AN ASSESMENT OF ATM SERVICE QUALITY AND ITS IMPACT ON CUSTOMER SATISFACTION IN THE CASE OF COMERCIAL BANK OF ETHIOPIA WEST ADDIS ABABA BRANCHES

ST. MARY'S UNIVERSITY COLLEGE SCHOOL OF GRADUATE STUDIES   DEPARTMENT OF MARKETING MANAGMENT

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DECLARATION

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

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June, 2020

ENDORSEMENT

This thesis has been submitted to St. Mary's University College, School of

Graduate Studies for examination with my approval as a university advisor.

Yibeltal Nigussie(Assistant Professor)   August 09,2020
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Acknowledgement

ABSTRACT

ATM service is a form of branchless banking which allows people to access bank accounts, making deposit, withdraw, and transfer funds and inquire about an account balance. Therefore, the purpose of this research is to assess the current practice of ATM service quality in commercial bank of Ethiopia west district. To this end, branches which are found in west district selected. Thus, the study adopted descriptive research methods by utilizing survey approach form that the data obtained from primary and secondary source through structured questionnaire from the concerned respondents and the data was analyzed using SPSS software. Accordingly, the finding confirms that, most respondents agree on the existing of good ATM service quality despite ATM locations are not secured and the challenges on telecom network and internet access and awareness creation among the society. It is recommended that commercial bank of Ethiopia should consider safety of ATM locations and enhancement of telecom service and collaboration of institutions to have a technological linkage among them.

Acronyms

E-   service –electronic service

TQM-   Total Quality Management

NPM-   New Public Management

DEA-   Data Envelopment Analysis

NN-   Neural Network

SERVQUAL- Service Quality

CBE-   Commercial Bank of Ethiopia

AITEQUAL-   Site Quality

Web Qual-   Web Quality

NBE: National Bank of Ethiopia

PIN: Personal Identification Number

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CHAPTER ONE

1. INTRODUCTION

1.1 Introduction/Background of the study

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). Excellence in service quality is a key to achieve customer loyalty which is the primary goal of business organizations, due to the advantages of customer retention. Today, the increasing awareness among bank customers of their rights, changing demands and highly competition requires constant progress in service quality from the bank for their customers to stay loyal.

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

Studies, both qualitative and quantitative, show that differences do exist in acceptance and usage levels of technologies across customer segments depending on their technology beliefs (Dabholker, 1996). These studies also suggest that similar differences are found in the evaluative processes used in judging electronic service quality.

Automated service quality research has been limited to relationship management rather than the metrics of service quality (Buckley, 2003). Most of this research has been viewed from the

service provider's perspective rather than the customer's perception of service quality.

Thus, management needs to understand how the customer evaluates e-service quality as a foundation for improving that service (Zeithaml, 2002). Overall, literature calls for more research on the impact of information technology-driven services on the customer's perceptions of the service quality received.

Certainly the banking industry in Ethiopia 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). With a growth of customer knowhow, little developments in telecom infrastructure and international relations, however, the current banking system is changing and starts providing some electronic banking services. Therefore banks should recognize the need for introducing electronic banking system to satisfy their customers and meet the minimum technology based service quality requirements by their customers should understand the dimensions the customers' value most in e- banking services.The purpose of this study is to identify the dimensions of service quality with respect to ATMs in the emerging market context of Ethiopia where online shopping is nonexistent and ATMs are a very recent development (Greenland., 2006). Specifically, the study intends to develop an instrument that can be used to measure the service quality of ATM banking in Commercial Bank of Ethiopian west Addis Ababa context. This instrument can then be used to determine the most important service criteria in such a context.

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1.2. Statement of the problem

When customers evaluate the quality of the service they receive from a banking institution they use different criteria which are likely to differ in their importance, usually some being more important than others. While several criteria are important only a few are most important. These

determinant attributes are the ones that will define service quality from the consumer's perspective (Loudon and Della Bitta, 1988).

In the current climate, competition in the banking industry is intense, with new financial service providers emerging all the time. Quality of service is seen more than ever as a key differentiator in the marketplace.

The technology is dramatically changing how financial services are 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.

Automated service quality research has been limited to relationship management rather than the metrics of service quality (Buckley, 2003). Most of this research has been viewed from the service provider's perspective rather than the customer's perception of service quality. Thus, management needs to understand how the customer evaluates e-service quality as a foundation for improving that service (Zeithaml, 2002). Overall, literature calls for more research on the impact of information technology-driven services on the customer's perceptions of the service quality received.

In this age of self-service technologies, bank managers need to understand what criteria are being used by customers to evaluate their services.

These days commercial bank of Ethiopia provides more than 1590 ATM terminal that gives banking services around the country. Even though financial service are paramount importance in domestic and international economies to facilitate service (Patrick, 1966), banks face a number of challenges during the function of giving operation for its customer like Machine out of order, Machine out of cash, No printing statements; cards get blocked; frequent breakdown of ATM service; unreliability of ATM service; lack of sufficient technicians who solve breakdown of ATM machine, lack of sufficient alternative system which substitute ATM service for the customer when temporary problem happen in the machine, lack of convenience ATM service,

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and Unknown charge. The existence of these problems may lead to dissatisfaction of customers and this problem motivated the researcher to undertake this study in order to identify and measure service quality dimensions in commercial bank of Ethiopia west Addis Ababa district selected branches.

1.3 Objective

1.3.1 General Objective

The main purpose of this study is to assess the important dimensions of service quality with respect to ATM service and its contribution on customers' satisfaction in the commercial bank of Ethiopia west Addis Ababa district selected branches.

1.3.2 Specific Objectives

The specific objective of this study is to:

1. To examine the main dimension of service quality and its contribution to ATM service quality.
2. To examine the contribution of ATM service quality to customer satisfaction.
3. Identify the existing factor that affect the performance of ATM service banking.
4. To examine the ATM card holders are satisfied with the service provided by the bank.

1.4 Research Question

The study tries to answer the following questions:

➢ What are the main important dimension of service quality and its contribution to ATM service quality?

➢ Are ATM users satisfied with the service provided by the bank?

➢ Is there any existing factor which affects performance of CBE birr service?

1.5 Significance of the study

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.

First for bankers to know the dimensions that customers value most is the important investigation to consider them in the early stage of expansion. Therefore, identifying the important dimensions from the point of view of the customer will value invaluable first degree significance for these banks.

Second, customers will be benefited from the result of the study because it is the researchers believe that banks will take the necessary measure to improve their service to the customers.

As a third place, the managers at corporate level will try to focus on e-payment channels to modernize its service delivery system by adopting novel idea and enables to create cashless society.

1.6 Scope of the research

The general objective of the study is to assess the e-service quality criteria's in commercial bank of Ethiopian west Addis Ababa district 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 electronic techno based banking services; most customers prefer ATM banking due to many reasons. First, the infrastructure for other e-services is not yet well developed. Second, most of teller based banking services are given for only eight hours a day. Therefore, ATM banking service quality will be a focus area in this research. From all ATM stations distributed in the city those stations located in West Addis Ababa districts selected branches are in focus to keep the course of the research flow in control.

1.7 Limitation of the study

The research aims to develop an instrument that measure ATM-banking service quality in the commercial bank of Ethiopia west Addis Ababa district banking context for which prior instrument is not developed well. And finding those samples that feel the real taste of each factor in ATM due to inexperience was a difficult task. The sample size selected from those who are ATM card holder does not represent the whole. And finally finding related secondary data sources was drawbacks for the researcher. On the conditions of the above limitation the researcher believes the study will get acceptance.

1.8 Organization of the study

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

CHAPTER TWO
2. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 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 (Gro¨nroos, 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. The use of the 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 & Thanassolis, 2006).

2.1.2. Dimensions and determinants of service quality

Gro''nroos (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 (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 Gronroos (1984) and Lehtinen's (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.

2.1.3. 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, 2003).

2.1.4. ATM banking practice in Ethiopia

Certainly the banking industry in Ethiopia is underdeveloped and therefore 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. With a growing number of import-export businesses, and increased international trades and international relations, the current banking system is short of providing efficient and dependable services and therefore all banks operating in Ethiopia should recognize the need for introducing electronic banking system to satisfy their customers and meet the requirements of rapidly expanding domestic and international trades, and increasing international banking services. Undeniably the largest state-owned bank, Commercial Bank of Ethiopia, introduced ATM service for local users in 2001 with its fleet of eight ATMs located in Addis Ababa. Moreover, CBE has had Visa membership since November 14, 2005. However, due to lack of appropriate infrastructure it failed to reap the fruit of its membership. Despite, being the pioneer in introducing ATM based payment system and acquired Visa membership. Available services on CBE ATMs are: Cash withdrawal, Balance Inquiry, Mini statement, Fund transfer between accounts attached to a single card and PIN (Personal Identification Number) change. Currently, the bank gives debit service only for Visa cards. CBE clients can withdraw up to 10,000 birr in cash and can buy goods and services of up to 100,000 birr per day. Expanding its leadership, CBE has begun accepting MasterCard in addition to Visa credit cards it began serving over four years ago The first ever electronic banking gateway was signed between Ethiopian Commodity Exchange (ECX) and CBE. The electronic banking system being developed with CBE is designed to give a secure electronic data sharing gateway between clients, banks and ECX, facilitating a smooth transaction (AbiyDemilew, 2008).

2.1.5 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 (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.

2.1.6. 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 (Zeithaml and Bitner, 2003) 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.

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).

The literature underscores the importance of quality perceptions and the relationship between service satisfaction and quality. There is a difference between customer satisfaction as related to tangible products, and customer satisfaction as related to service experiences. This is due to the inherent intangibility and perishability of services, as well as inability to separate production and consumption. Therefore, customer satisfaction with services and with goods may be influenced by different factors and should be treated as separate and distinct. Customer satisfaction in an online environment may be driven by consumer benefits in using the self-service technology.

Further in service quality research, there is need to clarify whether customer satisfaction is conceptualized as attribute specific, or overall (aggregate) and whether it is viewed as transaction specific (encounter satisfaction) or as cumulative (satisfaction overtime). In this study, customer satisfaction is conceptualized as an overall customer attitude towards the service provider.

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 support 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). However, no studies have tried to investigate the relationship between bank automated service quality and customers' commitment toward their banks. The relationship between service quality and relationship commitment has been investigated only in some B2B contexts or within the tangible goods services.

2.1.7. Why e-service quality?

Insights from studies dealing with people-technology interactions imply that customer evaluation of new technologies is a distinct process. For instance, findings from an extensive qualitative study of how customers interact with, and evaluate, technology-based products (Mick and Fournier, 1995) suggest that (a) customer satisfaction with such products involves a highly complex, meaning-laden, long- term process; (b) the process might vary across different customer segments; and (c) satisfaction in such contexts is not always a function of pre consumption comparison standards. Another major qualitative study by the same authors (Mick and Fournier 1995), focusing on people's reactions to technology, suggests that technology may trigger positive and negative feelings simultaneously. Moreover, other research involving both

qualitative and empirical components demonstrates that customers' propensity to embrace new technologies (i.e., their technology readiness) depends on the relative dominance of positive and negative feelings in their overall technology beliefs (Parasuraman 2000). Earlier studies focusing on specific technologies have also shown those consumers' beliefs about, and reactions to, the technology in questions is distinct and positively correlated with acceptance (Dabholkar, 1996).

Other research shows that perceived usefulness and ease of use are correlated significantly with self-reported and actual usage of technology. Collectively, the findings of these studies reveal important differences in acceptance and usage of technologies across customers depending on their technology beliefs and suggest that similar differences might exist in the evaluative processes used in judging e- service quality. In other words, customer-specific attributes (e.g., technology readiness) might influence, for instance, the attributes that customers desire in an idealWeb site and the performance levels that would signal superior e-service quality.

2.2Empirical Review

2.2.1. 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 (Wolfinbarger and Gilly 2003). In fact, Wolfinbarger 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 thenature and structure of e-service quality (Zeithaml, Parasuraman, and Malhotra 2005) formed the starting point for

developing ATM banking service quality instrument.

Conceptual framework

DIMENTIONS

- **RESPONSIVENESS**
- **EFFICIENCY**
- **CONVENIENCE**
- **RELIABLITY**
- **SECURTY AND PRIVACY**

Objectives

- Examine main dimension
- service quality and customer satisfaction

Factors affect ATM service quality

-

ATM SERVICE QUALITY

Challenges

- Technology
- New idea
- Awareness
- low financial literacy level
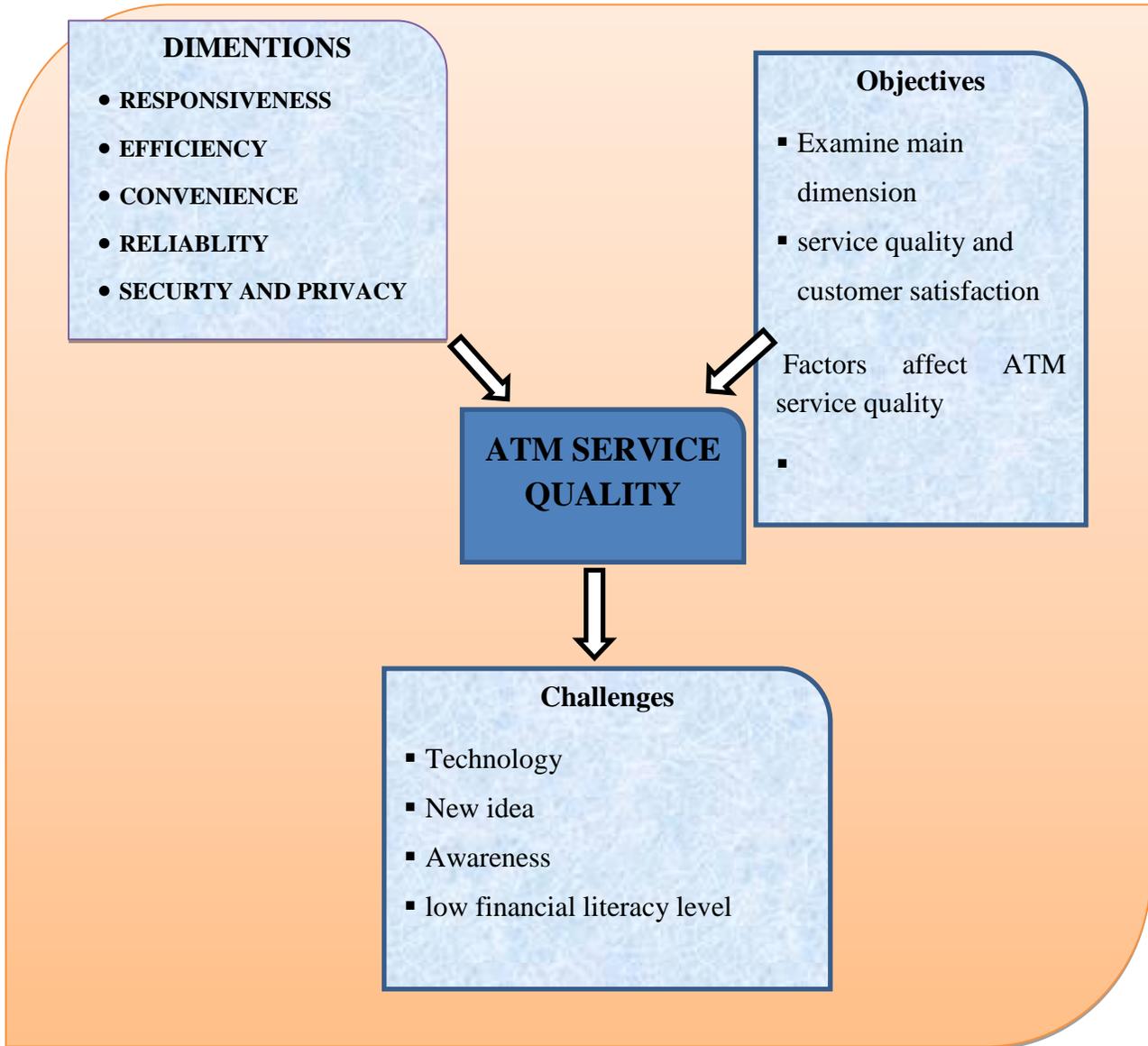
CHAPTER THREE

3. RESEARCH DESIGN AND METHDOLOGY

In this section the research design, approaches to research methods, unit of analysis, participants, research instruments, source of data, data collection methods, sampling issues (target population, sampling techniques and sample size), development of the instrument, pilot test, data analysis tools and validity and reliability will be discussed in detail.

3.1.Research Design

The study was employ survey research design that wills most suit to achieve an answer for the proposed research questions. Among four districts found in Addis Ababa west Addis Ababa district was selected purposively due to convenience to the researcher and to get accurate data from the respondent. So, Convenience sampling technique is used to select west Addis Ababa district. Due to the population is relatively homogenous and each member of the population has equal chance of being selected, simple random sampling technique was selected. The collected data was subjected to statistical software like SPSS 20 for analysis and results were presented using descriptive statistics, chart, etc.

3.2.Approaches to the research methods

The research used both qualitative and quantitative approaches. However, on the stage of developing the instrument and related activities the researcher tried to focus on qualitative methods like focus group, interview and content analysis as well.

3.3.Unit of analysis

The unit of analysis of this research will be assessment of ATM service quality delivered by commercial bank of Ethiopia west Addis Ababa district in the current scenario of banking service.

3.4. Participants

Participants of this research will be the card holders and bankers who are using automatic teller machine service of commercial bank of Ethiopia from ATM stations in west Addis Ababa.

3.5. Research instruments

To collect valid and reliable data for this research, the researcher will use the following research instruments. These are;

Questionnaires (the step of development will be seen later): A questionnaire with a 30 item scale on five dimensions will distributed to customers who are currently using ATM machine in the commercial bank of Ethiopia in the stations installed around Addis Ababa. Convenient time and ATMs are considered by the researcher to get customers who use ATM service at that time. Questionnaires are delivered in person to the respondents and assist them in filling it. Those who are willing are given to fill it.

Secondary sources: the researcher used different kinds of secondary sources for the research as input. Some of them are annual report of commercial bank of ethiopia, brochures, company website (different web sites, e-commerce books, service marketing books, journals, and internet will be used). The researcher has tried a lot to find contemporary and much related secondary information to use them as a stepping board for the research.

3.6. Data Collection

The primary data were collected through questionnaire by distributing them at the selected ATM stations in person and assist the respondents while filling. Some of the respondents were interviewed by the researcher. In addition, physical observation is conducted as primary information to assess the character of ATM customers in sell outlets. Secondary data is obtained from commercial bank of Ethiopia annual report, public website, etc.

3.7. Sources of data

The data were 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.

The questionnaires is administered by personal delivery for customer who uses ATM banking services at randomly selected ATM stations from branches in west Addis Ababa districts. Some of the customers who have great exposure on ATM banking is preferred to be interviewed.

3.8. Sampling

Population: Bank customers who use ATM banking service in commercial bank of Ethiopia are the considered populations for this particular study.

Sample Frame: From the total population those who use financial transactions in the ATM stations located in west Addis Ababa are considered as a sample frame.

Sampling Technique: To identify sample ATM machines included in the study simple random sampling is used..The study involved a convenience sample of Bank customers from the selected ATM machines, who had already used automated services will chosen as research respondents. To confirm the recommendation of Hair et al. (1998), i.e. be six times as large as the number of items in the questionnaire (6 *30) so the minimum sample size had to be 180 respondents. The sample consisted of mostly card holders and business persons because they are more likely to use ATMs than others (Zeithaml and Gilly, 1987). From the 180 questionnaires distributed 140 were respond and 40 was found to be not returned. This makes the response rate 64.8%. Convenience sampling technique chosen among the sampling techniques due to narrowness of the sample frame and difficult to find individuals those hold ATM cards and clearly identify the dimensions stated in the questionnaire.

3.9. Development of Instrument

The survey questionnaire measured five dimensions of ATM service quality and its effect on customer satisfaction. The convenience dimension contains (7 items); efficient operation (5 items); security and privacy (4 items); reliability (4 items); responsiveness (4 items); security and privacy (4 items) ;overall customer satisfaction (1 items) ; overall ATM service quality(1 item) ;and the main problem in using ATM service. The questionnaire contains three parts; the first part deals with the respondents back ground and related facts, the second part which focused on

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the five dimensions of ATM service quality and the third part focused on the overall service quality and customers satisfaction. Its design uses two scales to collect the data. The nominal scale is used to collect personal information about respondents. Five point Liker scale ranging from one (strongly agree) to five (strongly disagree) is used to measure the response of all dimensions of ATM service quality and customer satisfaction. Since the respondents are educated persons, the questionnaire is prepared in English.

3.10. Validity and Reliability of the Study

Validity: a conclusion of any study can be affected by either a researcher's bias or subjective judgment in the data collection process (Yin, 1994). Accordingly, the researcher must provide supporting evidence that a measuring instrument does in fact measure what it appears to measure. Preparing questionnaires to customer of CBE will be a way of maintaining validity.

Reliability: on the other hand, is the central concern to social scientists because the measuring instruments they employ are rarely completely valid. Reliability is the extent to which a measuring instrument contains variable errors, that is, errors that appear inconsistently from observation during any one measurement attempt or that vary each time a given unit is measured by the same instrument. Reliability of the data will be checked by triangulation of the collected data and information (Kothari, 2009).

CHAPTER FOUR

4. DATA ANALYSIS AND INTERPRETATION

In this chapter the data collected through questioner were analyzed and interpreted. For this study180 questioner were distributed and collected from customer of the bank ATM users. From the collected questioner 140 of the respondents were useable for the analysis. Descriptive analysis is done on the gathered data.

4.1. Demographic characteristics of respondents

4.1.1. Gender

Table 1: gender of the respondent

	Frequency	Percentage	Cumulative percent
Male	90	64.3	64.3
Female	50	35.7	100.0
Total	140	100	

Source: questioner returned

The result of the analysis of demographic characteristics of the respondents" shows that (64.3%) are males and the rest are females (35.7%).
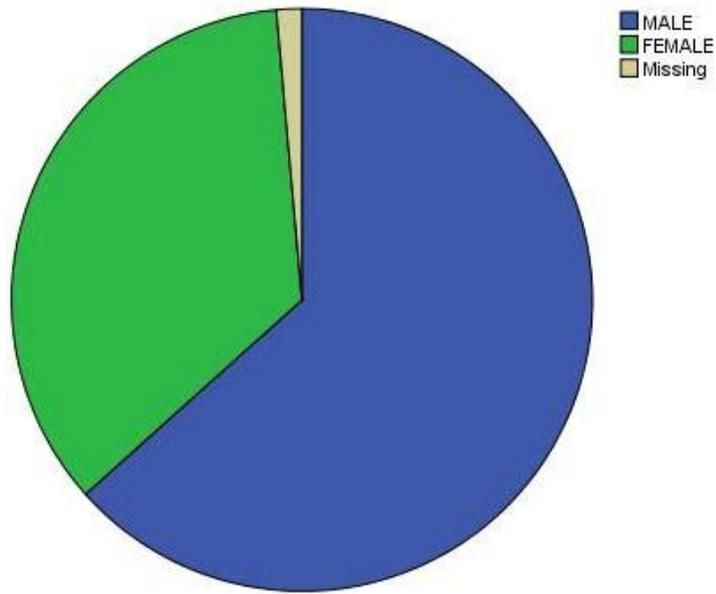
Chart 4.1 gender

4.1.2 Age

Table 2: age of the respondent

	Frequency	Percentage	Cumulative percent
18-25	70	50	50.0
26-30	46	32.9	82.9
31-35	15	10.7	93,6
36-40	6	4.3	97.9
Above 41	3	2.1	100.0
Total	140	100	

Source: questioner returned

The result of table 2 and chart 2 shows that 50% of the card holder respondents are between 18-25 (32.9%) fall between 26-30,(10.7%) fall between 31-35,(4.3%) fall between 36-40 and 2.1%

of card holders are above 41 years. This indicates that this e-payment channel are highly preferred by younger societal group(from 18-25). Hence the bank needs to do more to create awareness to the society among different age group.
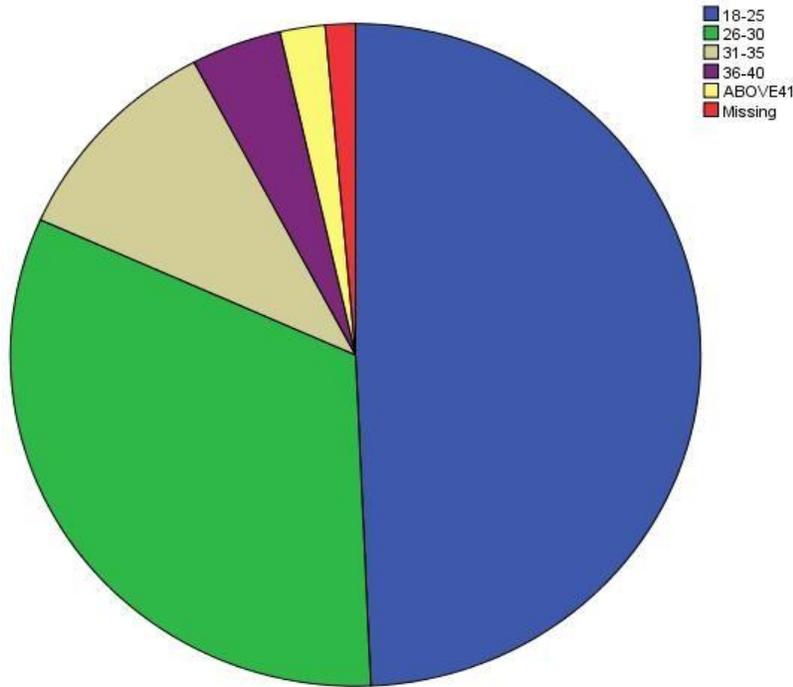
Char 4. 2: age of respondents

4.1.3 Occupation

Table 3: occupation of the respondent

	Frequency	Percentage	Cumulative percent
Private business	55	39.3	39.3
Student	7	5.0	44.3
Employee	70	49.3	94.3
Other	8	5.7	100
Total	140	100	

Source: questioner returned

Table 3 shows that the respondent professional status found as 49.3% were employee 39.3% private business, 5.7% of the respondents are worked at different profession and 5% are student. From the above table we can conclude that majority of the respondents profession are found to be employed (49.3) in different organization. Hence the bank needs to do more to create awareness at different profession and economic group.

4.1.4 Education

Table 4: education of the respondent

	Frequency	Percentage	Cumulative percent
High school or less	7	5.0	5.0
Diploma	54	38.6	43.6
First degree	75	53.6	97.1
Master	4	2.9	100
Total	140	100	

Source: questioner returned

When you see the education level of the respondents from the above table 53.6% were first degree holder, 38.6% were diploma 5% less than high school level and the remaining 2.9 % of the respondents are found at master level. From this data we can conclude that the bank has highly preferred by highly educated society. Hence the bank needs to do more in creating awareness at different education level by different mechanism.

4.1.5 Income

Table 5: income of the respondent

	Frequency	Percentage	Cumulative percent
Below 1000	2	1.4	1.4
1001-3000	20	14.3	15.7
3001-5000	46	32.9	48.6
5001-10000	33	23.6	72.1
Above 10000	39	27.9	100
Total	140	100	

Source: questioner returned

The level of income of the respondents were 32.9% fall between 3001-5000, 23.6% fall between 5001-10000, 27.9% of the respondents were found above 10000,14.3% fall between 1001-3000 and the remaining 1.4% were below 1000. From this the researcher concludes that majority of the respondent (32.9%) income level found between 3001-5000.

4.1.6 How many times do you use ATM service per month?

Table 6: How many times do you use ATM service per month?

	Frequency	Percentage	Cumulative percent
Daily			
Twice			
Once in a month			
Three times	18	12.8	12.8
Four times	73	51.8	64.5
Other	50	35.5	100
Total	140	100	

Source: questioner returned

As can be seen from table 6 the respondents were asked how many times you use ATM service per month, they answered 51.8%(four times a month), 12.8% (three times a month) and the remaining 35.5 % of the respondents were said many times a month. From this the researcher concludes that majority of the respondents (51.8%) use ATM card four times a month.

4.1.7 What major benefit ATM gives to you?

Table 7: What major benefit ATM gives to you?

	Frequency	Percentage	Cumulative percent
Save time	40	28.6	28.6
Cash withdrawal at any time 24/7	87	62.1	90.7
Balance confirmation	13	9.3	100
Total	140	100	

Source: questioner returned

As be seen in table 7 the respondents were asked what major benefit ATM gives to you? They answered cash withdrawal at any time 24/7(62.1%), save time(28.6%) and the remaining (9.3%) of the respondent said ATM gives a benefit for balance confirmation at any time. The researcher conclude that majority of the respondents (62.1%) said ATM service enable to withdraw at any time 24/7. Hence as we seen the above table the accessibility of ATM enable the customer to withdraw money at any time and the bank practice should be encouraged to gain a service quality.

			Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total	Mean	Mean of mean
1	There is available cash in the ATM at any time (A1)	NO	8	93	17	22		140	3.62	
		%	5.7	66.4	12.1	15.7		100		
2	Amount of cash limit to be withdrawn in a day is adequate(A2)	NO	80	32		24		140	4.25	
		%	60.0	22.9		17.1		100		
3	Responsiveness of call center assistant at any time is prompt(A3)	NO	15	48	31	41	5	140	3.19	
		%	10.7	34.3	22.1	29.3	3.6	100		3.70
4	It is easy to regain the captured card (A4)	NO	25	86		29		140	3.77	
		%	17.9	61.4		20.7		100		
5	There is qualified support staff (24/7 including holiday and non working hours) (A5)	NO	17	56		67		140	3.66	
		%	12.1	40.0		47.9		100		
		Over all mean							18.49	

Source: questioner returned

According to table 8, five question which deals about responsiveness of ATM service quality of bank customer were asked, the mean of each of the above statement are ; 3.62 for A1,4.25 for A2,3.19 for A3, 3.77 for A4 and 3.66 for A5. The mean response of each statement in the above table except A3 is above 3.5. This implies that majority of the respondents are agree on the responsiveness issue of ATM service quality, there is available cash in ATM, amount of cash limit to be withdrawn in a day is adequate, it is easy to regain the captured card and there is qualified support staff in holiday and non working hours. However, the responsiveness statement shown in A3 is 3.19, which indicates that the respondents are not a positive attitude towards this statement. Hence the bank needs to do more on responsiveness of call center assistant at any

time including holiday and non working day.

When you see the mean of mean of the above four statement of responsiveness dimension is above 3.5. This infer that majority of the respondents are agreed on the responsiveness dimension of ATM service quality.

4.2.1 Efficiency

Table 9: Efficiency

			Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total	Mean	Mean of mean
1	Cash is withdrawal correctly as it is ordered(B1)	NO	88	52				140	4.63	
		%	62.9	37.1				100		
2	The ATM enables me to complete a transaction quickly (B2)	NO	60	44		36		140	3.92	
		%	42.9	31.4		25.7		100		
3	The way the machine calculates charge is clear (B3)	NO	53	36		26	25	140	3.48	3.96
		%	37.9	25.7		18.6	17.9	100		
4	The machine gives a choice while giving money denomination (B4)	NO	22	93		25		140	3.80	
		%	15.5	66.4		17.9		100		
	Over all mean								15.83	

Source: questioner returned

From table 9, the mean response of each of the statement in the efficiency dimension of ATM service quality is 4.63 for B1, 3.92 for B3, 3.48 for B3, and 3.80 for B4.This implies majority of the respondents are agreed on the efficiency dimension of ATM service quality; cash is withdrawn correctly as it is ordered, the ATM enables me to complete a transaction quickly and the machine gives a choice while giving money denomination. However the way the machine calculates charge stated in B3 is not agreed by the respondents.

When you see the mean of mean of the four statement of the efficiency dimension of ATM service quality, it is greater than 3.5.This indicates that majority of the ATM card users have

agreed on efficiency dimension of ATM service quality.

4.2.2 Convenience
Table 10: Convenience

			Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total	Mean	
1	The ATM user interface is simple and easy to understand (C1)	NO	41	89		10		140	4.15	
		%	29.3	63.6		7.1		100		
2	There is adequate number of ATM station in the area I am living (C2)	NO	60	67		13		140	4.25	
		%	42.9	47.9		9.3		100		
3	All money denomination types are available (C3)	NO	28	20		92		140	2.88	
		%	20.0	14.3		65.7		100		3.89
4	The machine is located a way from public view (C4)	NO	71	59		10		140	4.36	
		%	50.7	42.1		7.1		100		
5	Easily understand the command of the ATM (C5)	NO	93	25		22		140	4.35	
		%	66.4	17.9		15.7		100		
6	Short service rendering time by the ATM during transaction (C6)	NO	45	66		29		140	3.90	
		%	32.1	47.1		20.7		100		
7	The card design is easy to handle and attractive (C7)	NO	39	33		68		140	3.31	
		%	27.9	23.6		48.6		100		
	Over all mean								27.20	

Source: questioner returned

In the analysis of table 10, which is the assessment of the attitude of the ATM users towards convenience dimension of ATM service quality has made using seven statements. The respondents were given the statement and express their level of agreement or disagreement in five points scale Likert scale. The mean of each statement in convenience dimension were;4.15 for C1, 4.25 for C2, 2.88 for C3,4.36 for C4,4.35 for C5,3.9 for C6 and 3.31 for C7. The mean response of each statement in the convenience dimension of ATM service quality except C2 & C7 is above 3.5. This indicates that majority of the respondents agreed on the convenience dimension of ATM service quality; the ATM user interface is simple and easy to understand, there is adequate number of ATM station in the area I am living, the machine is located a way from public view, easily understand the command of ATM, there is short service rendering time by the ATM during transaction and the card design is easy to handle and attractive. However the respondents have a negative attitude towards all money denomination types are available and the card design is easy to handle and attractive.

The result of the analysis in table-10 above has also indicate the mean of mean of the convenience dimension of ATM service quality is 3.89. This infer that majority of the respondents have agreed on the convenience dimension of ATM service quality.

4.2.3 Reliability

Table11: Reliability

			Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total	Mean	Mean Of mean
1	The ATM is always available for business (D1)	NO	28	45		67		140	3.24	
		%	20.0	32.1		47.1		100		
2	There is a power backup in the time of power interruption (D2)	NO	16	58		61	5	140	3.35	
		%	11.4	41.4		43.6	3.6	100		
3	The card works in point of	NO	82	48		10		140	4.44	3.84
		%	58.6	34.3		7.1		100		
4	Transaction printing is available D(4)	NO	50	86		4		140	4.3	
		%	35.7	61.4		2.9		100		
	Over all mean								15.33	

Source: questioner returned

As shown in table11, statement of reliability dimension of ATM service quality were analyzed and each of statement have a mean of 3.24 for D1, 3.35 for D2,4.44 for D3 and 4.30 for D4. This indicates that most of ATM card holders have agree on the reliability dimension of ATM service quality; the card works in point of sale machine (POS) and transaction printing is available. However most of the respondents are a negative attitude towards the reliability dimension of ATM service quality: the ATM is always available for business and there is a power backup in the time of power interruption (a mean of 3.24 & 3.35 respectively).

The result of the analysis in table-11 above has also indicate the mean of mean of the reliability dimension of ATM service quality is 3.89. From this the researcher conclude that majority of the respondents have agreed on the reliability dimension of ATM service quality.

4.2.4   Security and Privacy
Table 12: security & privacy

			Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total	Mean	Mean Of mean
1	The ATM machine has surveillance camera (E1)	NO	43	70	19	8		140	4.05	
		%	30.7	50	13.6	5.7		100		
2	ATM machine location are	NO	32	32		70		140	3.27	
		%	27.1	22.9		50.0		100		
3	I fell secure in using ATM card (E3)	NO	27	63	26	24		140	3.66	
		%	19.3	45.0	18.6	17.1		100		3.76
4	The ATM is accurate (E4)	NO	49	71		20		140	4.06	
		%	35	50.7		14.3		100		
	Over all mean								15.04	

Source: questioner returned

In the analysis of table 12, which is the assessment of the attitude of the ATM card users towards security and privacy dimension of ATM service quality has made using four statements. The mean of each statement under security and privacy dimension of ATM service quality were; 4.05 for E1, 3.27 for E2, 3.66 for E3 and 4.06 for E4. This implies that the mean of each statement except E2 has above 3.5 and this indicates that majority of the respondents has agreed on the security and privacy dimension of ATM service; the ATM machine has surveillance camera, I fell secure in using ATM card and the ATM is accurate. However the respondents have a negative attitude on the issue of ATM machine location are highly secured (3.27).

The mean of mean of the four statements of the security and privacy dimension of ATM service quality also analyzed and it is 3.76. This indicates that majority of the respondents have agreed on the security and privacy dimension of ATM service quality.

Generally the survey questionnaire measured five dimension of ATM service quality and its

effect on customer satisfaction. The responsiveness dimension contains five statements, the efficiency dimension contains four statements, the convenience dimension contains seven statements, the reliability dimension contains four statements and the security and privacy dimension contains four statements. The mean of five ATM service quality dimension is shown in table 13.

Table 13: the mean of five ATM service quality dimension

Dimension	N	Mean	Std.Devation
Responsiveness	140	3.70	0.94
Efficiency	140	3.96	0.98
Convenience	140	3.89	0.89
Reliability	140	3.84	0.53
Security and privacy	140	3.76	0.95

From table 13, the researcher conclude that the mean of the five dimension of ATM service quality is above 3.5 and this implies that the ATM card holder customer of the bank have agreed on the ATM service quality dimension.

Table 14: Customer satisfaction

No	Description		strongly disagree	disagree	neutral	Agree	Strongly agree	Mean
SAT1	I will refer others to use ATM	Frequency	3	13	3	81	20	3.95
		Percent	2.5	10.8	2.5	67.5	16.7	
SAT2	I will continue using ATM service in the future	Frequency	5	15	9	86	5	3.59
		Percent	4.2	12.5	7.5	71.7	4.2	
SAT3	I strongly appreciate ATM service quality	Frequency	9	70	6	33	2	2.57
		Percent	7.5	58.3	5.0	27.5	1.7	
SAT4	I frequently leave positive feedbacks about ATM service quality	Frequency	3	24	5	84	4	3.61
		Percent	2.5	20.0	4.2	70.0	3.3	
	Total mean							3.43

This implies majority of the respondents are satisfied on ATM service quality; respondents are willing to recommend others to use ATM in addition majority of them interested continue using ATM in the future and leave positive feedbacks. However regarding SAT3 mean is 2.57 this implies majority of respondents still not strongly appreciate ATM service quality which implies there are still problems regarding the service quality

4.3 How do you rate the overall service quality of the ATM service

Table 15: How do you rate the overall service quality of the ATM service

	Frequency	Percentage	Cumulative Percent
Excellent	9	6.4	6.4
Very good	4270	30.0	36.4
Good	70	50.0	86.4
Bad	19	13.6	10
Total	140	100	

Source: questioner returned

From the analysis of table 14 &chart 4.3, the researcher asked the respondents how do you rate the overall service quality of the ATM service quality they answered good (50%), very good (30%), bad (13.6%) and the remaining 6.4% said excellent. From this the researcher concludes that the ATM service provided by the bank has good (50%) and the bank has at the right track

CHAPTER FIVE
5. SUMMERY, CONCLUSION AND RECOMMENDATION

In this chapter the major finding of the study is summarized, conclusion is made and some possible recommendation is forwarded for the concerned body.

5.1 Summary and Conclusion

This study investigated service quality dimensions of ATMs in commercial bank of Ethiopia west Addis Ababa district. In the analysis of this research, five service quality dimension of ATM are used. These are; responsiveness (contains five item), efficiency (contains four item).reliability (four items), convenience (seven items) and security & privacy (four items. The mean response of ATM users on each statement which indicates there level of agreement or disagreement on five level of liker scale they are agreed on ATM responsiveness. In other words A1, A2, A4 and A5 have means greater than 3.5 which indicates that majority of the respondents have agreed on the responsiveness dimension of ATM; there is available cash in the ATM at any time, amount of cash limit to be withdrawn in a day is adequate, it is easy to regain the captured card and there is qualified support staffs.

Efficiency dimension of ATM service quality for bank customer except B3 is also a mean greater than 3.5.in other words B1, B2 and B4 have a mean of above 3.5. This indicates that the ATM card holders of the bank have agreed on the efficiency dimension of ATM; cash is withdrawn correctly as it is ordered, the ATM enables me to complete a transaction quickly, the way the machine calculate a charge is clear and the machine gives a choice while giving money denomination.

The mean response of the respondents on the convenience dimension of ATM service quality which indicate there level of agreement and disagreement on five level of liker scale have also analyzed in seven statement and each statement except C3 & C7 have a mean of above 3.5. This implies that majority of the ATM card holders have some level of agreement on the convenience dimension of ATM ;the ATM user interface is simple and easy to understand, there are adequate number of ATM station in the area I am living, all money denomination types are available, the machine is located a way from public view, easily understand the command of

ATM, there is short service rendering time by the ATM during transaction and the card design is easy to handle and attractive.

The reliability dimension of ATM service quality for bank customer except D2 is also a mean greater than 3.5 or in other words D1, D3 and D4 have a mean of above 3.5. This indicates that majority of the ATM card holder customer have some level of agreement on the reliability dimension of service quality of ATM; the ATM is always available for business, , the card works in point of sale machine (POS) and transaction printing is available.

The mean response of the respondents on the security and privacy dimension service quality dimension of ATM are also summarized in four statement and the mean of each statement except E2 has above 3.5.This indicates that the ATM card holder of the bank have some level of agreement on the security and privacy dimension of ATM service quality; the ATM machine has a surveillance camera, all machine location are highly secured, I feel secure in using ATM card and the ATM is accurate.

Generally the mean of the above five dimension of ATM service quality has above 3.5 and this implies that majority of the bank customer has agreed on the service quality dimension of ATM and the bank has on the right track.

5.2 Recommendation

➢ According to the finding of this study majority of bank ATM card holders are male. To reverse these situation top level managers and those employees found at different position should create awareness to those females to use ATM card and persuade the advantage of using the card for women's. The bank also give special benefit for females like discount of price in time of buying of goods and services at different organization including those institution less brand by the society.

➢ It was also found that majority of the ATM card holders of the bank age has between 18-25 years. There is the need for management to target customers in the other age categories by carrying different promotion mechanisms. The bank also give a prize link activity to those customers who are not using ATM card and waive the service charge in time of using ATM.

➢ All the service quality attributes from empirical researches are valid attributes of ATM service quality and that all the five dimensions significantly associate with ATM service

quality. ATM technologies installed by the bank are convenience, have good operational efficiency, have good operational security and reliable operation of ATM.

➢ The researcher also find out that the responsiveness dimension of the statement 'responsiveness of call center assistant at any time is prompt 'is not agreed by the respondents. Therefore the bank needs to do more in capacity building of the call center assistant by giving various training.

➢ The way the machine calculates the service charge commission is not known by the ATM card holder is also another problem in the efficiency dimension. Hence, the bank should display the commission of using ATM service on the user screen.

➢ It was also found that all money denomination types and the card design is easy to handle are another problem on the convenience dimension. Therefore the researcher recommends that all money denomination including coins should be available on the screen menu. The card design also easy to use and must be attractive by the user. The bank also forming a department of brand and promotion and this department main activity is designing the ATM cards not by itself rather asking the users which design is attractive and easy to carry.

References

Abiy Demilew (2008), capital, weekly news paper March, 17, 2008 Bailey, J.E. and Pearson, S.W. (1983), "Development of a tool for measuring and analyzing computer user satisfaction", Management Science, Vol. 29 No. 5, pp. 530-45.

Barnes, S.J. and Vidgen, R. (2002), "An evaluation of cyber-bookshops: the WebQual method", International Journal of Electronic Commerce, Vol. 6 No. 1, pp. 11-30.

Beckett, A., Hewer, P., & Howcroft, B. (2000). An exposition of consumer behaviour in the financial services industry. The International Journal of Bank Marketing, 18(1).

Binyam Tamene (2009), Daily Monitor, February, 20, 2009 Buckley, J. (2003), "E-service and the public sector", Managing Service Quality, Vol. 13 No. 6, pp. 453-62.

Burgers, A., Ruyter, K.D., Keen, C. and Streukens, S. (2000), "Customer expectation dimensions of voice-to-voice service encounters: a scale- development study", International Journal of Service Industry Management, Vol. 11 No. 2, pp. 142-61.

Dabholkar, pratibha A. (1996), "consumer evaluation of new technology based self service options: an investigation of alternative models of service quality," international journal of research in marketing 13(1), 29-51.

Gardechew worku(2009) electronic banking in Ethiopia practice, opportunity and chelenges, Journal of Internet Banking and Commerce 15(2).

Gefen, D. (2002), "Customer loyalty in e-commerce", Journal of the Association for Information Systems, Vol. 3, July, pp. 27-51.

Hoffman, Donna L. and Thomas P. Novak (1996), "Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations," Journal of Marketing, 60 (July), 50-68.

Isaac Wasswa Katono (2009). Student evaluation of e-service quality criteria in Uganda: the case of automatic teller machines. International Journal of Emerging Markets Vol. 6 No. 3, 2011 pp. 200-216

Joseph, M. and Stone, G. (2003), "An empirical evaluation of US bank customer perceptions of the impact of technology on service delivery in the banking sector", International Journal of Retail & Distribution Management, Vol. 31 No. 4, pp. 190-202.

Joseph, M., Mclure, C. and Joseph, B. (1999), "Service quality in the banking sector: the impact of technology in service delivery", International Journal of Bank Marketing, Vol. 17 No. 4, pp. 182-91. Julie Pallant (2005) A step by step guide to data analysis using SPSS for Windows Lehtinen, U. and Lehtinen, J.R. (1991), "Two approaches to service quality dimensions", The Service Industries Journal, Vol. 11 No. 3, pp. 287- 303.

Liao, Z., & Cheung, M. T. (2002).Internet-Based E-Banking and Consumer Attitudes: An Empirical Study. Information and Management, 39, 283-295.

Li, H. and Suomi, R. (2007), "Evaluating electronic service quality: a transaction process based evaluation model", in Remenyi, D. (Ed.), Proceedings of the European Conference on Information Management and Evaluation (ECIME), Montpellier, France, 20-21 September, pp. 331-40.

Loiacono, Eleanor, Richard T. Watson, and Dale Goodhue (2000), "WebQual™: AWeb Site Quality Instrument," working paper,Worcester Polytechnic Institute.

Loudon, D.L. and Della Bitta, A.J. (1988), Consumer Behavior: Concepts and Applications, McGraw-Hill, Singapore.

Mick, David Glenn and Susan Fournier (1995), "Technological Consumer Products in Everyday Life: Ownership, Meaning, and Satisfaction," working paper, report No. 95-104, 1-59, Marketing Science Institute, Cambridge, MA

Oliver, R.L. (1993), "A conceptual model of service quality and service satisfaction: compatible goals, different concepts", in Swartz, T.A., Bowen, D.E. and Brown, S.W. (Eds), Advances in Service Marketing and Management: Research and Practice, JAI Press, Greenwich, CT, pp. 65-85. Parasuraman, A. (2000), "Technology readiness index (TRI): a multiple-item scale to measure readiness to embrace new

technologies", Journal of Service Research, Vol. 2 No. 4, pp. 307-20. Parasuraman, A., Zeithaml, V.A. and Berry, L. (1985), "A conceptual model of service quality and its implications for future research", Journal of Marketing, Vol. 49 No. 4, pp. 41-50.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", Journal of Retailing, Vol. 64 No. 1, pp. 12-40. Parasuraman, A., Zeithaml, V.A. and Malhotra, A. (2005), "E-S-QUAL: a multiple-item scale for assessing electronic service quality", Journal of Service Research, Vol. 7 No. 3, pp. 213-33.

Philipose Lamore (2011), Portela, M.C.A.S., and Thanassoulis, E. (2005). Profitability of a sample of Portuguese bank branches and its decomposition into technical and allocative components. European Journal of Operational Research, 162(3), 850-866.

Santos, J. (2003), "E-service quality: a model of virtual service quality dimensions", Managing Service Quality, Vol. 14 No. 6, pp. 446-56.

Sharma, S., Niedrich, R.W. and Dobbins, G. (1999), "A framework for monitoring customer satisfaction: an empirical illustration", Industrial Marketing Management, Vol. 28 No. 3, pp. 231-43. Surjadjaja, H., Ghosh, S. and Antony, J. (2003), "Determining and assessing the determinants of e-service operations", Managing Service Quality, Vol. 13 No. 1, pp. 39-53.

Szymanski, David M. and Richard T. Hise (2000), "e-Satisfaction: An Initial Examination," Journal of Retailing, 76 (3), 309-22.

Tabachnick, B. G., & Fidell, L. S. (2001). Using multivariate statistics (4th ed.). Thousand Oaks, CA: Sage.

Van Riel, A.C.R., Liljander, V. and Jurriens, P. (2001), "Exploring consumer evaluations of e-services: a portal site", International Journal of Service Industry Management, Vol. 12 No. 4, pp. 359-77. Wang, Y. S., Y. M. Wang, H. H. Lin, and T. I. Tang (2001)

Determinants of User Acceptance of Internet Banking: an Empirical Study, International Journal of Service Industry Management, Vol. 14 No. 5, 2003, pp. 501- 19

Zeithaml, V.A. and Bitner, M.J. (2003), Services Marketing: Integrating Customer Focus across the Firm, McGraw-Hill/Irwin, Boston, MA.

Zeithaml, V.A. and Gilly, M.C. (1987), "Characteristics affecting the acceptance of retailing technologies: a comparison of elderly and non-elderly consumers", Journal of Retailing, Vol. 63 No. 1, pp. 49-68

Zhu, F.X., Wymer, W. and Chen, I. (2002), "IT-based services and service quality in consumer banking", International Journal Service Industry, Vol. 13 No. 1, pp. 69-91.

St, MARRY UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF MBA

Questionnaire on ATM Banking Service Quality

Dear respondents, this questionnaire is designed to obtain information about ATM service quality dimensions in commercial bank of Ethiopian west Addis Ababa district and will only take a few 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 . The study is entirely for academic purpose; and the information you provide will be kept confidential not to be transferred for a third party. For the coming result of the study is expected to benefit commercial bank of Ethiopian 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 spare 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

Thank You, for your cooperation and

timely response in advance.

1. General Information

A. Gender

Male ☐   Female ☐

B. Age

18-25 ☐   31-35 ☐

26-30 ☐   36-40 ☐   Above 41 Years ☐

C. Occupation

Private business ☐ Employee ☐ Student ☐

D. Educational background

High school or less ☐   Diploma ☐   First degree ☐   Master ☐

E. Income per month (ETB)

Below 1,000 ☐   3,001-5,000 ☐

1,001-3,000 ☐   5,001-10,000 ☐   Above 10,001 ☐

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

Daily ☐   Three times ☐   Four times ☐

Once in a month ☐   Twice ☐   please
state_____

G. What major benefits ATM give to you? _____

_____   _____

2. Survey Questions (please assess your personal branch)

S.no	Dimensions	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
	Responsiveness					
1	There is available cash in the ATM at any time					
2	Amount of cash limit to be withdrawn in a day is adequate					
3	Responsiveness of Call center assistant at any time is prompt					
4	It is easy to regain the captured card					
5	There are qualified support staffs 24/7(including holidays and nonworking hours					
	Efficiency					
6	Cash is always available in ATM					
7	Cash is withdrawal correctly as it is ordered					
8	The ATM enables me to complete a transaction quickly					
9	The way the machine/system calculates charges is clear					
10	The machine gives a choice while giving money denominations					
	Convenience					
11	The ATM user interface is simple and easy to understand					

12	There are adequate number of ATM stations in the area I am living					
13	All money denominations types are available					

14	The machine is located a way from public view					
15	Easily understand the command of the ATM					
16	Short service rendering time by the ATM during transaction					
17	The card design is easy to handle and attractive					
	Reliability					
18	The ATM is always available for business					
19	There is a power Back up in the time of power interruption					
20	The card works in point on sale machine(POS) (electronic payment)					
21	Transaction printing is available					
	Security and privacy					
22	The ATM machine has surveillance camera					
23	ATM machine locations are highly secured					
24	I feel secure in using ATM card					
27	The ATM is accurate					

3: Overall service quality and customer satisfaction (Please put 'x' mark below)

Excellent	Very good	Good	Bad	Very bad

1. Overall how satisfied are you with ATM service provided by the bank?

Very satisfied	Satisfied	Neutral	Dissatisfied	Highly dissatisfied

2. What are the main problems and challenges in using ATM service?

Thanks for participating