



**ST.MARY'S  
UNIVERSITY SCHOOL OF GRADUATE STUDIES COLLEGE OF  
BUSINESS AND ECONOMICS  
DEPARTMENT OF MARKETING MANAGEMENT**

**ASSESSMENT ON CUSTOMER ATTITUDE TOWARD ATM SERVICE  
IN ETHIOPIA: THE CASE OF COMMERCIAL BANK OF ETHIOPIA**

**BY –BINIYAME DEJENE  
(ID NO: SGS/0546/2009/A)**

**ADVISOR: ASFAW YILMA (PhD)**

**RESEARCH SUBMITTED TO SCHOOLS OF GRADUATE STUDIES  
OF ST.MARY'S UNIVERSITY IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF MASTERS OF ART IN  
MARKETING MANAGEMENT**

**ADDIS ABABA  
SEPTEMBER, 2018**

**ST.MARY'S UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES COLLEGE OF BUSINESS**  
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## **DECLARATION**

I, the under signed, declare that this thesis is my original work, prepared under the guidance of AsfawYilma (Ph.D). All sources of material used while working on this thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any type of degree.

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Name

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Signature and Date

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**APPROVED BY BOARD OF EXAMINERS**

_____	_____	_____
Dean, Graduate Studies	Signature	Date
_____	_____	_____
Research Advisor	Signature	Date
_____	_____	_____
External Examiner	Signature	Date
_____	_____	_____
Internal Examiner	Signature	Date

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## **ACRONYMS**

ATMs	Automatic Teller Machines
CBE	Commercial Bank of Ethiopia
CSE	Computer self-efficacy
OLS	Ordinary Least Square
PIN	Personal Identification Number
SERVPERF	Service Performance
UK	United Kingdom
USA	United States



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## **ABSTRACT**

*Automated Teller Machine (ATM) is one of the most popular delivery channels. This study explores customer's attitude towards ATM usage at commercial bank of Ethiopia. The main objective of this paper was identify the level of awareness of customers about ATM service, identify the challenges faced by customers while using ATM services and identifies factors that affect customer attitude towards ATM service. Causal research design was employed and data were collected from 297 customers. All the data have been analyzed by using the Statistical Package for Social Sciences (SPSS 16.0 version.). The findings of the study revealed that awareness of ATM banking, perceived usefulness, service satisfaction and ease of use had a positive effect on customer's attitude towards ATM usage. On the other hand perceived challenges had a negative relationship with customer attitude. Conversely, reliability didn't show any significant relationship with customer attitude. This finding is paramount useful among the banks as it will assist with their various strategic resource allocation decisions on their ATM banking solutions.*

**Key words:** *Customer Attitude, ATM, Commercial Bank of Ethiopia*

## CHAPTER ONE

### INTRODUCTION

#### 1.1. Background of the Study

Service quality is of utmost importance in analysing the performance of banks and their branches, since their survival depends on their service quality levels they provide (Portela&Thanassolis, 2005). Excellence in service quality is a key to achieve customer loyalty which is the primary goal of business organizations, due to the advantages of customer retention. Today, the increasing awareness among bank customers of their rights, changing demands and highly competition requires constant progress in service quality from the bank for their customers to stay loyal.

Many innovations have influenced the way organizations operate. Foremost among these innovations are electronic self-service technologies which are defined as services driven by information technology that enable customers to acquire a service without direct employee involvement, an example of which is automatic teller machines (ATMs)(Katono, 2009). Moreover, in the recent years there has been explosion of Internet-based electronic banking applications (Liao & Cheung, 2002). Beckett, Hewer and Howcroft (2000) states that the development of new forms of technology based self service sector has created highly competitive market conditions for bank providers. However, the changed market conditions demand for banks to better understanding of consumers' needs (Beckett *et al.*, 2000).

ATMs were initially only available at bank locations, though, by the early 1980s, shared ATM networks had been established in the US and ATMs were introduced at retail locations (e.g. Supermarkets and shopping malls). They appeared to provide a competitive advantage, but it diminished as more banks adopted the technology and ATM become a competitive necessity – forced to install them or risk loss of business. However, the replacement of human labour by automation certainly improved the traditional process. Since the ATM is one of the major IT investments in the banking industry and also it has the highest rate of use among all e-banking services, e-service quality factors in ATMs are explored. The researcher collected rich data on ATM use: in an attempt to measure importance of each indicator from the point of view of customers. Completely recognition of the clients' needs of ATMs helps to optimize infrastructure of hardware and software in ATMs.

Firms should manage the level of service quality they provide to their customers to improve their profitability and competitiveness. Electronic service quality has become a competitive weapon because it is easy to duplicate a bank product, but not a level of service. Therefore, by understanding the outcomes of automated service quality, benefits are available to banks in terms of enhancing the level of service quality, gaining competitive advantages, expanding their market share, increasing their innovation ability, and finally improving the bank performance. That is why ATMs represent a very important technology investment by banks.

A customer presented with a service implicitly (like ATM service) decides what aspects of that service are most important (Loudon and Della Bitta, 1988) based on some evaluative criteria. This evaluation is directly influenced by the attributes associated with that service (Dabholker, 1996). Put another way, customers judge service quality depending on a number of factors relevant to the context. Many attempts have been made to understand and measure e-service quality. Most of these efforts have focused on online shopping with limited attention to other service contexts (Li and Suomi, 2007). These endeavours have confirmed the existence of variability in the dimensions of e-service quality (Li and Suomi, 2007) which means that most measures of e-service quality that have been developed differ in dimensions and attributes.

Studies, both qualitative and quantitative, show that differences do exist in acceptance and usage levels of technologies across customer segments depending on their technology beliefs (Dabholker, 1996). These studies also suggest that similar differences are found in the evaluative processes used in judging electronic service quality. Automated service quality research has been limited to relationship management rather than the metrics of service quality (Buckley, 2003). Most of this research has been viewed from the service provider's perspective rather than the customer's perception of service quality. Thus, management needs to understand how the customer evaluates e-service quality as a foundation for improving that service (Zeithaml, 2002). Overall, literature calls for more research on the impact of information technology-driven services on the customer's perceptions of the service quality received.

Certainly the banking industry in Ethiopia providing of e-banking services is in developing due to lower infrastructure development in the country. However, there is an all immediate need to embark on capacity building arrangements and modernize the banking system by employing the state of the art technology being used anywhere in the world(Gardachew,

2009). With a growth of customer knowhow, little developments in telecom infrastructure and international relations, however, the current banking system is changing and starts providing some electronic banking services. Therefore, all banks operating in Ethiopia should recognize the need for introducing electronic banking system to satisfy their customers and meet the minimum technology based service quality requirements by their customers should understand the dimensions the customers' value most in e-banking services.

Commercial Bank of Ethiopia (CBE) is the largest commercial bank in Ethiopia as of June 2015; it had about 303.6 million birr in asset and approximately 67% of deposits and about 53% of all bank loans in the country. The bank has around 22,908 employees, who staff its headquarters and its 1000+ branches positioned in main cities and regional towns. The bank also operate two branches in south Sudan and is contemplating opening re-opening a branch in Djibouti, and opening branches in Dubai and Washington, DC , all serve the Ethiopian Diaspora. The bank is pioneer to introduce modern banking to Ethiopia and created for playing a catalytic role in the economic progress and development of the country. It is also the first bank in Ethiopia to introduce ATM service for local users. In line with the abovementioned concerns the purpose of this research is to assess customer attitude toward ATM service in commercial banks of Ethiopia.

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

In recent decades, investment in IT by commercial banks has served to streamline operations, improve competitiveness, and increase the variety and quality of services provided (Gabriel A, et al, 2015). The banking industry of our country, Ethiopia, is going through rapid and mounting development, where most of them have started to adopt various e-banking services. According to Yasuharu (2003), implementation of information technology and communication networking has brought revolution in the functioning of the banks and the financial institutions.

The ATM has been the most successful delivery medium for consumer of retail banking in most countries. Abor (2004) puts the ATM as the most widely used electronic delivery channel for banks in sub-Saharan African countries. Customers consider the ATM as an important service and this influences their choice of banks, and banks that have delayed the implementation of their ATM systems, have suffered irreparably to this service. Jordan and

Katz (1999) stated that the introduction of the ATM has made the distribution of banks services more efficient. ATMs have been able to entrench the one branch philosophy in country by being networked, so people do not necessarily have to go to their branch to do some banking. Before ATMs, withdrawals, balance inquiries, internal funds transfers, mini statement inquiry, among others, all required the face to face interaction between the consumer and the bank teller. Networking of ATMs has therefore increased banking services to customers. When customers evaluate the quality of the service they receive from a banking institution they use different criteria which are likely to differ in their importance, usually some being more important than others. While several criteria are important only a few are most important. These determinant attributes are the ones that will define service quality from the consumer's perspective (Loudon and Della Bitta, 1988).

In the current climate, competition in the banking industry is intense, with new financial service providers emerging all the time. Quality of service is seen more than ever as a key differentiator in the marketplace. The technology is dramatically changing how financial services are redesigned and delivered to consumers. The Ethiopian banking industry still relies on physical branches and commercial retail banking, but forces from the cost side as well as the customers' needs for better services, have pushed banks toward implementing technology based systems to reduce the cost of services and improving response time to the customer. There is a need, therefore, to uncover what the major technology based and related factors that heavily influence the satisfaction level of customers.

The research into e-banking service quality related to Ethiopia is limited in the marketing literatures. Despite the theoretical background underpinning the importance of automated service quality in building customer delight, trust, and commitment, empirical research is required to examine the extent to which automated service quality enhances or diminishes customer satisfaction in the Ethiopian automated banking context.

This study attempts to contribute to the banks and academician by identifying the major service evaluation criteria for ATMs by their customers on its verge of high distribution prospect and the future demand of e-payment system in the country, bridge the literature gap and find out how delivering a high-quality automated service could help banks to sustain a strong relationship with their customers. These days there are CBE provide ATM banking services. But there are some factors which affect customer satisfaction in electronic banking system (automatic teller machine service) during protest of this research. These are; Machine

out of order, Machine out of cash, No printing statements; cards get blocked; frequent breakdown of ATM service; unreliability of ATM service; lack of sufficient technicians who solve breakdown of ATM machine, lack of sufficient alternative system which substitute ATM service for the customer when temporary problem happen in the machine, lack of convenience ATM service, and Unknown charge. The existence of these problems may lead to dissatisfaction of customers and this problem motivated the researcher to undertake this study in order; therefore, in line with this research attempts to analyze the attitudes of customers to wards ATM service.

### **1.3.Objectiveof the Research**

#### **1.3.1. General Objective**

The main purpose of this study is to asses' customer attitude toward ATM service in Ethiopia In the case of commercial bank of Ethiopia

#### **1.3.2. Specific Objectives**

The specific objective of this study is to:

- To identify the level of awareness of customers about ATM service
- To identify the challenges faced by customers while using ATM services
- To identify factors that affect customer attitudetowards ATM service

### **1.4.Research Question**

The study tries to answer the following questions:

- What is the level of awareness of customers about ATM service
- What are the main challenges faced by customers while using ATM services
- What are the factors that affect customer attitude towards ATM service

### **1.5.Significance of the Study**

In Ethiopia, ATM banking is in its high prospect for expansion. Many banks are trying to install ATM stations at major cities. Including those who sign memorandum of understanding for their ATM network installation there are seven commercial banks in



Ethiopia who are working for ATM banking service rendering. The habit of using ATM for withdrawal of money, balance enquiry and transfer of balance is increasing from time to time. Therefore, identifying the important dimensions from the point of view of the customer will value invaluable first degree significance for these banks. Second, customers will be benefited from the result of the study because it is the researchers believe that banks will take the necessary measure to improve their service to the customers. As a third place, this study will benefit academicians and researchers as a benchmark for further study.

### **1.6.Scope of the Research**

The general objective of the study is to assess the e-service quality criteria's inCBE; however, it emphasized in Automatic Teller Machine service quality. This is mainly because of the absence or rare presence of real e-services like mobile banking and internet banking other than ATM banking service that is on verge of its renaissance. Furthermore, from all electronic techno based banking services; most customers prefer ATM banking due to many reasons. First, the infrastructure for other e-services is not yet well developed. Second, most of teller based banking services are given for only eight hours a day. Therefore, ATM banking service quality will be a focus area in this research. From all ATM stations distributed in the country those stations located in Addis Ababa are in focus to keep the course of the research flow in control.

### **1.7.Organization of the Study**

The research is organized into five chapters. The first chapter provides brief introduction to the study, explains the research problem, and discusses objectives of the study, research questions, and significance of the study. The second chapter reviewed theories and previous researches done. Chapter three presents the design of the research-methodology adopted in the study which covers the research design, population and sampling technique, data source and data collection techniques and methods of data analysis techniques. Chapter four summarized the results/findings of the study, and discusses the findings linked with the literature review as well as summary. Finally the last chapter which is Chapter five includes the conclusions and recommendations of the study.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### 2.1.Theoretical Review

##### 2.1.1. Customer Attitude

Customers' attitude can be defined as an evaluative statement of an individual's feeling and thought which could be favorable or unfavorable towards certain events in his environment (Robbins and Judge, 2012). Meanwhile, attitude towards behavior refers to the bank customers' predisposition towards electronic banking (ATM) based on positive or negative feeling generated over time. The concept of attitude is psychological in nature due to the fact that it can only be generated from the mind of an individual (Lee, 2012). However, the predisposition of customers' attitude towards behavior or use of electronic related systems such as ATM services can be defined as positive or negative feeling that an individual has towards certain action (Labianca, 2014). Attitude towards behavior can be summarized into two concepts; positive and negative. Therefore, the idea of developing positive or negative attitude towards behavior depends largely on the banking sector ability to improve customers' trust towards the use of its products and services (ATM). Thus, bank image and reputation depend on customers' satisfaction of the banking products and services (ATM). Rose and Fogarty (2006) revealed that perceived usefulness and ease of use directly or indirectly are factors affecting bank customers' attitude towards self-service banking such as ATM. Similarly, Moutinho and Smith, (2000) indicated that bank customers' attitudes towards automated banking have indirect effects on bank customers' loyalty. Also, consumers' motives predetermine customers' attitudes and behaviors towards different banking technologies such as ATM. The argument of the above studies shows that the attitude towards behavior could be mediated by different factors.

As the service company invests money in technology and in informing, convincing, educating and training the customer, it is important that customers keep using the service option. As satisfaction is said to have more antecedents than service quality, we ought to gain better insight into customer preferences and the relevance of service quality by comparing the relationship between satisfaction and preferences with the relationship between service quality and preferences for Technology-Based Self-Service. Some factors impacting on customer's preferences to participate in technology-based service systems may be easily explained in

terms of satisfaction. Satisfaction is recognized as having more antecedents, being a wider attitude and a better predictor of behavior, and given that we know very little about how influential service quality is in evaluating and forming preferences for Technology-Based Self-Service options. Drawing on human-factor research, their basic viewpoint is that interaction with a computer involves three basic human processes (Foley et al 1990).

### **2.1.2. ATM Technology**

Most inventions have happened due to sheer necessity and ATM is one of them. The history of ATM is full of interesting facts of which some are known and others unknown. According to the website [www.engineersgarage.com/invention-stories/atm-history](http://www.engineersgarage.com/invention-stories/atm-history), it is believed that the history of ATM started when an Armenian named Luther George Simjian was forced to move to USA in the year 1920, under the account of Armenian Genocide. He owned to his credit the invention of a portrait camera and then he later rolled out the formulated idea of ATM. Confident of his invention, he persuaded Citibank to run his product on a six month trial basis. Soon enough, he was disappointed with the performance and the lack of users and concluded that ATM was a wasteful addition to personal banking.

The lack of demand for the ATM finally forced him to take a back seat. During this period it was very clear that the time was not right for this concept to have been accepted generously (Omari, 2012). Simjian clearly lost out on the success and fame and the same was passed on to two other gentlemen, John Shepherd-Barron and Don Wetzel. John Shepherd-Barron was a Scottish national born in India. Later he relocated to Britain and pursued his education from the University of Edinburgh, and at Trinity College, Cambridge. After returning empty handed from a bank, Shepherd-Barron was disappointed to have had no option than to wait till the bank opened the next working day. And thus, in a similar fashion like Archimedes, Shepherd-Barron claims to have hit his interesting moment while taking a bath. A self-sufficient cash dispensing machine was what he was thinking about. And soon the ATM was invented in the early 1960s. The invention of a self-sufficient cash dispensing machine was his second and successful attempt at inventions. Prior to this invention he had invented an instrument to scare away seals (fish eating mammals) at his Scottish Salmon farms. Unfortunately, this device instead of deterring the seals attracted them, and was thus a failure. The same website also shows that the ATM machine gained Shepherd-Barron an ever-lasting recognition in the banking world and paved the way for hi-tech banking techniques, online bank accounts, Personal Identification Number (PIN) and chip security technology (Omari,

2012). The four-digit internationally accepted standard PIN was also invented by him. Earlier, he had a six-digit Army serial number in his mind but later his wife suggested for a shorter PIN as it would be easy to remember.

Finally in 1967, the first ATM that dispensed paper currency round the clock (24 hour basis) was unveiled. The ATM was installed outside a Barclay's bank in North London. The ATM machine accepted and generated money through cheques impregnated with certain chemicals. A mild radioactive substance, Carbon 14 was used for detection by the machine. Once the PIN was given, the machine gave out the cash. This radioactive substance had no ill effects on the health of users and Shepherd-Barron claimed that a user would have to eat about 136,000 cheques to suffer any kind of ill-effects. Reg Varney, a famous TV sitcom popular became the first person to use the ATM in the year 1967 and withdrew about 10 dollars. The amount seems too less for us, but this money was enough for a complete night out spent on the tiles in London, inclusive of dinner, drinks, a show and a taxi-ride back to home. While this prototype device originated by Shepherd-Barron had started functioning, various parallel developments were happening in different parts of the world. The same website further shows that an American engineer Donald Wetzel of Docutel engineered the Docuteller ATM which was declared as the first modern magnetic stripe machine. It recognized magnetically encoded plastic (credit cards) and not the usual paper cheques.

The development of ATM has gone through many stages; it started from its baby stage in the late 1930s and then geared up for longer runs in the 1960s, and finally a matured and stable stage that we see today. Undoubtedly, most of the ideas and patents contributed for makeover of the ATM from time to time form the backbone of what was initiated as "holes in the wall" (Omari, 2012). Today, ATMs hold a strong foothold in the world, offering everyone a better access to their money, be it in any corner of the world. There are about 1.8 million ATMs in use around the world with ATMs on cruise and navy ships, airports, newsagents and petrol stations. ATMs too have been categorized as on and off premise ATMs. On Premise ATMs are capable to connect the users to the bank with multi-function capabilities. Off premise, ATM machines on the other hand are the "white label ATMs" and are limited to cash dispense. The developments have not stopped; the contactless technology is on its rise. The same website concludes that Shepherd-Barron continued to take inimitable and lively interest in technology well even in his old age and had foreseen a future where plastic cards too would be numbered. For his excellent and unforgettable contributions to financial

technologies, Shepherd-Barron was offered the OBE award in the year 2005. In the year 2010, he took his last breath and left behind his legacy of technological advancements.

### **2.1.3. Factors Affecting Customer Attitude Towards ATM**

#### **2.1.3.1. Perceived Usefulness**

The concept of usefulness refers to the feeling developed by an individual in relation to a given phenomenon. Individual tends to attach positive or negative feeling towards the usefulness of an event or phenomenon such as an electronic system. Therefore, customers' perceived usefulness could be defined as the degree in which the user believes that using the information system can improve his/her work performance (Wu, Tao and Yang, 2008). Customers need to develop positive feeling towards the usefulness of electronic related system such as ATM in order for the banking sector to be more productive. Hence, customers' perceived usefulness of electronic banking (ATM) services will motivate them to patronize it more. Thus, it becomes imperative for the banking sector to provide more quality and accommodative atmosphere in relation to their products and services for customers' patronage (Auka, Bosire and Matern, 2013).

According to the TAM, perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance (Davis, 1989). Perceived usefulness is defined as the extent to which an individual believes that he or she would benefit from using mobile banking. The importance of perceived usefulness has been widely recognized in the field of mobile banking services (Bhatti, 2007; Guriting&Ndubisi, 2006; Kim, Chan & Gupta, 2007; Laforet& Li, 2005; Liao & Cheung, 2002; Polatoglu&Ekin, 2001). Previous research has consistently argued that there is a positive relationship between perceived usefulness of mobile banking, intention and attitude toward mobile banking and mobile banking usage (Bhatti, 2007; Davis et al., 1989; Kim et al., 2007; Pavlou, 2003; Venkatesh, 2000; Venkatesh& Davis, 1996, Venkatesh& Morris, 2000). For example, Chau and Lai's (2003) examined the contributing factors towards the consumer's adoption of internet banking and determined that perceived usefulness was found as an important factor in fostering a positive attitude towards accepting the internet banking services. Also, within mobile banking literature, a significant positive relationship between perceived usefulness of mobile banking and the usage of mobile banking is found (e.g., Davis, 1989; Davis et al., 1989; Gefen, Karahanna& Straub, 2003; Venkatesh& Morris, 2000).

Folorunsoet *al.* argued that customers' perceived usefulness of electronic banking (ATM) depends on its state of being important when the need arises. Similarly, Al-Gahtani revealed that customers' perceived usefulness coincides with the degree to which an individual believes that using a particular system would enhance his/her both social and business activities. Godoe and Johansen indicated that customers' perceived usefulness of technological innovations significantly contributes in determining its adoption and usage(Bhattacharjee, 2001).Meanwhile, Bhattacharjee argued that customers' willingness to perform a transaction on electronic banking is considered as perceived usefulness. However,perceived usefulness as the user's subjective probability that using an electronic related system will increase his/her expectations(Gong, Xu and Yu, 2004).

Lee (2008) categorized the perceived benefits of electronic banking into direct and indirect benefits. Direct advantages refer to immediate and tangible benefits that customers would enjoy by using online banking. For example, customers can benefit from a wider range of financial benefits, faster transaction speed, and increased information transparency. The wider range of financial benefits includes, the lower transaction handling fees, higher deposit rates, opportunities to win prizes and extra credit card bonus points. E-banking provides faster transaction speed which obviously means that time can be saved. Also, online banking does not need paper documents the processing of which can give rise to errors and delays, and which also requires more personnel. Online banking automates this process by mediating transactions through websites and electronic data interchange, and can also reduce the need for customers to communicate with bank staff regarding transaction details because they can be obtained at a website. During the transaction, online banking allows customers to monitor contractual performance at any time, or to confirm delivery automatically. In other words, more relevant information is immediately available and transparent to customers. According to Lee (2008), indirect advantages are those benefits that are less tangible and difficult to measure. For example, online banking allows customer to perform banking transactions anywhere in the world and enjoy 24-hour service, as well as offering customers more investment opportunities and services, such as stock quotations and news updates.Pikkarainen*et al.*,(2004) notes that customers are satisfied with a system that meets their needs and hence a system's success can be measured by how well it satisfies customers' needs.

### **2.1.3.2. Perceived Ease of Use**

Perceived ease of use is defined as the degree that an individual believes it is simple to use electronic related systems. Likewise, Davis, Bagozzi and Warshaw (1989) argued that perceived ease of use is the degree to which a customer agrees with the notion that using electronic systems such as ATM services for banking transaction is easy. Similarly, Zeithaml, Parasuraman and Malhotra (2002) stated that the level to which an innovation is easy to understand or use could be considered as perceived ease of use. Consult noted that perceived ease of use refers to the ability of customers to experiment with electronic banking in order to evaluate its benefits. Other than that, he also affirmed that the factors of growth in electronic banking are determined by the customers' perceived ease of use of the system. Previous research conducted on electronic banking revealed that customers' perceived ease of use influenced directly or indirectly on bank customers' usage of electronic related systems such as ATM services (Eriksson and Nilsson, 2005). Chen and Barnes (2007) were adamant that perceived ease of use greatly influenced customers' acceptance and use of electronic banking (ATM). Customers' perceived ease of use of ATM services refers to how clear and easy the system is in conducting a banking transaction. Similarly, customers' perceived ease of use demonstrates the degree to which electronic banking (ATM) is seen as being easy, not too difficult to understand, learn or operate (Kigongo 2011). Extensive research over the past decade provides confirmation of the significant effect that ease of use has on perceived usefulness (Agarwal & Prasad, 1999; Davis et al., 1989; Hu, Chau, Sheng, & Tam, 1999; Venkatesh, 1999, 2000; Venkatesh & Davis, 1996, 2000; Venkatesh & Morris, 2000). Mobile banking systems must be both easy to learn and easy to use in order to prevent the using problems of mobile banking system. In this study, it is argued that the mobile banking ease of use is one of the motivating factors of perceived usefulness of mobile banking.

Perceived ease of use in e-banking may be described as the physical or mental effort that customers exert or are likely to exert during e-banking. Customers' perception of "ease of use" regarding e-banking is predicted by a number of factors. For example, studies by Al-somali *et al.* (2009), Pikkarainen *et al.* (2004) and Sathye (1999) have all found significant positive relationships between the quality of internet connectivity and customers' perception of "ease of use" regarding e-banking. Additionally, perceived ease of use in e-banking is also more likely to be influenced by computer self-efficacy. Self-efficacy "refers to belief in one's capabilities to organize and execute the course of action required to produce given

attainments'' (Bandura, 1997). It is thought to result from past accomplishments, vicarious experience, verbal persuasion, and emotional arousal (Bandura, 1977). The term computer self-efficacy has been applied to studies involving IT systems. It was derived from the social-psychological concept of self-efficacy which postulates that an individuals' perception of his/her abilities affects his/her actual performance. Computer self-efficacy (CSE) is defined by Scott and Walczak (2009:221) as a person's judgment of his or her ability to use a computer system. Torkzadeh and Dyke (2002:494) note that computer self-efficacy is a pivotal concept that aids our understanding of technology acceptance, implementation, and use. Compeau and Higgins (1995) note that self-efficacy has a significant influence on user's anxiety towards using computers and their actual computer use. Hsu, Wang and Chiu (2008) conducted a survey on 207 MBA students from an AACSB accredited University in the Midwest of the United States of America. Their analysis revealed a significant and positive relationship between self-efficacy and perceived usefulness of computer software.

### **2.1.3.3.ATM Awareness and Usage**

In any service industry, it is important to investigate customers' awareness and usage in investigating customer behavior. The assessment of customers' awareness and usage of products/service has become more important as banks must not rely solely on indigenous banking styles as a strategy to secure customers' allegiances but they should also emphasize providing quality and efficient product and services (Dusuki& Abdullah, 2007). In a service business like banking, perception of quality emerges from both awareness and usage of the products/service. The reason is that unlike the quality of tangible products, quality of banking products/services depends on customers' experience with products/service. Banking products/services are experienced while they are produced (Metawa&Almossawi, 1998). In turn, service quality is highly related to (even though not equivalent to) customer satisfaction. Given the importance of awareness and usage in shaping customer behavior, Metawa and Almossawi (1998) measured customer awareness and usage of various Islamic bank products/services in context of Bahrain.

Organizations are aware that service quality provides strategic competitiveness in dynamic business environment. Literature provides significant relationship between service quality and Banks' performance based on improved productivity, increased market share, enhanced customers' attraction and loyalty, improved staff morale, and sustained profitability



(Jabnoun& Al-Tamimi, 2002). Research has found that service quality in banks is critical for satisfaction and retention of customers (Jabnoun& Al-Tamimi, 2002). Keeping in view the significance of service quality as a means of competitive advantage and organizational sustainability, the banks are pursuing multidimensional approaches to improvement in service quality to attract and retain customers.

According to Castleberry and Resurrecion (1989), the physical location of banks' delivery channels influence perception of customers about quality. Consistent delivery of services, physical dimensions and staff interaction with customers, trustworthy processes and procedures positively affect delivery of services quality (Sureshchandar et al., 2002). Pleasant customer interaction with staff significantly affects customers' perception of quality (Yavas et al., 1997). In response to this requirement, banks have initiated flawless delivery processes to reduce delivery timings to improve service quality.

Electronic banking is a revolutionary change in the banking sector as it is noted to have significantly improved the service provided to customers (Ashby 2005). However, several barriers and factors have slowed down broad acceptance of electronic banking by customers. Papazafeiropoulou, Pouloudi and Doukidis (2002) identified lack of awareness as one of the most frequently reported barriers in the adoption of electronic commerce, as people/firms do not seem to realize the opportunities offered by electronic commerce. They base their argument on the premise that all stages of the innovation diffusion process (that is, knowledge, persuasion, decision, implementation, and confirmation) are related to an information-need that users of the innovation have in order to move from one stage to another. Thus, awareness creation and information provision are considered to be very important elements for the adoption of an innovation. Sathye (1999:325) agrees with the afore-stated argument by stating that the use of online banking services is a fairly new experience to many people. Therefore, low awareness is a major factor preventing people from adopting online banking.

Ashby (2005) conducted a study into electronic banking services in the UK and noted that over half of all non-internet bankers (52%) said they did not bank online because they were happy with the way they currently bank. Furthermore, only 28% agreed that Internet banking was the easiest way to bank (compared with 92% of Internet bankers). These findings suggest two possible scenarios. Firstly, it may suggest that the benefits that Internet banking

customers identify and experience do not apply to those who do not bank online, that is, that their circumstances are different. Secondly, it may suggest that many non-internet bankers are not aware of or do not appreciate the benefits of online banking. Additionally, in an empirical study of Australian consumers, Sathye (1999) found that consumers were unaware of the possibilities, advantages or disadvantage involved with online banking.

#### **2.1.3.4. Customer Satisfaction**

Customer satisfaction is measured at the individual level, but it is almost always reported at an aggregate level. It can be, and often is, measured along various dimensions. 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. The state of satisfaction depends on a number of both psychological and physical variables which correlate with satisfaction behaviors such as return and recommend rate. The level of satisfaction can also vary depending on other options the customer may have and other products against which the customer can compare the organization's products (Parasuraman, 2000).

Work done by Parasuraman et al. between 1985 and 1988 provides the basis for the measurement of customer satisfaction with a service by using the gap between the customer's expectation of performance and their perceived experience of performance. This provides the measurer with a satisfaction "gap" which is objective and quantitative in nature. Work done by Cronin and Taylor propose the "confirmation/disconfirmation" theory of combining the "gap" described by Parasuraman et al. as two different measures (perception and expectation of performance) into a single measurement of performance according to expectation. Satisfaction is a person's feelings of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations said by Kotler (1997). Brown (1992) defines customer satisfaction as: The state in which customer needs, wants and expectations throughout the product or service's life are met or exceeded resulting in repeat purchase, loyalty and favorable worth-of mouth.

According to Jones and Sasser (1995), four basic elements affect customer satisfaction. They are: the basic elements of the product or service, basic support services, a recovery process for counteracting bad experiences, and extraordinary service. There are many definitions of the key elements of the services, but this one is considered appropriate in the context of care

or after sales services provider and is viewed as a function of all previous transaction-specific satisfactions (Teas, 1991).

In an ideal situation, both the transaction-specific satisfaction and overall satisfaction should be assessed. Transaction-specific satisfaction directly influences a customer's repurchase intentions, but only when overall satisfaction is low. In such a case, consumers allow their evaluation of the last service encounter to influence repurchase decisions. When a customer has had a bad experience, the service manager may wish to remind the customer of his/her previous overall satisfaction. Particularly at the early stages of the customer relationship, high levels of transaction-specific satisfaction are particularly important (Jones & Suh, 2000). A consumption-system that consists of a bundle of goods and services that are consumed over time in multiple consumption episodes conceptually has three constitutive elements: attribute-level evaluations, satisfaction, and behavioral intentions. Transaction-specific and cumulative satisfactions are distinguished, as consumption occurs as a series of encounters between consumption system and the consumer. In the case of automotive consumption, product and services are the key subsystems of the consumption-system (Mittal et al., 1999).

The relationship between attribute-level evaluations and overall satisfaction is dynamic and shifts over time. High levels of customer satisfaction resulted from the delivery of satisfiers. To delight a customer, a company's performance in hygiene factors must be adequate and combined with high performance in satisfiers (Naumann & Giel, 1995; Peck et al., 1997). According to Finkelman and Golland (1990), companies need to develop a detailed understanding of customers' expectations in each stage of their ownership experience, develop supporting procedures and establish evaluation and incentive systems in order to satisfy customers. Wellington (1995), divides customer satisfaction elements into product, sales, after-sales, location, time, and culture. The satisfaction elements of after-sales include maintained interest and complaint handling. Complaint handling should be responsive and keep the customer advised through the process; a customer should feel appreciated. A customer's reordering should be made easy and it should build on existing information about the customer.

The importance of delight has additionally been recognized in the area of quality by Deming (1986), who encourages companies to do more than merely satisfy customers. Delighting the customer can be a profitable business practice. The meaning of product and service features

to consumers is divided into product attributes, satisfiers, and delights. Product attributes are central to the basic function of the product and they only dissatisfy as the consumer expects their presence. Satisfiers are satisfying in the sense that high levels of such attributes have the potential for further satisfaction beyond that provided by the basic function of the product. Delights are unexpected and enjoyable. There are two types of delights: those that raise consumer expectations and those that are appreciated on a onetime basis and may be sought again. In cases of assimilated delight, it is likely to raise consumers' expectations. In this case if the loyalty effect or a consumer attraction can be improved, the delighting feature could be considered. In the case of transitory delight, the firm benefits only minimal as the delight is soon forgotten. Expectations are likely to be raised after delight, and delighting the customer will be more difficult in the future (Farson, 1997, Rust & Oliver, 2000).

A customer is delighted (Friday & Cotts, 1995) once the service that is delivered exceeds the customer's expectations. Even if a customer's demands or expectations are unrealistic or inappropriate, the customer makes the buying decisions. Customer expectations can be exceeded in two ways: in the first, the consumer says that the product was better than expected, but not surprisingly, and in the second, the level of performance is surprisingly positive (Rust & Oliver, 2000). Although expectations become higher, the supplier may benefit from the delight, because if the competitor is unable to copy the delight program, it will be affected more severely than the focal supplier will. If the competitor can easily copy the delight program, there is no advantage to be gained, as the situation resembles a "Prisoner's Dilemma Game". In such a scenario, profits decrease and all suffer. Therefore, it is essential for businesses to effectively manage customer satisfaction. To be able to do this, firms need reliable and representative measures of satisfaction. In researching satisfaction, firms generally ask customers whether their product or service has met or exceeded expectations. Thus, expectations are a key factor behind satisfaction. When customers have high expectations and the reality falls short, they will be disappointed and will likely rate their experience as less than satisfying. For this reason, a luxury resort, for example, might receive a lower satisfaction rating than a budget motel even though its facilities and service would be deemed superior in 'absolute' terms.

Recent advances in technology have created a surge in technology-based self-service (Dabholkar et al., 2003). Oliver (1980) defines customer satisfaction, as Satisfaction is the customer's fulfilled response. It is a judgment that a product or service feature, or the product

or service itself, provides a pleasurable level of consumption-related fulfillment. According to Yi (1990), customer satisfaction is a collective outcome of perception, evaluation and psychological reactions to the consumption experience with a product and also states that many studies found that customer satisfaction influences purchase intentions as well as post-purchase attitude. Johnson, (1993) says in his book that, a satisfied customer will recommend excellent products and services to their friends and help the enterprise to increase its market share and profitability'. Johnson also examined the factors that influence customers' satisfaction on ATM services includes costs involved, and the efficient functioning of ATM. Anderson, Fornell and Lehmann, (1994), the researchers of customer satisfaction said that the bank's ability to deliver the factors like convenience and accessibility will probably impact on customer satisfaction. Moutinho (1992) argued that ATM facility resulted in speed of transactions and saved time for customers. Lovelock (2000) identified that secured and convenient location, adequate number of ATMs, user-friendly system, and functionality of ATM are the important factors for the customer satisfaction. Based on the prior studies, Al-Hawari and Ward (2006) compiled a list of five major items about ATM service quality that include convenient and secured locations, functions of ATM, adequate number of machines and user-friendliness of the systems and procedures. Most early studies found location convenience influences most on bank selection (Kaynak&Kucukemiroglu, 1992).

According to Leeds (1992), the key dimensions of automated banking service quality include reliability, ease of use, privacy, convenience and responsiveness. Wolfenbarger&Gilly, (2003) argue that reliability is the strongest predictor of customer satisfaction. Much of the researches say that there is an association between customers' usage pattern and the demographic profiles. Ajay (2008) in his study on Technology led customer service has found that the customers would expect security of money, growth, safety and respectful listening from their banks. ATMs are used no longer for dispensing money only but also offer more information and services. In customer relationship management in banking sector, Sarangapani and Mamatha (2008) found that the introduction of ATMs, Internet banking and Credit cards help the customers to carry out their transaction in an easy way. ATM helps the customers to transact within a short time. Milligan (2007) mentioned that age is the main factor that determines ATM services in Coimbatore City.

Many studies had investigated the effects of demographic profile such as age, educational qualification, sex of the customers and the attitude towards the acceptance of new

technologies (Al Somali et al., 2008). The research on the relationship among young people and financial institution established that these people have their accounts in more than one bank, because of need for convenience, requirement of more services offered, and 24- hours' availability of ATM and location. Initially they were required to focus more on perception of a customer, whether he is willing to adopt the technology or not (Dabholkar, 1994). It has been established through research that customer's response to a specific technology depends upon the service quality that is provided (Parasuraman et al., 1994).

### **2.1.3.5. Reliability**

Reliability refers to the outcome in use of new technological self-service options, whether it's reliable and perfect, or is there any risk involved in this process. Ram.S (1989:24) suggests four types of risks that make customer more resistant to innovations in general: Functional risk: the fear of performance uncertainty, Economic risk: the fear of economic loss

3. Social risk: the fear of social obstruction, Psychological risk: the fear of psychological discomfort. In this study, social and psychological risks were treated as matters of personality rather than characteristics of the technology. Parasuraman et al (1985) found that the safer bank customers feel when conducting their business at an automatic teller, the more likely they are to use the ATM. Reliability has a positive effect on service quality.

## **2.2. Empirical Review**

Yt and Gph, (2015) explores the factors affecting the customer attitudes towards ATM usage in the Anuradhapura district. The main objective of the paper study was studying that what the factors are affecting to the customer attitudes towards ATM usage in Anuradhapura District, Sri Lanka and to identify the relationship between customer attitudes and ATM usage level. The authors validate a measurement model for customer attitudes towards ATM usage based on different models and theories. All of the concepts, ideas, opinions and theories that related to the five factors, namely; security, ease of use, trust, perceived usefulness and risk have been chosen. These variables have been tested to explore the relationship between customer attitudes and ATM usage. The Author also presented a theoretical framework. Around 384 respondents participated in this study through a structured questionnaire. The key findings revealed that demographic factors including age, Gender, education level and occupation have a relationship with the ATM usage. Five factors were found as influence the customer attitudes towards ATM usage. And also there is a positive

relationship with attitudes towards ATM usage and Actual ATM Usage level. This finding is paramount useful among the banks as it will assist with their various strategic resource allocation decisions on their ATM banking solutions.

Opoku, (2015)examine customers' attitude towards ATM services at Ghana Commercial Bank (GCB) Limited. The study was quantitative in nature and adopted descriptive and explanatory research approach. The population for the study consisted of all customers of GCB in Ashanti region of Ghana. Using convenience sampling technique, 30 customers each were selected from the five branches used for the purpose of this study. Structured questionnaires were used to collect primary data and analysis was done using frequencies, percentages, mean, standard deviation, one sample t-test, and binary logistic regression. The study revealed that four demographic variables of customers significantly affected the use of ATMs at GCB. These were gender, education, occupation, and level of income. The type of account operated (be it savings or current), did not significantly influence the usage of ATM services. The study indicated that, the majority of the customers had GCB's ATM card. And they mostly used either once or twice a month. The customers of GCB were satisfied with the existing ATM locations, speed of response, convenience of service, 24/7 service accessibility, the process of money withdrawn under ATM scheme, and the easy of login. The major challenges faced by customers when using GCB's ATM were, unreliable network system, machine out of order, valid limit on amount of cash withdrawn, wrong debits, reduction in balance without cash payment, card gets blocked or locked up, and machine out of cash. The study found out that males were more likely to use ATM services more than females. The researcher recommends that, for banks to fully realize the potential benefits of customers using its ATM facilities, it must have special promotional packages to attract females unto the ATM service.

Kibona and Mgaya, (2015) analyze the Attitude Customers Hold towards the Use of Automated Teller Machines (ATMs) A Case of Iringa Municipal Tanzania; the aim of this study was to analyze the attitude customers hold towards the use of ATM services. Automated Teller Machine (ATM) is a cash dispenser that enables bank customers to enjoy banking services without coming in-contact with bank tellers (cashier). Since the introduction of ATM in Tanzania, no bank has conducted research on the customer satisfaction towards the use of ATM services to its customer. A total of 110 customers holding ATM cards were

surveyed regarding the services offered by bank's ATM and their satisfaction. Data collected after survey were analyzed using SPSS and excel tools, and then percentage analysis were done to find the key contributors towards customer attitude. The study revealed that, there is great connection between gender, age, marital status, occupation, and location of the ATM towards the attitude customers hold on the use of ATM services.

Mwihaki, (2015) analyze the determinants consumer attitudes on the uptake of credit cards by customers of commercial banks within Kitengela Township. The study applied descriptive research design. The target population was the customers of Commercial Banks offering credit cards in Kitengela Township. A sample size of 70 customers was selected that is 10 customers from each Commercial Bank under the study. A quantitative approach was used to collect data. A questionnaire was administered to respondents at the Banking halls. The study found out that there is high level of awareness of credit cards as indicated by a mean of 4.92. The study also found out that it is cumbersome to shop with a credit card at a retail outlet as demonstrated by a mean of 4.79. The interest rates charged on credit cards was considered high as indicated by a mean of 4.12. Majority of the respondents disagreed that Banks give complete and sufficient information to consumers. This was noted so by the mean calculated in the analysis of 2.04. All this factors influenced attitude towards credit cards which eventually influenced adoption of credit cards. There was found to be a positive relationship between attitude and adoption of credit cards services. Attitude influence the way people behave and are therefore important for marketers to study them so as to understand how consumers behave. Credit cards contribute positively to customer satisfaction and also they are a good source of generating income it is hence important for Commercial Banks to understand their attitude so as to influence their uptake. Commercial Banks hence need to improve on Awareness, Knowledge, Feelings, and Attitude towards adoption of credit cards in order to ensure efficiency in the uptake of credit cards. The researcher recommended further research so as to address the limitation of the study which was only conducted in one urban centre and also involved seven Commercial Banks while Kenya has got forty three Commercial Banks. The study also recommended that Commercial Banks should collaborate with Retail companies to improve customer experience while using credit card Point of Sale machines. Credit cards substitute loans hence there is need for further research to be done on the impact of credit cards on the loan volume granted by the Commercial Banks.

Bada and Karupiah, (2014) assess factors influencing customers' trust in the use of Automated Teller Machine (ATM) Services in Sokoto State, Nigeria. The use of automated



teller machine (ATM) services by bank customers in Sokoto State, Nigeria depends on the level of trust they have towards its operating nature. The positive or negative perception that bank customers' develop towards trust tends to determine their level of ATM usage. Therefore, this article adopted the following factors (attitude towards behavior, intention behavior, actual usage, perceived ease of use and usefulness) from technology acceptance model (TAM) to assess their influence on customers' trust in the use of ATM services in Sokoto State, Nigeria. Correlation analysis was conducted on 300 customers of some selected banks in Nigeria. The result shows that attitude towards behavior, intention behavior, actual usage, perceived ease of use and usefulness has a significant and positive relationship with customers' trust in the use of ATM services in Sokoto State, Nigeria

Khawaja and Manarvi, (2009) evaluating customer perceptions towards ATM services in financial institutions; A case study of Pakistani Banks. Use of Automatic Teller Machines (ATMs) has seen a tremendous rise in the past few years in Pakistan. The investigation was based on establishing reasons of this increasing trend from the perspective of new technologies being introduced by service sector organizations especially banks in this country. The research was based on lessons learnt in use of ATMs in other countries and evaluating the personality, benefit and behavioral responses of the customers through quantitative analysis based on a questionnaire covering all these attributes of customers. The results were analyzed using statistical tools. It was observed that customers preferred convenience of use of ATMs when the banks started converting the software to their national language as well as the availability of more number of ATMs in near vicinity of customers. The study confirmed that a huge potential market existed for foreign banks to open their branches in limited locations and connect these to all other ATMs networks and could reap the benefits of their businesses in over 160 Million people economy.

Phan and Nham, (2015) assess 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 objectives of the study was to investigate the impact of service quality performance on customer satisfaction on ATM service in a commercial bank in Vietnam One of key challenge for Vietnamese commercial banks is how to compete in the market place with commonly undifferentiated services. The study applies SERVPERF framework to analyze the data collected from a questionnaire survey. The study found out that ASSURANCE and TANGIBLES factors significantly impact on the customer satisfaction. Kumbhar, (2014) also conduct an empirical study focuses on identifying key factors that have influences customers satisfaction in ATM service provided by public and

private sector banks. For the purpose of the study primary data were collected using schedule and collected data from March to November 2010. Results of factor analysis, correlation and regression analysis show that a cost effectiveness, easy to use and security and responsiveness in ATM service were most important factors in customer satisfaction.

Mwatsika, (2016) analyze the factors influencing customer satisfaction with ATM Banking. To achieving competitive advantage through ATM banking, bank managers need to know the key features of ATM banking whose performance greatly influence customers' satisfaction. 353 ATM card users rated the performance of ATM banking in 25 service quality attributes and further rated their perceived satisfaction with ATM banking. The regression analyses of the performance of the 25 ATM banking attributes and customers' satisfaction first reveal that the 25 attributes adopted from empirical studies provide a perfect model for predicting customer satisfaction. Secondly, reliability and responsiveness are the key service quality dimensions of ATM banking and thirdly, the analyses revealed 12 key attributes that influence customers' satisfaction with ATM banking and these are: ATM fees charged, ATMs not out of order, cleanliness of ATMs and ATM stations, accuracy of ATM transactions, ease of access to ATMs, readable slips, convenient location, employee accessibility to solve ATM problems, privacy at ATM stations, employee speed in solving ATM issues, ease of application process for ATM cards and cash availability in ATMs.

G/tsadkan, Damtew and Beyene (2017) make assessment of Customer Satisfaction on Automated Teller Machine in Adigrat, Ethiopia. The objective of this study was to assess customer satisfaction on Automated Teller Machines in commercial bank of Ethiopia Adigrat branch through descriptive research method. The primary data was collected through questionnaire and semi structured interview. Also the secondary data was collected from organizational manuals and internet. The data was summaries and analyzed in table form. The study shows that demographic characteristics of respondents 57.5%,52.5% 47.5%,62.5 % were males,26-30years age, degree and above and single, respectively. Also this study show that profession of the respondents was governmental employees (72.5%) with monthly income 2001-3000(30%) for 1-5 years ATM uses (42.5%) was the majority of ATM users. Factor that promotes the respondent to use ATM the majority was reduce time transaction (62.5%)but the least factor to promote ATM to uses were cost effectiveness's(10%).When we saw Frequently to use the ATM services per month of respondent the 4-8x/month(37.5%)whereas, over 12x/month was teen percents. Contribution of ATM to the success of banks respondent opinion was very high (62.5%). Result indicates that the majority of respondent agreed that ATMs are promptness to card delivery (60%) and

number transaction (52.5%), quality of notes (57.5%) and conveniently located (50%) were extremely satisfied. Results show that the majority have ever complained about ATM. Most of the complaints were about doesn't have less than 50 notes (62.5%), security (42.5%), reduction in balance without cash payment (17.5%) and Cards get blocked of ATMs(12.5%). 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. Constituency public awareness about used ATM uses to minimize ATM card broken and adopt CBE bank to used less than 50 birr notes was recommend.

### 2.3. Conceptual Framework

The variables discussed in the literature review above specify how each perceived factors contributes to customer attitude. Simplified schematic presentation of this model is presented in the following figure where customer attitude is dependent variable and perceived challenge, service satisfaction, reliability, ease of use and perceived usefulness are independent variables.

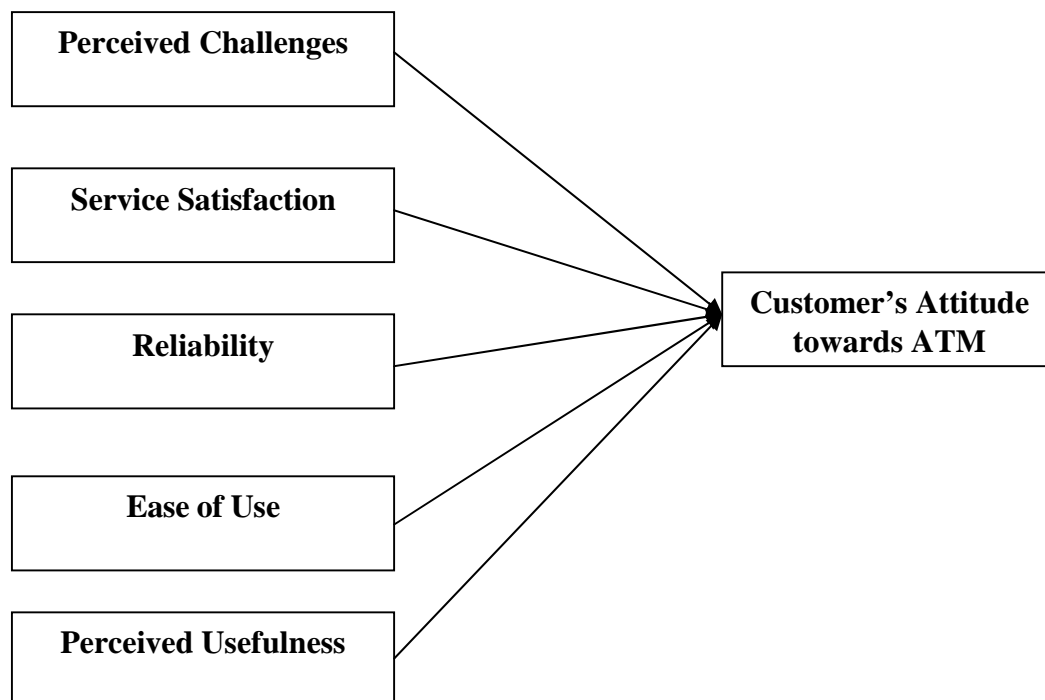


Figure 2.1 Conceptual Framework

Source: own developed based on Wijesekara and Kandambi, (2015) and Sanghita Roy, (2014)

## CHAPTER THREE

### RESEARCH METHODOLOGY

In this section the research design and approaches, research methods to be used, unit of analysis, participants, research instruments, source of data, data collection methods, sampling issues, data analysis tools and validity and reliability of the data would be discussed in detail.

#### **3.1. Research Approach and Design**

The research adopted a mixed method to analysis customer attitude toward ATM service in commercial bank of Ethiopia. Mixed research approach means adopting a research strategy employing more than one type of research method. The methods may be a mix of qualitative and quantitative methods, a mix of quantitative methods or a mix of qualitative methods. If mixed methods research is a research strategy does it represent a particular type of research design? The answer is both yes and no. Adopting a mixed method strategy may constitute a strategy in its own right or it may be subsumed within another research strategy as in the case of adopting a case study design in which a number of different methods are embedded. Ethnography and action research are also research strategies that may also employ more than one method (Brannen, no date).

Moreover, causal research design was used to examine customer attitude toward ATM service in commercial bank of Ethiopia. According to Creswell (2009) a research design is the plan of a research study. It includes the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis. The study mainly aims to provide an accurate and valid representation of variables that are relevant to the research topic. The study is a cross-sectional study since the study limited to year 2018.

#### **3.2. Sampling Size and Sampling Procedure**

The target population of this study will ATM card users of selected branches of commercial bank of Ethiopia found in Addis Ababa. The researcher first selects three branches of the bank purposely; accordingly, three branches Bole Medanehilem, 18 Mazoria and Mexico were selected purposely; therefore, the population of the study would be the total ATM user of these three branches. Therefore there are 15242 ATM users in these three branches. Accordingly, the target population of the study was 15242 ATM users where 3762 from Bole medanehilem, 4550 from 18 mazoria and 6930 Mexico branches.

Yamane (1967:886) (cited by Israel 2013) develops a simplified formula to calculate sample sizes which is stated below; accordingly the sample size was determined by the following formula:

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

$$n = \frac{15242}{1+15242(0.05^2)} \Rightarrow 389.77 \quad 389$$

Using the sample size formula a total of 389 sample size was determined. The sample size from each branch is decided based on proportional sampling technique. Hence, the proportion from each branch is done, first the sample size is divided by the total population and secondly the determined ratio is multiplied by each of the total customers of the branch; based on this, 96, 116 and 177 customers were taken randomly from Bole medanehilem, 18 matoria and Mexico branches respectively.

Table 3.1 Composition of sample from each branch

No.	Branch Name	No. of IFB customers	X = (n/N)*C
1	Bole medanehilem	3762	96
2	18 matoria	4550	116
3	Mexico	6930	177
	<b>Total</b>	15242	389

Where, n = sample size (388), N = total population (15242), C = total customer of each branch, X = sample from each branch

### 3.3. Research Method Used

#### 3.3.1. Source of Data

To conduct the study the researcher used both primary and secondary data to meet specific needs of the research. For primary data collection semi-structured questionnaires were used and distributed to targeted samples. Regarding secondary data magazines, annual reports and other relevant reference materials were used. The questionnaires was administer by personal delivery for customer who uses ATM banking services at randomly selected ATM stations from branch held in Addis Ababa.

### 3.3.2. Data collection Method

The primary data were collected through questionnaire by distributing them at the selected ATM stations in person and assist the respondents while filling. Some of the respondents were interviewed by the researcher. In addition, physical observation was conduct as primary information to assess the character of ATM customers in sell outlets. Secondary data was obtain from commercial banks of Ethiopia website and National Bank of Ethiopia website about the transactions made, number of ATMs, year of commencement and card holder, and related detailed information

### 3.4.Method of Data Analysis

The study utilized mainly quantitative data analysis techniques. Descriptive statistics such as mean, percentage and frequency tables used to describe the demographic data. Inferential statistics such as chi-square and Ordinary Least Square (OLS) were employed in order answer the research questions. The study incorporate five independent variables in which all of them was measured on a 5-point Likert-Scale, with “1” stands for “Strongly Disagree” and “5” stands for “Strongly Agree”. Apparently, mean was used as a measure of central tendency. Furthermore, the data were encoded, processed and analyzed using SPSS version 21. Furthermore, in this research the dependent variables are the customer’s attitude towards the ATM service delivered by the bank and the independent variable are Perceived Challenges, Service Satisfaction, Reliability, Ease of Use and Perceived Usefulness. Therefore, the general model of customer attitude has a form of:

$Y_t = f(\text{Perceived Challenges, Service satisfaction, Reliability, Ease of Use, perceived Usefulness})$

$$Y_t = \alpha + \beta_1 PC + \beta_2 SS + \beta_3 R + \beta_4 EU + \beta_5 PU + \beta_6 AW + u_t$$

Where

$Y_t$  = Customer Attitude

PC = Perceived Challenges

SS = Service Satisfaction

R = Reliability

EU = Ease of Use

PU = Perceived Usefulness

AW = Awarness

$U_i$  = error term.

### 3.5. Reliability Test

Reliability is the degree to which an assessment tool produces stable and consistent results, Cronbach's Coefficient Alpha method was used to test the reliability of the data, and therefore, the data was 71.6% reliable

#### Case Processing Summary

		N	%
Cases	Valid	294	98.6
	Excluded <sup>a</sup>	3	1.4
	Total	297	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.716	49

### 3.6. Ethical Consideration

The researcher has to know and respect the willingness of the respondents and has not disclosed the respondent's identity, and will not have used the information for personal purpose. Additionally, all participants for the success of the research should be acknowledged. Further, the researcher seeks informed consent of the respondent and the research data remained confidential throughout the study and the researcher ensure respondents participation in this study voluntary

## CHAPTER FOUR

### RESULT AND DISCUSSION

Based on the empirical findings this chapter presents the results of the study based on the data solicited from sample respondents. To facilitate ease in conducting the empirical analyses, the results of the descriptive analyses are presented first, followed by the inferential (statistical) analysis based on the methodology out lined in the previous chapter. The descriptive statistics utilized are based on frequency tables and graphical illustrations to provide information on key demographic variables. Next to the descriptive statistics the inferential statistics would be is presented based on examination of each hypothesis formulated for the research. 389 questionnaires were distributed to respondents and 297 of them were returned successfully which is 77% response rate. According to Fowler (2002), a 75% response rate is considered as adequate.

#### 4.1.Characteristics of Respondents

Table 4.1 General information of the Respondents

Items	Measurements	Freq.	Percentages %
Gender	Male	167	56.22
	Female	130	43.77
	<b>Total</b>	<b>297</b>	<b>100</b>
Age	Below 20	--	--
	Between 21 to 30	96	32.32
	Between 31 to 40	169	56.90
	Between 41 to 50	24	8.08
	Above 50	8	2.69
	<b>Total</b>	<b>297</b>	<b>100</b>
Marital status	Single	117	39.39
	Married	180	60.60
	Divorced	--	--
	Widowed	--	--
	<b>Total</b>	<b>297</b>	<b>100</b>
Educational level	BelowElementary	--	--
	Elementaryschool	4	1.35
	Highschool	82	27.60
	Diploma	87	29.29
	Degree Mastersandabove	124	41.75
	<b>Total</b>	<b>297</b>	<b>100</b>

Source; own computation 2018



Under this sub topic a certain features of respondents would be discussed; such as gender, age, and educational level and marital status. Accordingly, out of 297 respondents, 56.22% was male and the rest 43.77% is female. As shown in the table also 56.90% of the respondents were in the age group of 31 to 40, followed by respondents age 21 to 30, 41 to 50 and above 50 as they accounts 32.32%; 8.08%; and 2.69% respectively. So, the majority of current customers are belongs to young and adult groups. As shown in the table the marital statuses of the respondents were also included. There were only two categories; accordingly, 39.39 % of the respondents who are customers of the banks were single whereas 60.60% were married. Furthermore, respondents were also asked about their educational backgrounds; consequently, the largest numbers of the respondents 41.75% which were Degree, Masters and above holders, followed by Diploma holders 29.29%, whereas the rest 27.60% and 1.35% were High school and Elementary school respectively.

#### 4.2. Customer's Awareness towards ATM Banking

Table 4.2 customer's awareness about ATM Banking

Item	SA	A	N	D	SD
I don't have any information where to inform if my card captures from different bank's ATM terminals during usage of ATM.	53.77	7.87	9.81	22.81	2.21
I am not informed from My bank to use with my ATM card from many banks' ATM terminals.	59.87	9.87	9.82	19.82	9.22
I am not informed where to inform for wrong transaction with my ATM card from different bank's ATM terminals	55.49	8.39	8.35	22.33	4.33
I do not know all services I can get from the ATM terminal other than money withdrawal (I.e. mini statement, balance enquiry, PIN change, etc.).	56.66	7.96	8.9	23.51	3.61
I am not informed and know the ATM service charge for withdrawing money and mini statement from different banks' ATM terminals.	58.61	8.56	8.46	20.11	3.52
I do not know where to inform when my account has been debited using my ATM card by unauthorized individual from different banks' ATM terminals.	54.49	8.49	9.42	21.42	2.46
<b>Awareness of ATM Banking</b>	56.48%	8.52%	9.12%	21.66%	4.22%

Source; own computation 2018

More than 60 percent of the respondents agreed that they don't have any information where to inform if cards were captured from different bank's ATM terminals during usage of ATM; on the other hand around 24 percent of the respondents replied that they have information where to inform if cards captures from different bank's ATM terminals during usage of ATM. Close to 70 percent of the respondents also mentioned that they were not informed from their banks to use with their ATM card from any banks' ATM terminals. 64 percent of the respondents also agreed that they were not informed where to inform for wrong transaction with their ATM card from different bank's ATM terminals; however, around 27 percent of the respondents agreed regarding information of wrong transaction.

64 percent of the respondents agreed that they didn't know all services they can get from the ATM terminals other than money withdrawal (I.e. mini statement, balance enquiry, PIN change, etc.). On the other hand, 27 percent of the respondents confirmed that they know all services they can get from the ATM terminals other than money withdrawal. More than 67 percent of the respondents also agreed that they were not informed and know the ATM service charge for withdrawing money and mini statement from different banks' ATM terminals. In addition to these more than 62 percent of the respondents also replied that they do not know where to inform when my account has been debited using my ATM card by unauthorized individual from different banks' ATM terminals. On the other hand, 24 percent of the respondents agreed that they know where to inform when my account has been debited using my ATM card by unauthorized individual from different banks' ATM terminals. Generally, 56.48 percent of the respondents strongly agreed that they don't have awareness of ATM banking, 8.52 percent of the agreed they don't have ATM banking awareness, 9.21% neither agree nor disagree, and the rest 21.66% and 4.22% of the respondents agreed and strongly agreed that they have awareness about ATM banking.

### 4.3.Challenges Faced By Customers While Using ATM Services

Table4.2 description of challenges customer's in using ATM

Item	S A	A	N	D	S D
DuetofrequentfacedproblemswhileusageofATMfromdifferentbanks'ATMs,IdotrustthenationalswitchtousetheATMfromdifferentbanks'ATMs.	3. 2	3. 2	6 5. 2	1 2. 3	16 .1
DuetothechargeswhileusingATM,Iprefertogotomybanks'ATMterminals	2 4.	6. 5	5 6.	7. 3	5. 2

fortheservice.	2		9		
TherearecasesinwhicheithertheATMmachinesdispensethecashwithoutdebitingtheaccountordebitingtheaccountwithoutdispensingcash.	2 9	8. 9	4 1. 9	3. 2	16 .9
Incaseoferrorsduringtransactionthebanksdid notgivemequickresponse	5. 6	45 .2	2 8. 5	6. 5	14 .2
ThereisfrequentinterruptionofATMserviceduetonetworkfailures	3. 2	6. 5	4 5. 2	1 4. 2	21
LackofknowledgetoreadingoutinstructionduringperformingATMtransaction	9. 7	36 .3	4 2. 3	3. 7	8. 1
ThereisfrequentinterruptionofATMserviceduetoInterruptionofelectricpower	2 1	8. 9	4 9. 5	4. 8	15 .8
TherearelimitedservicesavailableonATMscomparedtowhenIusefrommybankATM	6. 5	38 .7	3 1. 8	6. 1	16 .9
TherearecasesinwhichIfaceddifficultiestonetneedednotedenominationonATMsinmoneycassettes	5. 6	31 .6	4 1	9. 7	12 .1
<b>Perceived challenges</b>		<b>20</b>	<b>4</b>	<b>7.</b>	<b>14</b>
	<b>1</b>	<b>.6</b>	<b>4.</b>	<b>5</b>	<b>.0</b>
	<b>2</b>	<b>4</b>	<b>7</b>	<b>3</b>	<b>3</b>

Source; own computation 2018

Challenges faced by customers in this research context refer to the challenges where customers face during using the service. Accordingly, considerable (28.4%) amount of customer's respondents disagreed that due to frequent faced problems while usage of ATM from different banks' ATMs, they do trust the nationals witch to use the ATM from different banks' ATMs; on the other hand 6.4 percent of agreed that they do trust the national switch to use the ATM from different banks' ATMs. The rest majority (65.2%) neither agreed nor disagree on this respect. The customers (37.4%) also confess that there are cases in which either the ATM machines dispense the cash without debiting the account or debiting the account without dispensing cash; whereas majority (41.9%) of the respondents neither agreed nor disagree on these issues. Moe than 50 percent of the respondents also said that in case of errors during transaction the banks did not giveback quick response; close to 45 percent of the respondents confirmed that there are limited services available on ATMs compared to when I use from my bank ATM and around 30 percent of the respondents also mentioned that there is frequent interruption of ATM service due to interruption of electric power.

#### 4.4.Descriptive statistics of factors affecting customer Attitude

Table 4.3 descriptive statistics of all variables

Items	Level of Agreement					Mean	St. Dv
	SA	A	N	D	SD		
<b>AwarenessofATMBanking</b>	56.48%	8.52%	9.12%	21.66%	4.22%	2.47	0.1745
<b>Perceived Usefulness</b>	32.43%	40.35%	8.12%	11.45%	7.56%	2.34	0.4352
<b>Perceived Challenges</b>	12%	20.64%	44.7%	7.53%	14.03%	3.12	0.3524
<b>Service Satisfaction</b>	10.13%	8.44%	14.43%	32.76%	34.33%	3.34	0.2765
<b>Reliability</b>	14.56%	11.23%	48.32%	17.24%	8.68%	2.99	0.1524
<b>Ease of Use</b>	12.14%	13.55%	5.31%	33.45%	35.55%	3.66	0.2214
<b>Customer Attitude</b>	40.65%	38.32%	8.03%	6.65%	6.35%	2.25	0.1433

Where, 1=Strongly Agree 2=Agree 3= Neutral 4=Disagree 5=Strongly Disagree

Source; own computation 2018

In this sub topic the situation of each variable would be discussed, accordingly, the first variable was the awareness of customers towards ATM banking, accordingly, more than 65 percent of the respondents agreed that they had good awareness regarding ATM service such as information where to inform if card captures from different ATM terminals, information from the bank to use with ATM card from any banks' ATM terminals, ATMs daily transaction limit for withdrawal and etc. On the other hand around 26 percent of the respondents didn't agree regarding the issues of customer awareness about ATM. Furthermore, customer's awareness had got a mean score of 2.47 with a standard deviation of 0.1745 which lies and approaches to agree level.

Around 73 percent of the respondents replied that and agreed that the ATM service was perceived useful because it can use it in all banks' ATM, it save peoples from transport costs and time by bringing self-service banking into convenient locations and it help people to monitor their bank account outside of the bank hours. On the other hand around 18 percent of the respondents confirmed that ATM services don't have much perceived use. The variable perceived usefulness had got a mean score of 2.34 with a standard deviation of 0.4352 which indicate customers perceived out that the service had a useful role as the means score approaches to agree level.

Close to 56% of the respondents confirmed that during the usage of the service they didn't have much challenging except the frequent interruption of ATM service due to network failures and lack of note denomination on ATMs in money cassettes, otherwise they got comfortable service such as opportunity to use the ATM from different banks' ATMs, complaint response. Respondents also suggest that they have the knowledge of reading out instruction during performing ATM transaction. However, on the contrary around 28% of the respondents replied that they got much difficulties regarding getting needed note denomination on ATMs in money cassettes, errors during transaction, ATM machines dispense the cash without debiting the account or debiting the account without dispensing cash, etc. Perceived challenges had got a mean score of 3.12 with a standard deviation of 0.3524 which lies between neutral and disagree level, however, it approaches to neutral level which implies respondents were uncertain about the service challenge they perceive via using the ATM service.

Around 67% of the respondents confirmed that they didn't satisfied with the ATM service delivered, which implies particularly faster transaction from all banks' ATMs terminals were not delivered, couldn't use any banks' ATM terminals with their bank ATM card easily, there are times where the ATM's goutof cash, ATM's always doesn't works properly without any abnormality Whenever I go. On the other hand, around 19% of the respondents agreed that they are satisfied with the overall service of ATM technology. Service satisfaction had got a mean score of 3.34 with a standard deviation of 0.2765, the mean score fall between the agreement scale of neutral and disagree, however it approaches to disagree level.

Around 26 percent of the respondents confirmed that the ATM service of the bank was not reliable, which particularly implies that the bank didn't commits to provide customers all the ATM services in accordance with the terms specified in the signed contract, clients' questions, complaints or concerns about ATM card service were not satisfactorily resolved by bank customers didn't received ATM Card at the time committed by bank and etc. on the other hand more than 25 percent of the respondents replied that the ATM service provided by the bank was reliable. On this regard majority (48.32%) of the respondents neither agrees nor disagree. The variable reliability had got a mean score of 2.99 with a standard deviation of 0.1524 which lies on neutral level.

Apart from the abovementioned point's respondents were also complies about the easiness of the service; accordingly, more than 68% of the respondents confirmed that ATM cared are

easy to use and can also be easily adopted which doesn't require much mental effort as well as doesn't take much time to learn also. Conversely, close to 26 percent of the respondents replied the technology of ATM is difficult to use and learn. Furthermore, this variable had got a mean score of 3.66 with a standard deviation of 0.2214 which implies the technology of ATM is easy to use and learn. In addition to this, more than 78 percent of the respondents also replied that and agreed that they have a good feeling to the overall ATM services delivered by the bank and recommend their families and relatives to use the ATM services from all banks' ATM terminals.

#### 4.5. Regression Analysis

This is the main section of the data analysis part which contains the regression part; under this topic two sub topics would be discussed the preliminary tests of OLS and the main regression estimation result. The first section incorporates Multicollinearity, Heteroscedasticity, Autocorrelation and Normality test. The second part contains the estimation results. Each of the sub-topics discussed below in details:

##### 4.5.1. Assumption tests of Ordinary Least Square (OLS)

###### 4.5.1.1. Multicollinearity

The problem of multicollinearity happens where the independent variables had correlation. A VIF test was used to test the existence of multicollinearity problem. The results of the test indicates the highest VIF is 4.19 with  $R^2 = 0.727$  (table 4.4); which indicates the model performed with no major multicollinearity problem among the explanatory variables.

Table 4.4 Multicollinearity Test

Variable	VIF	1/VIF	$R^2$
Awareness of ATM Banking	2.20	0.4545	0.727
Perceived Usefulness	4.19	0.2386	
Perceived Challenges	3.10	0.3225	
Service Satisfaction	2.23	0.4484	
Reliability	3.21	0.3115	
Ease of Use	1.24	0.8064	
Mean VIF	2.69		

###### 4.5.1.2. Heteroscedasticity

According to Gujarati (2003) in a classical linear regression model the variance of each disturbance term  $u_i$ , conditional on the chosen values of the explanatory variables should be some constant number (Gujarati 2003). Accordingly, Breusch-Pagan test was used. The interpretation of Breusch-Pagan test is done using the p values, if the p value is less than 5% significant level it is the indication of heteroscedasticity problem; however if the p value is greater than 5% level of significance it implies there is no a problem of heteroscedasticity. Accordingly, as the table below indicates the p values are not significant; and hence, the data is free from heteroscedasticity problem

Table 4.5 Analysis of heteroskedasticity test

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of effective
chi2(1) = 28.82
Prob> chi2 = 0.08740

Source; own computation 2018

#### 4.5.1.3. Normality

The assumptions of normality states that the error term should be normally distributed; therefore, in order to run ordinary least square method the error term or residuals must be normally distributed; therefore, in order to make the test the normality histogram map was used; the results of the analysis indicated that the residuals are normally distributed.

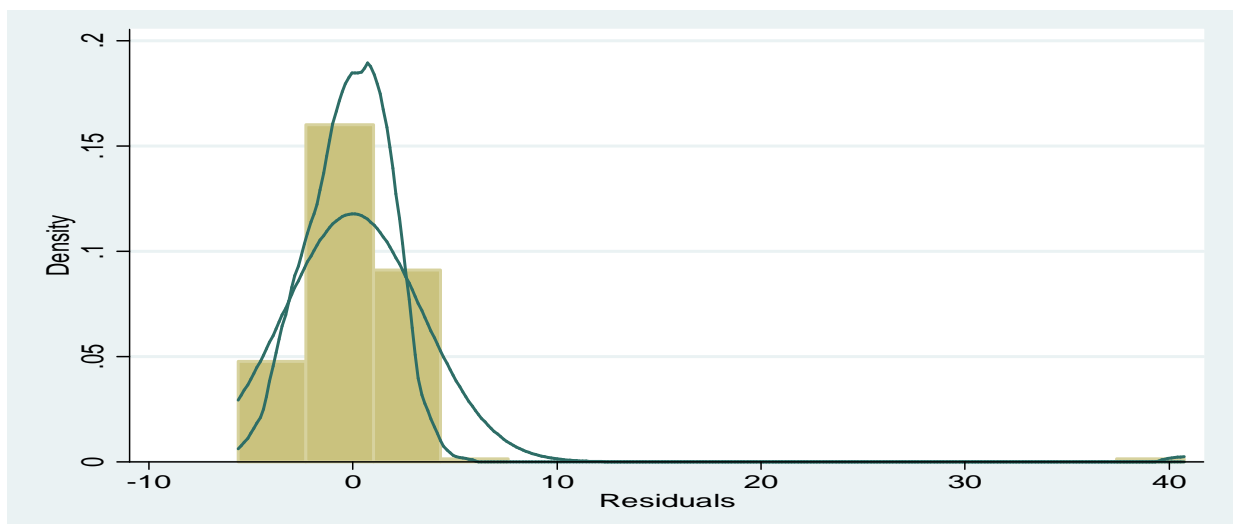


Figure 4.1 normality test

#### 4.5.1.4. Autocorrelation

Apart from the above tests there is also another assumptions that should be fulfilled; the problem of Autocorrelation. Although residuals are normally distributed, however there should not also be serial correlation between them. In order to find out the problem breusch-Godfrey method was used as a test method. As shown in table 4.6 in the table the significant value is greater than 5%, therefore, this tells us if it is not significant it is the indication of no serial correlation between residuals.

Table 4.6 test of Autocorrelation

Breusch-Godfrey LMtest for autocorrelation		
lags(p)	chi2 df	Prob> chi2
1	19.58 1	0.07601
H0: no serial correlation H1: serial correlation		

Source; own computation 2018

#### 4.5.2. Estimation Results of OLS

As shown in the previous sub topic all of the assumption was fulfilled except, therefore OLS was used to estimate customer attitude towards ATM service. Furthermore, Model summary and ANOVA table below the coefficient of determination ( $R^2$ ) for the model is 0.727 ( $F=72.057, p < 0.001$ ) showing that the model explained 72.2% of the variation in the level of customers attitude toward ATM service, and the overall model is also statistically significant. The results of the econometric model estimation revealed that, Awareness of ATM, Perceived Usefulness, service satisfaction and Ease of Use were found to contribute significantly and positively to customer attitude towards ATM service. In contrast, Perceived Challenges show negative and significant effective on customer attitude.

Table 4.7 Model Summary

Multiple R	.852
R Square	.727
Adjusted R Square	.617
Std. Error of the Estimate	.192
Log-likelihood Function Value	-485.474

Source; own computation 2018

Table 4.8 ANOVA



	Sum of Squares	df	Mean Square	F	Sig.
Regression	5.771	3	1.823	72.057	.000
Residual	17.794	291	.054		
Total	23.565	294			

Source; own computation 2018

Table 4.9 Coefficients

	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta	Std. Error		
(Constant)	.587	.372			.428	.021
AwarenessofATM	.0253	.049	.283	.045	4.143	.001
Perceived Usefulness	.0138	.044	.173	.065	4.147	.002
Perceived Challenges	-.0318	.035	.522	.057	-8.164	.000
Service Satisfaction	.0423	.897	.546	.062	3.54	.000
Reliability	.0778	.078	.667	.032	7.12	.665
Ease of Use	.0114	.887	.345	.046	9.14	.000

Source; own computation 2018

Awareness of ATM had a positive and significant effect ( $p < 0.05$ ) on customer attitude, the positive number and coefficient of Awareness suggested that, as the awareness of customers towards ATM service increases the positive attitudes of customers towards ATM would also increase. The other variable was the perceived usefulness of ATM, perceived usefulness had positive and significant ( $p < 0.05$ ) effect on customer attitude; the positive coefficients of this particular variable suggested that the more customers understanding the usefulness of ATM the more would be the attitudes of customers.

Service Satisfaction and Ease of Use had also a positive and significant ( $p < 0.001$ ) effect on customer attitude towards ATM service. The positive coefficients of these two variables suggested that as the technology of ATM service become easier and increase the overall satisfaction of customers, customers attitude towards ATM service also increases. Unlike to the above mentioned variables, perceived challenges had negative and significant ( $p < 0.001$ ) effect on customers attitude towards ATM service; the negative coefficient of this variable indicated that the more the challenges the less will be customers towards ATM use which

result customers to get far from using the technology. Furthermore, reliability of the service doesn't show a significant relationship with customer's attitude towards ATM service.

## CHAPTER FIVE

### FINDING, CONCLUSION AND RECOMMENDATION

#### 5.1. Summary of Key Findings

Based on the analysis of the research the following are the key findings:

- Ethiopian commercial banks working towards making its financial systems digitalized; however, the findings of the study shows that majority of its customer didn't have the knowledge of ATM service; almost more than 60 percent of sample respondents didn't use ATM banking.
- Although the distribution and adoption of ATM banking in the capital city seems good however it is not far from challenges and constraints such as frequent interruption of ATM service due to Interruption of electric power, errors during transaction, banks didn't give quick response, there are cases in which customers faced difficulties to get needed note denomination on ATMs in money cassettes and there are cases in which either the ATM machines dispense the cash without debiting the account or debiting the account without dispensing cash.
- Customer Attitude Toward ATM Service is determined by a number of factors, under this case study there are two cases; the first one is the attitude of customers were positively determined by awareness of customers towards ATM, Ease of Use of the technology, Service Satisfaction and Perceived Usefulness. On the other hand the finding of the study shows that the ATM customer's attitude towards ATM service was constrained by the perceived challenges.

#### 5.2. Conclusion

This research was carried out to assess customer attitude toward ATM service in Ethiopia: the case of commercial bank of Ethiopia; the study employed explanatory research design where data were gathered from 297 customers. It is observed from the study that five out of six variables were significantly affect customer attitude where four factors had positive relationship with customer Attitude while one had negative relationship with customer attitudes. It was found out that Awareness of ATM, Perceived Usefulness, Service Satisfaction and Ease of Use had strong and positive influences on customer's attitude towards ATM usage. The study further shows that there were negative relationship between Consumer

Attitude and Perceived Challenges. This is because when customers got more difficulties and challenges during and while using the service they become more reluctant and board to use the service. If there is a higher challenges and difficulties to use the service there would be a lower the rate of customer attitudes towards ATM usage. In converse to the above statements reliability didn't show a significant relationship with customer attitude towards ATM service and use.

### **5.3.Recommendation**

Based on the findings of the study the researcher forwards the following recommendations:

- The findings of the study suggests that customers didn't have much awareness about ATM service; and hence, organizations should undertake a deliberate policy to increase the level of awareness of customers about ATM banking and service; apparently develop and adopt technological innovations perceived to be useful and easy to use by customers so as to foster significant actual system usages.
- The frequent interruption and dysfunction of ATM machine were reducing the service satisfaction of customers, and hence the bank should follow every time the wellbeing of the ATM machines since they determine the satisfaction level of customers.
- The attitudes of customers increases when positive perceptions are exist; and hence, this attitudes influences and determine the decision to use the technology, ATM service actually, therefore, the bank should take in to consideration customer needs, internal functions and processes that enable the realization of result.
- For further researches, further researchers can do and crystallize the theme in more broad ways and increase the sub branches in order to more generalize the findings.

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## APPENDIX

### QUESTIONNAIRE

#### General Guidelines

This questionnaire has two parts; you

are kindly requested to respond to the questions based on the instructions under each section. If you have any comment or further explanation please don't hesitate to use the space provided at the end of the questionnaire

#### Part I. Respondent's general information

Please indicate the following information by ticking ( ) on the spaces provided in front of each option.

1. **Gender :**           A. Male    B. Female
2. **Marital status:**   A. Single   B. Married
3. **Age**                A. Under 20   B. 21-30   C. 31-40   D. 41-50   E. Above 50
4. **Educational**   A. Below Elementary   B. Elementary school   C. High school   D. Diploma  
F. Degree Masters and above

#### Part II. Questionnaire related to ATM usage

The following list of statements are used to get relevant information for the accomplishment of the research objective. Thus, please indicate your level of agreement with each statement by ticking ( ) on the spaces provided under each option. The options range from Strongly Agree to Strongly Disagree

**Note:**   SA-for Strongly Agree;   A-For Agree;   N-For Neutral;   D-For Disagree, and SD-For Strongly Disagree

<b>Awareness of ATM Banking</b>	<b>S</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>S</b>
	<b>A</b>				<b>D</b>
Idon't have any information where to inform if my card captures from different bank's ATM terminals during usage of ATM.					
I am not informed from My bank to use with my ATM card from many banks' ATM terminals.					
I am informed where to inform for wrong transaction with my ATM card from different bank's ATM terminals					
Idonot know all services I can get from the ATM terminals other than money withdrawal (I.e. mini statement, balance enquiry, PIN change, etc.).					
I am not informed and know the ATM service charge for withdrawing money					

admin statement from different banks' ATM terminals.					
I do not know where to inform when my account has been debited using my ATM card by an unauthorized individual from different banks' ATM terminals.					
I don't know the ATM's daily transaction limit for withdrawal.					
<b>Perceived Usefulness</b>					
I get much benefit from my ATM card because I can use it in all banks' ATM.					
ATMs save me from transport costs and time by bringing self-service banking in to convenient locations and working around the clock even if my bank's ATMs are not working.					
The speed of processing a transaction by ATMs is much faster.					
ATMs help me to monitor my bank account outside of bank hours through balance enquiries in every Bank's ATM terminals.					
<b>Perceived Challenges</b>					
Due to frequent faced problems while usage of ATM from different banks' ATMs, I do not trust the national switch to use the ATM from different banks' ATMs.					
Due to the charges while using ATM, I prefer to go to my bank's ATM terminals for the service.					
There are cases in which either the ATM machines dispense the cash without debiting the account or debiting the account without dispensing cash.					
In case of errors during a transaction, the banks did not give me a quick response.					
There is frequent interruption of ATM service due to network failures.					
Lack of knowledge to read out instructions during performing ATM transaction.					
There is frequent interruption of ATM service due to interruption of electric power.					
There are limited services available on ATMs compared to when I use from my bank ATM.					
There are cases in which I faced difficulties to get needed denomination on ATMs in money cassettes.					
<b>Service Satisfaction</b>					
The ATM's are placed in convenient and accessible locations in such a way that my Safety, Security and Privacy are maintained.					
I get faster transaction from all banks' ATM terminals whenever I go.					
Quality of receipt I get from all Banks' ATM terminals is good.					
I get prompt response from Banks for ATM transaction related problem.					
I use any bank's ATM terminals with my bank ATM card easily.					
The charge for getting service from any bank's ATM terminals is fair.					
There are times where the ATM's go out of cash.					
I am always informed via Alert message after every transaction done on ATM.					
The ATM always works properly without any abnormality whenever I go.					
Always ATMs have receipt when I want to print.					
The print on the slip during request of mini statement is too small to read.					
ATM slip always shows me updated balance.					
<b>Reliability</b>					
Bank commits to provide customers all the ATM services (withdrawals, account management, money transaction etc) in accordance with the terms specified in the signed contract.					
Any clients' questions, complaints or concerns about ATM Card					



Service are satisfactorily resolved by bank					
Customers are informed after every transaction done on ATM					
ATM carries out exactly what customers required					
Customers received ATM Card at the time committed by bank					
<b>Ease of Use</b>					
I think that interaction with ATM service require a lot of mental effort					
I have the ability to use ATM service					
It would take me lots of time to learn how to use ATM service					
<b>Customer Attitude</b>					
I have a good feeling to the overall ATM services delivered by the bank					
I recommend my families and relatives to use the ATM services from all banks' ATM terminals					