducted in different countries on the title "impact of ATM on customer satisfaction", it may not be appropriate to consider the findings for our countries. Understanding the scenario in other country may throw some light on the topic however it

cannot be applicable fully. This is due to the fact customer preferences and satisfaction level based on the demography, culture, affordability, IT penetration varies from country to country. Thus, there is a significant gap relating to research as to impact of ATM on customer satisfaction. There for the proposed study aims to fill up this research gap by studying the impact of ATM on customer satisfaction in the case of Oromia International Bank s.c.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

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

3.2 Research Design

A research design can be understood as the plan of what data to gather, from whom, how and when to collect the data, and how to analyze the data obtained. It is a systematic plan or structured framework of how one intends to conduct the research process in order to solve the research problem. Research design usually constitutes the formation of a strategy to resolve a particular question, the collection and the recording of evidence, the processing and analysis of the data and their interpretation, and the publication of results.

This study was conducted to assess the level of OIB ATM service customer's satisfaction in Addis Ababa. For this purpose, data was acquired from both secondary and primary sources. The data acquired from secondary sources was obtained from various publications such as text book, journals and previous studies on ATM service customer's satisfaction in Ethiopia and other countries. Hence, the main objective was assess consumer satisfaction on ATM in Oromia International Bank Addis Ababa, the data collected from secondary sources were instrumental to develop a quantitative measurement for customer's satisfaction. Consequently, a quantitative research design was used in this study. A quantitative research, a descriptive cross-sectional survey to be more specific, involves identifying characteristics of an observed phenomenon or exploring possible correlations among two or more phenomena. A cross-sectional descriptive survey research examines a situation as it is; as such it does not involve changing situations and detecting cause and effect relationships. In light of this, the analysis of this study was based on quantitative data collected through self-reporting questionnaires.

Furthermore, qualitative method, more specifically unstructured interview, was employed to supplement the quantitative analysis and in order to explore some issues in detail.

3.2.1 Study Population

A study population refers to the group one want to generalize to and the group from which a sample is taken for in a study. In this study, the population from which a sample was drawn consisted of OIB ATM service customers in Addis Ababa irrespective of their gender, age, job grade or qualification.

3.2.2 Sampling Method

Sampling can be understood as the process by which some members of a population are selected for observation or to collect data. The procedure followed and the number of individuals or cases selected form a population is affected by several factors such as the research design, the objective of the research, time and resource availability etc. Generally, there are two competing sampling procedures, random sampling and non-random sampling. Random sampling is the ideal sampling method if the research aims to generalize the result of the study on the population, which demands the sample to be a representative of the population as closely as possible. Alternatively, non-probability sampling procedures are used either when probability sampling procedures are found to be difficult or when generalization is not sought as the ultimate goal of a research.

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

First, a decision was made regarding the sample size of for the questionnaire. According to the information obtained from the OIB's Electronic Banking Department Director, there were around 44,200 ATMs card holders in Addis Ababa. Subsequently, the following formula was used to calculate the simple size that was provided by Yamane (1967).

$$\underline{N}$$

$$n = 1 + N (e)^2$$

Where: n is number of sample size

N is total number of study population

Using a margin error (e) of 6%, a sample size of 276 was generated for the study population. However, considering customer's unwillingness to respond, the constraints of time and financial resources and invalid response, the sample size was reduced to 250.

Then, a formal request was submitted to OIB management to obtain permission to distribute the questionnaire for the OIB ATM customers. Upon receiving a formal permission, the questionnaires were hand delivered to OIB ATM users who came to use OIB ATM service at the time of data collection between July 25 and August 05, 2018. The questionnaires were completed by customers at five different ATM stations in Addis Ababa, namely Africa Godana branch ATM station (which is located at head office of the bank), Bole Medanyalem area ATM station, Zerhun building ATM Station located in the Haile Gebresilase street, ATM station at Wedesa Branch around Piazza and ATM stations at Gulele branch. These branches were selected by the researcher purposively considering the high volume of ATM transactions. Fifty questionnaires were allocated to each ATM stations and the questionnaires were completed by customers who volunteered to complete the questionnaire on the spot. This helped the researcher to attain 80% response rate in which all the questionnaires prepared for the study, which means 200, were completed.

Although the sample size of the study population to measure OIB ATM service user's satisfaction was made on the basis of generally accepted scientific guideline for determining sample size decisions, certainly the sampling procedure employed in this research has some inescapable limitations. The researcher acknowledges that, the drawbacks of employing convenient sampling in this study is that it could lead to bias in the analysis of the study as some groups of OIB ATM customers may be under-represented while other groups may be

over-represented. As a result, the interpretation of the research findings could be biased and hence the trustworthiness of generalization questionable.

3.2.3 Designing the Questionnaire

As indicated in previous section, questionnaires were the primary data collection tools used in this study. A questionnaire is a set carefully formulated written questions to which respondents record the answers, usually within rather closely defined alternatives. Questionnaires are an efficient data collection method when the researcher knows exactly what is required and how to measure the variables of interest.

The structure of the questionnaire is adopted, without major modification, from previous researches conducted to measure the level of ATM customers' satisfaction. For the purpose of this study, a questionnaire comprising of three major categories of questions were used to collect data from OIB ATM service customers.

The first category comprises a set of questions regarding the demographic characteristics of respondents including their gender, age, marital status, occupational status, educational qualification, frequency of ATM use, type of ATM service used and number of years as OIB ATM service customer.

The second category, which is the main part of the questionnaire, consisted of a total of 25 items directly related to different aspects of ATM service. The 25 items were further categorized into five major dimension of ATM service, namely tangibles, responsiveness, reliability, assurance, and empathy. Each category constituted four to five items on the basis of which the level of ATM service customers' satisfaction on each dimension is examined. The items in each dimensions were presented customers to indicate the level of their agreement or disagreement using a five point Likert scale, where 1 equals to very disagree, 2 equals to disagree, 3 equals to neither agree nor disagree, 4 equals to agree, and 5 equals to strongly agree was used. In short, the five dimensions of ATM service are treated as independent variables which are believe to determine the dependent variable, which is the level of ATM service customers.

The last, but not the least, part of the questionnaire consisted of two open ended questions. These questions were added to offer opportunities for respondents to voice their concerns which may not have been raised satisfactorily by the closed-ended items. The first open-ended question asks customers to state the major problems they usually encounter when using OIB ATM services. The second asks customers to forward their suggestion that can improve the quality of OIB ATM service in the future.

3.2.4 Method of Data Analysis

The statistical package for the Social Science (SPSS) Version 20 was used to analyze, compute and present the findings of the research by considering the main research questions this study intended to answer at the outset.

First, descriptive statistics was used to present a descriptive summary of the quantitative data. Descriptive statistics is a method for presenting quantitative descriptions in a manageable form, describing a single variable or the associations that connect one variable with another. Commonly, measures of central tendencies such as mean, mode and median are used to calculate frequency of distribution for different categories and the result is presented using tables, bar graphs, pie charts and histograms. This study uses tables to present a statistical description the quantitative data from the questionnaires.

Secondly, Correlation analysis is performed to analyze whether there is relation between each item of the five ATM service quality dimension. Moreover, it is performed to see the relation between the five service quality dimension and customer satisfaction on ATM service delivery.

Thirdly, anova were used to determine whether there are any statistically significant differences between the means of independent variables. Last but not least the, one sample t-test was used to test statistical difference between a sample mean and a known or hypothesized value of the mean in the population.

While descriptive, correlation analysis, t-test and anova methods were used for structured items, content analysis was used to analyze the data obtained from open ended questions.

Unstructured Interview; - an in-depth interview was made with seven managers of the bank. Of these, 5 of them are branch managers from where quantitative data were collected and the

2 of them are head office senior managers who direct work relation with ATM service of the bank. So, the data obtained through the interview was analyzed on the basis of a systematic coding.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

The previous chapter provided a detailed discussion on the research design including the study population, the sampling method and data collection instruments used. Further explanation was also presented on the development of the data collection instrument, i.e. the survey questionnaire and the contents constructed.

Whereas this chapter demonstrates the research investigation by outlining the results obtained in the study and providing a detailed discussion of these results. The descriptive statistics calculated for the study are presented in an outline of the characteristics of the sample with regards to the variables included in the study. This chapter, therefore, presents an analysis of the responses to the questionnaire. In the first part of the chapter data related to the questionnaire, return rates and demographic questions are analyzed. The remainder of this chapter will present the data found in the questionnaire.

4.2 Survey Findings

4.2.1 Validity Analysis

Carmines and Paul R. (1998), defines Validity is as how much any measuring instrument measures what it is intended to measure. It's a critical aspect of measurement that must be considered as part of an overall measurement strategy. Validity focuses on what the test or measurement strategy measures. Admonitions such as those of Singer and McClelland (1990) are particularly appropriate for newly collected data sets, which have not existed for long periods of scholarly use and which have not been subjected to extensive reliability and validity tests.

However, in this study the researcher adopted tested standard instruments to indemnify the issue of data validity in the research process for each of the five ATM service and the overall customer satisfaction regarding ATM.

4.2.2 Reliability Analysis

This quality criterion of the research refers to the consistency of a measure of a concept. This quality criteria deals with the question whether the results of a study are repeatable (Bryman and Bell, 2007). Cronbach's alpha is used in this study to assess the internal consistency (reliability of the instrument (questionnaire)). Cronbach's alpha is a coefficient of reliability used to measure internal consistency of a test. Cronbach's alpha score ranges from 0 to 1. According to George & Mallery (2003) a Cronbach's alpha value > 0.9-Excellent, > 0.8-good, > 0.7-acceptable, > 0.6 questionable, > 0.5 poor and < 0.5, unacceptable.

Table 1-Cronbach's Alpha (Reliability analysis)

Dimensions	Cronbach's Alpha value	Number of items
Tangibility	.718	6
Reliability	.778	6
Responsiveness	.804	6
Assurance	.751	3
Empathy	.703	4
Overall scale reliability	.888	25

Source: Compiled by author from SPSS version 20 result, 2018

Accordingly, the overall reliability of the scale is acceptable as its coefficient (0.888) is greater than 0.7. Moreover, the scale consistency of each dimensions are also acceptable for the reliability coefficient of tangibility, reliability, responsiveness, assurance and empathy are of value 0.718, 0.778, 0.804, 0.751 and 0.703 respectively which are more than 0.7 and closer to 1. Therefore, it is logical to conclude that reliability of the scales is acceptable as indicated in the table 1.

4.2.3 Return Rates

To obtain the required sample size, 250 questionnaires were hand delivered to OIB ATM service customers in five purposively selected ATM stations in Addis Ababa. All the distributed questionnaires were returned as the respondents fill and return back on spot, of those 50 questionnaires were invalid ones, which contained many blank answers. Therefore,

after removing 50 invalid questionnaires, 200 remained questionnaires were used for the study. Return rates for each school was presented in table 2.

Table 2-Questionnaire Return Rates for Each ATM Stations

ATM Station Site	Questionnaires Distributed	Questionnaires Returned	Return Rate
Africa Godana Branch	50	46	92%
Bole Medanyalem	50	39	78%
Zerhun Building	50	41	80%
Wedesa Branch	50	40	80%
Gulele Branch	50	34	68%
Total	250	200	80%

4.2.4 Demographic Information

The following demographic information was obtained from the questionnaire regarding participants:

- Gender distribution
- Age distribution
- Marital status
- Educational qualification
- Occupational status
- Monthly income
- Number of years as OIB ATM service customer
- Frequency of OIB ATM service use
- Type ATM service used

The descriptive statistics such as frequencies and percentages computed for each above listed demographic variables are presented in the subsequent sections.

Table 3-Gender distribution of respondents

Gender	Frequency	Percentage
<i>Male</i>	147	73.5
<i>Female</i>	53	26.5
Total	200	100.0

Table 3 presents the gender distribution of the selected sample. As can be observed from table 3, the majority of the respondents were male. More specifically, 73.5% (n=147) of the respondents were male, while only 26.5% (n=53) of the respondents were female. Table 3 shows that, more than 74% of ATM users were males. So, OIB needs to do more promotion to attract female gender.

Table 4-Age distribution of respondents

Age category	Frequency	Percentage
18-25	23	11.5
26-30	101	50.5
31-40	56	28.0
41-50	20	10.0
Total	200	100.0

The second demographic information respondents provided was concerning their age. From the frequency distribution presented in table 3, it may be deduced that 50.5% (n=101) of the respondents were between 26-30 years of age, 28% (n=56) of participants were between 31-40 years of age, 11.5% (n=23) of the respondents were between 18-25 years of age, and 10% (n=20) of the respondents were above 41 years of age. Table 4, shows that more than 75% of ATM users age ranges from 26-40 age and indicates that the bank's ATM service were more preferred by younger social group. So, OIB needs to do more to create awareness among the society at different age group.

Table 5-Educational Qualifications of respondents

Qualification	Frequency	Percentage
High School	27	13.5
Diploma	26	13.0
First Degree	117	58.5
Master's Degree & above	30	15.0
Total	200	100.0

Table 5 presents a summary of the educational qualification of respondents. As can be seen the majority of the respondents, that is 58.5% (n=117) had a qualification level of first degree,

15% (n=30) of the respondents had educational level of Master's degree and above, 13.5% (n=27) of respondents had a qualification level of high school and 13% (n=26) of respondents had diploma. Therefore, the composition of the respondents exposed that the lion's share of them were degree holders. This can be considered as a prospect to the bank that communication becomes smoother than if the educational status could have been the other way round. Moreover, it may be indicates that level of education matters in easy understanding of the technology.

Table 6-Marital status distribution of respondents

Marital status	Frequency	Percentage
Married	142	71.0
Unmarried	58	29.0
Total	200	100.0

Table 6 present the frequency distribution of the respondents' marital status. From the marital status frequency distribution in table 6, it may be seen that the majority of the respondents, that is 71% (n=142) were married and 29% (n=58) of participants were unmarried. As shown in the above table 6, the sample of the respondents is made up of 71% married, 29% unmarried. This means that the majority of the respondents were married and also this findings are consistent with the findings on age of the respondents which shows that majority of the respondents were above 26 years of age.

Table 7-Occupational status distribution of respondents

Occupational status	Frequency	Percentage
Government employee	24	12.0
Private employee	137	68.5
Business men/women	14	7.0
Self-employed	14	7.0
Student	11	5.5
Total	200	100.0

Table 7 presents the frequency distribution of the occupation status of the respondents. Of the 200 respondents, the majority, that is 68.5% (n=137) of the respondents were private

employees, 12% (n=24) of the respondents were government employees, equal proportions of respondents were business men/women and self-employed, that is 7% (n=14) each, and 5.5% (n=11) of the respondents were students.

Table 8-Salary distributions of respondents

Salary	Frequency	Percentage
3001-5000birr	31	15.5
5001-10,000birr	48	24.0
above 10,000 birr	121	60.5
Total	200	100.0

From the frequency distribution in table 8, in terms of the salary distribution of the sample, the majority of the respondents, that is 60.5% (n=121) earned above 10,000 birr per month, 24% (n=48) earned between 5,001-10,000birr per month, and 15% (n=31) earned less 5,000 birr per month.

4.3 Customers ATM Use Status

Table 9-Respondents Customer status distribution

Customer status	Frequency	Percentage
Less than a year	15	7.5
1-2 Years	25	12.5
2-3 years	33	16.5
4-5 Years	67	33.5
Above 5 years	60	30.0
Total	200	100.0

As can be seen from the frequency distribution in table 9, regarding the longevity of respondents as OIB customer, the majority, that is 33.5% (n=67) had been OIB customers for 4-5 years, 30% (n=60) of the respondents had been OIB customers for more than 5 years, 16.5% (n= 33) of the respondents had been OIB customers for 2-3 years, 12.5% (n=25) of the respondents had been OIB customers for 1-2 years and 7.5% (n=15) of the respondents had been OIB customers for less than one year.

Table 10-Frequency of ATM service use distribution of respondents

Frequency of ATM service use	Frequency	Percentage
Everyday	25	12.5
Every week	65	32.5
Every two or three weeks	63	31.5
Every month	13	6.5
Every two or three months	34	17.0
Total	200	100.0

In terms of the frequency distribution of ATM service use status of the respondents, table 10 depicts that 32.5% (n=65) of the respondents had been using ATM service every week, 31.5% (n=63) of the respondents had been using ATM service every two or three weeks, 17% (n=34) of the respondents had been using ATM service every two or three months, 12.5% (n=25) of the respondents had been using ATM service every day and 6.5% (n=13) of the respondents had been using ATM service every month.

Table 11-Frequency distribution for ATM service use for cash withdrawal

ATM service use for cash withdrawal	Frequency	Percentage
Regularly	62	31.0
Sometimes	92	46.0
Rarely	40	20.0
Never used before	6	3.0
Total	200	100.0

Table 11 presents a summary of how often customers use ATM service for cash withdrawal. As can be observed from the table, the majority of participants, 46% (n=92), reported that they sometimes use ATM for cash withdrawal whereas a minority of 3% (n=6), never used use ATM for cash withdrawal.

Table 12-Frequency distribution for ATM service use for fund transfer

ATM service use for fund transfer	Frequency	Percentage
Regularly	3	1.5
Sometimes	23	11.5
Rarely	16	8.0
Never	158	79.0
Total	200	100.0

With regard to customers' use of ATM service for fund transfer, table 12 presents the frequency distribution of the selected sample. The majority of participants, that is 79% (n=158), never used ATM service for fund transfer whereas the minority, that is 1.5% (n=3), said that they regularly use ATM service for fund transfer. Table 12 shows that most of cardholders of the bank do not use ATM for fund transfer, this may be due to lack of awareness. So, the bank needs to do more promotion about the services.

Table 13-Frequency distribution for ATM service use for balance Inquiry

ATM service use for fund transfer	Frequency	Percentage
Regularly	17	8.5
Sometimes	64	32.0
Rarely	21	10.5
Never	98	49.0
Total	200	100.0

Table 13 presents the frequency distribution of ATM service use for balance inquiry. As illustrated, the majority, that is 49% (n=98), reported that they never used ATM service for balance inquires, while the minority, that is 8.5% (n=17), of the participants reported that they regularly use ATM service for balance inquiry. From this it can be said that out of the ATM users of the bank around 49% do not effectively use the ATM to get balance inquiry. This might have been caused by promotion related problems.

Table 14-Frequency distribution for ATM service use for mini statement

ATM service use for fund transfer	Frequency	Percentage
Regularly	0	0
Sometimes	38	19.0
Rarely	24	12.0
Never	138	69.0
Total	200	100.0

Table 14 presents the frequency distribution of ATM service use of the selected sample for mini statement. As can be observed more than half of the participants, that is 69% (n=138) never used ATM service for mini statement, whereas 19% (n=38), sometimes use ATM service for mini statement. As it is shown in table 14 that, most of the ATM users didn't use ATM for mini statement as 69% of the users never used before and 12 % rarely use the service. This may be result from, less knowledge on the diverse functions the ATM may do aside it being used for withdrawals. So, the bank has to do more on awareness creation about the service customers get from ATM.

4.4 Descriptive Statistics

The survey was conducted on 200 respondents who are using ATM services of OIB in Addis Ababa city. Respondents were asked about their perceived service quality on ATM service of the bank against the 25 ATM service quality attributes that was adopted from previous study (Charles Mwatsika, 2016). These ATM service quality attributes are classified into five service quality dimensions (Parasuraman et al, 1988) that includes: tangibles, reliability, responsiveness, assurance and empathy.

Table 15- Descriptive Statistics of Service Quality Dimensions

	Mean	Std. Deviation	N
Assurance	3.3733	0.8951	200
Tangibility	3.2633	0.6638	200
Reliability	3.2217	0.6073	200
Responsiveness	2.9442	0.7457	200
Empathy	2.8601	0.7069	200
How do you rate your overall satisfaction with OIB ATM service?	3.3202	0.8490	200

Source: Compiled by author from SPSS version 20 result (2018)

The above table shows respondent's perception towards ATM service quality dimensions and overall customer satisfaction with the bank's ATM. As clearly seen in the table 15, perception of respondents on assurance, tangibility and reliability are 3.37, 3.26 and 3.22 respectively in terms of mean score which have above average. On the other hand, responsiveness and empathy have low perception with mean score of 2.94 and 2.86 respectively.

The mean perception of the customers on assurance score is 3.37. The mean score of assurance is more than 3 which was marked as indifferent in the questionnaire but it is not close to 4 which means respondents' somewhat agree that the bank is performing good in the level of security, confidentiality and in providing advice about ATM usage.

Similarly, the mean perception of the respondents on the tangibility is 3.26 is the second better dimension relatively, this is also above average mean score (3), which means that the respondents' somewhat agree that the bank is performing good in cleanliness of ATMs and stations areas, issuance of clean notes, issue readable slips and have good brand appearance. On the other hand, two of tangibility attributes namely sufficient number of ATMs & convenient locations were performed below the average mean score, which means customers were not satisfied with those attributes.

Thirdly, ATM service quality perception of respondents on reliability scored 3.22 which are slightly above mean average score (3). Respondents are fairly satisfied with speed, systems usability, easily accessible and range of services they got from ATM. In contrast, respondents' were not satisfied with ATM out of order and accuracy of transactions attributes of reliability.

However, the mean perception of respondents' to ATM service quality dimension on responsiveness and empathy are 2.94 and 2.86 respectively which are below the mean score (3) which means the customers disagree that banking staff listen to the customers' problems carefully and provide individualized attention to their concerns and demands, offer prompt service, timely cash availability in ATMs, quick replacement of lost and Swallowed ATM cards.

The mean score of overall customer satisfaction toward the bank ATM is 3.32, which is above average mean score. This shows that respondents' are marginally satisfied with the quality of services delivered by ATM of the bank.

Accordingly, among the variables, assurance has the highest mean value and empathy has least mean value. Therefore, it may be concluded from table 15 that respondents are most satisfied with assurance and highly dissatisfied with empathy.

The following tables show details of frequencies of the core questions about the overall customer satisfaction with the ATM service delivery of the bank, using the 5-point Likert scale (starting with 1- Very dissatisfied, 2- Dissatisfied, 3-neutral, 4-Satisfied, and 5-Very satisfied).

Table 16-Overall satisfactions with OIB ATM service

	Frequency	Percent	Valid Percent
Very dissatisfied	5	2.5	2.5
Dissatisfied	26	13	13
Netural	78	39	39
Satisfied	82	41	41
Very satisfied	9	4.5	4.5
Total	200	100	100

Source: Compiled by author from SPSS version 20 result (2018)

From the above table 16, the researcher categorized respondents to three categories, satisfied, neutral and unsatisfied with their perception of ATM services service quality. So, the researcher added satisfied with very satisfied and dissatisfied with very dissatisfied. So, from the above table it can be observed that 15.5 % (2.5+13) of the respondent were not satisfied, 39 % were neither satisfied nor dissatisfied and 45.5% of the respondents were satisfied.

The following section presents the statistical frequency of the respondent's perception of OIB ATM service quality.

Table 17-Respondent's perception of OIB ATM service quality

variable	N	C*. Mean	H**. Mean/Test Value	Std. Deviation	T	df	Sig.
Tangibility	200	19.5800	18	3.98283	5.610	199	.000
Reliability	200	19.3300	18	3.64383	5.162	199	.000
Empathy	200	11.4400	12	2.82779	2.801	199	.006
Responsiveness	200	17.6650	18	4.47469	1.059	199	.291
Assurance	200	10.1200	9	2.68545	5.898	199	.000
Overall Customer Satisfaction	200	78.1350	75	14.16545	3.130	199	.002

C = Calculated mean, ** Hypothetical mean,*

Source: Compiled by author from SPSS version 20.0

Table 17 shows that the calculated mean, hypothetical mean, standard deviation and one sample t-test statistics of variables. As indicated in table 17, the calculated mean score of Tangibility was 19.58 with a standard deviation of 3.98 and the hypothetical mean score was 18. This means in 6 items of a 5-point Likert scale the possible score ranges from 6 ($6 \times 1 = 6$) to 30 ($6 \times 5 = 30$) and the hypothetical mean score becomes 18 ($6 \times 3 = 18$). The calculated mean score was greater than the hypothetical mean score. One sample t-test result showed that there was a statistically significant mean score difference between the hypothetical mean/test value and calculated mean, $t = 5.61$, $df = 199$, $p < 0.001$. This implies that, in this study participants' level of *Tangibility* in relation to the use of ATM was high or above average.

Similarly, the calculated mean score of *reliability* (19.33) was greater than the hypothetical mean score (18) which implies that participants' level of Reliability in relation to the use of ATM was high or above average. Regarding *Assurance*, the calculated mean score (10.12) was greater than the hypothetical mean score (9) which again implies that participants' level of Assurance in relation to the use of ATM was high or above average.

However, the calculated mean score of *Empathy* (11.44) was almost equal with the hypothetical mean score (12) which implies that participants' level of Empathy in relation to the use of ATM was moderate or average. Concerning responsiveness, the calculated mean

score (17.67) was less than the hypothetical mean score (18) which implies that participants' level of Responsiveness in relation to the use of ATM was low.

Finally the overall customer satisfaction related to the use of ATM was measured. As indicated in table 13, the calculated mean score (78.14) was greater than the hypothetical mean score (75), which implies that participants' level of overall customer satisfaction related to the use of ATM service was high or above average.

4.5 Correlation Analysis

According to Reimann, Filzmoser, Garrett, and Dutter (2008) correlation analysis estimates the extent of the relationship between any pair of variables. The correlation coefficient is a measure of this relationship and depends on the variability of each of the two variables. Because of covariance, correlation coefficient can take a number with + or – sign (Reimann et.al, 2008). One of the widely-used methods to calculate a correlation coefficient is the Pearson product moment correlation. This method result in a number between –1 and +1 that expresses how closely the two variables are related, ± 1 shows a perfect 1:1 relationship (positive or negative) and 0 indicates that no systematic relationship exists between the two variables (Reimann et.al, 2008). In relation to the magnitude of correlation coefficient, Cohen (1988) stated that a correlation coefficient between 0.10 and 0.29 can be considered as small or weak, from 0.30 to 0.49 medium and from 0.50 to 0.10 large or strong.

Table 18-Correlation analysis

Relationship among ATM SQ Dimension and Over All Customers' Satisfaction

	Customer Satisfaction	Tangibility	Reliability	Empathy	Responsiveness
Customer Satisfaction	1				
Tangibility	.765**	1			
Reliability	.851**	.629**	1		
Empathy	.785**	.457**	.599**	1	
Responsiveness	.839**	.437**	.606**	.656**	1
Assurance	.761**	.489**	.559**	.507**	.598**

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

As it can be seen from table 18 above, all ATM service quality dimensions (tangibility, reliability empathy, responsiveness and assurance) have significantly correlate to customer satisfaction though the magnitude of the relationship differs among ATM service quality dimensions. In light of this, reliability, responsiveness, empathy, tangibility and assurance have a correlation coefficient value of 0.851, 0.839 0.785, 0.765 and 0.761 respectively showing the existence of significant and strong relationship with customer satisfaction.

Moreover, it shows correlation among variables. As we can see from table, there was a statistically positive significant relationship among all variables. This implies that as one variable increases, the other variable also increases and vice-versa. For instance the positive correlation between tangibility and reliability implies that as tangibility increases, reliability also increases and vice-versa.

Regarding the magnitude of correlation coefficients among variables is concerned, There was strong correlation between Empathy and Responsiveness, $r = 0.656$, $p < 0.01$. The correlation between Tangibility and Reliability was strong, $r = 0.629$, $p < 0.01$. Similarly, the correlation between Reliability and Responsiveness, was also strong, $r = 0.606$, $p < 0.01$. In addition the correlation between Reliability and Empathy ($r = 0.599$, $p < 0.01$), Reliability and Assurance ($r = 0.559$, $p < 0.01$), Empathy and Assurance ($r = 0.507$, $p < 0.01$), Responsiveness and Assurance ($r = 0.598$, $p < 0.01$) were also strong. However, the correlation between Tangibility and Empathy ($r = 0.457$, $p < 0.01$), Tangibility and Responsiveness ($r = 0.437$, $p < 0.01$), and Tangibility and Assurance ($r = 0.489$, $p < 0.01$) were moderate.

4.6 Mean score difference among groups of background on dependent variables

Table 19-Mean Difference between Groups of Background Variables on Tangibility

Variable	Group	N	Mean	SD	df	F	Sig.
Sex	Male	147	19.4082	3.97553	1,198	1.033	.311
	Female	53	20.0566	4.00200			
Age	18-25	23	17.3913	4.76483	3,196	3.134	.027
	26-30	101	19.9109	3.98522			
	31-40	56	19.5000	3.93123			
	41-50	20	20.6500	1.98083			
	high school	27	19.4074	2.30817			
Educational level	Diploma	26	20.2308	.81524	3,196	.554	.646
	First degree	117	19.3419	4.61101			
	Master's degree	30	20.1000	4.18824			
Marital status	Married	142	19.7535	4.07237	1,198	.929	.336
	Unmarried	58	19.1552	3.75477			
	Govt employee	24	19.7500	4.17289			
Occupation	Private employee	137	19.5036	4.39104	4,195	.119	.975
	Business men/women	14	19.3571	2.40535			
	self-employed	14	19.7143	1.81568			
	Student	11	20.2727	.90453			
Monthly income	3001-5000	31	20.3226	1.98976	2,197	.924	.399
	5001-10,000	48	19.8125	4.72502			
	above 10,000	121	19.2975	4.04072			

A one way between-group analysis of variance was conducted to explore whether there was a statistically significant mean difference between groups of background variables on Tangibility. Table 19 shows that there was a statistically significant tangibility mean score difference between groups of background variable, age. However, there was no statistically significant tangibility means score difference between groups of background variables like sex, educational, level marital status, occupation and monthly income.

Post-hoc group comparison using Tukey HSD shows that participants in the age group of 26-30 ($M = 19.91$, $SD = 3.99$) had significantly higher mean score than participants in the age group of 18-25 ($M = 17.39$, $SD = 4.76$). Similarly, participants in the age group of 41-50 had significantly higher mean score than participants in the age of 18-25. However, there was no statistically significant mean score difference among the rest groups of Age.

Table 20-Mean Difference between Groups of Background Variables on Reliability

Variable	Group	N	Mean	SD	df	F	Sig.
Sex	Male	147	19.4082	3.78127	1,198	.254	.615
	Female	53	19.1132	3.25612			
Age	18-25	23	19.4783	3.27344	3,196	.314	.815
	26-30	101	19.5149	3.90029			
	31-40	56	19.1429	3.88671			
	41-50	20	18.7500	1.48235			
	high school	27	16.5926	.57239			
Educational level	Diploma	26	18.2308	.81524	3,196	8.750	.000
	First degree	117	20.1368	4.04907			
	Master's degree	30	19.6000	3.72873			
Marital status	Married	142	19.4014	3.82055	1,198	.187	.666
	Unmarried	58	19.1552	3.19430			
	Govt employee	24	19.0000	3.36219			
Occupation	Private employee	137	20.0000	3.92016	4,195	5.347	.000
	Business men/women	14	17.0000	2.00000			
	self-employed	14	16.5714	1.45255			
	Student	11	18.1818	.60302			
Monthly income	3001-5000	31	18.2581	2.46262	2,197	1.622	.200
	5001-10,000	48	19.6250	4.12891			
	above 10,000	121	19.4876	3.66996			

A one way between-group analysis of variance was conducted to explore whether there was a statistically significant mean difference between groups of background variables on Reliability. Table 20 shows that there was a statistically significant reliability mean score difference between groups of background variable, educational level and occupation. However, was no statistically significant reliability mean score difference between groups of background variables like sex, age, marital status and monthly income.

Post-hoc group comparison using **Tukey** HSD shows that participants having educational level of high school (M = 16.59, SD = 0.57) had significantly lower mean score than participants having educational level of first degree (M = 20.14, SD = 4.05) and Masters' degree (M = 19.60, SD = 3.73). However, there was no statistically significant mean score difference among the rest groups of educational level.

Regarding occupation of participants, post-hoc group comparison using **Tukey** HSD shows that participants having occupation of private employee (M = 20.00, SD = 3.92) had significantly higher mean score than participants working as business men/women (M = 17.00, SD = 2.00) and self-employed (M = 16.57, SD = 1.45). However, there was no statistically significant mean score difference among the rest groups of occupation.

Table 21-Mean Difference between Groups of Background Variables on Empathy

Variable	Group	N	Mean	SD	df	F	Sig.
Sex	Male	147	11.4014	2.93225	1,198	.103	.748
	Female	53	11.5472	2.53867			
	18-25	23	12.7826	2.69607	3,196	3.861	.010
	26-30	101	11.5347	2.68166			
	31-40	56	11.2500	3.22631			
Age	41-50	20	9.9500	1.63755	3,196	17.96	.000
Educational level	high school	27	9.2593	1.28879			
Marital status	Diploma	26	9.3077	1.08699	1,198	1.042	.309
	First degree	117	12.3333	2.90659			
	Master's degree	30	11.7667	2.59553			
Occupation	Married	142	11.5704	2.94006	4,195	12.99	.000
	Unmarried	58	11.1207	2.52759			
	Govt employee	24	10.2083	2.60400	5	9.134	.000
	Private employee	137	12.2701	2.77728			
	Business men/women	14	10.0000	1.00000			
Monthly income	self-employed	14	8.2857	.72627	2,197	9.134	.000
	Student	11	9.6364	2.11058			
	3001-5000	31	10.8065	2.37233			
Monthly income	5001-10,000	48	12.8958	2.93359	2,197	9.134	.000
	above 10,000	121	11.0248	2.71251			

A one way between-group analysis of variance was conducted to explore whether there was a statistically significant mean difference between groups of background variables on Empathy. Table 21 shows that there was a statistically significant empathy mean score difference between groups of background variable, age, educational level, monthly income and occupation. However, there was no statistically significant empathy mean score difference between groups of background variables like sex and marital status.

Concerning age, Post-hoc group comparison using **Tukey HSD** shows that participants in the age group of 18-25 ($M = 12.78$, $SD = 2.30$) had significantly higher mean score than participants in the age group of 41-50 ($M = 9.95$, $SD = 1.64$). However, there was no statistically significant mean score difference among the rest groups of Age groups.

For educational level, Post-hoc group comparison using **Tukey HSD** shows that participants having educational level of high school ($M = 9.25$, $SD = 1.29$) had significantly lower mean score than participants having educational level of first degree ($M = 12.33$, $SD = 2.91$) and Masters' degree ($M = 11.77$, $SD = 3.73$). Similarly, participants having educational level of Diploma ($M = 9.31$, $SD = 1.09$) had significantly lower mean score than participants having educational level of first degree ($M = 12.33$, $SD = 2.91$) and Masters' degree ($M = 11.77$, $SD = 3.73$). However, there was no statistically significant mean score difference between participants having educational level of high school and Diploma as well as First degree and Masters.

As far as occupation of participants is concerned, post-hoc group comparison using **Tukey HSD** shows that participants working as private employee ($M = 12.27$, $SD = 2.78$) had significantly higher mean score than participants working as business men/women ($M = 10.00$, $SD = 1.00$), self-employed ($M = 8.29$, $SD = 0.73$), government employee ($M = 10.21$, $SD = 2.60$) and student ($M = 9.63$, $SD = 2.11$). However, there was no statistically significant mean score difference among the rest groups of occupation.

Table 22-Mean Difference between Groups of Background Variables on Responsiveness

Variable	Group	N	Mean	SD	df	F	Sig.
Sex	Male	147	17.7143	4.60345	1,198	.067	.796
	Female	53	17.5283	4.13523			
Age	18-25	23	18.0435	4.45664	3,196	2.814	.040
	26-30	101	18.3762	4.84531			
	31-40	56	16.9464	4.24015			
	41-50	20	15.6500	1.56525			
	high school	27	13.7778	2.88675			
Educational level	Diploma	26	15.0000	2.00000	3,196	16.43	.000
	First degree	117	18.9060	4.42754			
	Master's degree	30	18.6333	4.88829			
Marital status	Married	142	17.7183	4.62090	1,198	.069	.793
	Unmarried	58	17.5345	4.13040			
Occupation	Govt employee	24	16.0000	3.84482	4,195	14.51	.000
	Private employee	137	19.0292	4.41078			
	Business men/women	14	13.7857	.80178			
	self-employed	14	12.8571	2.17882			
Monthly income	Student	11	15.3636	1.20605	2,197	5.578	.004
	3001-5000	31	15.8710	2.99713			
	5001-10,000	48	19.1875	5.18450			
	above 10,000	121	17.5207	4.31876			

A one way between-group analysis of variance was conducted to explore whether there was a statistically significant mean difference between groups of background variables on Responsiveness. Table22 shows that there was a statistically significant responsiveness mean score difference between groups of background variable, age, educational level, occupation and monthly income. However, no statistically significant responsiveness mean score difference is found between groups of background variables like sex and marital status.

For age, Post-hoc group comparison using Tukey HSD shows that participants in the age group of 26-30 (M = 18.38, SD = 4.85) had significantly higher mean score than participants in the age group of 41-50 (M = 15.65, SD = 1.57). However, there was no statistically significant mean score difference among the rest groups of Age.

Regarding educational level, Post-hoc group comparison using Tukey HSD shows that participants having educational level of high school (M = 13.78, SD = 2.89) had significantly

lower mean score than participants having educational level of first degree ($M = 18.91$, $SD = 4.43$) and Masters' degree ($M = 18.63$, $SD = 4.89$). Similarly, participants having educational level of Diploma ($M = 15.00$, $SD = 2.00$) had significantly lower mean score than participants having educational level of first degree and Masters' degree. However, there was no statistically significant mean score difference between participants having educational level of high school and Diploma as well as First degree and Masters.

Concerning occupation of participants, post-hoc group comparison using Tukey HSD shows that participants working as private employee ($M = 9.03$, $SD = 4.41$) had significantly higher mean score than participants working as government employee ($M = 16.00$, $SD = 3.84$), business men/women ($M = 13.79$, $SD = 0.80$), self-employed ($M = 12.86$, $SD = 2.18$), and student ($M = 15.36$, $SD = 1.20$). However, there was no statistically significant mean score difference among the rest groups of occupation.

Regarding monthly income, Post-hoc group comparison using Tukey HSD shows that participants having monthly income between 3001-5000 birr ($M = 15.87$, $SD = 3.00$) had significantly lower mean score than participants having monthly income between 5001-10,000 birr ($M = 19.19$, $SD = 5.18$). However, there was no statistically significant mean score difference between participants having monthly income between 5001-10,000 birr and above 10,000 birr.

Table 23-Mean Difference between Groups of Background Variables on Assurance

Variable	Group	N	Mean	SD	df	F	Sig.
Sex	Male	147	10.1633	2.73496	1,198	.143	.705
	Female	53	10.0000	2.56455			
Age	18-25	23	10.5217	2.66065	3,196	3.498	.017
	26-30	101	10.1089	2.82100			
	31-40	56	9.4464	2.61409			
	41-50	20	11.6000	1.35336			
	high school	27	6.9630	1.72050			
Educational level	Diploma	26	12.0769	.27175	3,196	23.27	.000
	First degree	117	10.3761	2.63833			
	Master's degree	30	10.2667	2.43443			
Marital status	Married	142	10.1479	2.70787	1,198	.053	.819
	Unmarried	58	10.0517	2.65186			
Occupation	Govt employee	24	11.6250	2.37400	4,195	16.23	.000
	Private employee	137	10.3869	2.50954			
	Business men/women	14	7.2857	1.06904			
	self-employed	14	6.7143	1.81568			
	Student	11	11.4545	1.80907			
Monthly income	3001-5000	31	9.5484	2.82653	2,197	4.772	.009
	5001-10,000	48	11.1250	2.71814			
	above 10,000	121	9.8678	2.55259			

A one way between-group analysis of variance was conducted to explore whether there was a statistically significant mean difference between groups of background variables on *Assurance*. Table 23 shows that there was a statistically significant assurance mean score difference between groups of background variable, age, educational level, occupation and monthly income. However, no statistically significant assurances mean score difference was found between groups of background variables like sex and marital status.

Regarding age, Post-hoc group comparison using Tukey HSD shows that participants in the age group of 41-50 ($M = 1.60$, $SD = 1.35$) had significantly higher mean score than participants in the age group of 31-40 ($M = 19.45$, $SD = 2.61$). However, there was no statistically significant mean score difference among the rest groups of Age.

Concerning educational level, Post-hoc group comparison using Tukey HSD shows that participants having educational level of high school ($M = 6.93$, $SD = 1.72$) had significantly

lower mean score than participants having educational level of Diploma ($M = 12.08$, $SD = 0.27$), first degree ($M = 10.38$, $SD = 2.64$) and Masters' degree ($M = 10.27$, $SD = 2.43$). Similarly, participants having educational level of diploma had significantly higher mean score than participants having educational level of first degree and Masters' degree. However, there was no statistically significant mean score difference between participants having educational level of First degree and Masters.

For occupation of participants, post-hoc group comparison using Tukey HSD shows that participants working as private employee ($M = 10.39$, $SD = 2.51$) had significantly higher mean score than participants working as business men/women ($M = 7.29$, $SD = 1.07$) and self-employed ($M = 6.71$, $SD = 1.82$). Similarly, government employee ($M = 11.63$, $SD = 1.37$) had significantly higher mean score than participants working as business men/women and self-employed. In addition, students ($M = 11.45$, $SD = 1.81$) had significantly higher mean score than participants working as business men/women and self-employed. However, there was no statistically significant mean score difference between participants working as private employee and government employee, student and government employee as well as private employee and student.

Concerning monthly income, Post-hoc group comparison using Tukey HSD shows that participants having monthly income between 5001-10,000 birr ($M = 11.45$, $SD = 2.72$) had significantly higher mean score than participants having monthly income between 3001-5000 birr ($M = 9.55$, $SD = 2.83$) and above 10,000 birr ($M = 9.87$, $SD = 2.55$). However, there was no statistically significant mean score difference between participants having monthly income between 3001-5000 birr and above 10,000 birr.

Table 24-Mean Difference between Groups of Background Variables on Overall Satisfaction

Variable	Group	N	Mean	SD	df	F	Sig.																																																																																												
Sex	Male	147	78.0952	14.62281	1,198	.004	.947																																																																																												
	Female	53	78.2453	12.94352				Age	18-25	23	78.2174	13.77731	3,196	.682	.564	26-30	101	79.4455	15.33980	31-40	56	76.2857	14.36500	41-50	20	76.6000	4.93537	high school	27	66.0000	6.03834	Educational level	Diploma	26	74.8462	2.98921	3,196	10.285	.000	First degree	117	81.0940	15.15778	Master's degree	30	80.3667	15.17367	Marital status	Married	142	78.5915	14.76153	1,198	.507	.477	Unmarried	58	77.0172	12.63869	Govt employee	24	76.5833	13.61877	Occupation	Private employee	137	81.1898	14.57462	4,195	8.278	.000	Business men/women	14	67.4286	2.13809	self-employed	14	64.1429	7.98900	Student	11	74.9091	3.01511	Monthly income	3001-5000	31	74.8065	10.87633	2,197	3.649	.028	5001-10,000	48	82.6458	16.96240		above 10,000	121	77.1983
Age	18-25	23	78.2174	13.77731	3,196	.682	.564																																																																																												
	26-30	101	79.4455	15.33980																																																																																															
	31-40	56	76.2857	14.36500																																																																																															
	41-50	20	76.6000	4.93537																																																																																															
	high school	27	66.0000	6.03834																																																																																															
Educational level	Diploma	26	74.8462	2.98921	3,196	10.285	.000																																																																																												
	First degree	117	81.0940	15.15778																																																																																															
	Master's degree	30	80.3667	15.17367																																																																																															
Marital status	Married	142	78.5915	14.76153	1,198	.507	.477																																																																																												
	Unmarried	58	77.0172	12.63869																																																																																															
	Govt employee	24	76.5833	13.61877																																																																																															
Occupation	Private employee	137	81.1898	14.57462	4,195	8.278	.000																																																																																												
	Business men/women	14	67.4286	2.13809																																																																																															
	self-employed	14	64.1429	7.98900																																																																																															
	Student	11	74.9091	3.01511																																																																																															
Monthly income	3001-5000	31	74.8065	10.87633	2,197	3.649	.028																																																																																												
	5001-10,000	48	82.6458	16.96240																																																																																															
	above 10,000	121	77.1983	13.36452																																																																																															

A one way between-group analysis of variance was conducted to explore whether there was a statistically significant mean difference between groups of background variables on overall customer satisfaction. Table 24 shows that there was a statistically significant overall customer satisfaction mean score difference between groups of background variable, educational level, occupation and monthly income. However, was no statistically significant overall customer satisfaction means score difference between groups of background variables like sex, age, and marital status.

Regarding educational level, Post-hoc group comparison using Tukey HSD shows that participants having educational level of high school ($M = 66.00$, $SD = 6.04$) had significantly lower mean score than participants having educational level of first degree ($M = 81.09$, $SD = 15.16$) and Masters' degree ($M = 80.37$, $SD = 15.17$). However, there was no statistically significant mean score difference among the rest groups of educational level on the overall customer satisfaction score.

Concerning occupation of participants, post-hoc group comparison using Tukey HSD shows that participants working as private employee ($M = 81.19$, $SD = 14.17$) had significantly higher mean score than participants working as business men/women ($M = 67.43$, $SD = 2.14$) and self-employed ($M = 64.14$, $SD = 7.99$). Similarly, government employee ($M = 76.58$, $SD = 13.32$) had significantly higher mean score than participants working as self-employed. However, there was no statistically significant mean score difference among the rest groups of occupation.

Finally as far as monthly income is concerned, Post-hoc group comparison using Tukey HSD shows that participants having monthly income between 5001-10,000 birr ($M = 82.65$, $SD = 19.69$) had significantly higher mean score than participants having monthly income between 3001-5000 birr ($M = 74.81$, $SD = 10.88$) and above 10,000 birr ($M = 77.20$, $SD = 13.36$). However, there was no statistically significant mean score difference between participants having monthly income between 3001-5000 birr and above 10,000 birr.

4.7 Salient problems encountered by OIB ATM service users

As shown in the analysis of data from survey questionnaires, the level of OIB ATM service users' satisfaction is generally high. This is good news despite the multitude of problems commonly observed in ATM service due to poor infrastructure. In other words the current level of customers' satisfaction does not entirely mean that there are no problems or the ATM service is up to the level of customers' expectation. Data obtained from open-ended question on the questionnaires distributed to the sample group has shown that there are a number of problems ATM users encounter.

First, respondents were asked to write the three most frequent problems they encounter while using OIB ATM service. A content analysis of the responses given by the sample respondents is summarized in *table 25*.

4.8 Frequent Problems encountered by ATM customers of OIB

The most frequent problems encountered by ATM customers of the bank and the results of the items of the section are presented and analyzed as follows, according to frequency of problems faced by respondents;

Table 25-Frequent Problems encountered by ATM customers of OIB

No.	Description of problems	Frequency	Percentage
1	Poor interconnectivity of ATMs' network	24	18.05
2	ATM out of service	20	15.04
3	Inadequacy of number of ATMs	16	12.03
4	Lack of sufficient cash balance on ATM	14	10.53
5	Failure to gate immediate response when ATM machine deduct customers money and fails to dispense the cash	14	10.53
6	Debiting accounts without dispensing cash to customers	13	9.77
7	ATM location inconvenience	12	9.02
8	ATM swallow card and fails to return	7	5.26
9	OIB is not efficient in making quick delivery of ATM card for new card application	4	3.01
10	Inability to get ATM service of OIB out of Addis Ababa.	3	2.26
11	ATM machines dispense poor cash notes	2	1.5
12	Long queues at ATM terminals	2	1.5
13	Fee charged at other bank.	1	0.75
14	Language of the ATM on the screen	1	0.75
Total		133	100

From the total 200 respondents only 133 of them provided a list of problems they frequently face. As depicted in table 25 there are a number of problems that OIB ATM service users encounter. Of the fourteen lists of problems listed, the three most frequently observed problems include Poor interconnectivity of ATMs' network, ATM out of service and insufficient number of ATM.

Secondly, respondents were also asked to forward their suggestions to improve the OIB ATM service. Of the total respondent of 200 only 91 of them forwarded their suggestion outlining what measures needs to be taken to improve the ATM service quality. A content analysis of the responses are summarized and presented in table 26.

Table 26-Summery of respondent’s suggestion to improve OIB ATM the service

No.	Recommendations	Frequency	Percentage
1	Put effective ATM management and maintenance programmes to keep ATMs in good working order, produce accurate transactions and well stocked with cash at all times so that customers access banking products/services freely and easily	23	25.27
2	Increase the ATM machine access in every of their branches and some Selected areas like hospital, shop and hotels.	19	20.88
3	Banks should intensify effort to deploy ATMs to some other strategic places of the country, so as to ease the tension of inadequacy of the machine in Addis and other regional towns.	19	20.88
4	Speed up in handling ATM issues such as return of cash when ATM debit customer account but fails to dispense cash, fast return of swallowed cards and quick replacement of lost cards and Passwords.	17	18.68
5	Improve on the communication link by the banks negotiating with Ethio Tel Com to avoid interruptions on which results in communication break between the ATM and main server resulting failure to process the transaction accurately.	7	7.69
6	The management of bank should ensure that officers in charge of ATMs should always made enough cash available so as to enable the machine dispense cash to customers whenever need arises.	6	6.59
Total		91	100

As shown in table 26 respondents forwarded a wide range of recommendation on different aspects of the ATM service which demands measures to improve the quality of the ATM service. In order to improve the service quality of OIB ATM, ATM users made different types of recommendation. Some of the major recommendations forwarded by respondents include putting in place an effective ATM management and maintenance programmes; increasing the number of ATM; installing ATM in other strategic places; speeding up in handling ATM issues; and improving the quality of ATM network.

4.9 Interview Findings

For the purpose of exploring the views of the service giver, that is OIB; unstructured interview was conducted with seven senior OIB managers. Of these, 5 of them are Branch Managers of the bank where quantitative data were collected from customers through questioner and the remaining two of them are head office organs that directly the service will concern (Director of E-Banking and Division Manager of Internet and Card Banking). All the interviews were conducted from May 08 to 10, 2018. The interview data were analyzed on the basis of a systematic coding. This type of analysis consists of a systematic coding (breaking down) of data according to a code list, in such a way as to identify (practically and theoretically) relevant patterns. The coded segments are then grouped and synthesized into (more general) categories, which in turn get linked to more general themes and (theoretical) concepts.

4.9.1 Major problems related to ATM Services obtained from interview

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

4.9.2 Sources of the ATM service problems obtained from interview

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

Poor telecommunication infrastructure; Lack of infrastructure for telecommunications, Internet and online payments impede smooth ATM transactions in Ethiopia. The bank's ATM malfunctions mainly, due to ethio telecom's network failure or internal system failure. The

ATM relies on the bank communication network hence when the bank communication network goes off line the ATM services become unavailable for customers use.

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

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

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

Bureaucratic disputes handling among banks with regards to ATM problem; bureaucratic dispute handling among banks when ATM issue arise, it will take a very long time (nine up to thirteen days) to refund to a customer account when ATM deducts the account of one customs' without dispensing cash while using ATM service using another banks ATMs. It is also stated that most of the time no support is offered for customers for technical failures or other ATM service related problems after working hours

4.9.3 Enhancing customers' satisfaction obtained from interview

All interviewees acknowledged that the introduction of ATM service has been instrumental in increasing the satisfaction of OIB customers. As per the interview data, ATM banking services has given more satisfaction than ordinary banking because customer can get 24 hour access to banking services, quicker and near to their residence. What's more, customers can check their balance at any time without any fee. They also noted that the introduction of ATM has reduced customers visit of the branch which could be seen from the transaction on ATM and even some customers have been even totally do not visit the branch after they take the personalized electronic card. It is stated that, the level of satisfaction intended to be provided

by ATMs, however, is reduced by technological and processing failures due to various problems described earlier.

The interviewees finally forwarded a number of measures that needs to be taken in order to enhance the satisfaction of ATM service users. Their suggestions by and large overlaps with the suggestions gathered via the survey questionnaires. The suggestions put forward by all interviewees include the following:

- Speeding up in handling ATM issues such as return of cash when ATM deduct customers account but fails to dispense cash, fast return of swallowed cards and quick replacement of lost cards and Passwords;
- ATM custodians need to be well trained in order to handle customer queries confidently and competently;
- Enhancing the awareness level of customers about the inter-operability of all ATM machines in the country;
- Always ensuring that officers in charge of ATM service are available to deal with problems during as well as outside working hours.
- To put effective ATM management and maintenance programmes to keep ATMs in good working order;
- Increasing the number of ATM in other areas; and
- Having own ATM switch.

CHAPTER FIVE: FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

Any business institution needs an element that helps it to be competitive in the market. The most important thing that helps a business organization to be competitive in the market is to continuously improve its customer service. Likewise, any banking institution aims to ensure customer satisfaction and strengthen its relationships with customers. In order to achieve this, it is necessary to use any opportunity that can help to improve the quality of customer service. Modern technology plays an important role in maintaining customer competitiveness in the banking industry.

Recently, the use of modern technology in the country's economy is growing. The banking industry is one of the few sectors where modern technology is increasingly utilized to modernize its operations. The banking sector is adopting new technologies to improve service quality, expand its market base and maximize its economic efficiency. OIB is one of the private banks engaged in private banking services. The bank is contributed to the expansion of modern banking services in the country. The bank is investing in modern technology to improve its banking service to meet the demands of its customers. For example, the use of ATM banking service is an important component of this investment. It is a technology that allows the bank to provide efficient, accessible, flexible and affordable banking services to its customers.

OIB is developing strategies to expand their market and offer competitive service to stay in the market. The use of advanced information technology is useful to provide competitive service, to improve their customer service and thereby strengthen their relationships. As the industry continues to grow, the competition between banks is growing. The bank is required to provide a quality service to customers to cope up with the growing competition. The growing use of ATM banking service is a major change in this regard. At present, ATM card users can withdraw cash and transfer money from any bank. The major challenge remains that the bank needs to cope up with the ever-growing demands of its customers.

The purpose of this study was to investigate the level of OIB ATM service customers' satisfaction in Addis Ababa. A survey questionnaire was distributed to two hundred customers to collect their opinion on five dimensions of ATM service quality. In addition, unstructured interview was conducted with two senior OIB managers to explore some issues in detail. This chapter provides a summary of the major findings of the research, the conclusion drawn and finally, some suggestions that can improve the quality of OIB ATM service.

5.2. Research Findings

The major findings of the study are the following:

The descriptive analysis conducted with the aim of assessing the level of OIB ATM service quality dimensions and its effect on customer satisfaction. On the base of the finding of mean value of all the dimensions of ATM service quality indicated in table-15, *assurance* is better followed by *tangibility* and *reliability* with a mean score value of 3.37, 3.26 and 3.22 respectively. Responsiveness and empathy are below the average mean value with mean score of 2.94 and 2.86 respectively. The mean score of overall customer satisfaction toward the bank ATM is 3.32, which is above average mean score. This shows that respondents' are marginally satisfied with the quality of services delivered by ATM of the bank. Besides, the frequency table 16 showed that, 15.5 % of the respondents were not satisfied, 39 % were neither satisfied nor dissatisfied and 45.5% of the respondents were satisfied.

Correlation coefficient statistics shows that all ATM service quality dimensions; reliability, responsiveness, empathy, tangibility and assurance have a positive and significant relationship with overall customer satisfaction with coefficient value of 0.851, 0.839 0.785, 0.765 and 0.761 respectively. Hence, ATM service quality attributes perceived by customers does have significant influences on customer satisfaction, supporting the research model. Moreover, the finding also indicated that there is a positive and significant relationship among independent variables where in a relatively stronger correlation observed between empathy and responsiveness and tangibility and reliability with coefficient value of 0.656 and 0.629 respectively. In the same way, the correlation between reliability and responsiveness, reliability and empathy, reliability and assurance and empathy and assurance were also strong with coefficient value of 0.606, 0.599, 0.559 and 0.507 respectively. However, the correlation

between tangibility and empathy, tangibility and responsiveness and tangibility and assurance were moderate with coefficient value of 0.457, 0.437, and 0.489 respectively.

The one-way analysis of variance (ANOVA) was conducted to explore whether there was a statistically significant mean difference between groups of background variables and revealed that;

- ✓ A statistically significant difference was observed in the level of satisfaction among customers of different age groups on *tangibility* dimension of ATM service quality. However, no difference was observed in the level of satisfaction among other background variables.
- ✓ A statistically significant difference was observed in the level of satisfaction among customers of different level of education and occupation on reliability dimension of ATM service quality. However, no significant difference was observed in the level of satisfaction among other background variables.
- ✓ A significant difference was observed in the level of satisfaction among customers of different age group, level of education, occupation and income on assurance dimension of ATM service quality. However, no significant difference was observed in level of satisfaction among other background variables.
- ✓ A statistically significant difference was observed in the level of satisfaction among customers of different age group, level of education, occupation and monthly income on responsiveness dimension of ATM service quality. However, no statistically significant difference was observed in the level of satisfaction between groups of background variables.
- ✓ A statistically significant difference was observed in the level of satisfaction among customers of different level of age, education, monthly income and occupation on empathy dimension of ATM service quality. However, no statistically significant difference observed in the level of satisfaction among other background variables.

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

5.3. Conclusion

On the one hand, the expectation of customers is changing as a result of economic and technological changes; on the other hand the competition between banks is growing. This changes demands that banks to pay attention to improve consumer service qualities. OIB bank has been investing in e-banking technologies which are of great value to satisfy the needs of its customers. No wonder that the bank has made some success in this regard over a very short period of time. The number of ATM card users can be taken as a good example. Nonetheless, the main issue remains to be able to provide quality services that match customers' expectation. The question of how much the bank's ATM service quality satisfies its customers expectation is a question that needs to be answered. This study has attempted to answer this question. Thus, based on the findings of the study, the following conclusions can be made.

The study concludes that:

1. On the whole, OIB ATM customer's level of satisfaction was slightly positive with mean score of 3.32, which is above average mean score 3, but the result showed that the bank has much to do to improve its ATM service quality in the future.
2. Though the overall level of customers in all ATM service quality dimensions appears to be close to average, their level of satisfaction in *responsiveness* and *empathy* dimensions of ATM service quality was relatively lower than the other three dimensions and below the average mean score. Therefore, it can reasonably be argued that these two service quality dimensions have significantly impacted customer level of satisfaction.
3. All the five ATM service quality dimensions significantly associate with customer satisfaction.
4. There is a positive and significant relationship among independent variables empathy and responsiveness, tangibility and reliability, reliability and responsiveness, reliability and empathy, reliability and assurance and empathy and assurance. However, correlation between tangibility and empathy, tangibility and responsiveness and tangibility and assurance were moderate.
5. The banks performance in addressing the often problems encounters by its ATM service customers was below the expectations of consumers.

It is undeniable that the expansion of ATM service over the past few years has helped OIB to improve its customer's service. Owing to the structural problems of underdevelopment in major infrastructures in the country, the bank's ATM banking service quality is far from satisfactory. Although some of the problems customers experience can be beyond the capacity of the bank to address in the immediate terms, there are a number of problems that can be solved with the capacity of the bank and thereby improve its ATM service quality. The result of this study has shown that a lot needs to be done to improve the quality of the bank's ATM service. This research offers some suggestion that can help to improve the quality of OIB ATM service quality.

5.4.Recommendations

Based on the findings and conclusions of the study, the following recommendations are forwarded to the management of the bank.

Assurance dimension, the research finding revealed that respondents' were most satisfied with privacy, security of the bank's ATM and advice they got about ATM usage. Even though, the bank is performing relatively well with assurance dimension, it needs to continual improve all assurance dimensions to be competent in the industry.

Tangibility dimension is one of the most important factors influencing customer satisfaction in this research finding and respondents' were relatively satisfied next to assurance with this dimension. But, customers are not satisfied with number of ATMs and convenience of ATM locations. So, the bank should deploy new ATM in strategically selected areas. Furthermore, the bank should enhance the awareness level of customers about the inter-operability of all ATM machines in the country.

Reliability dimension is one of the most important factors influencing customer satisfaction in this research finding. However, the customers of the banks are less satisfied with some of reliability attributes, like ATM out of service and deduct money from the account without actually dispensing money. So, to solve those issues the bank have to put effective ATM management and maintenance programmes to keep ATMs in good working, and to have power back up to avoid sudden system failure that may deter the machine from dispensing cash.

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

Regarding empathy dimension customers of the bank were less satisfied in terms of the employee's friendliness, ATM card application, and accessibility of bank employees to ATM problems. To solve this problem, the bank has to give training for employees about customer service, make card application process easier and assign permanent staff that follow and respond to customer's problem.

The last, but not the list, the bank needs to constantly improve service quality to enhance customer satisfaction.

5.5.Recommendation for Future Research

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

In view of the above, the researcher recommends that funds be made available for the study to be replicated in the other banks since the findings of the current study indicated that there are varied challenges as well as advantages with ATM services. Recommendations from such a

study would lead to a much better administration and patronage of electronic banking product for economic growth and development.

Reference

- Abraham H.(2012).Challenges and Opportunities of Adapting electronic banking in Ethiopia.
- Al-Hawari, M. and Ward, T. (2006).The impact of automated service quality on financial performance and the mediating role of customer retention.Journal of Financial Service Marketing. 10(3), pp. 228-43.
- Anderson, C and Zeithaml, C P (1984). “Stage of the Product Life Cycle, Business Strategy, and Business Performance,” Academy of Management Journal, 27 (March), 5-24.
- Anderson, E W, Fornell, C and Lehmann, D R (1994). “Customer Satisfaction, Market Share and Profitability: Findings from Sweden,” Journal of Marketing, 58(3), 53-66.
- Anyanwaokoro, M. (1999) Theory and Policy of Money and Banking, Enugu, Nigeria: Hossana Publications.
- Ayo, C. K.; Adewoye, J. O. & Oni, A. A. (2010): The state of e-banking implementation in Nigeria, a post consolidation review, Journal of emerging trends in economics and management science (1): 37-45
- Babakus, E and Boller, G W (1992).“An Empirical Assessment of the Servqual Scale,” Journal of Business Research, 24(3), 253-68.
- Balogun, O.J., Ajiboye, F.A. &Dunsin, A.T. (2013).An Investigative Study on Factors Influencing the Customer Satisfaction with E-Banking in Nigeria.International Journal of Academic Research in Economics and Management Sciences, 2(6) Pp. 64-73.
- Banker, R. D. and Kauffman, R. J. (1988). Strategic contributions of information technology: An empirical study of ATM networks, proceedings of the ninth International Conference for Information Systems, Minneapolis, MW.
- Banker, R., Bardhan, S., Lin, H., & Chang.(2006). Plant Information Systems, Manufacturing Capabilities and Plant Performance. MIS Quarterly.
- Bitner, M. J.; Hubbert, A. R. 1994.Encounter satisfaction versus over satisfaction versus quality. In the service quality: new directions in theory and practice, in R. T. Rust, R. L. Oliver(Eds). Thousand Oaks: Sage Publication, 79–84 p.

Boulding, W; Kalra, A, Staelin, R and Zeithaml, V A (1993). "A Dynamic Process Model of Service Quality: From Expectations to Behavioral Intentions," *Journal of Marketing Research*, 30(February), 7-27.

Bryman, A. & Bell, E. (2007). *Research Designs. In: Business Research Methods*. New York. Oxford University Press. P. 44-7

Burnham, B. (1996). *The Internet's Impact on Retail Banking: Booz-Allen Hamilton*, pp. 1-10.

Buzzell, R D and Gale, B T (1987). *The PIMS Principles*, New York: The Free Press.

Carmines, Edward G., and Richard A. Zeller (1998) *Reliability and validity assessment*, Newbury Park, CA: Sage Publications

Charles Mwatsika. *Impact of ATM Banking Performance on Customer Satisfaction with the Bank in Malawi*. *International Journal of Business and Economics Research*. Vol.5, No. 1, 2016.

Cheng, T. (2006). *Adoption of internet banking: An empirical study in Hong Kong*. *Decision Support Systems*.

Cohen, J.W. (1988). *Statistical Power Analysis for behavioral science*.(2nd edn). Hillsdale, NJ: Lawrence Erlbaum Associations

Crane, D.B and Bodie, Z. 1996, *From Follows Function: The Transformation of Banking*, *Harvard Business Review*, Vol. 74 (2): 109-117

Cronin, J.J. and Taylor, S.A. (1992). *Measuring service quality: A re-examination and extension*. *Journal of Marketing*, 56, July, pp. 55-68

Crosby, P B (1984). Paper presented to the "Bureau de Commerce," Montreal, Canada (Unpublished), November

Dabholkar, P. A., Shepherd, C. D. and Thorpe, D. I. (2000), "A comprehensive framework for service quality: an Investigation of critical conceptual and measurement issues through a longitudinal study", *Journal of Retailing*, Vol. 76 No. 2, pp. 131-139.

Daniel, E. (1999). *Provision of electronic banking in the UK and the Republic of Ireland*. *International Journal of Bank Marketing*, 17(2), 72-82

Dzogbenuku RK. Banking innovation in Ghana: Insight of students' adoption and diffusion. *J. Internet Bank. Commer.*2013; 18(3).

Edvardsson, B.; Thomasson, B.; Ovretveit, J. 1994. *Quality of service– Making it really work.* 1st ed. Berkshire: McGraw-Hill Book Company Europe.

Eiglier, P and Langeard, E (1987).*Servuction, Le Marketing des Services*, Paris:McGraw-Hill.

Ethswich S.C financial statement and Audit report 2017

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference.* 11.0 update (4th ed.).

Fenuga OJ (2010). The effect of electronic payment on customer service delivery. *International Journal of Economic Development Research and Investment.*

Fishbein, M. and Ajzen, I. (1975).*Belief, attitude, intention and behaviour: An introduction to theory and research.* Addison-Wesley, Reading, Massachusetts.

Fornell, C. (1992). A National Customer Satisfaction Barometer: The Swedish Experience. *Journal of Marketing*, 56 (January), 6-21

Gardachew, W 2010, ` Electronic -banking in Ethiopia: practices, opportunities and Challenges', *Journal of internet Banking and commerce*,15(2):2-9

Garvin, D A (1983). "Quality on the Line," *Harvard Business Review*, 61(September-October), 65-73.

Glaser, P. F. (1988). Using technology for competitive advantage: the ATM experience of Citicorp in managing innovation cases from services industries. Guide, B. R. and Quinn, J. B. (eds) National Academy Press, Washington DC pp 108–114.

George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference.* 11.0 update (4th ed.). Boston: Allyn& Bacon.

Gezahegn Bacha (2015). Assessment of customer satisfaction with ATM banking: Empirical evidence from Selected Commercial Banks in Ethiopia.

Halstead, D., David H., and Sandra L.S. (1994).Multisource effects on the satisfaction formation process. *Journal of the Academy of Marketing Science*, 22 (spring): 114-129.

Howells, P. (2008). *The Economics of Money, Banking and Finance*. Pearson Education Limited.

Hudson, S.; Hudson, P.; Miller, G. A. 2004. The measurement of service quality in the tour operating sector: a methodological comparison, *Journal of Travel Research* 42(3): 305–312.

Juan and Gupta (2004). *Measuring Service Quality: SERVQUAL Vs. SERVPERF Scales* Vikalpa • Volume 29 • No 2 • April - June 2004

Johnston, R. (1997). Identifying the Critical Determinant of Service Quality in Retail Banking: Importance and Effect. *International Journal of bank marketing*, Vol.15(No.4), pp. 111-116.

Juran, J M (1988). *Juran on Planning for Quality*. New York: The Free Press.

Klingebiel Daniela (2002). *Electronic Finance. A New Approach to Financial Sector Development*. World Bank Discussion Paper No. 431. Washington D.C.

Kotter Philp (2003) *Marketing Management*, eleventh edition.

Kotler, P and Armstrong, G (2005) “*Principles of Marketing*” (Eleventh edn), p13, Prentice Hall, New Delhi, India

Kotler, Ph.; Wong, V.; Saunders, J.; Armstrong, G. 2005. *Principles of marketing*. 4th ed. Prentice Hal

Kotler, P and Keller, K, L (2006) “*Marketing Management*” (twelve edn), pp144-146, Prentice Hall, New Delhi, India

Kumbhar V.M. (2011). Factors affecting customer satisfaction: Some evidence from Indian banks, *Management research and practice*.

Laderman, F. S. (1990). The public policy implications of state laws pertaining to Automated Teller Machines. *Economic Review* (Federal Reserve Bank of San Francisco pp. 43–58.

Lemma Belay (2017) *The Effect of ATM Service Quality on Customer Satisfaction: Evidences from Customers of Ethiopian Commercial Banks in Debremarkos Town*

Lewis, R.C. and Booms, B.H. (1983).The marketing aspects of service quality.Emerging perspectives in service marketing, In Berry, L.L., Shostack, G. and Upah, G. (eds.) American Marketing Association.Chicago, IL pp. 99-107.

Mishra R. and J.Kiranamai. (2009). E-banking: A case of India. Icfai University, Journal of publication Administration.Vol.5, No.1, pp.55-65.

Mohammed-Aminu, S., &Arhin, E. (2011).Using ATMs as Workload Relievers for Ghanaian Bank Tellers: The Customer Behavioural Challenge. Journal of Economics and Behavioural Studies, 3 (1), 13-21.

Mols, N.P. (1998).The behavioral consequence of PC banking. International Journal of bank marketing 16(5), pp.195-201.

Normann, R (1984). Service Management. New York: Wiley.

Parasuraman, A. 1985. A conceptual model of service quality and its implications for future research, Journal of Marketing 49: 41–50.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, spring, pp. 12-40

Pham, N. Th.; Nguyen, H. Ph. 2007. SERVQUAL versus SERVPERF– a comparative study in Vietnamese supermarket, Science and Technology Development 10(8): 1–30.

Philipos Lamore Bambore (2013). Customer satisfaction and electronic banking service on some selected banks of Ethiopia.

Phillips, L W, Chang, D R and Buzzell, R D (1983). “Product Quality, Cost Position and Business Performance: A Test of Some Key Hypothesis,” Journal of Marketing, 47 (Spring), 26-43.

Phong Nham, Chi Phan(2015).The Impact of service quality on customer satisfaction of automated teller machine service: case study of a private commercial joint stock bank in Vietnam.

R.K.Uppal, and RimpiJantana.(2007).E-banking in India: challenges and opportunities,pp.266

Rasiah, R.(2010) Industrialization in the second-tier NIE, in R. Rasiah; D.J. Schmidt (eds):The new political economy of Southeast Asia (Cheltenham, Edward Elgar), pp. 44–102

Reimann, R. C., Filzmoser, P., Garrett, R. G., & Dutter, R. (2008). *Statistical Data Analysis Explained: Applied Environmental Statistics*. John Wiley & Sons, Ltd.

Rose, Peter S., (1999) "Commercial Bank Management" (4th Ed), Irwin/McGraw-Hill, Boston, USA.

Rust, R T and Oliver, R L (1994). *Service Quality — New Directions in Theory and Practice*, New York: Sage Publications

Singer, J. David (1990) "Variables, indicators, and data: the measurement problem in macro political research." In Singer and Paul F. Diehl, eds. *Measuring the correlates of war*. Ann Arbor: University of Michigan Press, pp. 3-28.

Shaw, J (1978). *The Quality - Productivity Connection*, New York: Van Nostrand

Shittu Olorunsegun. (2010). *The impacts of electronic banking in Nigeria banking system*.

Sureshchandar G.S., Rajendran C, and Anantharaman R.N.; 2002, "the relationship between service quality and customer satisfaction – a factor specific approach"; *Journal of Services Marketing*; 16(4), 363 – 379

Tirhas G/tsadkan, Fasil Damtew, Addis Beyene (2017); *Assessment of Customer Satisfaction on Automated Teller Machine in Adigrat, Ethiopia*.

Tse, David K. and Peter, C. Wilton; 1988, "Models of Consumer Satisfaction: An Extension"; *Journal of Marketing Research*; 25 204-212.

United Nations Conference on Trade and Development (UNCTAD) (2000), *E-Commerce and Development Report 2002* (New York & Geneva: United Nations).

Zhou, L. 2004. A dimension-specific analysis of performance only measurement of service quality and satisfaction in China's retail banking, *Journal of Services Marketing* 18(7).

Annex

Annex 1 Questionnaire for ATM users

QUESTIONNAIRES FORM OF STUDY SURVEY

**ADDIS ABABA UNIVERSITY COLLEGE OF BUSINESS & ECONOMICS
DEPARTMENT OF MANAGEMENT, EMBA PROGRAM**

Dear Respondent,

This study will undertake to understand the Impact of E-Banking Service via ATM service on Customers Satisfaction in the Banking Industry in Ethiopia case of Oromia International Bank customers who are currently using ATMs of the bank in Addis Ababa city as Partial Fulfillment of the Requirements for the Award of the Degree of Executive Masters of Business Administration of Addis Ababa University.

The questions will ask about general information about you, performance of ATM, the problems you experiences while using the service, your views regarding the compliant response about ATMs and your general satisfaction level towards ATMs service of OIB.

The information that you provide will help to understand the status of ATM service customer's satisfaction in the country by systematically examining the level of OIB ATM service customer's satisfaction in Addis Ababa; the problems customers experience during ATM services uses; and the factors contributing ATM service problems. The questions will take few minutes to complete.

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

Thank you for your participation

Best regards,

Habte Ashenafi,

EMBA student at Addis Ababa University college of Business and Economic

Questionnaire for ATM users

I. Part 1. Demographic information

Please put right mark (✓) in front of your choice box that express yourself.

.(እባክዎትን ለተጠቀሱት ጥያቄዎቻችሁ እየሚሰጡትን አንድ ይረዱ (✓)

ምልክት ያድርጉባቸው፡)

1. Gender(ጾታ)

Male (ወንድ) Female (ሴት)

2. Age(እድሜ)

18 - 25years (አመት) 26 - 30 years (አመት) 31 – 40 years (አመት)

41 – 50 years (አመት) 51 – 60 years above (ከ) 60 years (አመት በላይ)

3. Education (የትምህርት ደረጃ)

Illiterate (ያልተማረ) High School (የሁለተኛ ደረጃ የጠናቀቀ) Diploma

(ዲፕሎማ) Degree (ዲግሪ) Masters Degree (ማስተርስ)

Others (please specify)(ሌላ ካለ ይጠቀሱ) _____.

4. Marital Status (የጋቻሁኑ ጾታ)

Married (የ ገባ) Un married(ያላገባ)

5. Profession (ስራ)

Govt Employee (የ ሚኒስቴር ተቀጣሪ) Private Employee (የ ግል ድርጅት ተቀጣሪ)

Business (ገንዘብ) Self Employed (በራሱ ራሱ ስራ ያደርጋል)

Student(ተማሪ) House Wife (ቤት እንደሚሰራ)

6. Monthly Income (ወራዊ ገቢ)

Below (ከ በታች) 1,500 1,501-3,000 3001-5,000

5001-10,000 above 10,000

II. Part 2.General question

1. How long you have been the customer of OIB?

የኦ.ቲ.ቲ. ኢንተርናሽናል ባንክ ደንበኛ ከሆኑ ምን ያክል ጊዜ ሆኖት?

Less than 1 year (አመት) 1-2 yrs (አመት) 2-3 yrs (አመት) 4-5

yrs(አመት) above 5 years (ከ 5 አመት በላይ)

2. How long you have been using OIB ATM service?

የኦ.ቲ.ቲ. ኢንተርናሽናል ባንክ ኤቲኤም ልግሎት ተጠቃሚ ሆኑ ምን ያክል ጊዜ ሆኖት?

Less than 1 year (ከ አንድ ዓመት በታች) above one year(ከ አንድ ዓመት በላይ)

3. How frequently do you use OIB ATM service?

(በየ ምን ያክል ጊዜ ወሰን ላይ ወይ ባንኩን ኤቲኤም ሚጠቀሙት?)

Every day (በየ ቀኑ)

Every week (በእያንዳንዱ ሳምንት)

Every two or three weeks (በ ሁለት ሳምንት ወይ ሦስት ሳምንት ጊዜ)

Every month (በእያንዳንዱ ወር)

Every two or three month (በእያንዳንዱ ሁለት ወይ ሦስት ወር)

4. How often you use the following ATM services?

ከታችኛቱ ተዘረዘሩትን የኤቲኤም አገልግሎቶች በየምን ያህል ጊዜ ይጠቀሙ?

- Cash withdrawal(ገንዘብ ብድር መውጣት) – Regularly (በየ ጊዜው)
Sometimes(አላገደ አልገደ) Rarely(እንብዛ ምልጠቀም) Never
(እስከ ሁን ተጠቅሞ ለወቅም)

- Fund Transfer(ከህሳብ ብድር ህሳብ ለሌላ ለገቢ) –Regularly (በየ ጊዜው)
Sometimes(አላገደ አልገደ) Rarely(እንብዛ ምልጠቀም)
Never (እስከ ሁን ተጠቅሞ ለወቅም)

- Balance enquiries(ባላንስ መጠየቅ) –Regularly (በየ ጊዜው)
Sometimes(አላገደ አልገደ) Rarely(እንብዛ ምልጠቀም)
Never (እስከ ሁን ተጠቅሞ ለወቅም)

- Mini statement(ሜኒ እስቴትመንት) – Regularly (በየ ጊዜው)
Sometimes(አላገደ አልገደ)
Rarely(እንብዛ ምልጠቀም) Never (እስከ ሁን ተጠቅሞ ለወቅም)

III. How do you rate OIB's ATM service on the basis of the following items? ከታች በተጠቀሱት ዝርዝር የኤቲኤም ማሻሻያ ስራዎች ላይ የደረሰውን ደረጃ ያሳውቁ። ኤቲኤም አገልግሎት ላይ የደረሰውን ደረጃ ያሳውቁ። Please put right mark (✓) in front of the item your rate on choice box that express. (እባክዎ ትኩረት በሚጠይቁት ስራዎች ላይ ትኩረት ያሳውቁትን ደረጃ ያሳውቁ።)

S.N	ATM Service Quality Attribute	Very disagree (በጣም አልስማማም)	Disagree (አልስማማም)	Neutral (ማካከለኛ)	Agree (እስማማለሁኝ)	Strongly agree (በጣም እስማማለሁ)
1	The bank have sufficient number of ATMs per ATM station. (በቂ የሆኑ የኤቲኤም ማሻሻያ ኖች በእያንዳንዱ ገቢ ላይ አሉ።)					
2	ATM machines are placed at convenient locations የኤቲኤም ማሻሻያ ኖች በአጠቃላይ ተስማሚ ቦታዎች ላይ አሉ።					
3	Corporate Brand Appearance On ATMs induced me የኤቲኤም ማሻሻያ ኖች አገልግሎት ለማግኘት ለጠቅላላ ተቃራኒ ክቶች ላይ ያሳደግኩኝ።					
4	ATM machines provides me readable Slips. (የኤቲኤም ማሻሻያ ኖች የሚያሰጡት ሰነድ ወይም ትኬት ግልጽ ነው።)					
5	ATM machines issues clean Notes የኤቲኤም ማሻሻያ ኖችን ደረሰው የገቢ ኖች ወይም ሰነድ ግልጽ ነው።					
6	ATM Stations areas and ATMs are Clean ኤቲኤም ማሻሻያ ኖችን ደረሰው አካባቢ ግልጽ ነው።					
7	ATM provide me with wide range of services ኤቲኤም ማሻሻያ ኖች የተለያዩ አገልግሎቶችን ይሰጣሉ።					
8	ATM Transactions are accurate. ኤቲኤም ማሻሻያ ኖች አገልግሎትን በትኩረት ይሰጣሉ። (ሂሳብን በትኩረት ይሰጣሉ።)					
9	The Speed of ATMs are good የኤቲኤም ማሻሻያ ኖች ፍጥነት ጥሩ ነው።					
10	ATMs will not be out of order የኤቲኤም ማሻሻያ ኖች አገልግሎት ወጪ አይሆንም።					
11	ATM Systems are easily usability የኤቲኤም ማሻሻያ ኖች በቀላሉ ማግኘት ይቻላል።					
12	ATMs are easily accessed. የኤቲኤም ማሻሻያ ኖች ለአገልግሎት በቀላሉ ማግኘት ይቻላል።					
13	Sufficient cash are availability in ATMs በእያንዳንዱ የኤቲኤም ማሻሻያ ኖች ውስጥ ገንዘብ ለአገልግሎት ለማግኘት በቂ ነው።					
14	Lost ATM cards were quick replaced					

S.N	ATM Service Quality Attribute	Very disagree (በጣም አይስማምም)	Disagree (አይስማምምም)	Neutral (መካከለኛ)	Agree (አስማምታለሁኝ)	Strongly agree (በጣም አስማምታለሁ)
15	Less waiting time at ATMs ከኤቲኤምባንኮች አገልግሎት ለማግኘት የሚወስደው ጊዜ አጭር አይደለም :					
16	Swallowed ATM cards were returned quickly በኤቲኤምባንኮች ተይዞ ወደ ማቆራረጫ ቦታ ተመልሶ ለማግኘት ይቻላል :					
17	Employee respond promptly with ATM problems የባንኩ ሰራተኞች በኤቲኤምባንኮች ላይ ለሚከሰቱ ችግሮች ረገጥ ትኩረት ይሰጣሉ :					
18	Employee are effective in solving ATM problems የባንኩ ሰራተኞች ከኤቲኤምባንኮች ላይ ለሚከሰቱ ችግሮች ረገጥ ትኩረት ይሰጣሉ :					
19	Privacy at ATMs are good, በኤቲኤምባንኮች ማጠቃለያ ትኩረት ይሰጣል :					
20	The bank provides sufficient advice about ATM Usage and Security. ባንኩ ለኤቲኤምባንኮች ጥቅም ላይ የሚውል ማረጋገጫና የሥነ ምግባር ማረጋገጫ ረገጥ ላይ ትኩረት ይሰጣል :					
21	There is sufficient security at ATM stations በባንኮች ላይ ተጠቃሚዎችን የሚያስጠበቅ የሥነ ምግባር ማረጋገጫ ረገጥ ላይ ትኩረት ይሰጣል :					
22	The employees are friendly in dealing with customers የባንኩ ሰራተኞች ተጠቃሚዎችን ለማረጋገጥ ጥሩ ግንኙነት አላቸው :					
23	ATM Fees are fair(free) የኤቲኤምባንኮች የአገልግሎት ክፍያ ተመጣጣኝ ወይም የለም :					
24	ATM card application process were easy የኤቲኤምባንኮች አገልግሎት ለማግኘት የሚያስፈልገው ማረጋገጫ ረገጥ ላይ ትኩረት ይሰጣል :					
25	Employee of the bank are easily accessibility to Solve ATM Issues. የባንኩ ሰራተኞች ከኤቲኤምባንኮች ላይ ለሚከሰቱ ችግሮች ረገጥ ትኩረት ይሰጣሉ :					

IV. General Customer feelings about OIB ATM Service (አጠቃላይ ሚዛን ላይ ያለውን አገልግሎት ለጠቀሱት ጥያቄዎች ምልክት ያድርጉ)

Please put right mark (√) for response of your feeling about the question provided. (እባክዎ ወይንም ለተጠቀሱት ጥያቄዎች ምልክት ያድርጉ።)

1. OIB's ATM service is providing me banking service satisfaction up to my expectation?
 አገልግሎት ኢንተርናሽናል ባንክ በሚሰጠው አገልግሎት ደረጃ ለግሎት እኔ በምጠበቀው ደረጃ ላይ ያለውን ግንኙነት ያሳያል፡፡

- Very disagree በጣም አልስማማም Disagree አልስማማም
 Neutral (አይታወቅም) Agree (አስማማለሁ)
 Strongly Agree (በጣም አስማማለሁ)

2. How do you rate your overall satisfaction with OIB ATM service?
 በአጠቃላይ አገልግሎት ኢንተርናሽናል ባንክ በሚሰጠው አገልግሎት ደረጃ ለግሎት እርካታዎችን ያሳያል?

- Very dissatisfied (እጅግ አልረካለሁ)
 Dissatisfied (አልረካለሁ)
 Neutral (አይታወቅም)
 Satisfied (ረካለሁ)
 Very satisfied (እጅግ ረካለሁ)

V. Part 4

Open ended question (other challenges and possible suggestion)

1. What are the three most frequently problem you face in using OIB's ATM service?
 (Please rank from 1 up to 3 according to their frequency.)
 የባንኩን አገልግሎት ማጠቃለያ ለግሎት እርካታዎች ምልክት ያድርጉ። እባክዎ ወይንም ለተጠቀሱት ጥያቄዎች ምልክት ያድርጉ።

2. What do you think needs to be done to improve the service you get through the ATM?
 ባንኩምን ቢያደርግዎ ኤቲኤምማክኖችዎ አገልግሎትማክሻል ወይም በለጠጥሩ ማድረግ ያለ ባቸውን ዝርዝር ነገሮች ይጥቀሱ

Thank you very much

እና ማከግናለን፡፡

Annex 2- Interview questions for e-banking department director.

INTERVIEW QUESTIONS FOR SURVEY STUDY

ADDIS ABABA UNIVERSITY COLLEGE OF BUSINESS & ECONOMICS

DEPARTMENT OF MANAGEMENT, EMBA PROGRAM

1. What are the challenges/problems you face while providing ATM service in Addis Ababa?
2. What are the factors contributing to OIB ATM service problems in Addis Ababa?
3. Does the bank think ATM service has given more satisfaction to customers than ordinary banking and does it reduced the frequency of branch visits?
4. What is the reason for persistent complaints from customers as regards ATM service in Addis Ababa?
5. What are the possible solutions to ATM service challenges in Addis Ababa?

Annex 3- ATM Service quality attributes statistics

ATM Service Attributes	Mean	Std. Deviation	N	Quality Dimension
The bank has sufficient number of ATMs per ATM station.	2.32	1	200	Tangible
ATM machines are placed at convenient locations	2.71	1.041	200	Tangible
Corporate Brand Appearance on ATMs induced me	3.39	1.011	200	Tangible
ATM machines provide me readable Slips.	3.69	1.121	200	Tangible
ATM machines issues clean Notes	3.73	0.987	200	Tangible
ATM Stations areas and ATMs are Clean	3.74	0.882	200	Tangible
ATM provide me with wide range of services	3.12	1.158	200	Reliability
ATM Transactions are accurate.	2.99	1.02	200	Reliability
The Speed of ATMs are good	3.84	1.106	200	Reliability
ATMs will not be out of order	2.22	1.199	200	Reliability
ATM Systems are easily usability	3.83	0.975	200	Reliability
ATMs are easily accessed.	3.33	1.261	200	Reliability
Sufficient cash are availability in ATMs	2.77	0.986	200	Responsiveness
Lost ATM cards were quick replaced	2.66	1.048	200	Responsiveness
Less waiting time at ATMs	3.44	0.121	200	Responsiveness
Swallowed ATM cards were returned quickly	2.87	1.072	200	Responsiveness
Employee respond promptly with ATM problems	2.88	1.092	200	Responsiveness
Employee are effective in solving ATM problems	3.04	1.059	200	Responsiveness
Privacy at ATMs are good	3.5	0.94	200	Assurance
The bank provides sufficient advice about ATM Usage and Security.	3.14	1.256	200	Assurance
There is sufficient security at ATM stations	3.49	1.272	200	Assurance
The employees are friendly in dealing with customers	2.71	0.897	200	Empathy
ATM Fees are fair(free)	3.72	1.188	200	Empathy
ATM card application process were easy	2.67	1.118	200	Empathy
Employees of the bank are easily accessibility to Solve			200	Empathy

ATM Issues.	2.36	1.283		
-------------	------	-------	--	--