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

**ASSESSMENT ON AUTOMATIC TELLER MACHINE SERVICE QUALITY
IN ETHIOPIAN PRIVATE BANKS CUSTOMERS -THE CASE OF
UNITED BANK AND WEGAGEN BANK**

BY

ASHENAFI W/AREGAY

SGS/0127/2007B

JANUARY, 2017

ADDIS ABABA, ETHIOPIA

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DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Mohammed Mohammednure (Asst. Prof.). All source of materials used for 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 degree.

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St. Mary's university college, Addis Ababa

Signature

January, 2017

ENDORSEMENT

This thesis has been submitted to St. Mary's University College, Scholl of Graduate Studies for the examination with my approval as a university adviser.

Advisor

St. Mary's university college, Addis Ababa

Signature

January, 2017

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Ashenafi Weldeargay

JANUARY, 2017

Addis Ababa

ACRONYMS/ ABBREVIATIONS

E-banking: - electronic banking

ATM: - Automatic teller machine

E-service:-electronic services

TQM :- total quality management

NPM:- new public management

DEA:-data envelopment analysis

NNs:- neural network

SST- Self-service technology

E-service :- electronic service quality

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Abstract

The purpose of this study is to identify, examine and analyze the level of service quality with respect to ATMs in the Ethiopian banking context, taking Wegagen and united bank as point of reference, 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 e-service 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. In this research the researcher considered ATM banking service quality as a focus area from some selected ATM stations located in Addis Ababa to keep the course of the research flow in control. Therefore, this study measure the ATM service quality from the customer's point of view, using the five SERVQUAL dimension. Compare and weight each service quality dimension for users and provide some possible recommendations about the existing ATM service on banks in Ethiopia. In this study mixed-method approach was employed to ensure effectiveness of the research process as the findings of the qualitative data enhance the findings of quantitative one and the vise versa for better understanding of the research problem than either of each alone. The study utilized a convenience sample of mainly business persons who uses ATM card of domestic as well as international banks. A stratified sampling was used in selecting ATM stations from the two banks. According to the findings of the study one of the prime factors that customers give higher emphasis is reliability issue while choosing a bank for their ATM service need. like availability of cash in the ATM, power issue, amount of cash limit to withdraw in a day, network issues and availability of all denomination in the ATM can be taken as the major onces and these banks should give higher emphasis due to the sensitivity issue for their customers with regard to ATMs and they should also take care of the negative response givers because they might spoil the bank reputation. On the other hand customers have doubt about the existence of qualified support staffs, the availability of 24/7 network at the ATMs and recovery speed while there is failure in ATMs for which items the satisfaction is very low. Therefore, banks need to employe qualified staffs that give prompt service for their customers at any enquiry and aware their customer those qualified personnel that the banks had already.

Key Words: Service quality, ATM, SERVQUAL, E-Service

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

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. Moreover, in the recent years there has been explosion of Internet-based electronic banking applications (Liao & Cheung, 2002). Beckett, Hewer & 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 a., 2000).

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. 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 and Service quality is of utmost importance in analyzing the performance of banks and their branches, since their survival depends on their service quality levels they provide (Portela & Thanassolis, 2005).

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 endeavors 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. Besides, most measures are ad hoc and have not been validated, potentially leading to poor managerial decisions (Zeithaml, 2002). Further, while several e-service dimensions may be important, only a few are most important from the customer's perspective (Joseph and Stone, 2003).

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. Overall, literature calls for more research on the impact of information technology-driven services on the customer's perceptions of the service quality received. In addition, the research on e-banking service quality related to Ethiopia is limited in the marketing literatures. (Zeithaml, 2002)

Certainly the banking industry in Ethiopia is underdeveloped in providing e-banking services 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).

The purpose of this study is to identify, examine and analyze the level of service quality with respect to ATMs in the Ethiopian banking context in Addis Abeba where online shopping is nonexistent and ATMs are a very recent development.

1.2. Statement of the Problem

Competition in the banking industry is intense, with new financial service providers emerging all the time and quality of service is seen more than ever as a key differentiator in the marketplace for the banks and customers evaluate the quality of the service they received from a banking institution they use different criteria which are likely to differ in their importance, usually some being more important than others. These determinant attributes are the ones that will define service quality from the consumer's perspective (Loudon,D.L. and Della Bitta, 1988).

The technology is dramatically changing how financial services are designed 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 techno 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.

Despite the theoretical background underpinning the importance of automated service quality in building customer delight, trust, and commitment, empirical research is required to identify and examine the service quality dimensions of ATM's 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 .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

In this age of self-service technologies, bank managers need to understand what criteria are being used by customers to evaluate their services. Almost all commercial banks in Ethiopia provide ATM banking services and there are some factors which may affect customer satisfaction in electronic banking system (automatic teller machine service).

Among these, Philips, (2013), who studies customer satisfaction and electronic banking on the selected three banks, found out that despite the growth of ATM banking, there are some factors which affect customer satisfaction. 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, 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 lack of fair distribution of E-banking service in all over Ethiopia during pretest of his study.

As the researcher try to say above all banks are providing ATM banking services in major regional cities and public places for both domestic and foreign card holders and there is significant amount of transaction are done by these limited stations daily. This shows that customers are choosing techno based services. Therefore, to probe the inner desire of customers is the most important work to be done. There are some factors which affect the service quality in electronic banking system (automatic teller machine service) during pretest 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, and lack of convenience ATM service.

Furthermore, in the study titled “Assessment of ATM service quality and customer satisfaction at selected three banks in Addis Ababa “, (Abebe, 2013), using the five service quality dimensions of SERVEQUAL model, investigates that limited number of machines located in some fixed places, limited amount of money to withdrawn at once and frequent failure of network are some of the reasons which large number of customers are not satisfied in ATM services.

Even though, these two studies were done based on the service quality dimensions, the study conducted by Philips , 2013 has been focused on the overall e-banking service and tries to see the ATM banking service of three banks only.

The second study conducted by Abebe, 2013 was also done on the same banks . The growth of ATM banking service is explosive and all of our banks have been positioning ATMs to increase their reach. As the use of ATM banking increasing from day to day , it is important to examine, what the ATM banking customers are thinking about its various features, what problems are they faced, how they compare the ATM service with the traditional branch banking service etc.

Thus, as per the preliminary assessment, there is no sufficient research has been carried out so far to evaluate the service quality of the ATM banking which is pivotal to make any marketing decisions. By considering the research gap, the aim of this paper is, therefore, to look at all these problems and also to examine the service quality of ATM banking of the selected banks customers by deriving factors from the SERVEQUAL model developed by (Parasuraman et al., 1988)

Under the above articulated problems the researcher is intended to answer the following research questions

- ✓ What are the prospects and challenges of e-service of banking in Ethiopia?
- ✓ What the possible recommendation on the existing e banking service of the banks?
- ✓ What are ATM services provided by Ethiopian commercial banks?
- ✓ What are the most important and significant factors that ATM banking customers weighted most?

1.3. Objective of the Research

1.3.1. General Objective

The main purpose of this study is to identify, examine and analyze the level of service quality with respect to ATMs in the Ethiopian banking context, taking Wegagen and united bank as point of reference.

1.3.2. Specific Objectives

The specific objective of this study are to:

- Measure the ATM service quality from the customer's point of view, using servqual dimension
- Compare each service quality dimension for users.
- Compare and contrast the weight of each quality dimensions and their impact
- Provide some possible recommendations about the existing ATM service on banks in Ethiopia.

1.4. Significance of the Study

The researcher can fulfill his partial requirement for obtaining MBA. Moreover, the result of the study can serve as a reference material for further studies that could be done on this area of research and can try to identify those that are not covered in this study. Second, customers can benefit from the result of the study because it is the researchers believe that banks under consideration, take the necessary measure to improve their service to their customers based on the output of the study. Finally, it is helpful for banks to know the dimensions that customers value most, identifying the important service quality dimensions from the customer point of view.

1.5. Scope of the Study

The general objective of the study is assessing the service quality criteria in Ethiopian banking context, 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 e-service 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, in this research the researcher considered ATM banking service quality as a focus area from some selected ATM stations located in Addis Ababa to keep the course of the research flow in control.

1.6. Limitation of the Study

The research aims to measure ATM-banking service quality in the Ethiopian banking context for which the researcher could not find related prior research. Therefore, time was a significant constraint to undertake the research. The researcher also faced a lot of effort in filling the questioner and making interview due to non-willingness of the participants and finally finding related secondary data sources was drawbacks for the researcher.

1.7. Organization of the Study

The research is arranged in five chapters. The first chapter of the research briefly discusses the recent developments in e-banking services quality measurement. It also include and address the general and specific objectives, statement of the problem, research questions, its significance to stakeholders, the benefit that result in, limitations and research chapterization ; chapter two deeply investigated and further processed related literatures to study and outline all ATM service quality dimensions; The third chapter handle the methodology of the study; The fourth chapter reveal data analysis and interpretation of the result; and finally ,the fifth chapter focus on conclusion and recommendations.

CHAPTER TWO

2. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Terms Definitions.

Electronic Banking (e-banking) – is a banking activity by which a customer may perform banking transactions electronically by using techno based services (Automatic teller machine, mobile banking, telephone banking, internet banking and others).

Automatic Teller Machine (ATM) - is an innovative service delivery mode that offers diversified financial services like cash withdrawal, cash deposit, fund transfer, payment of utility and credit card bills, cheque book requests, and other financial enquiries.

SERVQUAL - a well-known scale developed by Parasuraman et al. (1985, 1988) for measurement of service quality.

E-SERVQUAL - a multi-item scale for assessment of electronic service quality

Customer Satisfaction - feelings or judgment by the customers toward Automatic teller machine (ATM) after they have used it.

Customer – the people who are using electronic banking system (Automatic teller machine (ATM) service in the selected stations.

VISA -debit card which is used for ATM customer to withdraw or to know total balance of their account in ATM.

WEBQUAL: - a multi-item scale for assessment of website service quality

2.1.2 Service Quality Concept

Service quality has been defined in services marketing literature as an overall assessment of service by the customers. Perceived service quality is believed to be resulting from comparison between customers' prior expectations about the service and their perceptions after actual experience of service performance (Parasuraman et al., 1985). Service quality has been defined by the practitioners in terms of key dimensions that customers use while evaluating the services.

Conceptualization of service quality should include both the service delivery process (Parasuraman et al., 1985) as well as the service outcomes (Groenroos, 1984) offered a service quality model with dimensions of technical quality (what consumer gets), functional quality (how consumer gets the service) and corporate image (how consumers perceive the firm and its services).

Similarly, Lehtinen (1991) offered another model with three dimensions of service quality: physical, interactive and corporate. Physical quality is about the quality of physical products involved in service delivery and consumption. Interactive dimension refers to the interaction between the customers and the service organization employees. Corporate quality refers to the corporate image as perceived by the customers. The service quality literature has also highlighted that service quality can also be treated as a second order construct consisting of interaction, physical environment and outcome quality. As the time evolve, quality concepts such as total quality management (TQM) and new public management (NPM) have been adopted by many organizations in most developed countries as early as 1990s.

The key objective of NPM, for instance, is to improve the delivery of service quality by taking a customer-oriented approach integrates data envelopment analysis (DEA) and neural network (NNs) to examine the relative branch efficiency. Using DEA technique in performance benchmarking of bank branches has evolved from relative benchmarking of performance in terms of operating efficiency (service quality) and profitability (Portela, M.C.A.S., & Thanassolis, E. 2006).

Service quality has been defined in services marketing literature as an overall assessment of service by the customers. Perceived service quality is believed to be resulting from comparison between customers' prior expectations about the service and their perceptions after actual experience of service performance (Parasuraman, A., Zeithaml, V.A. and Berry, L. 1985). Service quality has been defined by the practitioners in terms of key dimensions that customers use while evaluating the services.

Similarly, Lehtinen, U. and Lehtinen, J.R. (1991) offered another model with three dimensions of service quality: physical, interactive and corporate. Physical quality is about the quality of physical products involved in service delivery and consumption. Interactive dimension refers to the interaction between the customers and the service organization employees. Corporate quality refers to the corporate image as perceived by the customers. The service quality literature has also highlighted that service quality can also be treated as a second order construct consisting of interaction, physical environment and outcome quality.

2.1.3 Dimensions and Determinants of Service Quality

Gro'nroos, C. (1984) and Lehtinen and Lehtinen (1982) have considered the service quality of the service encounter as two different dimensions one being technical or output quality and the other functional or process quality. These dimensions were assessed according to attitudes and behavior, appearance and personality, service mindedness, accessibility and approachability of customer contact personnel. Lehtinen and Lehtinen (1982) not only pinpointed the process and outcome quality dimensions but also identified three different dimensions of the service encounter, distinguishing between customer perceptions, provider characteristics and production realities.

They suggested that these covered common crucial characteristics in service delivery and that the determinants of satisfaction were therefore similar in each case. For the customer perceptions and production realities, they listed elements which were judged along a continuum. The customer perceptions included purpose, motivation, result, salience, cost, reversibility, and risk. The production realities related more to elements such as technology, location, content, complexity and duration.

These two dimensions can be compared to the customer's perception of a Web site and the complexity or speed of the technology involved. The third dimension of provider characteristics relates to the expertise attitude and demographic attributes of the staff. Gefen, D. (2002) expanded further these two types of service quality, and summarized four aspects of quality which affect customers' perceptions:

- (1) Technical quality;
- (2) Integrative quality;
- (3) Functional quality; and
- (4) Outcome quality.

Technical quality refers to the skills of the personnel and design of the service system. In e-commerce, these two aspects are hidden from view and are not experienced directly and therefore cannot be judged by the customer. Integrative quality is concerned with how the different parts of the service delivery system work together. This is crucial in e-commerce because the customer must have a positive experience online and if relevant a positive experience offline. The third aspect is functional quality which means the manner in which the service is delivered. As for Gro'nroos, C. (1984) and Lehtinen and Lehtinen (1982) definition of functionality quality, the meaning is the same and is relevant to e-commerce in so far as the layout and accessibility of a web site is concerned, without the direct human contact or physical environment. Outcome quality is when the actual service meets the promised service and the customer's needs and expectations. This is true in the case of e-commerce just as much as for businesses in the physical world. If a customer is dissatisfied, s/he is unlikely to visit that shop again.

2.2. SERVQUAL

Among general instruments, the most popular model used for evaluation of service quality is SERVQUAL, a well-known scale developed by Parasuraman et al. (1985, 1988). The attributes of (Parasuraman et al., 1985), were: tangibles, reliability, responsiveness, competency, courtesy, assurance, credibility, security, access, and understanding. Parasuraman et al. (1988) later reduced these ten dimensions into five by using a factor analysis. Based on the five dimensions, a 22-item survey instrument for measuring service quality has been developed. These five dimensions are:

Tangibles - Physical facilities, equipment and appearance of personnel.

Reliability - Ability to perform the promised service dependably and accurately.

Responsiveness - Willingness to help customers and provide prompt service.

Assurance (including competence, courtesy, credibility and security) - Knowledge and courtesy of employees and their ability to inspire trust and confidence.

Empathy (including access, communication, understanding the customer) - Caring and individualized attention that the firm provides to its customers.

Although there has been criticism from some other researchers to SERVQUAL instrument, yet SERVQUAL is the instrument most utilized for its confirmatory factor analyses in most cases. Thus, up to date, SERVQUAL has proven to be a parsimonious model that has been used in various service organizations and industries to measure service quality including banks. SERVPERF also become an important measurement tool after critics are raised over SERVQUAL. It is developed because it is difficult to assess the expectation of customers rather it is better to measure the current performance of service while customers get at the spot (Zeithmal , V.A. Bitner , M.J. 2003).

2.3. Traditional Service Quality VERSUS Electronic Service Quality

Extensive research on traditional Service Quality has been conducted during the past 20 years. In contrast, only a limited number of scholarly articles deal directly with how customers assess e-service quality and its antecedents and consequences. In this section, we briefly overview the relevant aspects of traditional service quality and describe the reasons why that research needs to be repeated in the electronic context.

By traditional service quality refers to the quality of all non-automation-based customer interactions and experiences with companies. Early scholarly writings on service quality (Grönroos 1982; Lehtinen and Lehtinen 1982) suggested that service quality stems from a comparison of what customers feel a company should offer (i.e., their expectations) with the company's actual service performance. Using insights from these studies as a starting point, Parasuraman, Zeithaml, and Berry (1988, 1985) conducted empirical studies in several industry sectors to develop and refine SERVQUAL, a multiple-item instrument to quantify customers' global (as opposed to transaction-specific) assessment of a company's service quality.

Three broad conclusions that are potentially relevant to defining, conceptualizing, and measuring perceived e-service quality emerge from the traditional service quality literature:

- (a) The notion that quality of service stems from a comparison of actual service performance with what it should or would be has broad conceptual support, although some still question the empirical value of measuring expectations and operationalizing service quality as a set of gap scores;
- (b) the five SERVQUAL dimensions of reliability, responsiveness, assurance, empathy, and tangibles capture the general domain of service fairly well, although (again from an empirical standpoint) questions remain about whether they are five distinct dimensions; and
- (c) Customer assessments of service quality are strongly linked to perceived value and behavioral intentions.

A noteworthy feature of the extant service quality literature is that it is dominated by people-delivered services. As such, whether the preceding conclusions extend to e-service quality contexts and what the similarities and differences are between the evaluative processes for service quality and e-service quality are open questions. One author who has extended the SERVQUAL conceptualization to the electronic context is Gefen (2002), who found that the five service quality dimensions collapse to three with online service quality: (a) tangibles; (b) a combined dimension of responsiveness, reliability, and assurance; and (c) empathy. In that research, tangibles were found to be the most important dimension in increasing customer loyalty and the combination dimension most critical in increasing customer trust. However, the items in the scale were changed to adapt to the electronic context (e.g., tangibles were represented in part by an item about appearance of the Web site), and therefore the scales were not comparable across the research contexts. For this and other reasons discussed below, studying e-service quality requires scale development that extends beyond merely adapting offline scales.

2.4. Research on E-service Quality

Some academic researchers have developed scales to evaluate Web sites. Loiacono, Watson, and Goodhue (2000) created WebQual, a scale for rating Web sites on 12 dimensions: informational fit to task, interaction, trust, response time, design, intuitiveness, visual appeal, innovativeness, flow-emotional appeal, integrated communication, business processes, and substitutability. However, this scale's primary purpose is to generate information for Web site designers rather than to measure service quality as experienced by customers. The research that produced the scale involved students visiting Web sites to evaluate them rather than actual purchasers evaluating their experiences. Therefore, although some WebQual dimensions might influence perceived service quality; other dimensions (e.g., innovativeness, business processes, and substitutability) are at best tangential to it. Moreover, the scale developers excluded a dimension called customer service because it could not be measured under the research methodology that was used. For the same reason, WebQual does not include fulfillment as a dimension.

Barnes and Vidgen (2002) developed a completely different scale to measure an organization's e-commerce offering, which they also call WebQual. This scale provides an index of a site's quality (customer perceptions weighted by importance) and has five factors: usability, design, information, trust, and empathy.

Data used in developing and testing the questionnaire were obtained from convenience samples of university students and staff who were directed to visit one of three bookstore sites, to collect some information about a book of their choice, and then to rate their experience on the scale items. The scale is designed to be answered without a respondent needing to complete the purchasing process and is therefore a transaction-specific assessment of a site rather than a comprehensive evaluation of the service quality of a site. Yoo and Donthu (2001) developed a nine-item SITEQUAL scale for measuring site quality on four dimensions: ease of use, aesthetic design, processing speed, and security. As in the case of Barnes and Vidgen's (2002). WebQual scale, data for developing and testing SITEQUAL were gathered from convenience samples. Specifically, students enrolled in marketing classes were asked to visit and interact with three Internet shopping sites of their own choice and then evaluate each site. Like WebQual, SITEQUAL does not capture all aspects of the purchasing process and therefore does not constitute a comprehensive assessment of a site's service quality.

Using an online survey, Szymanski and Hise (2000) studied the role that customer perceptions of online convenience, merchandising (product offerings and product information), site design, and financial security play in satisfaction assessments. This study did not include aspects of customer service or fulfillment; rather, it dealt only with aspects of the Web site. Furthermore, it measured satisfaction rather than service quality. Wolfinbarger and Gilly (2003) used online and offline focus groups, a sorting task, and an online-customer-panel survey to develop a 14-item scale called eTailQ. The scale contains four factors: Web site design (involving some attributes associated with design as well as an item dealing with personalization and another dealing with product selection), reliability/fulfillment (involving accurate representation of the product, on-time delivery, and accurate orders), privacy/security (feeling safe and trusting of the site), and customer service (combining interest in solving problems, willingness of personnel to help, and prompt answers to inquiries). Wolfinbarger and Gilly's goal of creating a scale to measure customer perceptions of e-tailing quality is excellent, and their three study approach is comprehensive.

The resulting scale raises several questions, however. Although two of their dimensions—security/privacy and reliability/fulfillment— show strong face validity and are highly descriptive of the items they represent, the other two dimensions appear less internally consistent and distinct. Web site design, for example, embraces aspects of in-depth information, level of personalization, selection, and speed of completing transactions. The factor called customer service contains items relating to the company’s willingness to respond to customer needs, the company’s interest in solving problems, and the promptness with which inquiries are answered. These dimensions, as well as other items that might be relevant to customer assessment of service quality on Web sites, need to be tested further.

Thus, although past studies provide insights about criteria that are relevant for evaluating e-service quality, the scales developed in those studies also raise some important questions that call for additional research on the topic. On the basis of a comprehensive review and synthesis of the extant literature on e-service quality, Zeithaml, Parasuraman, and Malhotra (2005) detailed five broad sets of criteria as relevant to e- service quality perceptions:

- (a) Information availability and content,
- (b) Ease of use or usability,
- (c) privacy/security,
- (d) Graphic style, and
- (e) reliability/fulfillment.

A number of studies have examined various aspects of these criteria. Some have been hypothesized to be critical, whereas the importance of others has been demonstrated empirically. Availability and depth of information appear to be important because when users can control the content, order, and duration of product-relevant information, their ability to integrate, remember, and thereby use information improves. Ease of use appears relevant because Internet-based transactions are complex and intimidating to many customers. Privacy (the protection of personal information) and security (the protection of users from the risk of fraud and financial loss) have been shown empirically to have a strong impact on attitude toward use of online financial services.

Graphic style—which embodies such issues as color, layout, print size and type, number of photographs and graphics, and animation—has also been shown to affect customer perceptions of online shopping (Hoffman and Novak, 1996)

Finally, reliability/fulfillment has been cited as an important facet of e-service quality (Wolfenbarger and Gilly 2003). In fact, Wolfenbarger and Gilly (2003) found that reliability/fulfillment ratings were the strongest predictor of customer satisfaction and quality, and the second strongest predictor of intentions to repurchase at a site. Insights from the research on e-service quality reviewed above and a comprehensive conceptual study of the nature and structure of e-service quality (Zeithaml, Parasuraman, and Malhotra 2005) formed the starting point for developing ATM banking service quality instrument.

2.5. Service Quality Dimensions in Technology Enabled Services

In case of technology-enabled services, research has identified new dimensions of service quality (different from the traditional service quality dimensions), such as automated search, communication among customers, information acquisition, content, mass customization, and ease of use (Bailey and Pearson, 1983). As consumers' willingness to use and adapt to the new technologies affect their perceptions of service quality, unique scales such as technology anxiety and technology readiness index (Parasuraman, 2000) are also used for the measurement of service quality in technology-enabled services. Parasuraman et al. (2005) developed a multi-item scale for assessment of electronic service quality, which they named as E-S-QUAL. The four dimensions of E-S-QUAL are efficiency, fulfillment, system availability and privacy. Service recovery is also an important factor affecting service quality perception of customers in technology-based services. Hence, Parasuraman et al. (2005) also developed a scale for electronic service recovery quality (E-RecS-QUAL) which consists of three dimensions – responsiveness, compensation and contact.

Van Riel, A.C.R., Liljander, V. and Jurriens, P. (2001) identified user interface, core service and supplementary services as the crucial dimensions of e-service quality in the case of internet-enabled businesses.

E-service quality can also be considered from the perspective of process, outcome and recovery quality. Other dimensions considered to measure e-service quality are website appearance, ease of use, linkage, layout and content, reliability, efficiency, support, communication, security, incentives, performance, feature, storage capability, serviceability, trust, responsiveness, customization, web store policies, reputation, assurance and empathy (Madu, C.N. and Madu, A.A. 2002).

Self-service technology (SST) and call centers (customer service) are the other important research areas related to technology-enabled services. Depending on the technology interface, SSTs can be categorized into the types of telephone, internet, interactive kiosks (e.g. ATM) and video/CD. Consumer perceptions of service quality vary depending on the specific type of SST used.

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2.6. Electronic Banking

The concept of e-banking is a delivery channel for banking services. It is an umbrella term, the process by which a customer may perform banking transactions electronically without visiting a brick- and-mortar institution. Electronic banking include; personal computer(pc) banking, internet banking, online banking, home banking, remote electronic banking, and phone banking, and internet or online banking are the most frequently used designations. It should be noted, however, that the terms used interchangeable.

Personal computer banking is a form of online banking that enables customers to execute the bank transactions from a PC via a modem. In most personal banking ventures, the bank offers the customers proprietary financial software program that allows the customers to perform financial transactions from his or her home computer. The customer then dials into the bank with his or her modem, down loads, and runs the programs that are resident on customer's computer. (Philipos Lamore, 2011).

Banks have used electronic channels for years to communicate and transact business with both domestic and international corporate customers. E-banking includes the systems that enable financial institution customers, individuals or businesses, to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet or mobile phone. The common definition for e-banking, and the one used in this paper, comes from the Basel Committee Report on Banking Supervision, (1998).

“E-banking refers to the provision of retail and small value banking products and services through electronic channels. Such products and services can include deposit-taking, lending, account management, the provision of financial advice, electronic bill payment, and the provision of other electronic payment products and services such as electronic money”.

2.7. Technology-Enabled Service Quality in Banks

The 'bank' is generally understood as “an institution that holds a banking license granted by financial supervision authorities. Under the authorities, the bank conducts the most fundamental banking services like accepting deposits and loans, and other financial services” (Wang and Wang, 2007). The banking industry is one of the earliest adopters of service automation as providers recognized that technological innovations in banking services represented an opportunity to differentiate themselves from competitors in what was otherwise a mature market. Customers have altered the ways in which they access many services because of the growth of technology-based self-service designs in recent years, including banking services (Dabholkar et.al, 1996).

The rapid advancement in IT has had a profound impact on the banking industry and from the last two decades it has become a tool for the wider financial sector that facilitates “banks' organizational structures, business strategies, customer services” and other linked functions. In financial services industry, the recent IT revolution has exerted extensive effects on economies. Banks have willingly implemented self-service technologies (SSTs) of different types e.g. ATM, telephone banking, internet banking, and mobile banking” – all of them can be used by consumers independently, without any need for interaction with bank employees.

2.8. Measurement of E-service Quality

Research on the measurement of e-service quality takes traditional service quality dimensions and web interface quality dimensions as the point of departure (Li and Suomi, 2007). SERVQUAL (Zeithaml and Bitner, 2003), though mostly measuring traditional service quality, is suggested as a good starting point in this regard. Zeithaml (2002) and Parasuraman et al. (2005) postulated that some dimensions of SERVQUAL can be applied to e-service, but additional dimensions are present in e- service that is specifically related to technology.

Barnes, S.J. and Vidgen, R. (2002) extend the SERVQUAL and establish a WebQual Index with 24 items measuring seven dimensions namely: reliability, compliance, responsiveness, access, credibility, communication and understanding the individual. Similarly, Madu and Madu (2002) propose 15 dimensions of online service quality: performance, features, structures, aesthetics, reliability, storage capacity, serviceability, security and system integrity, trust, responsiveness, product differentiation and utilization, web store policies, reputation, assurance and empathy.

Gefen (2002) also attempted to extend SERVQUAL to the electronic context by collapsing the five dimensions into three, i.e. tangibles, empathy and a combination of the others into one dimension. In view of these criticisms, Parasuraman et al. (2005) developed the E-S-QUAL with four dimensions which they labeled efficiency, fulfillment, systems availability, and privacy. Other instruments that were developed in response to this debate are WEBQUAL and SITEQUAL.

Other studies have made an attempt to identify key dimensions of online businesses like online banking. Joseph et al. (1999) have identified six dimensions of online banking service quality, namely convenience/accuracy, feedback/complaint management, efficiency, queue management, accessibility and customization.

The above narration shows in summary that there is no consensus on what drives online service quality and e satisfaction. Initial research on ATMs had focused on providing evidence of the association between consumer usage patterns and their demographic profiles as well as consumer psychographic profiles. However, the continued rejection of ATMs called for more research to establish how users and non-users perceive them and why. The contention is that perceptual variables are more successful as predictors of the purchase outcome than customers' personal characteristics. Consensus has yet to emerge over e-service evaluation criteria since cultural differences affect the relative importance placed on the various dimensions.

2.9. Bank Automated Service Quality

Even though the e-service quality concept has received a great deal of academic and researchers' attention, the conceptualization of this concept is still limited. A review of the current conceptualization of automated services revealed that general automated service definitions include specific references to the internet, but they negate the inclusion of other important automated service types, such as telephone services and automated service delivery outlets. Surjadjaja et al. (2003) identified an automated service as a web-based service delivered through the internet whereby the customer's interaction or contact with the organization is limited to the information and communication technology itself. A recent study that was carried out by Parasuraman et al. (2005) used similar definitions and referred to an automated service as a website-based customer service.

In the banking sector, customers have tended to use different service delivery channels in a complementary way; consequently, developing a relationship with the customer can be achieved through any one of these media and, more likely, a combination of them. Surjadjaja et al. (2003) indicated two main shortcomings in regard to the previous studies on e-service quality conceptualization. One of these shortcomings is that the conceptualization of e-service quality is synonymous with website quality or, in particular, web interface design quality. The second is the arbitrary nature of the suggested factors in some studies of the concept of e-service quality that reflect to a large extent the conceptual character of the latter.

Every automated service delivery channel has its own attributes (Dabholkar, 1996) and consequently the main shortcoming of referring to the website features is the failure to separate the particular attributes of every delivery channel, or other compounding factors, that may affect the customer perception of automated service quality. Customers' evaluation of automated service options and their intention to use a particular option are directly affected by their perception of the attributes associated with that option (Dabholkar, 1996).

A more holistic definition by Santos, J. (2003), thus, is adopted for the purposes of this research as it is recognized as providing not only a more general definition of automated service quality but one that extends beyond the internet channel. Automated service quality was defined by Santos (2003) as the customer's overall evaluation of the excellence of the provision of services through electronic networks such as the internet, automated teller machines (ATMs), and telephone banking. This definition seemed to be the most appropriate fit for this research, as the internet banking channel is not the only automated service delivery channel that can be identified in the banking sector.

Lovelock et al., 2010 developed six different factors of e-service quality, taking into consideration the nature of all of the electronic means of banking: accuracy/convenience, accessibility/reliability, good queue management, personalization, friendly/responsive customer services, and targeted customers. Convenience refers to the availability of different services, accuracy, and operating hours. Convenience is a main driver of customers' use of automated services (Lovelock et al., 2010). Moreover, it is a main determinant of service quality and it is vital for customer satisfaction (Dabholkar, 1996). Queue management refers mainly to the time required to complete bank transactions over the automated channels. Bank customers these days are short of time. Thus, they prefer not to wait for a long time before receiving service delivery. Speed, speed, and speed are an important factor that customers use to judge the quality of services. Personalization refers to the possibilities of service personalization through automated service channels. Personalization has been considered as a factor of automated services by many authors such as Zeithaml et al. (2002). One often-cited benefit of automated services is that they can be customized to the user's need, although this might be a challenging task because of the lack of the human touch. Organizations need to strive to customize their services to their targeted customers in order to create extra values and hence gain a competitive advantage. Responsiveness refers to the ability of automated services to handle customer queries and problems. It was noted from the literature review that the responsiveness element has frequently been included in measurements of different dimensions of e-service quality. As in the traditional service context, customers usually expect a quick response to their requests or a quick solution to any problem they might face while using the automated channel.

Finally, security refers to the ability of automated services to offer a safe environment free of privacy interruption. Security is a serious concern to e-service customers. It concerns the risk that a third party might access critical financial information about the customer. Security is included as a dimension of e-service quality in many studies.

2.10. Customer Satisfaction and Service Quality

Satisfaction and quality are two concepts that are the core of marketing theory and practice. The key to sustainable competitive advantage lies in delivering high quality service that will result in satisfied customers. However, the two concepts are distinct, though obviously related. In terms of customer satisfaction, no agreed upon definition appears to exist. This definitional shortcoming is evidenced by the debate on whether satisfaction is a process or an outcome. However, it is generally agreed that customer satisfaction is a post-purchase phenomenon. (Zeithaml and Bitner, 2003)

In this study, the term customer will refer to the end-user of the product (ATMs). Customer satisfaction is defined as the customer's evaluation of a product or service in terms of whether that product or service meets that individual's needs or expectations. On the other hand, service quality focuses on an evaluation of how the customer perceives elements of the service. Parasuraman et al. (1985, 1988) define perceived quality as the gap between the consumer's expectations and the consumer's perception regarding the service. Many firms have discovered that increasing levels of customer satisfaction are linked to customer loyalty (Zeithaml and Bitner, 2003).

2.11. Quality-Commitment Relationship

Relationship commitment is defined as an enduring desire to maintain a valued relationship. A "valued relationship" exists when the relationship is considered important. Similarly, Morgan and Hunt (1994, p. 23) defined commitments as "the exchange partner belief that an ongoing relationship with another is important as to warrant maximum effort at maintaining it"; that is, the committed party believes the relationship is worth working on to ensure it endures indefinitely.

It was indicated that mutual commitment is the base of building a relationship. Even though commitment and loyalty are connected, they are considered as two different concepts. Commitment plays a major role in soothing the behavior regardless of the changing environmental condition. They continued by arguing that commitment is an essential component of a solid and lasting loyal relationship. Loyalty is seen as “a deeply held commitment to re-buy or repurchase a preferred product/service consistently in the future, thereby causing repetitive same-brand or same-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour” (Oliver, 1999). Thus, it can be concluded from the above discussion that commitment is a lower level of customer loyalty and it is the right way to an ultimate loyal relationship with customers.

In Ethiopia, offering automated services by banks is still recent and newly introduced. At this stage, achieving customers' commitment rather than loyalty within the context of automated services might be more realistic. Loyalty is a higher relational level and requires more than offering automated services. Commitment has been treated in the literature as a very useful construct for measuring the probability of customer loyalty as well as forecasting customer purchase intentions. Most researchers who studied the commitment construct predictors tested their model within industrial markets as well as consumer goods. Bank customers cannot evaluate the service performance easily until sometime after the transaction date. Establishing strong communication channels with bank customers in regard to their investments, loans, deposits, and all their other transactions will enhance relationship commitment. Timely communication with customers about their investment status, possible future opportunities and risk, and whether they are achieving the expected financial outcomes has to add to the relationship commitment. Automated bank services are considered as an efficient method for providing timely and accurate information to customers. Bank customers can be updated with all of their different financial transactions whenever and wherever they wish. (Sharma and Patterson, 1999).

In general, theoretical and some empirical support has been found in the literature for the notion that automated service quality could enhance rather than diminish relationships. The literature showed that if firms fail to provide the channels that their customers seek and value, they will find it more difficult to have a strong relationship with their customers.

Owing to the nature of automated media, such as telephone and internet banking, the relationships between some parties have become closer than ever before. Automated delivery channel quality has the potential to make customers enthusiastic about their bank and inclined to tell other potential customers about its advantages. Thus, automated channel users would be more likely to comment positively about their bank to other people, recommending the bank and encouraging others to do business with it. The quality and the use of automated channels as a means of delivering banking services have become an important way of maintaining customers' commitment and loyalty and increasing the market share (Joseph and Stone, 2003). In general, both theoretical and some empirical support have been found in the literature for the notion that automated services represent a positive experience for the users and provide increased value for money to entice customers to have the intention of continuing to do business with their bank (Zhu et al., 2002).

2.12. Conceptual Framework

Based on literature reviewed above, the relationship between service quality variables and customer satisfaction can be shown in figure below. The key dimension of automated banking service quality of this study include Tangibility, Reliability, Responsiveness, Assurance and Empathy. These five dimension will be ranked by the respondent on the level of importance for determining the quality of banking service.

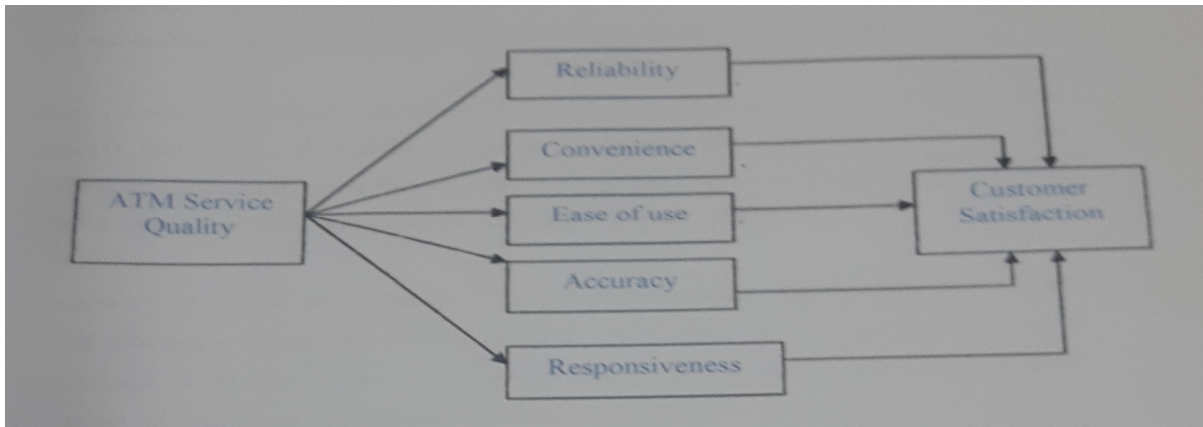


Figure 1: Conceptual Framework of this study

Source: Adapted from the conceptual framework developed by Parmita S. and Yanni Z described in their study in internet banking.

Tangibles - Physical facilities, equipment and appearance of personnel.

Reliability - Ability to perform the promised service dependably and accurately.

Responsiveness - Willingness to help customers and provide prompt service.

Assurance (including competence, courtesy, credibility and security) - Knowledge and courtesy of employees and their ability to inspire trust and confidence.

Empathy (including access, communication, understanding the customer) - Caring and individualized attention that the firm provides to its customers.

CHAPTER THREE

3. RESEARCH METHODOLOGY

In this section the researcher identified and considered the research methodology in general that he has used when he conducts the research in terms of the research design, approaches, participants, source of data, data collection methods. This part also discussed sampling issues like target population, sampling techniques and sample size.

3.1 Research Approaches

There are three approaches to conduct any research: Qualitative, Quantitative and Mixed approaches. According to Saunders *et. al.* (2009) mixed method approach is the general term for when both qualitative and quantitative data collection techniques and analysis procedures are used in research design. In this study mixed-method approach was employed to ensure effectiveness of the research process as the findings of the qualitative data enhance the findings of quantitative one and the vice versa and the research used Mixed methods in this study for better understanding of the research problem than either of each alone.

In Quantitative research the researcher used numbers and ultimately describe an event by using figures. By using frequency and percentage, the researcher converted the data collected and ensure that the results are not just a coincidence observation. On the other hand, in Qualitative research the researcher describes the kind and quality of a subject, while interpreting and attempting to understand the qualitative aspect of the study. By using narrative descriptions, the purpose of qualitative research is to give the reader of this paper a mental picture of what the researcher is seeing.

3.2 Research Design

The research mainly focused on empirically investigation of service quality perception from the customer's point of view on ATM service of Ethiopian private banks using descriptive design. Descriptive research is used to describe characteristics of a population or phenomenon being studied. It does not answer questions about how/when/why the characteristics occurred. Rather it addresses the "what" question (what are the characteristics of population or situation being studied?). The characteristics used to describe the situation or population are usually some kind of categorical scheme also known as descriptive categories. Hence, descriptive research cannot describe what caused a situation. Thus, descriptive research cannot be used to as the basis of a causal relationship, where one variable affects another. In other words, descriptive research can be said to have a low requirement for internal validity.

The description is used for frequencies, averages and other statistical calculations. Often the best approach, prior to writing descriptive research, is to conduct a survey investigation. Qualitative research Often has the aim of description and researchers may follow-up with examinations of why the observations exist and what the implications of the findings are.

3.3 Population, Sample Size and Sampling Procedure

3.3.1 Target Population

For this particular study the researcher has only considered united bank and Wegagen bank card holders issued from Addis Ababa area banks due to easy and accessibility of information from their payment card department and the number of card holder is somehow manageable to undertake this study which is 55,400 card holders from united bank and 44,166 from Wegagen bank are selected as a target population. The ATM which are located in administrative areas (Ten Sub cities) of Addis Ababa who use ATM banking service were the target population of this research.

3.3.2 Sampling Technique and Sample Size

To identify sample ATM for interview and physical observation in the study the researcher used stratified sampling to obtain a sample size that best represents the total ATM installed in Addis Ababa. It is also minimize sample selection bias and ensuring certain segments of the population are not over represented or underrepresented. Each sub city in Addis Ababa was considered as a stratum and selected ATM from each sub city from each bank. Due to that 10 ATM from United Bank and 10 ATM from Wegagen Bank, and a total of 20 ATMs were selected as a sample of this study.

S.N	Bank	Total No of ATM	Card Holder	ATM in Addis	Sample Size for ATM
1	Wegagen Bank	147	44,166.00	88	10
2	United Bank	69	55,400.00	48	10
		216	99,566.00	136	20

Table 3.1. ATMs and numbers of card holders of the Banks

Secondly, the researcher used Convenience sampling technique for selecting the card holder, because of the ease of their volunteering or selecting units because of their availability or easy access. The advantages of this type of sampling are the availability and the quickness with which data can be gathered from a bank customers, who used automated services. The minimum sample size is 350 respondents as per below formula.

$$\text{Sample Size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

Where: n: the desired sample size

z: the standard normal deviate usually set at 1.96 (which corresponds to the 95% confidence level)

p: the proportion in the target population to have a specific characteristic. If no estimate available set at 50% (or 0.50)

d: absolute precision or accuracy, normally set at 0.05.

e: Margin of error

3.4 Sources of Data

The data was obtained from both primary and secondary sources. A structured written questionnaire is prepared based on the instrument developed to obtain crucial data from many time users of the ATM service. Unstructured interview is also held to obtain a primary data from the sample population and officials at respective positions.

The questionnaires is administered by personal delivery for 350 customer who uses ATM banking services at randomly selected ATM stations from each cluster (the Two banks) in Addis Ababa. Some of the customers who have great exposure on ATM banking in other countries preferred to be interviewed. Moreover, some bank's card payment center provide secondary data about the card holders, transactions made and other related data. The researcher also used different kinds of secondary sources for the research as input from annual report of banks, brochures, company website (different web sites, journals, and internet).

3.5 Methods of Data Collection

To collect valid and reliable data for this research, the researcher used the following tools:

Questionnaires: A questionnaire with a 36 item was distributed to customers who are currently using ATMs in the two Private Banks in Ethiopia installed in Addis Ababa. Convenient time and ATMs are considered by the researcher to get customers who use ATM service at that time and the researchers and some volunteers friends of him gave the questionnaires in person to the respondents and assisted them in filling it.

Physical Observation: Physical observation was conducted on the selected automatic teller machine service outlets from Tuesday 6:30 pm-8:00pm, Saturday 6:00 Pm-10:00pm and Sunday 10:30AM-12:00AM to observe the natural setting of customers while conducting an ATM transaction.

Unstructured Interview –the researcher conducted unstructured interview with some customers at different time. The objective of the interview was to identify facts that couldn't be exposed in the survey questionnaire and to find related information.

3.6 Data Analysis Tools

After the relevant data are collected through the above mentioned tools , the researcher has coded, cleaned and then entered in to SPSS (Statistical Package for Social Sciences) version 20.0 .It was used to compute and analyze the data .The statistical tests that are used in the analysis of data included frequencies by using tables, percentages and graphs and interpretation.

CHAPTER FOUR

4. DATA PRESENTATION AND ANALYSIS

This chapter will present data that has been collected through quantitative survey, interview as well as secondary sources. Firstly, an overview of e-banking practice of Ethiopian banks, secondly the general information about the sample population is given and thirdly the data presented according to the research questions and the variables identified in focus group discussion will be discussed.

4.1. General Information

S.N	Variables	Classification of Variables	Frequency	Percentage
1	Gender	Male	225	64.5
		Female	123	35.2
		Missing	1	0.3
2	Nationality	Ethiopian	346	99.2
		Foreigners	3	0.8
3	Number of ATM cards	One card	191	54.7
		Two card	78	22.3
		Three card	56	16
		Four card	24	6.9
4	Usage Frequency	Once in a month	26	7.4
		Twice	49	14
		Three times	52	15
		Four times	49	14
		Daily	5	1.5
		Other	168	48.1
5	Time of the day respondents prefer ATM	8:00 Am - Noon	66	19
		Noon - 5:00 Pm	82	23.4
		5:00 Pm - 7:59 Am	201	57.6
6	Length of Service of the card	less than six months	63	18.1
		6-12 months	70	20.1
		1-3 years	138	39.3
		more than three years	78	22.6
7	Type of Card	Debit card	346	99.1
		Credit card	3	0.9

Table 4.1.1: customers' demographic information

As shown on the above table, with regard to the demographic variable from the total of 349 respondents 64.7% were male and the remaining 35.3% were female. As a matter of chance the male respondents are higher than the female but this doesn't show that the population of male card holders are higher than the females. The table also shows that only 3 foreigners could be found while distributing the questioner and the remaining 346 (99.2%) are Ethiopian. In addition, table 4.1.1 shows that More 54.7 % of the respondents have only one ATM card, 22.3% have two ATM card, 16% have three ATM cards and the remaining 6.9 % have four cards. These shows that most of the customer would like to have to have only one card from one bank and loyal to their personal bank.

According to table 4.1.1 the usage pattern of ATM card holders is not complex as expected. Though most of them (48.1%) prefer to use five or more times per month that means the bank customer are adapting themselves with automated teller machine and depending on the service of the machines. The above tables also depict that with different reasons more than half which is 57.6% of the respondents prefer to use ATM at the times where there is no teller service option. i.e. from 5:01 pm to 7:59am. This indicates that banks need to maintain enough cash at their ATMs during off working hours.

Again from the above table we can see that most of the time the respondents prefer using ATM because of many reasons such as running out of cash at that time, prefer self-service technology than tellers, they could easily communicate (foreigners) with the ATM than the tellers. These respondents account for 54.7% of the samples. Undeniably those respondents who prefer ATMs are because of unavailability of teller option at that time account for 25.8%.

In addition from the above table Most of the respondents use their ATM card for one to three years which is (39.3%). The remaining 20.1%, 22.6% and 18.1% hold their card for 6-12months, more than three years and less than six months respectively.

On the other hand, as per the information from each bank data center employees the banks in Ethiopia issue only debit cards and accept both debit and credit cards. Since most of the respondents are Ethiopian, 99.1% of the respondents have debit card. The remaining low percentile goes to credit card type.

4.2 Specific Information

4.2.1 Satisfaction of the Respondents with Tangibility Dimensions

S.N	Variables	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc
1	Easy of handling and attractiveness of card design	84	24.3	186	53.8	54	15.6	16	4.6	340	98.3
2	Attractiveness of the ATM facility	133	38.4	155	44.8	42	12.1	12	3.5		
3	There are adequate number of ATM stations in the area I am living	30	8.7	123	35.5	77	22.3	88	25.4	24	6.9
4	The machine is located a way from public view	69	19.9	130	37.6	38	11	58	16.8	41	11.8

Table 4.2.1 Satisfaction of the respondents with tangibility dimensions

As shown on the above table the beauty and portability of the card have a significant impact up on the satisfaction level of customers. Here the data show that Ethiopian commercial banks have worked good in this regard because more than 79% of the respondents are delight about the card design attractiveness and easy to handle. As shown on table 4.2.1 the other factor under tangibility issue is attractiveness of the ATM appearance.

More than 84% of respondents agreed on the attractiveness of ATM boxes. Invaluable 3.5% disagree on the existence of attractive ATM facility. In addition, as we can see on the above table, the number of ATMs that give service in a given area is another concern while customers choose their personal bank for their card service. In this regard, though the positive range higher a significant number of customers are dissatisfied. This implied that banks were not installed enough number of ATMs throughout the city evenly to all area.

Finally the table 4.2.1 shows People prefer to transact a way from public view; this is mainly due to be safe. More than 59% of the respondents agreed that ATM boxes are away from public view. The remaining 29.5% and 11.3% disagree and neutral about the issue respectively. This gives a cue for these banks to work on this issue because it is a case by which most Ethiopians give emphasis

4.2.2 Satisfaction of the Respondents with Reliability Dimensions

S.N	Variables	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc
1	There is frequent power interruption at the ATM stations	32	9.2	158	45.7	49	14.2	78	22.5	29	8.4
2	There is available cash in the ATM at any time	66	19.1	182	52.6	47	13.6	29	8.4	22	6.4
3	Amount of cash limit to be withdrawn in a day is adequate	53	15.3	156	45.1	56	16.2	43	12.4	31	9
4	The network is available at any time	9	2.6	69	19.9	88	25.4	123	35.5	50	14.5
5	There is 24/7 service availability	32	9.2	166	48	75	21.7	44	12.7	24	6.9
6	All money denominations types are available	33	9.5	81	23.4	73	21.1	109	31.5	47	13.6
7	The card works in point on sale machine (PoS) (electronic payment)	127	36.7	164	47.4	33	9.5	11	3.2	4	1.2
8	Availability of mini statement										
9	There is easy confirmation of balance	82	23.7	206	59.5	21	6.1	33	9.5		
10	The availability of transaction printing	43	12.4	51	14.7	88	25.4	109	31.5	50	14.5
11	Short service rendering time by the ATM during transaction	94	27.2	168	48.6	46	13.3	21	6.1	17	4.9

Table 4.2.2 satisfaction of the respondent with the reliability dimension

As we can see from the above table more than 54 % of the respondents agreed up on the frequent power interruption at the ATM stations. First the ATM could not work without electric power that could make them unable to use ATMs. Second, while there is no light during night time the security will be in question. This indicates that banks need to maintain power continuing mechanisms and energy sources every time. The remaining 22.5%, 14.2%, 8.4%, 9.2% disagree, neutral, strongly disagree and strongly agree about the case respectively.

In addition, table 4.2.2 also shows the other reliability item which is availability of cash in the ATMs at any time and more than 71% of the respondents have positive response. 52.6% agreed and 19.1% strongly agreed up on the availability of cash in the ATM on demand. Only 14.8% of the customers give negative response for it. This indicates that banks are maintaining enough cash at their ATMs during all time.

As per the above table for the maximum amount to be withdrawn from ATM most of the respondents (61.7%) agreed that this limit is adequate. However, 21.4% of the respondents stand against this view. This limit is set to make both the customer and the bank safe or avoid risk and keep the bank and customers from fraud.

Table 4.2.2. Also shows the other reliability issue is related to the infrastructure of the bank in information technology. Banks have some web based and database programs by which they are giving wide area network connection for its customers via physical branches and ATMs. The customer of any branch could transact at any branch or ATM of the bank. Here the respondents' response weighted to negative spectrum of the Likert scale. And only 23% of the respondent believes that the network for the ATM is available any time.

The other point we can see from the above table is existence of 24 hour service a day and seven days a week service is another quality of the ATMs. More than 58% of the respondents agreed. In this regard, these commercial banks are performing well. Because, this kind of service will help their customers to get service after the banks working hours.

As per table 4.2.2 above with regard to the availability of all money denominations types at any time. Here customers would be highly dissatisfied while the machine gives unnecessary denomination types. For example, if the customer needs to withdraw 500 birr and ordered the machine to give him/her, it might give him 100 times 5 birr notes. This reliability dimension only satisfied 33.2% of the respondent. However, the remaining more than 56% are dissatisfied.

Table 4.2.2 also shows use of the cards on PoS machine around supermarket, hotels, gas stations, jewelries and other markets. Due to this they could enable to satisfy around 85.8% of the sample respondents. About 9.7% of the respondents lie on neutral point of the scale this is might be due to lack of knowhow or inexperience of the customers about the use of the card at PoS machines.

On the other hand we can also see on the above table one of the tangible facilities that ATMs give is mini statement printing. These commercial banks ATMs provide mini statement printing for the last ten transactions. About 34.9% of the respondents agreed up on the existence of mini statement printing and more than 37% disagree. In addition, the effort to know about the balance in your account is another point to see and with this regard more than 84% of the respondents satisfied and highly satisfied. Only 15.7% of the respondents are neutral and disagree about the case.

Furthermore, transaction printing has been address and more than half of the respondents disagree on the existence of transaction printing. The last but not the least we can see from the above table is the time taken to pass a single transaction is another item and with this regard 75.7% of the respondents give a positive response and 13.3% remain neutral/indifferent about the issue.

4.2.3 Satisfaction of the Respondents with Responsiveness Dimensions

S.N	Variables	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc
1	There are qualified support staffs 24/7 (including holidays and non-working hours)	36	10.4	67	19.4	117	33.8	73	21.1	44	12.7
2	Recovery speed while there is failure in ATMs is fast	24	6.9	62	17.9	75	21.7	132	38.2	50	14.5
3	Responsiveness of Call center assistant at any time is prompt	32	9.2	71	20.5	113	32.7	79	22.8	45	13
4	Reissuance speed of the bank while there is card loss is not time taking	27	7.8	55	15.9	76	22	97	28	86	24.9
5	Easy of regaining the captured card	41	11.8	121	35	78	22.5	90	26	12	3.5

Table 4.2.3 satisfaction of the respondent with the responsiveness dimension

As we can see from the above table more than half of the respondents don't have information about the existence of qualified support staff and have zero response about it. This indicates that these banks don't create awareness about their support staffs who always strive for the satisfaction of their customers.

Also as per the above table we can see that the recover speed if there is any failure related ATMs, banks support staff maintain the problem. The speed of identifying the problem and time taken to recover this is another issue that might make difference among commercial banks. Here also the response balanced to the negative spectrum of the scale. More than 52% disagree or strongly disagree about the existence of speedy maintenance of failed ATMs. This implied that banks do not have a special task force that works intensively on this issue in order to speed up the recovery of ATM failure.

Table 4.2.3 also address the responsiveness of the call center of this banks. Though the distribution here mainly centered to the indifferent and agrees points a significant number of respondents lie on the negative spectrum. Only 30.3% agreed up on the existence of responsive call center and 36.4% disagreed stands negatively with the point, and the remaining major share goes to indifferent /neutral/ section of the scale (33.2%).

On the other hand, cards issued from the bank might be damaged or stolen. In this case the banks will issue another card timely as possible to make the customer satisfied about their card service. Only 24% agreed up on the timely issuance of damaged or lost card, however, another 22.3% prefer to be neutral about the case. And a significant number of respondents disagreed about the case (52.9%) as you can see from the above table. Sometimes the ATM captures cards due to its technical failure and un-readability of card. This time the bank will give prompt concern about returning back the card to the customer. While the customers use inter-branch ATMs the bank send the card to the originating branch so that the customer could easily access it.

As we can see from the above table more than 47% of the respondents agreed up on the easy regain of the captured card, however, a significant amount 29.8% of the respondent's dissatisfied about the recovery speed.

4.2.4 Satisfaction of the Respondents with Assurance Dimensions

S.N	Variables	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc
1	The level of secrecy of the pin code when given from the bank is maximum	62	17.9	193	55.8	43	12.4	28	8.1	20	5.8
2	If the ATM machine has surveillance camera	37	10.7	113	32.7	67	19.4	89	25.7	16	4.6
3	Security of ATM locations	66	19.1	156	45.1	40	11.6	50	14.5	33	9.5

Table 4.2.4 satisfaction of the respondent with the Assurance dimension

There might be a doubt on the secrecy of the pin cod while given from the bank. As per the above table some respondents (13.9%) disagreed about safeness and security of the code while given from bank. But most of the respondents (73.7%) have no doubt about its secrecy. The remaining 12.4% remains indifferent.

In addition, some banks put a surveillance camera for the safety and security of their own bank and their customers on the ATM boxes. Customers are asked to prefer camera or no-camera box and the result is almost 43.4% of the respondents are agree and 19.4% remain neutral and there is some weight on the positive response side as we can see from the above table.

Table 4.2.4 also shows the security level of ATM locations as one of the major issues in this dimension. Here the place at which the machine installed plays a major role. The respondents that give positive response weight that of negative response (64% by 23%) and the remaining 11 percent remains neutral. This indicated that banks are working well in installing their ATMs at secured places and prompt to safe their customers.

4.2.5 Satisfaction of the respondents with Empathy dimensions

S.N	Variables	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc
1	The clarity and simplicity of the ATM language	126	36.4	160	46.2	34	9.8	14	4	5	1.4
2	Easy of using the ATM command										
3	ATM instructions enable me to feel in control during transaction	43	12.4	157	45.4	92	26.6	36	10.4	17	4.9
4	There are lower number of PIN code trials to access the account	108	31.2	92	26.6	68	19.7	13	3.8	53	15.3

Table 4.2.5 satisfaction of the respondent with the Assurance dimension

The ATM has local and foreign languages as a choice to operate. Most of the ATMs of these banks have a choice one local language (Amharic) and one language (English). The above table shows that 84.4% of the respondent satisfied with the existing language clarity and simplicity. The command has to be usual and friendly as we can see from the above table the command of the ATM is another dimension. Here the weight highly balanced to the positive spectrum (80.8%). This implied that banks are satisfying their customers in this regard and maintain this quality.

Table 4.2.5 also shows the other dimension which is the control in during transactions. In this regard, the major share goes to positive score which is 58 % of the respondents are satisfied and around 26.7% goes to neutrality spectrum. There only 15.3 % of the respondents are dissatisfied with this item. The last point with this dimension is the number of trials to access your account. Table 4.6.1 shows more than 59% of the respondents are satisfied with the number of trial that is given by the ATM. Most of these banks have code trials of three. It is only after three trials that the ATM blocks the access to the account by capturing the card. Still there are 19.7% of respondents remain neutral about the adequacy of these trials.

4.2.6 Overall Satisfaction of the ATM Service of my Personal Bank

	Frequency	Percent	Valid Percent
strongly agree	72	20.8	20.8
Agree	191	55.2	55.2
Neutral	38	11.0	11.0
Valid Disagree	35	10.1	10.1
strongly disagree	10	2.9	2.9
Total	346	100.0	100.0

Table 4.2.6. Overall satisfaction of the ATM service of my personal bank

As we can see from the above table the overall satisfaction rate, around 20.8% of valid responses have strong agreement about the ATM service quality, 55.2% of the respondents are moderately satisfied, 11% are indifferent and 13% of respondents are dissatisfied about the general service quality of the commercial banks ATMs in Ethiopia. However, they should work hard to increase the satisfaction level since the competition in the future market might be highly stiff.

4.3 Document Analysis/ Interview Analysis

Wegagen bank has installed more than 147 ATMs in its area branches in Addis Ababa and outlying cities, hotels and other public areas. Available services on its ATMs are Cash withdrawal, Balance Inquiry, Mini statement, Transaction printing and PIN (Personal Identification Number) change. The ATM configuration enables it to accept deposit and they are trying to begin this activity on ATMs at any time. This might make them to be the first bank in Ethiopia. The bank commences its operation in July 2010 and the number of card holders reached 128,866. The maximum amount of ETB to be withdrawn in a given day is 5,000 like the other banks.

United bank is the other bank that was selected for this specific study with ATM banking technology. They have more than 69 ATM stations and more PoSs distributed throughout Ethiopia and card holders reaches 103,000) like the other the ATM gives services of withdrawal, transaction printing and balance enquiry.

On the other hand while conducting the interview the major challenges that was identified and discussed by the customers who used the ATM and other e banking technology are

- Frequent power disruption
- Lack of skilled manpower
- Poor telecommunication infrastructure
- People are resistant to new payment mechanisms
- Lack of trust on banks about the accuracy and speed of their service.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATION

5.1. Summary of Major Findings

Tangibility

- The beauty and portability of the card one of the dimensions and the data show that the two banks have worked good in this regard because more than 79% of the respondents are delight about the card design attractiveness and easy to handle.
- More than 84% of respondents agreed on the attractiveness of ATM boxes. Invaluable 3.5% disagree on the existence of attractive ATM facility.
- The number of ATMs that give service in a given is area is another concern while customers choose their personal bank for their card service. In this regard, though the positive range higher a significant number 32.2 % of customers are dissatisfied.

Reliability

- More than 54 % of the respondents agreed up on the frequent power interruption at the ATM stations.
- The other reliability item which is availability of cash in the ATMs at any time and more than 71% of the respondents have positive response. Only 14.8% of the customers give negative response for it.
- On the other hand 23% of the respondent believes that network for the ATM is available any time.

Responsiveness

- More than half of the respondents don't have information about the existence of qualified support staff.
- The recover speed if there is any failure related ATMs, banks support staff maintain the problem. Here also the response balanced to the negative spectrum of the scale. More than 52% disagree or strongly disagree about the existence of speedy maintenance of failed ATMs.

- The responsiveness of the call center of these banks. Though the distribution here is mainly centered to the indifferent and agrees points a significant number of respondents lie on the negative spectrum. Only 30.3% agreed up on the existence of responsive call center and 36.4% disagreed stands negatively with the point.
- Cards issued from the bank might be damaged or stolen. Only 24% agreed up on the timely issuance of damaged or lost card, however, another 22.3% prefer to be neutral about the case. And a significant number of respondents disagreed about the case (52.9%).

Assurance

- Some of the respondents (13.9%) disagreed about safeness and security of the code while given from bank. But most of the respondents (73.7%) have no doubt about its secrecy. The remaining 12.4% remains indifferent.
- Customers are asked to prefer camera or no-camera box and the result is almost 43.4% of the respondents are agree and 19.4% remain neutral and there is some weight on the positive response side
- The security level of ATM locations as one of the major issues in this dimension. Here the place at which the machine installed plays a major role. The respondents that give positive response weight that of negative response (64% by 23%).
- More than 59% of the respondents agreed that ATM boxes are away from public view. The remaining 29.5% and 11.3% disagree and neutral about the issue respectively.

Empathy

- The command has to be usual and friendly. Here the weight highly balanced to the positive spectrum (80.8%).
- The other dimension which is the control in during transactions. In this regard, the major share goes to positive score which is 58 % of the respondents are satisfied and around 26.7% goes to neutrality spectrum. There only 15.3 % of the respondents are dissatisfied with this item.
- Most of the ATMs of these banks have a choice one local language (Amharic) and one language (English). 84.4% of the respondent satisfied with the existing language clarity and simplicity.

- The last point with this dimension is the number of trials to access your account. More than 59% of the respondents are satisfied with the number of trial that is given by the ATM. Most of these banks have code trials of three. It is only after three trials that the ATM blocks the access to the account by capturing the card. Still there are 19.7% of respondents remain neutral about the adequacy of these trials.

In general the Overall satisfaction rate, around 20.8% of the responses have strong agreement about the ATM service quality, 55.2% of the respondents are satisfied, 11% are indifferent and 13% of respondents are dissatisfied about the general service quality of the commercial banks ATMs in Ethiopia.

5.2. Conclusion

This study investigated service quality of ATMs in Ethiopian banking context by developing and validating sound instrument and then uses that same instrument to identify the ATM service evaluation criteria.

In the descriptive part of the study, the researcher has identified that automatic and e-banking service in the Ethiopian banking context is still under developed. There are about 2335 ATMs still exist in the financial market from all the banks. The majority of ATM users in Addis Ababa are citizens of Ethiopia, from the total card holders the researcher only consider users obtain cards from united Bank and Wegagen Bank. There is lower frequency of using ATM card among these customers and most of these customers prefer ATM banking in hour where there no teller-based banking operation. All the card services are debit card services of saving accounts.

The most important and significant factors that ATM banking customers weighted most are the availability of cash in the ATM any time, the availability of all denomination, network availability, frequent power interruption, transaction printing and mini statement availability could be mentioned and the major ATM services provided by Ethiopian commercial banks includes cash withdrawal, confirmation of balance, mini statement printing and transfer of balance can be mentioned.

Lastly, Frequent power disruption , Lack of skilled manpower , Poor telecommunication infrastructure , resistant to new payment mechanisms ,Lack of trust on banks about the accuracy and speed of their service can be seen the current as well as prospects challenges of e-service of banking in Ethiopia.

The study establishes that ATM users consider reliability, security, affordability and location, in that order, as important evaluation criteria of ATM services. Based on the moderate overall satisfaction with service score, Ethiopian banks need to do much more in order to meet the ATM service expectations of their customers. The instrument used in this study should enable managers to bench mark performance and plan improvements.

5.3. Recommendation

According to the findings of the study one of the prime factors that customers give higher emphasis is reliability issue while choosing a bank for their ATM service need. From the reliability items like the availability of cash in the ATM, power issue, amount of cash limit to withdraw in a day, network issues and availability of all denomination in the ATM can be taken as the major are that these commercial banks should give higher emphasis due to the sensitivity issue for their customers with regard to ATMs and They should also take care of the negative response givers because they might spoil the bank reputation

Customers have doubt about the existence of qualified support staffs, the availability of 24/7 network at the ATMs and recovery speed while there is failure in ATMs for which items the satisfaction is very low. Therefore, banks need to employ qualified staffs that give prompt service for their customers at any enquiry and aware their customer those qualified personnel that the banks had already.

In addition, though the infrastructure is the problem of the country at large they should have to purchase a database product that is contemporary with the international banking arena and could easily run with low network frequency so that try to avail networks every time at the ATMs stations. Moreover, every ATM machine might face technical and mechanical error at any time; therefore, a task force that easily identify and solve the problem should be standby.

The other determinant factor in expressing the overall satisfaction level of ATM customers is security of the machine and its area. The machine location, level of secrecy of the code and the surveillance camera issue are included here. There is almost fifty-fifty agreement and disagreement among customers about its presence in and around the box. So banks need to conduct a depth survey about this issue.

Most customers agreed up on the level of secrecy while taking the card and pin code from the bank. However, there are insignificant numbers of customers who have a doubt about it. The banks should strive to avoid this as much as they can because these customers may spoil the expectation of others.

Location (convenience) is the other major factor that contributes for the satisfaction of customers. There are approximately 2,335 ATMs installed in Ethiopia by all private and government commercial banks which is one ATM for every 35,000 citizen of the country (excluding the foreign users). This indicates that still the number is very low to satisfy customers. Therefore, banks need to install many ATMs as possible in order to increase their customer base.

5.4. Implications for practitioners and researchers

- First, this study provides an instrument that bank managers can use to monitor ATM service quality in Ethiopia.
- Second, bank managers should endeavor to design attractive ATM sites in line with their branding and positioning strategy. For instance, the premises ought to be kept clean and secure at all times.
- Third, bank managers hire a necessary qualified staffs to give prompt assistance for the customers.
- Fourth, managers ought to ensure that ATM breakdowns are kept at a minimum and that ATMs do not run out of cash. Service recovery measures ought to be efficient. Similarly, the management of ATM complaints should be effective.
- Fifth, banks ought to locate their ATM sites in secure and easy to reach places, improve accessibility (provide 24-hour service), as well as establish more service points where possible.

The study utilized a convenience sample of ATM card users. Given the current cutthroat competition in the banking industry, a similar study needs to be conducted to establish the service evaluation criteria of bank customer using probabilistic sampling technique.

In light of the findings of this study, researchers need to establish a number of issues relating to each of the identified evaluation criteria. For example, how best should banks design their ATM sites? To what extent would customers feel secure if they had to draw money from an exposed ATM? Do all bank customers prefer to be served by self-service technologies or do some desire human interaction that can only be provided by individual bank personnel? What demographic factors influence perception of e-service quality? Which bank has a greater performance in ATM banking? There is need to do more research about the customers' identity. To what extent do customers make full use of all the banking services available from ATMs?

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Appendix I

School of Business, St. Mary's University

MASTERS IN BUSINESS ADMINISTRATION

Questionnaire on ATM Banking Service Quality

Dear respondents, this questionnaire is designed to obtain information about *ATM service quality dimensions in Ethiopian Private banking sector* and will only take 20 minute to complete. The information shall be used as a primary data in conducting survey, which will help the researcher to fulfill partial requirement for MBA in General. The study is entirely for academic purpose; and the information you provide will be kept confidential not to be transferred for a third party. Forthcoming result of the study is expected to benefit Ethiopian banks to improve the ATM banking service and the whole society.

In this regard the researcher kindly request you to provide to the best of your knowledge reliable, genuine, honest and prompt information, which will be a valuable input for the findings to meet the intended purpose.

Please spend some of your precious time and answer the following questions. If the question is not clear and understandable please ask the data collector.

General Instruction:-

- There is no need of writing your name
- In all cases where answer options are available please tick(P)

Thank You, for your cooperation and timely response in advance.

1. General Information

a. Gender

Male

Female

b. Occupation _____

c. Nationality

Ethiopian

Foreigner

d. No. of ATM cards you have

e. Your personal bank from which you got your card _____

f. How many times do you use ATM service per month?

Once in a month

twice

Three times

Four times

Daily

Other please state _____

g. Which time of the day you prefer ATM?

8:00 am – Noon

Noon- 5:00pm

5:01pm-7:59 am

Why? Please state the reason _____

h. What major benefits ATM give to you?

i. How long do you use the card services?

Less than six months

6-12 months

1-3 Years

More than 3 years

j. What type of card do you maintain at your personal bank?

Debit card

Credit Card

2. Survey Questions (please assess your personal bank) (for the foreigners please assess the bank at which your international bank operates)

S No	Dimensions	Strongly Agree	Agree	Neutral	Disagree	strongly Disagree
	Tangibility					
1	The card design is easy to handle and attractive					
2	Appearance of the ATM facility is Attractive					
3	There are adequate number of ATM stations in the area I am living					
4	The machine is located a way from public view					
	Reliability					
1	There is frequent power interruption at the ATM stations					
2	There is available cash in the ATM at any time					
3	Amount of cash limit to be withdrawn in a day is Adequate					
4	The network is available at any time					
5	There is 24/7 service availability					
6	All money denominations types are available					
7	The card works in point on sale machine (PoS) (electronic payment)					
8	Mini statement printing is available ,There is easy confirmation of balance & Transaction printing is available					
	Responsiveness					
1	There are qualified support staffs 24/7(including holidays and non Working hours)					
2	Recovery speed while there is failure in ATMs is fast					
3	Responsiveness of Call center assistant at any time is Prompt					
4	Reissuance speed of the bank while there is card loss is time taking					
5	It is easy to regain the captured card					
	Assurance					
1	The level of secrecy of the pin code when given from the bank is maximum					
2	Is the ATM machine has surveillance camera					
3	ATM machine locations are highly secured					
	Empathy					
1	The Machine uses simple and clear language & Easily understand the command of the ATM					
2	ATM instructions enable me to feel in control during transaction					
3	There are lower number of PIN code trials to access the Account					