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THE EFFECT OF AUTOMATIC TELLER MACHINE SERVICE
QUALITY ON CUSTOMER SATISFACTION AND ITS IMPACT
ON LOYALTY (FUTURE PROSPCET)

(The Case of Dashen Bank S.C)

BY: SINISHAW ASFAW

JUNE, 2017

ADDIS ABABA, ETHIOPIA

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SINISHAW ASFAW

**A THESIS SUBMITTED TO ST.MARY'S UNIVERSITY COLLEGE, SCHOOL OF GRADUATE
STUDIES IN PARTIIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
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ADDIS ABABA, ETHIOPIA

ST.MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

The Effect of Automatic Teller Machine Service Quality on Customer Satisfaction and Its Impact on Loyalty (Future Prospect)

(The Case of Dashen Bank S.C)

By: SINISHAW ASFAW

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DECLARATION

I, **Sinishaw Asfaw** hereby declare that the thesis entitled “*The Effect of Automatic Teller Machine Service Quality on Customer Satisfaction and its Impact on Loyalty(Future prospect): The case of Dashen Bank S.C*” submitted by me for the award of Master Degree in General Business Administration is my original work and it has not been presented for the award of any other Degree, Diploma, Fellowship or any other similar titles of any other university or institutions.

Signature _____

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Date: June, 2017

ENDORSEMENT

This thesis has been submitted to St. Maryø University, School of Graduate studies for examination with my approval as a university advisor.

Tesfaye Wolde(Phd)
Advisor

Signature

St. Mary's University, Addis Ababa

June, 2017

ACRONYMS

ATM: Automatic teller machine

E-business: Electronic business

SERVQUAL: Service Quality

DB: Dashen Bank

Techno-based: Technology based

VIF: Variation of inflation factor

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ABSTRACT

Currently the banking service is well equipped with innovations and as the application of the technology in the banking industry is becoming so significant firms have made huge investment on technology based banking and shifting from bricks and mortar banking to such branchless mode of banking . Following such shift customers are also shifting to technology based banking service due to perceived usefulness, convenient to use, privacy and freedom of mobility. Thus the objective of the study was to examine the effect of ATM Service quality dimensions on customer satisfaction and future prospects of ATM in the case of DB.

With a high emphasis, a quantitative approach based on a convenience sampling technique was used, in which a structured survey questionnaire was employed to collect data from the customers. For data analysis a descriptive and inferential statistics were used while to aid computation SPSS Version 20 was applied. The results of the study reveal that the effect of ATM service quality dimensions on customer satisfaction and future prospects of ATM is direct and significant. To improve the service delivery the bank has to increase features and improve the facilities of the technology based banking service in such a way that customers can receive a wider range of financial services.

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

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CHAPTER ONE

INTRODUCTION

Advances in information and communication technologies in particular, the growing use of the Automatic Teller Machine (ATM) for business transaction, have had a profound effect on the banking industry. The technological innovations improved customer demand of services offered by the banks. This revolution has set a motion in the banking sector for the provision of a payment system that is compatible with the demands of the electronic market (Arnaboldi and Claeys 2008). Further, technology has changed the preconditions for service delivery, dramatically in recent years (Acharya 2004).

This chapter will provides a bird's eyes view of the entire study. Customer satisfaction, the reason for the choice of the study and technology in the service sector such banks is briefly detailed in the background of the study. Subsequently statement of the problem, research objectives, research questions, limitations of the study, and delimitations of the study, significant of the study, ethics and organization of the study will briefly entertain.

1.1 Background of the Study

One of the basic elements of modern business understanding is customer satisfaction. Business can survive as long as they can meet the customers' needs and enable customer satisfaction. Determining the consumer's wishes and needs and a meeting them is one the ways of enabling consumer satisfaction. For this reason, it is pretty important in our intensively competitive environment to be in regular contact with customers and to follow the changes in them closely. One of the sectors in which competition is experienced intensively is the banking sector. Banks are the finance institutions that meet the economic needs of the individuals and businesses and that perform such economic activities as collecting bank deposits, giving credits, providing capital, giving international banking activities and soon.

Customer satisfaction has been an essential concept in the literature of business and for customer focused firms, it is both a goal and a tool. And yet there are factors that affect customer satisfaction such as friendly employee, service quality and competitive pricing (Angelova and

Zekiri, 2011).The challenge is as the environment endures drastic changes and increased awareness with technological advancement, how firms can manage service quality and hence satisfy customers, is what motivated the student researcher to focus on the topic area which is contemporary and dynamic.

Several technology based models have been proposed to measure the service quality which has a direct relationship with customer satisfaction. The technology provides arrays of opportunities to customers such as checking balance, transferring funds and thereby reduces time and costs. Also it enables service providers to customize their offering and make available with superior delivery. And yet studies show that the economy of most developing countries including Ethiopia is still cash driven and the monetary transactions are performed via the exchange of bank notes, and coins for goods and services.

Sangeetha(2012) states that in service sector technology has been employed to standardize services through the minimization of employee-customer interface and customers prefer a techno-based service offering instead of having interaction with human teller. He further contends that as the interface between the customers and service providers shifted from a customer-employee to a customer- technology in accessing a given organization, various issues are coming to surface regarding the impact of technology on the service quality being delivered and its thereof on customer satisfaction. Also Dabholkar (1996) cited in Sangeetha (2012) contends that regarding customers preference for self-service alternatives little is known, where customers' preference in Ethiopia, Dashen Bank in focus would not be exceptional.

ATM (Automatic Teller Machine) is "an electronic device which allows a bank's customers to make cash withdrawals and check their balances at any time without the need for human teller"(Islam 2005). They state that ATM is an innovation which can mechanically accept deposits, transfer funds between accounts and collect bills. Also ATM is defined as "an automatic teller machine which is used to save the cost and reach-ability of a bank; by satisfying customer needs"(Vasumathi and Dhanavanthan, 2010).

ATM has several contribution to the banking industry, on one hand it add values to customer satisfaction in terms of giving quality services , on the other it enables, the bank to gain more

competitive advantage over their rivals through the provision of superior service delivery (Gbandeyan and Gbonda ;Omar, 2011). According to Khan (2010) the use of ATM has rendered new ventures regarding the service quality dimensions and banks are delivering new choices and channel alternatives to their customers.

Dashen Bank S.C in adopting the technology such as a full-fledged ATM and based on the above importance it seems high time to examine the effect of ATM service quality dimensions on customer satisfactions and future prospects to maintain the momentum and accelerate its growth in such a way that to do its level best to turn over the shortcomings and challenges into better opportunities.

The study will conduct on the Dashen Bank ATM card holders with convenient sampling technique to get input into the different factors utilized while conducting the assessment of the ATM service quality.

1.1.1 History of Banking in Ethiopia

One can trace the history of using modern money in Ethiopia to more than 2000 years. This had flourished in what is called the Axumite era which can stretch from 1000BC to around 975 AD. Modern banking in Ethiopia started in 1905 with the establishment of Abyssinian Bank based on a 50 years agreement with the Anglo-Egyptian National Bank. In 1908 a new development bank (named Societe Nationale d'Ethiope Pour le Development de l'Agriculture et du Commerce) and two other foreign banks (Banque de l'Indochine and the Compagnie de l'Afrique Oreintale) were also established. These banks were criticized for being wholly foreign owned. In 1931 the Ethiopian government purchased the Abyssinian Bank, which was the dominant bank, and renamed it the Bank of Ethiopia the first nationally owned bank on African continent.

During the five-years of Italian occupation there was an expansion of banking activity. In particular the Italian banks were active. After independence from Italy's brief occupation (of 1933-1941) where the role of British was paramount owing to its strategic consideration in World War II, Barclay's bank had established and was in business in Ethiopia from 1941 to 1943.

Following this, in 1943, the Ethiopian government established the "State Bank of Ethiopia". This bank was operating both as commercial and central bank until 1963 when it was dissolved into today's National Bank of Ethiopia (the central bank, reestablished in 1976) and "The Commercial Bank of Ethiopia", CBE henceforth. After this period many other banks were established; and just before the 1974 revolution the following banks were in operation.

All privately owned financial institutions including three commercial banks, thirteen insurance companies and two non-bank financial intermediaries were nationalized on 1 January 1975. The nationalized banks were reorganized and one commercial bank (the Commercial Bank of Ethiopia), a National Bank (recreated in 1976), two specialized banks (the Agricultural and Industrial Bank renamed recently as the Development Bank of Ethiopia; and a Housing and Saving Bank renamed recently as the Construction and Business Bank) as well as one insurance company Ethiopian Insurance Company were formed. Following the regime change in 1991 and the liberalization policy in 1992, these financial institutions were reorganized to work on market-oriented policy framework. Besides, new privately owned financial institutions were also allowed to work along the publicly owned ones.

1.1.2 Background of the Bank

After the economy liberalization of the sector in 1991 formations and expansion of private banks is started. Dashen Bank is the second private bank that is established next to Awash International Bank which is the first private bank in the country. The bank got its name from the highest mountain in the country which is mount Dashen. It is one of the biggest private bank in the country. It operates through its head office in Addis Ababa and 220 branches, 5 foreign exchange bureaus, 873 Point of Sale (PoS) terminals and 350 Automatic Teller Machines (ATMs) located in and outside of Addis Ababa. It also has established correspondent banking relationship with more than 450 banks across the world. It also works in partnership with leading brands in the e-payment industry like American Express, Visa, Master Card & Union Pay cards and also with prominent money transfer operators. It is one of the most reputable brand in the domestic banking industry.

Currently there are three governments owned and 16 private banks operating in Ethiopia and these banks put into a lot of pressures due to increased and intense competition. The service

provided by these banks is almost the same and new products developed by each bank are easily copied by its competitors which make the competition harder each year and make it difficult for the banks to retain their customers. Therefore in order to win this intense competition the bank needs to assess the effect of ATM service quality dimension on customer satisfaction and future prospect.

The remaining parts of the chapter will organize as follows. The second section will present statement of the problem. The third section will set out the research questions. The fourth section will provide objectives of the study. The fifth section will provide the limitation of the study; sixth section will show the delimitation of the study. The significance of the study will offer in the seventh section. The eighth section of the study will provide the organization of the study. Finally, operational definition will present in the ninth section.

1.2 Statement of the Problem

When compared with the banking industry operated in developed country , without doubt 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 of technology being used anywhere in the world. With a growing number of import-export business and increased international trade and relations the current banking system is short of providing efficient and dependable services (Gardachew 2010).

Currently the banking service is well equipped with innovations, postulating the quality service as the relation of the digital era using technology as an interface. The world at large including some African nations is enjoying the technology. Dilijonas (2009) identified dimensions of ATM including sufficient number of ATMs, search locations, user friendly, and ATM functionality and conveniently located in the Baltic States.

In Ethiopia, however banking service is underdeveloped and cash note is still the dominant medium of exchange (Gardachew 2010). And also, there are few studies that have been conducted on the challenges, problems and prospects of e-banking in Ethiopia.

And yet, the techno based service quality studies have become increasingly significant as the preference of customers is shifting towards techno-based self service. In today's fierce

competition and volatile business environment no firms can remain static enjoying its current innovations. So managers should have to know the criterion customers put in place in evaluating the service being offered and know how to measure service quality from their customers' perspective so that to understand their needs and satisfy them.

Even though E-banking has a lot of benefit in delivering quality service to customer, in Ethiopia customers were missed to enjoy with the technological advancement in banking sector which has been entertained elsewhere in Africa and the rest of the world.

Sangeetha (2012) states that technology has been implemented in service organization with the aim of enhancing customer service quality delivering, to reduce costs and standardize core service offerings. However, to enjoy benefits of the technology, the techno based service delivery is still non-existence in Ethiopia except some banking services such as ATM debit card and with Mobile-banking such as SMS messages telling the available balance of the customer. So the factors behind such failure of exploitation of the available technology are gap that should be examined.

Dabholkar (1994) conclude that to elevate more customer participation to wider coverage, the technology-based service have laid new service delivering options in firms. However, in Ethiopia, the issue is not yet practiced and there are no studies conducted on such area. So this is also another research gap that needs empirical studies.

Considering the low extent of development of technological infrastructure in developing countries, when compared with the developed countries ATM has not been really able to diffuse into society given the low rate of internet access (Banji and Catherine 2004).

The aim of this research is to make what is untapped in the area of research's deal. So the study made an investigation to fill the gaps observed by addressing the pertinent effect of ATM service quality dimensions on customer satisfaction and future prospects. In this regard the service quality dimensions in ATM by Tewodros (2012) and determinants of customer's adoption of E-banking by Mulugeta (2013) are addressed, the effect of ATM service quality dimensions on customers satisfaction and future prospects is still untapped. Whereas, Movowed and Kleiner (1996) cited in Al-Hawari et al (2005) state that customer perceptions and preferences of service quality have an essential effect on a bank's success. However, in Ethiopia particularly Dashen

Bank S.C. in focus, customers' perception and preferences of the techno-based self service is not yet assessed.

Therefore, this study will assess the effect of ATM service quality dimensions on customer satisfaction and future prospects of ATM in the case of Dashen Bank.

1.3 Research Questions

To deal with the problem established above, the following basic research questions were attempted to answer in the course of the study.

1. What is the effect of ATM service quality dimensions on customer satisfaction?
2. What is the effect of ATM service quality dimensions on the future prospects of ATM?
3. What is the effect of customer satisfaction on future prospects of ATM?

1.4 Objective of the Study

1.4.1 General Objective

To examine the effect of the ATM service quality dimensions on customer satisfaction and future prospects based on perceived perception of the Dashen Bank S.C ATM card holders.

1.4.2 Specific Objectives

- ❖ To analyze the effect of ATM service quality dimensions on customer satisfaction
- ❖ To explore the effect of ATM service quality dimensions on future prospects.
- ❖ To determine the effect of customer satisfaction on future prospects.

1.5 Significance of the Study

Conducting this study on the effect of ATM service quality dimensions on customer satisfaction and future prospects is believe to be an important approach. The research results will provide assistance to the bank's management to better satisfy their customers, respond to their needs efficiently and on timely manners. As a result, the finding of this study specifically is significant for the following reasons.

- ✓ The results of the study will provide a cue bank managers how to rectify problems and provide better service and hence satisfy their customers.

- ✓ The findings from this study will give more insights for further investigation concerning the effect of ATM-service quality dimensions on customer satisfaction and future prospects.

1.6 Scope and Limitation of the Study

Due to time and financial constraints taking large sample size were difficult to include all branches of the bank. Therefore geographically the scope of this research is customers of selected branches which are found in the four districts of Addis Ababa.

This study is confined to examine only the effect of the ATM service quality dimensions on customer satisfaction and future prospects. Other forms of electronic banking such as POS (Point Of Sale) and mobile banking is not include in the study therefore; the findings of this study cannot be generalized to the electronic banking as a whole. The secondary data will utilize for this study only covers up to the year 2015/2016G.C.

1.7 Organization of the Study

This subsection outlines the entire study in a concise manner. The first chapter starts by giving an introduction and background of the study which is followed by a problem statement which identifies the gap between the current literatures, the research questions which is followed by the objective of the study, the significance and scope of the study.

The second chapter will gives deeper insights on the subject matter under the study which is effect of the ATM service quality dimensions on customer satisfaction and future prospects by using theoretical and conceptual frameworks

The third chapter will be the methodology of the study which explains about the research design, type, sampling techniques and data collection techniques.

The fourth chapter will deal with the data analysis and will explain the major findings and test the proposed hypothesis.

The fifth and final chapter will summarize, conclude and recommend based on the findings of data analysis

CHAPTER TWO

RELATED LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Service Quality Theoretical Framework

Customers usually evaluate the service quality of their banks' and yet, the criterion they use may be different from customer to customer, based on their individual needs and preferences. Joseph et al(1999) state that during evaluation of quality of services being delivered customers usually employ various s criteria that are likely different from each other in their importance.

Most importantly, they sate that though many criteria are important but only a few are so essential. Loudon and Bittea (1988) cited in Joseph etal. (1999) state that these determinant attributes are those that shall define service quality from customerø point of view. On the other hand, service quality has received much attention due to the fact that it is related to cost, financial performance, customer satisfaction and customer loyalty (Al-Hawari et al., 2005) and it has drawn the attention of mangers and researchers due to its great influence on the performance of business firms (Anglova and Zekiri ,2011). So providing quality service is essential as it leads to higher satisfaction, profitability and retention of customers (Ndamnsa and Hamde, 2010). Ahmad and Al-Zuøbi(2011) state that quality has a long lasting effect on customer satisfaction. Clow(1993) cited in Mosahab et al.(2010) claims "quality as the organization's life-giving blood". Mesay's (2012) findings on the Private banks in Ethiopia show that all service quality dimensions are positively correlated with customer satisfaction , showing that the quality of banking service as essential prerequisite for having customers that are satisfied with the service quality being delivered.

Also nowadays banks due to high pressure of globalization and fierce competition among themselves and volatile and dynamic market are continuously looking for new ways so that they will be in a position to add value to their services being offered to their customers (Muyeed, 2012). Accordingly due to the fact that financial services are competing in the market place most

of the time with "undifferentiated products" service quality is a prime competitive tool (Stafford, 1996) cited in Muyeed (2012).

Ndamnsa and Hamde (2013) pointed out service quality as one of the basic aspects among other factors which has significant contribution to business growth and leading position in today's fierce competition of the business environment, in which service quality has a significant role in the service sector, because of its untouchable nature which cannot be disclosed to customers to make judgment before reaching the final decision.

According to Rahaman et al. (2011) service quality is an approach which enables to manage the business processes so that it is feasible to ensure full satisfaction of customers and this in turn will result to increasing competitiveness and effectiveness of the given industry. These show that for business firms to improve and maintain a better position in the era of globalization, it demands to evaluate the performance of the services provided to their customers (Ndamnsa and Hamde, 2013). This is due to the fact that service quality is an essential gateway for customer satisfaction (Mosahab et al., 2010). In the old days the game was "best cost", however, in the era of globalization, the game is "best cost and quality" underlying the quality of services being offered as critical issue (Goetsch and Davis, 2000).

2.1.1.1. Characteristics of Service and service quality

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

Service quality has three unique features namely: intangibility, heterogeneity, and inseparability of production and consumption and in the absence of objective measures, an appropriate assessment of the service quality of a firm is to measure consumers' perceptions of quality (Parasuraman et al., 1988; cited in Angelova and Zekiri, 2011). There are four basic characteristics of service offerings. Services are "performances or actions" and cannot be touched, tasted, felt or seen. For instance, health care services are actions that will be carried out

by the service providers and directed toward patients including surgery and diagnosis treatment. According to these characteristics in one hand, it is quite difficult for service providers to readily display or easily communicate to customers the service which is **intangible**, on the other, it is quite challenging for customers to assess the quality of the service being delivered (Zeithmal and Bitner, 2004).

The second characteristics of service are **heterogeneity**. Because services are performances that are performed by humans, there are little chances where two services being performed for two customers will be exactly alike. Moreover , it is a hard fact that there is no way that two customers are exactly alike , as they have their own peculiar experience and performances and evaluate the services being offered to them uniquely in their own ways and perspectives. For instance, a bill collector of "Kifya Financial Technologyö PLC in Addis Ababa city may render a different service experience to two different customers on the same day based on their individual needs and personalities and on whether the bill collector is entertaining them when he or she is fresh in the morning and or tired of in the after-noon. It is "impossible for service industry or individual seller of services to standardize output" (Stanton, 1985). For instance, the service quality being rendered by a given Airline might not be the same on each trip. Hence, because heterogeneity is not consistent across time, organization and people, ensuring, Consistent service quality is usually quite challenging to the service providers.

The third characteristics of services are the "**simultaneous production and consumption** of services ". Unlike the most goods which can be produced first then sold and consumed, most services are sold first and produced at the same time. For instance, a techno mobile can be produced in Bahr dar, shipped to Addis Ababa, sold after some days later and used for some years. However, services which are intangible such as Hotel services have different experiences from that of tangibles goods. Basically, services can't be rendered until they have been sold and the dining experience is actually produced and consumed once at the same time.

Moreover, most of the time the customer is present in the moment of the service is being performed and observe and may also sometimes take part or show up in the process of producing the service (Zeithmal and Bitner, 2004). Also õservices often cannot be separated from the

person of the seller" and most services should be created and dispensed at the same time (Stanton, 1985).

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

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

2.1.1.2. Traditional Service Quality and SERVQUAL

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

Sangeetha and Mahalingam(2011) state that the issue of managing perceived service quality entails that the firms should match the expected service and perceived service to each other , in such a way that customer satisfaction would be attained. Parasuraman et al (1985) identified ten determinants of service process quality which were collapsed into five dimensions. Following this distillation the SERVQUAL model show up in the sphere (Gupta and Bansal, 2012) and it was originally designed out to measure the service quality that was based on the premise that

service quality is the difference between customers' expectations and the evaluation of the service outcome they received. Accordingly SERVQUAL employs about 22 items, to measure the five dimensions namely: tangible, reliability, responsiveness, assurance and empathy.

Generally studies show that these five dimensions were relevant for banking, insurance, repair and maintenance, retail and business service (Clow and Kurz, 2003).

In light of the traditional service quality measurement setting customer satisfaction was measured using the SERVQUAL model (Parasuraman et al., 1988) by adopting Expectancy-Disconfirmation Model, Performance only Model/SERVPERF (Cronin and Taylor, 1992) or American ASCI (Angelova and Zekiri, 2011). Among these the most extensively employed instrument to assess quality service being delivered which influences customer satisfaction in the traditional service settings was the SERVQUAL model. However, despite SERVQUAL's wider range of applications criticism came out to surface because of its dimensionality, lack of universality and fall short of generalizations (Cronin and Taylor 1992; Brown et al., 1993) cited in Gupta and Bansal (2012). For instance, the SERVQUAL model (Parasuraman et al., 1985, 1988)) shows that customers' perception of service quality was influenced by series of expectations-performance gaps. However, for SERVQUAL model to be properly functional, expectations should be constant but Carman (1990) cited in Joseph et al(1999) came out with the notion that expectations do actually change with familiarity of service. The basic difference between the two is that SERVQUAL dimensions conceptualize service quality by comparing the perceptions of the service being received with expectations where as SERVSERF entertains only the perception of service quality, the performance only.

Seth et al (2004) state that in today's liberalized economy, to remain competitive and gain competitive edge, service providers are increasingly providing to their customers techno-based service options. Firms have employed techno-based service with the purpose of reducing costs and creating value-added services for their customers. For instance, Fure(1991)cited in Seth et al (2004) proposes that IT is so essential for enhancing service quality as it increases convenience, rendering extra services, and collecting service performance information for management use. As the importance of the application of IT increased from day to day scholars get motivated to have better insights regarding " how service customers evaluate IT-based services and how their evaluations affect their perceptions of the overall service quality of the service provider and of

their own satisfaction"(Seth et al.,2004). Thus in due course the details of the issue of the technology-based service in the banking industry and its importance over the traditional banking system will be discussed in details.

2.1.2 Technology Based Theoretical Framework Technological Background

As of the mid of 1990's, a radical shift has been made in the banking industry regarding the channel of delivery through the implementation of self-service channels, that is via e- banking such as ATM and internet banking(Musiime and Ramadhan, 2011). Following such radical shift Kotler and Armstrong (2006) state that the "technology boomö has created various ways which enable firms to learn about and track customers. Most importantly, to create products and services which are finely tailored to the individual customer needs, they state that the technology is providing a valuable support business companies in such a way that they are in a position to reach out their products and services more efficiently and effectively than ever before. In this way technology has brought new ways of communication and tools which enables companies to reach out their targeted customers at ease. For instance, through ecommerce customers have arrays of opportunities to learn regarding the design, order and payment for the products and services of their choices directly from home without visiting the showrooms physically.

Besides rendering opportunities for new service offerings the technology is making available vehicles to deliver existing services in more accessible, convenient and efficient manners. For instance, technology such as ATM facilitates the basic customers service functions including bill paying, checking account records, tracking orders, transaction and information seeking, applying for loans and shift money among accounts without visiting branches. In short technology has changed once and for all the customer service approach. Above all, through self-service technologies customers are in a position to serve themselves in more effective and efficient manner which has never been imaginable in the "old days". Joseph and Stone (2003) state that the installment of customer friendly technology such as ATM ,telephone and internet banking as a means to deliver the traditional banking and thereby to maintain customer loyalty and increase market share. Because of these crucial importance banks make huge investment in technology with the aim of controlling cost, attracting potential customers and meeting the convenience and technical expectations of the existing customers (Joseph and Stone, 2003). Also the basic reason behind such huge investments and implementations by banks is related to reduce cost of delivery

through personnel and thereby to meet the challenges posed by competitors that are highly innovative with technological advancement (Howcraft and Beckett, 1996; Byers and Lederer, 2001 and Kelly, 1989) cited in Joseph and Stone (2003).

The beauty of the technology is that for employees it can render a valuable support in making them more effective and efficient to deliver the required service to the intended customer at the right time. Above all, employees will be in a position to customize the service they render in such a way that, their offerings can fit individual customer needs. Hence the technology has come out in the potential for reaching out to customers across the globe. That is, "Advances in communication technology have made people from all over the world electronic neighbors and electronic customers" Goetsch and Davis (2000). As a result to align business strategies that enable them to be innovative, efficient in functional operations and offer better service, competitive banks have made huge investment to adapt the technology (Saleem and Rashid, 2011) and banks are fundamentally shifting from traditional way of banking to branchless mode of banking, by adopting the technology such as ATM (Angelova and Zekiri, 2011).

E-service Quality

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

Accordingly in the past decade the banking industry has been highly affected by the advancement of information and communication technology by which banks and other financial institutions have made improvement on their services through the implementations and application of IT. In so doing technology has become as one of the essential tool which facilitates banks' organizational structures, business strategies, customers' services and related functions (Zaman and Chowdhury, 2012). One of the imputes of such technological advancement in the banking industry is its ability in bringing distant customers come closer (Howcraft and Drukin, 2003) cited in Zaman and Chowdhury (2012).

Swaid and Wignad (2009) came out with six dimensions regarding the e-service quality measurement such as website usability, information quality, reliability, responsiveness, assurance and personalization. Accordingly they found out that with the exception of personalization e-service quality dimensions are related to the various types of customers' loyalty. Furthermore, they state that the perception of reliability and assurance are the essential factors which have effect on favorable loyalty aspects including repurchase intentions, communicating positive word of mouth and loyalty.

2.1.2.1. ATM Service Quality

ATM and its Benefits

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

ATM has several contribution to the banking industry, on one hand it add values to customer satisfaction in terms of giving quality services , on the other it enables, the bank to gain more

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

Dimensions of ATM Service Quality

The review of literature shows that there are different models and dimensions of ATM service quality and different scholars have proposed and developed various ATM service quality dimensions.

Roy (2010) came out with four dimensions namely customer service, technology security and information quality, technology convenience and technology usage easiness and reliability. Joseph and Stone(2003) in their study regarding the US bank customers' perception of the impact of technology on service delivery came out with accurate ATM and electronic banking ,customer service ,excellent telephone and internet banking, secure and flexible service, easy and convenient banking and personalized service as the essential dimensions of the technology based banking service quality including ATM.

Sangeetha(2012)has identified different dimensions of technology interface service quality including ATM ,Telephone banking ,Internet banking, Call center , Customer perception of price and Core services and Queue systems.

Service Quality, Customer Satisfaction, and Dissatisfaction in ATM

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

Pahwa and Saxena's (2011) findings show that customers are highly satisfied with availability of cash in ATMs, quality of currency notes in the ATMs as primary criteria by customers and also equally satisfied with promptness delivery of ATM cards and correctness of cash withdrawal made from the ATM. However, on the other side of the coin their findings show that features such as non-availability of compliant books, location issues and insufficient number of ATMs as well as the failure of not having power back up in case of power break dawn were the source for the dissatisfaction with the service being delivered. Bloemer (1998) cited in Mosahab et al (2010) proposed a model which shows that the mental picture, service quality and customer satisfaction could influence loyalty. Their findings came out with the view that service quality influences loyalty both directly and indirectly through customer satisfaction. Caruana (2002) cited in Mosahab et al.(2010) in the Malta's banks came out with conclusion that customer satisfaction acts as mediators in the effect of service quality on customer loyalty while Mircholi et al(2013) state that delivering high quality service will result to an increase in customer

satisfaction and profit. Davies et al (1996) cited in Khan (2010) investigated factors that are influential regarding customers' satisfaction of ATM service quality.

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

According to Mohammad and Alhamasani's (2011) findings, service quality is an essential antecedent of customer satisfaction and consistent with prior findings (Gotlieb et al., 1994; Buttle, 1996; Zeithaml and Bitner 1996; Lee et al., 2000) cited in Mohammad and Alhamadani's (2011). Amirzadeh and Mousavi's (2011) findings show that security and privacy is the most indicators of the ATM users while suitable place of ATM and integrated interbank network are the essential factors which are in a position to increase the level of customer satisfaction.

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

Accordingly upgrading ATM systems in such a way that to speed up the machine to save time and money, providing sufficient security to reduce theft of money, identification of factors which affect customer dissatisfaction and promoting the culture of internet banking and service usage are the main factors that should be taken into account to make the technology enabled Self-service banking more effective satisfy customers and thereby foster loyalty and long lasting relationship.

Dilijonas et al(2009) found out that more than 50% of respondents agreed that the use of ATM is convenient and time saving as it allows them free movement in providing cash acting like mini, banking to those customers who are in need of cash. Moreover, despite the restriction and

limitations of amount of cash withdrawal, it fulfills the need of the customers. Accordingly the authors suggest that banks need to pay attention to essential aspects such as user-friendliness, ATM functionality and availability of transaction receipts, security and privacy, regular monitoring and maintenance of ATMs.

Generally studies show that the different models or dimensions of service quality have been identified thus far vary in the degree of emphasizes given, which is mainly attributed to the objective of the banks. For instance, Ganguli and Roy (2010) in their study have found out four dimensions including security, convenience, easiness and customer service. Mojoodi et al (2013) state that in light of their study the assessment they have made which is consistent with prior scholars' findings, have made measurement of easiness, certainty, convenience, supporting services and employee's knowledge factors as the basic dimensions of service quality. From the evaluation of the eight dimensions regarding their effects on customer satisfaction and customer loyalty, Mojoodi et al (2013) came out with a conclusion that variables such as customization and comprehensiveness have no effect on customer loyalty and yet they have enduring effects on customer satisfaction.

From the aforementioned literatures that have been conducted by different scholars across the globe the student researcher has understood that some customers are welcoming the emerging technology while others do not. The very reasons for such like and dislike of use of ATM by customers are enormous. Customers prefer ATM for it is time saving, avoid long queue in banks, easy to use, readily available and can be accessed from anywhere without personal contact of bank's employees. Khan (2012) on his part suggests that the youth prefer to use innovative and technology based service offering such as ATM while the olds don't make use of it, due to the perceived risk of failure complexity ,security and absence of personalized service (Moutinho,1992) cite in Khan (2010). Also some customers are in favor of technology based self-service instead of traditional service as it is easy to use and avoid interaction with human-teller (Meuter et al., 2000) cited in Dabholkar (1996). Dissatisfaction is the main reason for why customers switch banks (Manrai and Manrai, 2007) and the most essential determinant of customer satisfaction is service quality being perceived by clients (Titako et al.,2012).

Anderson and Jacobsen (2000) cited in Singh (2006) state that customer loyalty is the end result of an organization's effort in creating a benefit for a customer so that they will be in a favorable condition to maintain and increase their purchase from that organization. They further state that true customer loyalty is maintained provided that the customer becomes to the position of advocating for the company without having any incentive to do so. Thus Singh (2006) concluded that, though customer satisfaction will not be taken as a guarantee for having repurchase on the part of the customer it has its own role to ensure and foster customer loyalty.

E-service Quality Dimensions

After a wider range of assessment was done on the extant of the relevant literatures on the research topic area, it is identified that presently there is no generally accepted model to measure the e-service quality such as ATM service quality. Moreover, most of the research studies that have been done and instruments developed so far as well employed in the traditional service setting.

A wider range of assessment was done on the extant models a structural model was adapted for this study(Mojoodi et al.,2013)with eight dimensions namely easiness, security, assurance, customization, comprehensiveness, convenience, support service and employee knowledge. The very reason for adapting such model was that the technology presented a plate form by which companies can be in a position to design out and deliver services which is perceived by customers as superior (Surjadjaja et al., 2003) cited in Al-Hawari et al (2005) and it addresses the essential constructs of the technology and managers may gain more insights and learn about customers' needs and hence satisfy them.

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

2.1.3 Future Prospects of ATM

According to Zaman and Chowdhury (2012) for more than a decade, the rapid advancement in information and communication technology has significantly and drastically affected the banking

industry across the globe. As a result banks and other financial institutions have forced to improve their services through the application of Information Technologies, which has become a tool that facilitates banks' organizational structures, business strategies, customer services and related functions. They state that the recent " 'Information Technology (IT) revolution' has exerted far-reaching impact on economics, in general, and the financial service industry, in particular" and from the financial service industry, the banking sector was the first to entertain such rapid globalization and get benefited significantly from that development.

In the rest of the world the application of technology based banking service such as ATM is well developed while in Ethiopia such practice is quite low. Actually Dashen Bank S.C has been playing a significant role in providing technology based banking services such as ATM in the past one decade, point of sales and recently mobile banking and internet banking. The trend shows that without the application of the technology conducting banking service may not be achievable in the coming years. As a result banks in Ethiopia, Dashen Bank in focus should pave a way to this emerging banking technology in such a way that the challenges will be minimized and opportunities will be effectively utilized.

2.2 Empirical Review

Some related studies are conducted by different researchers in different parts of the world. However, there are limited numbers of studies conducted in Ethiopia in relation with the effect of ATM service quality dimensions on customer satisfaction and future prospects. Specifically, Gardachew (2010) conducted research on the opportunities and challenges of E-banking in Ethiopia. The aim of his study was focused on analyzing the status of electronic banking in Ethiopia and investigates the main challenges and opportunities of implementing E-banking system. The author conducted a survey on the existing operating style of banks and identifies some challenges of using E-banking system, such as, lack of suitable legal and regulatory frame works for E-commerce and E- payments, political instability in neighboring countries, high rates of illiteracy and absence of financial networks that links different banks. According to Gardachew (2010), Opportunities offered by ICT through e-learning programs and Commitment of the governments on development of ICT infrastructures is considered as drivers of using E-commerce and E-payment systems.

Wondwossen and Tsegai (2005) also studied the challenges and opportunities of E-payments in Ethiopia; their objective was studying E-payment practices in developing countries, Africa and Ethiopia. The authors employ interview and on site observation to investigate challenges to E-payment in Ethiopia and found that, the main obstacles to the development of E-payments are, lack of customers trust in the initiatives, unavailability of payment laws and regulations particularly for E-payment, Lack of skilled manpower and Frequent power disruption. According to Wondwossen and Tsegai (2005), an adequate legal structure and security framework could foster the use of E-payments, which is contradicting with the finding of the previous study.

Polatoglu & Ekin (2001) conducted a research on an empirical investigation of Turkish consumer acceptance of internet banking and mention reliability as the prime factor in their finding for the adoption of new technological innovations, reliability consists of security and privacy in Internet Banking transactions. They go on to state that risks (security concern) include financial, physical or social risks associated when trying an innovation. They say that security risk is known to be as one of the major barriers in online banking adoption. Zhao *et al.* (2010) in their study of adoption of internet banking service in china says trust in a bank is the fundamental because it deals with customers financial activities. Trust is not only important to reduce risk in Internet Banking in general but also it helps banks to build trust to be more competitive in the industry.

Pahwa and Saxena's (2011) findings show that customers are highly satisfied with availability of cash in ATMs, quality of currency notes in the ATMs as primary criteria by customers and also equally satisfied with promptness delivery of ATM cards and correctness of cash withdrawal made from the ATM. However, on the other side of the coin their findings show that features such as non-availability of compliant books, location issues and insufficient number of ATMs as well as the failure of not having power back up in case of power break dawn were the source for the dissatisfaction with the service being delivered. Bloemer (1998) cited in Mosahab et al (2010) proposed a model which shows that the mental picture, service quality and customer satisfaction could influence loyalty. Their findings came out with the view that service quality influences loyalty both directly and indirectly through customer satisfaction. Caruana(2002) cited in Mosahab et al(2010)in the Malta's banks came out with conclusion that customer satisfaction acts as mediators in the effect of service quality on customer loyalty while Mircholi et al (2013) state that delivering high quality service will result to an increase in customer

satisfaction and profit. Davies et al (1996) cited in Khan(2010) investigated factors that are influential regarding customers' satisfaction of ATM service quality such as costs related to the use of ATM and efficient functions of ATM.

In general, the above all Review of Empirical studies show that there are many studies regarding on opportunities and challenges, adoption and barriers of E-banking. Whereas, in related with the effect of ATM service quality dimension on customer satisfaction and future prospect there are two thesis's on the issue of service quality dimensions in ATM by Tewodros (2012) and determinants of customers' adoption of e-banking by Mulugeta (2013) are addressed, the impact of ATM service quality dimensions on customers satisfaction and future prospects is still untapped.

2.3 Research Conceptual Framework

The conceptual framework for this study is based on Mojoodi et al (2013) structural model which has eight dimensions. The effect of each of these dimensions on customer satisfaction and loyalty (future prospects) will be assessed. In summing up the discussions so far entertained, this study points that the impact of ATM service quality dimensions on customer satisfaction and future prospects is based essentially on those stated eight dimensions.

Service quality denotes the difference between customers' expectations of how a firm needs to carry out and the service performance which customers perceive (Alanezi et al. 2010). The meaning or usage of these eight dimensions defined by (Mojoodi et al., 2013) as follows:

1. **Easiness:** this means that users can easily learn how to work with the technology and use it.
2. **Assurance:** this means that technology works true.
3. **Security:** safety in using technology, proper handling of information and quality information.
4. **Customization:** to make (something/services) according to a customer's individual requirements and needs.
5. **Comprehensiveness:** this means that the technology must be capable of providing a wide range of customer needs.
6. **Convenience:** convenience of using technology over the employees as well as speed and time of using technology.

7. **Support services:** the service provided to customers during problem situations and through call centers.
8. **Employee knowledge:** the amount of employees' information and knowledge to solve customer problems (Mojoodi et al., 2013)

SERVICE QUALITY DIMENSIONS

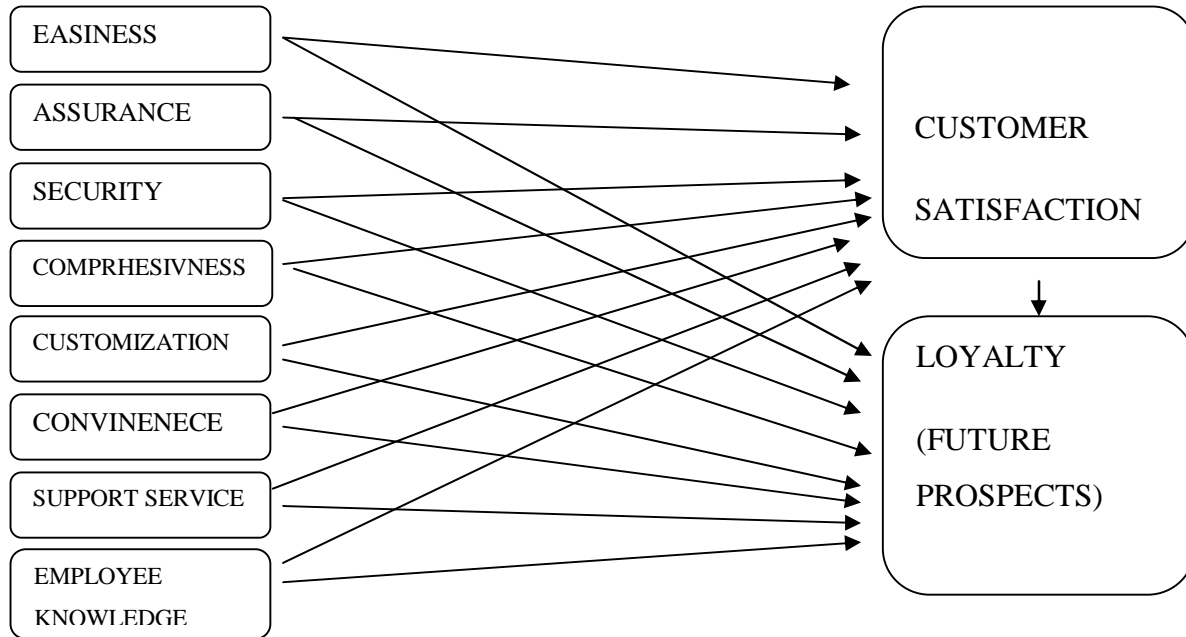


Figure 2.1 Conceptual Framework of the Study (Mojoodi et al., 2013)

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

Ho. Generic dimensions of service quality technology-based banking have no direct and significant effect on customer satisfaction.

H1. Generic dimensions of service quality technology-based banking have direct and significant effect on customer satisfaction.

Ho1a: Easiness has no direct and significant effect on customer satisfaction.

HA1a Easiness has direct and significant effect on customer satisfaction.

Ho1b. Assurance has no direct and significant effect on customer satisfaction.

HA1b. Assurance has direct and significant effect on customer satisfaction.

Ho1c. Security has no direct and significant effect on customer satisfaction.

HA1c. Security has direct and significant effect on customer satisfaction.

Ho1d Customization has no direct and significant effect on customer satisfaction.

HA1d Customization has direct and significant effect on customer satisfaction.

Ho1e Comprehensiveness has no direct and significant effect on customer satisfaction.
HA1e Comprehensiveness has direct and significant effect on customer satisfaction.
Ho1f Convenience has no direct and significant effect on customer satisfaction.
HA1f Convenience has direct and significant effect on customer satisfaction.
Ho1g Support service has no direct and significant effect on customer satisfaction
HA1g Support service has direct and significant effect on customer satisfaction
Ho1h Employee knowledge has no direct and significant effect on customer satisfaction.
HA1h Employee knowledge has direct and significant effect on customer satisfaction
Ho2.Generic service quality dimensions of technology-based banking have no direct and significant effect on customer loyalty (future prospects).
HA2.Generic service quality dimensions of technology-based banking have direct and significant effect on customer loyalty (future prospects).
Ho2a: Easiness has no direct and significant effect on future prospects
HA2a Easiness has direct and significant effect on future prospects.
Ho2b. Assurance has no direct and significant effect on future prospects.
HA2b. Assurance has direct and significant effect on future prospects
Ho2c. Security has no direct and significant effect on future prospects
HA2c. Security has direct and significant effect on future prospects.
Ho2d Customization has no direct and significant effect on future prospects.
HA2d Customization has direct and significant effect on future prospects.
Ho2e Comprehensiveness has no direct and significant effect on future prospects.
HA2e Comprehensiveness has direct and significant effect on future prospects.
Ho2f Convenience has no direct and significant effect on future prospects.
HA2f Convenience has direct and significant effect on future prospects.
Ho2g Support service has no direct and significant effect on future prospects
HA2g Support service has direct and significant effect on future prospects
Ho2h Employee knowledge has no direct and significant effect on future prospects.
HA2h Employee knowledge has direct and significant effect on future prospects
Ho3.Customer satisfaction has no a direct positive effect on customer loyalty.
HA3.Customer satisfaction has a direct positive effect on customer loyalty

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Research Methodology is a systematic way to solve a problem. It is a science of studying how research is to be carried out. The procedure by which researchers go about their work of describing, explaining and predicting phenomena are called research methodology. It is also defined as the study of methods by which knowledge is gained. Its aim is to give the work plan of research.

The aim of this study is to examine the effects of ATM service quality dimensions on customer satisfaction and its impact on customer loyalty (future prospects). To achieve such objective the research design, research methods, data Collection tools, data collection methods, sampling, target population, sampling frame, data analysis methods and validity and reliability analysis was briefly discussed which is the essential components for the study.

3.2 Research Approach

According to Creswell (2009) there are three types of research approach: the first one I qualitative research involves emerging questions and procedures, data typically collected in the participant's setting. The second one is quantitative research; it is a means for testing objective theories by examining the relationship among variables. The last one is mixed method research, it also an approach to inquiry that combines or associates both qualitative and quantitative forms (Creswell 2003). Studies that are products of the pragmatist paradigm and that combine the qualitative and quantitative approach within different phases of the research process (Grove 2003).

According to Stephanie (2008, P.2) *“experimental (quantitative) designs are said to be the approach for obtaining information about causal relationships, allowing researchers to assess the correlation (relationship) between one variable and another”*

For the study the researcher chose quantitative research approach to describe the effect of ATM service quality on customer satisfaction and its future prospect (loyalty) in Dashen Bank S.C by

collecting quantitative data from customers of the bank. In addition the effect of the independent variables (ATM service quality dimensions and customer satisfaction) on the dependent variable future prospect (loyalty) will be quantitatively measured by this study.

3.3 Research Design

Research designs are plans and the procedures for research that span the designs from broad assumptions to detailed methods of data collection and analysis (Creswell, 2011, p. 3). It is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement, and analysis of data (Creswell, 2011, p. 31).

This research will be descriptive study in nature for it is efficient to evaluate and determine the adequacy of a program under existing condition against customer expectation (Best and Kohn, 1999).

3.4 Population of the Study

Table 3.1: Number of ATM stations in those four Dashen Bank Districts

District Total No. of ATM

NAME	STATIONS PER DISTRICT
EAST	65
WEST	34
NORTH	59
SOUTH	53
TOTAL	169

Source: E-payment Department of Dashen Bank, November, 2016

Any person who is currently using Dashen Bank ATM card banking in the four districts of the bank across Ethiopia, particularly in Addis Ababa has been taken as the target population of this study. According to the data obtained from the Dashen Bank ATM e-payment department office

the total number of ATM card holders in those four districts of the bank in Addis Ababa is 500,000, which is the target population of this study.

3.5 Sampling Design

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

3.6 Sampling Frame

Those four districts of the bank were taken as the sampling frame of this study and accordingly the sample size of the study with convenient sampling strategy was taken from Dashen Bank ATM card holders who are in the city of Addis Ababa.

To collect the data of interest from these card holders who are in Addis Ababa city about eight ATM stations with convenient sampling procedure were selected. Accordingly as the sampling strategy is convenient sampling, those customers who are outside Addis Ababa city will systematically exclude from the study.

3.7 Sampling Size/ Sampling Procedure

To obtain a comprehensive sample, convenience sampling technique was applied for the purpose of primary data collection. This study will be conducted in Addis Ababa city branches of Dashen Bank S.C. The numbers of ATM stations in Addis Ababa city are 169 as of 2016. So a sample of eight ATM stations from those 169 stations which are suitable in the city of Addis Ababa will be selected with convenience sampling methods. The reason for these branches selection is these stations will be more suitable for the student researcher to collect the data. Determining the number of representative sample size is a pivotal concern of every research to a given

population. The following sample size determination formula was used to identify sample size Taro Yamane (1969).

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

Where n is the sample size,

N is the total population and

e is the level of precision or sampling error

Therefore the sample size is

$$n = 500000/1+500000(0.05)^2 = 399.68 \sim 400$$

Hence, the study was taken the sample size of 400 that is working under 169 ATM station in Addis Ababa branches.

Table 3.2 List of branches the questionnaire will be distributed

Name of Branch	Grade of Branch	Number of sample will be distributed
Airport	I	50
Adwa Adebabay	I	50
Kolfe	II	50
Wuhalimat	II	50
Yerer	III	50
Kality	III	50
Bole	IV	50
Africa Andinet	IV	50
Total		400

N.B Accordingly 50 questionnaire is distributed at a given eight branches by systematic random sampling which is total sample size divided by total number of branches.

3.8 Data Collection Methods and Procedures

3.8.1 Data Collection Methods

There are two types of sources when collecting data; primary and secondary data sources. Primary sources are directly related to the study purpose. Primary data consists of all the data collected throughout the study. Secondary data on the other hand, contains relevant data that was collected for a different purpose but from which the conclusion is valuable for the purpose.

The researcher uses both primary and secondary data sources. Primary data was used through conducting questionnaire regarding the effect of ATM service quality dimension and future prospect. Secondary data was used through a theoretical study comprised of books, research thesis, articles journals, internet and annual reports of the Dashen Bank.

3.8.2 Data Collection Procedure

The items for measuring the ATM service quality dimension were adapted from Ganguli and Roy (2010). In collecting the data the student researcher was personally approach customers and asking first of all for their willingness and then prompts whether they are using ATM banking and if they will use ATM questionnaire was distributed to be fill out. Since filling out a questionnaire was taken some time for staff customers, the student researcher will give the questionnaire to the respective customer service mangers to distribute and fill it out when the staff respondents have spare time at office.

The questionnaire was translated into Amharic for those people who may not understand the English version and the questionnaire were given out to the respondents by the researcher. The collected questionnaire was proved by nominal response rate of the collecting questionnaire for its reliability and validity through pilot study. According to Rubin and Babbie (2010) a response rate of 70% is övery goodö for further assessment.

3.8.3 Data Collection Tools

In this study the eight dimensions of service quality including easiness, security, assurance, customization, comprehensiveness, convenience, support service and employee knowledge will be entertain as independent variables. Whereas customer loyalty (future prospects) will entertain as dependent variable, customer satisfaction will be a mediating variable.

3.8.3.1 Independent Variables

Service quality denotes the difference between customers' expectations of how a firm needs to carry out and the service performance which customers perceive (Alanezi et al. 2010). The meaning or usage of these eight dimensions defined by (Mojoodi et al., 2013) as follows:

1. **Easiness:** this means that users can easily learn how to work with the technology and use it.
2. **Assurance:** this means that technology works true.
3. **Security:** safety in using technology, proper handling of information and quality information.
4. **Customization:** to make (something/ services) according to a customer's individual requirements and needs.
5. **Comprehensiveness:** this means that the technology must be capable of providing a wide range of customer needs.
6. **Convenience:** convenience of using technology over the employees as well as speed and time of using technology.
7. **Support services:** the service provided to customers during problem situations and through call centers.
8. **Employee knowledge:** the amount of employees' information and knowledge to solve customer problems (Mojoodi et al., 2013)

3.8.3.2 Dependent Variables

According to (Bhattacharjee, 2012) Operationalization is developing items for measuring constructs. The first step in operationalization is to define and specify the meaning and concepts and variables to be studied, conceptualization of constructs. From existing literature measurement was adapted which can fit the current context. Thus future prospects of ATM (Customer loyalty) can be operationalized.

3.8.3.3 Mediating variable

Customer satisfaction: Hansemark and Albinsson (2004) cited in Angelova and Zekiri (2011) define satisfaction as "an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some need, goal or desire".

3.9 Data Analysis Technique

For the analysis of quantitative data both descriptive and inferential statistics were used. To aid computation a Statistical Package for Social Science (SPSS) version 20 was employed. After the data get collected, the data analysis will do as follows:

Coding: is assigning separate code number to each variable in the study. Then the process of eliminating coding and data entry errors," clearing the data'(Rubin and Babbie, 2010) will be done.

The statistical tools were utilized in the following ways:

- ✓ The descriptive statistics (Frequency distribution) will use to examine customers' perceptions toward ATM service quality dimensions, the level of the customer satisfaction and future prospects.
- ✓ The relationship and effect of the ATM-banking service quality dimensions and customer satisfaction and future prospects was analyzed by using inferential statistics, in particular correlation and multiple regressions.
- ✓ A linear regression analysis will use to analyze the effect of customer satisfaction on customer loyalty (future prospects).

3.10 Reliability and Validity of the Research

Reliability is the consistency of a set of measurements or measuring instrument used to describe a test. One of the most commonly used is called **Cronbach's Alpha**. The Cronbach Alpha coefficient is an indicator of internal consistency of the scale. A high value of the Cronbach Alpha coefficient suggests that the items that make up the scale "hang together" and measure the

same underlying construct. A value of Cronbach alpha above 0.70 can be used as a reasonable test of scale reliability (Gaur A. and Gaur S., 2009).

The Cronbach alpha will be computed for each of eight dimensions regarding customers' perception to ensure the reliability of data collected. All values of individual dimensions should be above the minimum threshold (>0.7) to prove the adequacy of internal consistency.

Validity is concerned with whether the findings are really about what they appear to be about. Validity defined as the extent to which data collection method or methods accurately measure what they were intended to measure. Numbers of different steps will take to ensure the validity of the study:

- Data will be collected from the reliable sources (Dashen Bank e-payment department), from respondent who have experiences in using the ATM service of the bank.
- Survey question will be made based on literature review and frame of reference to ensure result validity.

3.11 Model Specification/Assumptions

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + \dots + b_nx_n +$$

Where, Y = Loyalty (Future prospect)

a = y intercept

b₁ = the regression coefficient of Comprehensiveness

x₁ = comprehensiveness

b₂ = the regression coefficient of Convenience

x₂ = convenience

b₃ = the regression coefficient of Easiness

x₃ = Easiness

b₄ = the regression coefficient of Assurance

x₄ = Assurance

b₅ = the regression coefficient of Employee Knowledge

x₅ = Employee Knowledge

b₆ = the regression coefficient of Support Service

x₆ = Support Service

b_7 = the regression coefficient of Security

x_7 = Security

b_8 = the regression coefficient of Customization

x_8 = Customization

= error term

3.12 Ethical Considerations

In order to keep the confidentiality of the data that will be given by respondents, the respondents will not require writing their name and assured that their responses will be treated in strict confidentiality. The purposes of the study will be disclosed in the introductory part of the questionnaire. Furthermore, the researcher will try to avoid misleading or deceptive statements in the questionnaire. Lastly, the questionnaires will be distributed only to voluntary participants.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

In this chapter the data collected from respondents were analyzed and interpreted using quantitative analysis which involves analysis of the demographical information of respondents and the descriptive and inferential statistics employed to test the hypothesis and to investigate the influence of independent variables on dependent variable. To analyze the collected data in line with the overall objective of the research undertaking, statistical procedures were carried out using SPSS version 20.

4.2 Sample and Response rate

After distributing 400 questionnaires for customers, a total of 340 answered questionnaires were retrieved, which are 85.1% of the total distributed questionnaires and the remaining 60(14.9%) were lost due to incompleteness and missing values. After checking the retrieved questionnaires, the 280 questionnaires were valid for statistical analysis. Ultimately, 70% of the total questionnaires distributed entered the analysis. According to Rubin and Babbie(2010) a response rate of 70% is "very good" for further assessment. So 70 % is significant.

4.3 Reliability Test Result

The reliability test is an important instrument to measure the degree of consistency of an attribute which is supposed to measure. As stated by Mahon and Yarcheski (2002) the less variation of the instruments produces in repeated measurements of an attribute the higher its reliability. Reliability can be equated with the stability, consistency, or dependability of a measuring tool.

Cronbach's alpha is one of the most commonly accepted measures of reliability. It measures the internal consistency of the items in a scale. It indicates that the extent to which the items in a questionnaire are related to each other. It also indicates that whether a scale is one-dimensional or multidimensional. The normal range of Cronbach's coefficient alpha value ranges between 0-1 and the higher values reflects a higher degree of internal consistency. Different authors accept different values of this test in order to achieve internal reliability, but the most commonly

accepted value is > 0.70 as it should be equal to or higher than to reach internal reliability (Hair *et al.*, 2003).

The variables were tested for reliability by using Cronbach's Coefficient Alpha and the overall reliability of the measurement constructs is found to be 0.840 which shows the measure has internal consistency.

Table 4.1: Reliability testing results

S. No	Dimensions within Factors	No of items	Cronbach's Alpha
1	Convenience and Comprehensiveness	4	.825
2	Easiness and Assurance	4	.763
3	Support Service and Employee Knowledge	6	.780
4	Security and Customization	5	.804
5	Over all Cronbach's Alpha for four factors	19	.840
6	Customer Satisfaction	4	.798
7	Future Prospects	3	.799

Source: Survey Result, SPSS (2017)

4.4 Survey Analysis

4.4.1 Demographic Analysis of Respondents

Demographic variables including gender, age, monthly income, period for which respondents are customers of their, usage pattern or frequency of monthly usage and type of service used were examined. Before starting the analysis of the data background information such as demographic data is useful in order to make the analysis more meaningful for the readers.

As indicated in Table 4.1 below the male respondents constituted the largest share of the gender composition representing 58.6% of the respondents while 41.4% were females. The age groups were distributed as shown in figure 4.1. As it shown in the figure 57.1% were from 21-30 age groups, 25.7% were from 31-40, 11.4% were from less than 20 years of age and 5.7% the remaining are from greater than 40 years of age.

Regarding the monthly income of the respondent, 38.2% of the respondents were found their monthly income between 2501-7500br, 32.5% of respondent above 7500br, 26.8% of the respondent between 1200-2500br and 2.5% of the respondents were found their monthly income is less than 1200br.

Concerning the length of relationship with the bank either for personal or commercial purpose, 36.1% were found to be using DBø services for month that range from 6-12, the other 34.3% using Dashen bank service for more than 3 years, 24.6% of respondents using the bank service for years that range from 1-3 years and 5% of respondents using the bank service for month that less than 6 months.

As to the services that are used in DB, Current account & saving account users take the highest share that is 30% and 61.8% respectively. Other services of the bank used by the respondent constitute 8.2%. This implies that most of the respondents use Current account & Saving account service of the bank.

Table 4.2 Demographic Profile of Respondent

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	164	58.6	58.6	58.6
	Female	116	41.4	41.4	100.0
	Total	280	100.0	100.0	
Age					
Valid	Less than 20 years	32	11.4	11.4	11.4
	21-30 years	160	57.1	57.1	68.6
	31-40 years	72	25.7	25.7	94.3
	Above 40 years	16	5.7	5.7	100.0
	Total	280	100.0	100.0	
Monthly Income					
Valid	Less than Br.1,200	7	2.5	2.5	2.5
	Br.1,200 - Br.2,500	75	26.8	26.8	29.3
	Br.2,501 - Br.7,500	107	38.2	38.2	67.5
	Greater than 7,500	91	32.5	32.5	100.0
	Total	280	100.0	100.0	
Period for which respondents' are customers of the Bank					
Valid	Less than 6 Month	14	5.0	5.0	5.0

	6 - 12 Months	101	36.1	36.1	41.1
	Between 1- 3 years	69	24.6	24.6	65.7
	More than 3 years	96	34.3	34.3	100.0
	Total	280	100.0	100.0	
Frequency of monthly usage					
Valid	Up to 5 times	80	28.6	28.6	28.6
	More than 5 - 10 times	142	50.7	50.7	79.3
	More than 10 - 20 times	44	15.7	15.7	95.0
	More than 20 times	14	5.0	5.0	100.0
	Total	280	100.0	100.0	
Service type used					
Valid	Checking Account	84	30.0	30.0	30.0
	Saving account	173	61.8	61.8	91.8
	Home Banking account through internet	9	3.2	3.2	95.0
	Telephone banking	14	5.0	5.0	100.0
	Total	280	100.0	100.0	

Source: Survey Result, SPSS (2017)

4.5 Factor Analysis

Exploratory Factor Analysis (EFA) was conducted by using SPSS 20.0 on the service quality perceptions data collected from 280 respondents. Factor analysis is used to reduce a data set to a more manageable size (Field, 2000). Before the extraction of factors the Bartlett test of Sphericity ($\chi^2=295.115$) and Kaiser-Meyer-Olkin (KMO) test was conducted and the KMO measure of sampling adequacy score is 0.726. Factors with Eigen value greater than one were retained for further analysis. The principal axis factoring extraction method with Direct Oblimin rotation was used and four factors were obtained: **factor 1** Convenience and Comprehensiveness, **factor 2**: Easiness and Assurance, **factor 3**: Support service and employee knowledge and **factor 4**: Security and Customization. So a four factor model/8 dimensions was expected to represent the collected data explaining 76.050%.of the total variance (Table 3).

Table 4.3 : KMO and Bartlett's Test

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.726
Bartlett's Test of Sphericity	Approx. Chi-Square of df	295.115 6
	Sig.	.000

Source: Survey Result, SPSS (2017)

Table 4.4: Total variance Explained

Factor Loading		
S. NO	Dimensions within Factors	Factor Loading
1	Convenience and Comprehensiveness	.629
2	Easiness and Assurance	.826
3	Support Service and Employee Knowledge	.797
4	Security and Customization	.546

Eigen value = 1.842

Variance Explained = 76.050

4.6 Correlation Analysis

Like the demographic factors, the scale typed questionnaire entered to the SPSS software version 20 to process correlation analysis. Based on the questionnaires which were filled by the customers of Dashen Bank, the following correlation analysis was made.

Pearson correlation is used to find out the relationship between the dimensions, customer satisfaction and future prospects of ATM. Correlation coefficients show the magnitude and direction of relationships, in which the magnitude is the degree to which variable goes either in unison or opposition. Correlation analysis gives insights to gain the direction and strength of relationship (Cooper and Schindler, 2008). The correlation coefficient takes the value between -1

and 1. The value of -1 meant the variables are negatively and perfectly correlated and when one increases, the other decreases by a proportionate amount whereas coefficient value +1 meant that the correlation is perfectly positive, so as one increases the other increases by a proportionate amount. The coefficient value 0 shows that there is no correlation or linear relationship at all between variables and sign of correlation coefficient, (-, +) show the direction of the relationship (Field, 2006). The value of correlation coefficients +0.1 represent small effect, +0.3 represent medium effect and +0.5 represent large effect respectively (Field, 2006).

4.6.1 Correlation Analysis between ATM Service Quality dimensions and Customer Satisfaction

To examine the relationship between perception of customers of ATM service quality dimensions and their satisfaction, correlation analysis was conducted. From the eight dimensions convenience has the strongest and significant relation (CON=.690) while the weakest one is employee knowledge (EMP=.347) with customer satisfaction. The result shows that convenience allows customers to complete transactions quickly and saves their time. The second and the third strongest and significant relations are observed between support service (SUPP. =0.583) and Assurance (ASS. =0.575) with customer satisfaction respectively.

The remaining dimensions have a positive and moderately strong and medium relation with value of (CUS. =0.488, COM. =0.467, SEC. =0.382, EAS. =0.363 and EMP. =0.359) respectively with customer satisfaction. For instance, customization (CUS=0.488) and comprehensiveness dimension (COM.=0.467)have moderately strongly relation with customer satisfaction whereas easiness (EAS.=0.363)and security(SEC=-0.382)dimensions have medium relation with customer satisfaction.

4.6.2 Correlation Analysis ATM Service Quality dimensions and Future Prospects

The result shows customers agreed with convenience dimension (CON=.742) and future prospects of the technology is in good shape whereas the failure of employee knowledge (EMP=.302) may deteriorate such attachment. The second strongest and significant relation is observed between support service and future prospects (SUPP. =0.543) showing that support service is confidential. Comprehensiveness (COM. =0.541) and Customization (CUS. =0.507)

has strongest and significant relation with future prospects Along with the second weakest correlation is in easiness dimensions (EAS. =0.380). Assurance has moderately strong relation (ASS. =0.459) with future prospects of ATM which shows technology is reliable. Also the relationship between the dimension of security (SEC=0.392) with future prospects of ATM is positive and the future is so bright.

4.6.3 Correlation Analysis between Customer satisfaction and Future Prospects

Customer satisfaction (SAT. =.596) has strong and significant relation with future prospects. Hence as long as customers get satisfied with the services and their expectations met they stay in touch with their bank and yet failing to do so may lead customers to switch.

Table 4.5 Correlations Matrix

		COM	CON	EAS	ASS	SUPP	EMP	SEC	CUS	SAT	LOY
COM	Pearson Correlation Sig. (2-tailed) N	1 280									
CON	Pearson Correlation Sig. (2-tailed) N	.540** .000 280	1 280								
EAS	Pearson Correlation Sig. (2-tailed) N	.423** .000 280	.528** .000 280	1 280							
ASS	Pearson Correlation Sig. (2-tailed) N	.455** .000 280	.401** .000 280	.623** .000 280	1 280						
SUPP	Pearson Correlation Sig. (2-tailed) N	.486** .000 280	.464** .000 280	.542** .000 280	.517** .000 280	1 280					
EMP	Pearson Correlation Sig. (2-tailed) N	.508** .000 280	.426** .000 280	.592** .000 280	.390** .000 280	.641** .000 280	1 280				
SEC	Pearson Correlation Sig. (2-tailed) N	.198** .001 280	.092 .126 280	.188** .002 280	.170** .004 280	.190** .001 280	.206* .001 280	1 280			
CUS	Pearson Correlation Sig. (2-tailed) N	.795** .000 280	.208** .000 280	.337** .000 280	.466** .000 280	.393** .000 280	.426* .000 280	.251* .000 280	1 280		
SAT	Pearson Correlation Sig. (2-tailed) N	.467** .000 280	.690** .000 280	.363** .000 280	.575** .000 280	.583** .000 280	.347* .000 280	.382 .169 280	.488* .000 280	1 280	
LOY	Pearson Correlation Sig. (2-tailed) N	.541** .000 280	.742** .000 280	.380** .001 280	.459** .000 280	.543** .000 280	.302* .000 280	.392 .089 280	.507* .000 280	.596* .000 280	1 280

Source: - SPSS output

4.7 Regression Analysis

Regression analysis is a way of predicting an outcome variable from one predictor variable (simple regression) or several predictor variables (multiple regressions). To examine the relationship between the ATM service quality dimensions and customer satisfaction and future prospects multiple linear regression was employed. To examine the relationship between customer satisfaction and future prospects simple linear regression was used.

4.7.1 Assumptions of Linear Regression Analysis

The multiple linear regression analysis has assumptions to come up with estimates and inferences about the parameters of the population being studied. Thus, the three assumptions taken for this study include: *normality*, *linearity*, *homoscedasticity* and *independence of residuals* checked using residual diagnostic plots.

Normality: the residuals should be normally distributed about the predicted responses. This means that errors are normally distributed, and that a plot of the values of the residuals will approximate a normal curve and once the sampling distribution of the mean is known, it is possible to make predictions for a new sample Keith (2006).

Linearity: the residuals should have a straight line relationship with the predicted responses (Osborne & Waters, 2002); as a result, the plotted points of this study's data.

Collinearity: collinearity (also called multicollinearity) refers to the assumption that the independent variables are uncorrelated (Darlington, 1968; Keith, 2006). Multicollinearity occurs when several independent variables correlate at high levels with one another, or when one independent variable is a near linear combination of other independent variables (Keith, 2006). The more variables overlap (correlate) the less able researchers can separate the effects of variables. Small values for tolerance less than 0.1 and large VIF values greater than 10 show the presence of multicollinearity (Keith, 2006). In this study the tolerance value for each independent variable is greater than 0.10; therefore, the multicollinearity assumption is fulfilled. This is also supported by the VIF value, which is all the VIF value for each independent variable is well below the cut-off of 10.

Homoscedasticity: The assumptions of homoscedasticity refer to equal variance of errors across all levels of the independent variables (Osborne & Waters, 2002).

Homogeneity of variances: The homogeneity of variance option gives Levene's test for homogeneity of variances, which tests whether the variance in scores is the same for each of the groups. If the significance value (Sig.) for Levene's test is *greater* than .05, then the Levene's test for assumptions of homogeneity has *not been* violated. In this study all the Sig. values are greater than .05 homogeneity of variance assumption has not been violated.

4.7.2 Multiple Regression of ATM Service Quality Dimensions on Customer Satisfaction

The multiple regression analysis was conducted using the hierarchical regression method. It is conducted to investigate the influence of independent variable on the dependent variable and identify the relative significant influence (predictors).

The result of regression analysis of the independent variables on the dependent variable customer satisfaction indicates existence of positive and statistically significant effect. The model summary table R-Square value is 0.536 which means that 53.6% of the customer satisfaction was explained by the variation of the eight ATM service quality dimensions.

Table 4.6 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.636 ^a	.536	.506	.50173	.404	22.968	8	271	.000

a. Predictors: (Constant), CUS, CON, SEC, EMP, ASS, SUPP, EAS, COM

b. Dependent variable ; SAT

Source: Survey Result, SPSS (2017)

Table 4.7 ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	70.256	8	8.782	41.424	.000 ^b
Residual	68.221	271	.213		
Total	128.477	279			

a. Dependent Variable: SAT

b. Predictors: (Constant), CUS, CON, SEC, EMP, ASS, SUPP, EAS, COM

Source: Survey Result, SPSS (2017)

Table 4.7 shows the sums of squares and the degrees of freedom associated with each. As it can be noticed in the table F value of 41.424 is significant at 0.000 levels. Therefore, from the result, it can be concluded that with 53.6 % of the variance (R-Square) is significant and the model appropriately measures the construct.

Table 4.8 Regression Analysis between ATM service quality dimensions and Customer satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	.506	.262		3.672	.033	.045	1.077		
COM	.156	.112	.184	.1.714	.013	-.498	-.059	.619	1.655
CON	.375	.058	.396	2.742	.000	.160	.388	.548	1.825
EAS	.031	.065	.047	1.026	.306	-.198	.059	.776	1.288
ASS	.337	.047	.236	1.803	.000	-.082	.101	.643	1.556
SUPP	.057	.070	.254	1.067	.000	.163	.438	.713	1.933
EMP	.259	.060	.044	4.396	.295	-.157	.080	.497	2.012
SEC	.022	.014	.021	0.034	.973	-.051	.005	.630	1.587
CUS	.143	.110	.138	1.729	.000	.483	.918	.355	2.379

a. Dependent Variable: SAT

Source: Survey Result, SPSS (2017)

Table 4.8 presents the result of regression analysis which is based on the eight independent variables and the independent variables that contribute to variance of the dependent variable are

explained by the standardized Beta coefficient.

The beta value on the coefficient table indicates level of effect each dimension has on the dependent variable which is customer satisfaction. We can see from the above table that the beta coefficient for Comprehensiveness is 0.184 which indicates if other things remain constant an increase in Comprehensiveness by 1 unit will result increased customer satisfaction by 18.4%. The same is true for the remaining independent variables.

Therefore, from among the eight dimensions, **Convenience** has the strongest effect on customer satisfaction and should be given the highest focus. **Security** has the lowest effect on customer satisfaction.

The Multiple regression model of **customer satisfaction with ATM service quality dimension** can now be properly written in an equation form as the following.

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + \dots + b_nx_n + e$$

Y (future prospect) = 0.506 + 0.184Com + 0.396Con + 0.047Eas + 0.236Ass + 0.044Emp + 0.254Supp + 0.021Sec + 0.138Cust + 0.262

Where:

y=Future Prospects, Com. =Comprehensiveness, Con. =Convenience, Eas. =Easiness
Ass=Assurance, Emp=Employee Knowledge, Supp=Support Support, Sec= Security
Cus= Customization

e= Error Term

Hypothesis1 Ho. Generic dimensions of service quality technology-based banking have no direct and significant effect on customer satisfaction.

Hypothesis1 H1. Generic dimensions of service quality technology-based banking have direct and significant effect on customer satisfaction.

The result shows that about 53.6% of the variance in the overall satisfaction is explained by the generic technology based service quality dimensions. Also the result reveals that there is positive and significance ($p < 0.05, F = 41.424$) relationship between the technology based service quality dimensions and Customer satisfaction. This shows that the ATM service quality dimensions are significant to the Dashen bank ATM banking customer satisfaction. Thus

hypothesis one (**Ho1**) is **rejected** and then the alternative **HA1** is **accepted**.

Ho1f Convenience has no direct and significant effect on customer satisfaction.

HA1f Convenience has direct and significant effect on customer satisfaction

The result shows that there is a positive and significant ($p < 0.05$, Beta value = .396) relationship between convenience and customer satisfaction. And also convenience is the strongest predictor of the customer satisfaction. Hence hypothesis (**Ho1f**) is **rejected** and in turn alternative (**HA1f**) is **accepted**.

Ho1g Support service has no direct and significant effect on customer satisfaction

HA1g Support service has direct and significant effect on customer satisfaction

Support service has positive and significant relationship ($p < 0.05$, Beta value = .254) which is the second strongest dimension that predicts customer satisfaction. The result reveals that the faster the bank resolves the complaints quickly, offering fair compensation for its mistakes and kept confidentiality of personal information. Hence hypothesis (**Ho1g**) is **rejected** and in turn alternative (**HA1g**) is **accepted**.

Ho1b. Assurance has no direct and significant effect on customer satisfaction.

HA1b. Assurance has direct and significant effect on customer satisfaction.

The result also show that assurance is in a position to predict the dependent variable, customer satisfaction ($p < 0.05$, Beta value = .236). The interpretation is that the more the technology is reliable the more the positive and significant impact on the customer satisfaction. . Hence hypothesis (**Ho1b**) is **rejected** and in turn alternative (**HA1b**) is **accepted**.

Ho1e Comprehensiveness has no direct and significant effect on customer satisfaction.

HA1e Comprehensiveness has direct and significant effect on customer satisfaction.

The result shows that Comprehensiveness ($p < 0.05$, Beta value = .184) has also positive relation with customer satisfaction which the more the bank's technology is being accessible beyond regular business hours is so suitable than interacting with employees, has the significant effect on customer satisfaction. Thus hypothesis (**Ho1e**) is **rejected** and alternative **HA1e** is **accepted**.

Ho1d Customization has no direct and significant effect on customer satisfaction.

HA1d Customization has direct and significant effect on customer satisfaction.

Also Customization has ($p < 0.05$, Beta value = .138) positive relation with customer satisfaction. The interpretation is the technology is customized so that it can provide sufficient information, reports and thereby ensures freedom of mobility, has the significant impact on the customer satisfaction. Thus hypothesis **Ho1d** is **rejected** and alternative **HA1d** is **accepted**

Ho1a: Easiness has no direct and significant effect on customer satisfaction.

HA1a Easiness has direct and significant effect on customer satisfaction.

Ho1c. Security has no direct and significant effect on customer satisfaction.

HA1c. Security has direct and significant effect on customer satisfaction.

Ho1h Employee knowledge has no direct and significant effect on customer satisfaction.

HA1h Employee knowledge has direct and significant effect on customer satisfaction

According to the above table 4.8 the remaining three dimensions and in turn their hypotheses namely security with (Beta value = .021), employee knowledge with (Beta value = .034) and easiness with (Beta value = .047) have no statistically significant ($p > 0.05$) relationship with customer satisfaction. Thus hypotheses **Ho1c, Ho1a and Ho1h are accepted**. The result of easiness may happen because as the banking technology is new and recent phenomena, the easy to use the technology might not be adaptable by users. Security might be so risky as some ATM stations are not secure enough especially during the night. On Regarding to the employee knowledge dimensions except in case of things go bad there is no personal contact with employee and it may not have significant impact.

4.7.3 Multiple Regression of ATM service quality dimensions on customer loyalty (Future prospect)

Table 4.9 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.617 ^a	.593	.556	.51328	.515	35.911	8	271	.000

a. Predictors: (Constant), CUS, CON, SEC, EMP, ASS, SUPP, EAS, COM

b. Dependent variable ; LOY

Source: Survey Result, SPSS (2017)

Table 4.9 presents the result of regression analysis of the independent variables on the dependent variable customer loyalty indicates existence of positive and statistically significant effect. The model summary table R-Square value is 0.593 which means that 59.3% of the future prospect (loyalty) was explained by the variation of the eight ATM service quality dimensions.

Table 4.10 ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	80.689	8	8.461	62.92	.000 ^b
Residual	65.397	271	.321		
Total	147.086	280			

Source: Survey Result, SPSS (2017)

Table 4.10 shows the sums of squares and the degrees of freedom associated with each. As it can be noticed in the table F value of 62.92 is significant at 0.000 levels. Therefore, from the result, it can be concluded that with 59.3 % of the variance (R-Square) is significant and the model appropriately measures the construct.

Table 4.11 Regression Analysis between ATM service quality dimensions and customer loyalty (future prospect)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	.653	.147		3.874	.000	.098	.958		
COM	.170	.063	.189	1.614	.108	.296	.154	.312	1.665
CON	.275	.053	.296	5.742	.000	.223	.457	.848	1.220
EAS	.331	.030	.137	2.026	.000	.534	.271	.376	1.355
ASS	.237	.043	.249	4.803	.001	.030	.158	.443	1.022
SUPP	.047	.045	.054	1.047	.000	.308	.589	.613	1.070
EMP	.239	.054	.275	5.396	.296	.059	.183	.797	2.176
SEC	.002	.045	.002	-.034	.973	.044	.013	.630	1.090
CUS	.132	.051	.148	2.629	.000	.330	.775	.455	2.846

a. Dependent Variable: LOY

Source: Survey Result, SPSS (2017)

The beta value on the coefficient table indicates level of effect each dimension has on the dependent variable which is customer loyalty (future prospect). We can see from the above table that the beta coefficient for Comprehensiveness is 0.189 which indicates if other things remain constant an increase in Comprehensiveness by 1 unit will result in increased customer loyalty by 18.9%. The same is true for the remaining independent variables. Therefore, from among the eight dimensions, **Convenience** has the strongest effect on future prospect and should be given the highest focus. **Security** has the lowest effect on customer loyalty.

The Multiple regression model of **loyalty (future prospect) with ATM service quality dimension** can now be properly written in an equation form as the following.

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + \dots + b_nx_n +$$

Y (future prospect) =

$$0.653 + 0.189Com + 0.296Con + 0.137Eas + 0.249Ass + 0.275Emp + 0.054Supp + 0.002Sec + 0.148Cust + 0.147$$

Hypothesis2 Ho2.Generic service quality dimensions of technology-based banking have no direct and significant effect on customer loyalty (future prospects).

Hypothesis2 HA2.Generic service quality dimensions of technology-based banking have direct and significant effect on customer loyalty (future prospects).

The result shows that about 59.3% of the variance in the overall loyalty is explained by the generic technology based service quality dimensions. Also the result reveals that there is positive and significance ($p < 0.05, F = 62.92$) relationship between the technology based service quality dimensions and Customer loyalty. This shows that the ATM service quality dimensions are significant to the DASSen bank ATM banking customer satisfaction. Thus hypothesis one (**Ho1**) is **rejected** and then the alternative **HA2** is **accepted**.

Ho2f Convenience has no direct and significant effect on customer loyalty

HA2f Convenience has direct and significant effect on customer loyalty

The result shows that there is a positive and significant ($p < 0.05$, Beta value = .296) relationship between convenience and customer loyalty. And also convenience is the strongest predictor of the customer loyalty. Hence hypothesis (**Ho2f**) is **rejected** and in turn alternative (**HA2f**) is **accepted**.

Ho2g Support service has no direct and significant effect on customer loyalty

HA2g Support service has direct and significant effect on customer loyalty

Also assurance has positive and significant ($p < 0.05$, Beta value = .249) relation with future prospects in which the banking technology is reliable and has positive and significant impact on future prospects. Thus hypothesis (**Ho2b**) is **rejected** and alternative hypothesis **HA2b** is **accepted**.

HA2e Comprehensiveness has direct and significant effect on future prospects (loyalty).

Ho2f Convenience has no direct and significant effect on future prospects (loyalty).

Table also indicates comprehensiveness has a positive and significant relation with future prospects ($p < 0.05$, Beta value = .189) showing that the bank's technology is being accessible beyond regular business hours and avoids interaction with employee has a significant and positive effect on future prospects. Thus hypothesis (**Ho2e**) is **rejected** then alternative **HA2e** is **accepted**.

Ho2d Customization has no direct and significant effect on future prospects.

HA2d Customization has direct and significant effect on future prospects.

Also customization ($p < 0.05$, Beta value = .148) has a positive and significant relation and predicts the future prospects showing that the technology has positive and significant impact on future prospects. Thus hypothesis (**Ho2d**) is **rejected** and alternative **HA2d** is **accepted**.

Ho2a: Easiness has no direct and significant effect on future prospects

HA2a Easiness has direct and significant effect on future prospects.

Also easiness has positive and significant ($p < 0.05$, Beta value = .137) relation with Future prospects. Thus hypothesis (**Ho2a**) is **rejected** and **HA2a** is **accepted**.

Ho2c. Security has no direct and significant effect on future prospects

HA2c. Security has direct and significant effect on future prospects.

Ho2h Employee knowledge has no direct and significant effect on future prospects.

HA2h Employee knowledge has direct and significant effect on future prospects

And yet **security** (beta value = 0.002) and **employee knowledge** (beta value = 0.0542) have no statistically significant ($p > 0.05$) relationship with future prospects. Thus hypotheses (**Ho2c**) and (**Ho2h**) are **accepted**.

4.7.4 Regression Analysis of Customer Satisfaction with Future Prospects

Table 4.12 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.508	.255	.216	.545

Source: Survey Result, SPSS (2017)

Table 4.13 ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.939	1	53.939	97.089	.000 ^b
	Residual	155.022	279	.553		
	Total	208.941	280			

Source: Survey Result, SPSS (2017)

Table 4.14 Regression Analysis of Customer satisfaction with Future Prospects

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	0.578	.182		3.184	.001	.971	1.793		
SAT	.715	.053	.518	9.853	.000	.611	.819	0.890	1.730

a. Dependent Variable: LOY Source: Survey Result, SPSS (2017)

Ho3.Customer satisfaction has no a direct positive effect on customer loyalty.

HA3.Customer satisfaction has a direct positive effect on customer loyalty

To analysis the effect of customer satisfaction on future prospects a simple linear regression analysis was employed. The result shows that about 25.5% of the variance of the future prospects is explained by the customer satisfaction. Also the result indicates that there is positive and significance ($p < 0.05, F = 97.089$)relationship between the customer satisfaction and future prospects. This means customer satisfaction is so significant to the Dashen bank ATM banking future prospects. Thus hypothesis three (**Ho3**) is **rejected** and in turn **HA3** is **accepted**.

The overall simple linear regression model of **customer loyalty (future prospect) with customer satisfaction** can now be properly written in an equation form as the following.

$$y = 0.578 + 0.518Cus + 0.182.$$

4.8. Discussion of the Results

The central issue which was given an emphasize in this study was the effect of the ATM service quality dimensions that are perceived by users as essential elements in the service delivery and to what extent these dimensions(easiness, assurance, security, customization, comprehensiveness, convenience, support service and employee knowledge) are influential on customer satisfaction and future prospects.

The results of the structured questionnaire survey rendered strong empirical support for the stated hypothesized relationships between the given constructs. The discussions on the empirical results of the study are entertained as follows.

Among the eight ATM service quality dimensions **convenience** is the strongest dimension which has a significant and direct effect on customer satisfaction and customer loyalty (future prospects). Findings such as Khan(2010) states convenience dimension as an ease of use and a service which is to be accessible at all times, and also it pointed out that customers prefer a service which is flexible enough that enables them to attain their financial needs at any time.

The result is consistent with these findings in which the bank's technology is accessible beyond regular business hours, provides more freedom of mobility and enables to complete transactions quickly and customers are happy with flexibility and convenience of the technology.

Support service is the second strongest dimension which has a significant and direct effect on customer satisfaction and future prospects. This is consistent with findings such as Gaguli and Roy(2010) in which the service delivered through the banking technology determines customer satisfaction and customer loyalty (future prospects).

Among the eight ATM service quality dimensions, in this study **easiness, security and employee knowledge** have no significant effect on customer satisfaction. However, the results of easiness and security are contrary or inconsistent with prior findings. For instance, Amirzadeh and Mousavi's(2011) findings show that security and privacy is the most indicators of the ATM users and Raigaga(2000)cited in Haque etal.(2009) states that the concern of security have been the main factors.

Result of employee knowledge of this study on loyalty (future prospects of ATM) is contrary to previous studies such as Mojoodi et al.(2013) in which their study shows that the value was(Betha =0.450) in which the employee knowledge has effect on loyalty(future prospects) while the result of this shows no effect(Betha value = 0.054).

The results of this study for customization and comprehensiveness is different from that of Mojoodi et al.(2013)in which they concluded that customization and comprehensiveness have no effect on customer loyalty and yet they have enduring effects on customer satisfaction whereas in this study both dimensions have positive effect on customer satisfaction and future prospects.

Ganguli and Roy's (2010) findings show that customer loyalty is influenced positively and significantly by customer satisfaction and their study cleared out that the generic service quality dimensions have an impact on customer satisfaction and customer loyalty. Also the result of this study shows that customer satisfaction has a profound impact on customer loyalty (future prospects) and consistent with prior studies.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

In this chapter summary, conclusions of the research findings that have been analyzed and discussed in the previous chapter are briefly presented. Furthermore, based on the findings of the study possible recommendations are made.

5.1 Summary of finding

The main objective of this study is to investigate the effect of the ATM service quality dimensions on customer satisfaction and customer loyalty (future prospect). The study was descriptive in type and inferential statistics in particular such as ANOVA, correlation and regression analysis were used.

In this study, both primary and secondary data were used as source of information. Based on the research objective, English and Amharic version questionnaires were prepared. Four Hundred (400) questionnaires were distributed and out of this 340 of them returned but 60 responses from the collected data are rejected due to incomplete information given by respondents on both the demographic questions and basic research questions on the distributed questionnaires. Responses were also rejected due to impractical response patterns followed by respondents.

Regarding the e- service quality dimensions the structural model was adapted as the conceptual model for this study which was developed and used by (Mojoodi et al.,2013) with eight dimensions namely easiness, security ,support service , comprehensiveness, convenience, assurance, employee knowledge and customization.

As the findings of this study indicated, 57.3% of respondents are satisfied with the bank's technology which is convenient; support service is good and accessed beyond regular business hours and provides more freedom of mobility. This shows that there is a direct and significant relationship between ATM banking service quality dimensions and customer satisfaction. Among the eight dimensions convenience and support service dimensions are the dominant predictors of customer satisfaction and followed by assurance, comprehensiveness and customization. On the other hand the remaining three dimensions namely security, easiness and employee knowledge has no direct and significant on the overall customer satisfaction.

Also the findings of this study indicated, there is a direct and significant relationship between ATM service quality dimensions and future prospects in which about 52.7% of customers contended that they are happy with their bank and can recommend to others and continue working with the bank in the future while the remaining 47.3% disagreed with their bank. Among the eight dimensions convenience and support service dimensions are the dominant predictors of future prospects followed by assurance, customization, comprehensiveness and easiness. On the other hand the remaining two dimensions namely security and employee knowledge has no direct and significant on the future prospects.

In addition the result of the correlation and regression analysis shows that there is a direct and significant relationship between customer satisfaction and customer loyalty (future prospects of ATM).

5.2 Conclusion

This research has numerous functions in management of bank customers because the bank is interested in obtaining and retaining of customers who are using Dashen bank ATM service to achieve competitive advantage through loyalty. Based upon on the investigation the following conclusions are made.

In the traditional service setting such the interface was employee ócustomer while in the technology based banking service the interface is shifting into technology- customer through the application of self-service technologies. Accordingly the purpose of the study was to make an original contribution to the banking service sector and It contributes to the service marketing management discipline in finding out the role of the technology based banking such as ATM in enhancing customer satisfaction and loyalty (future prospects).A high quality technology based service is the determinant factor toward the success of the banking industry and by understanding the characteristics of technology based services that enhance customerø satisfactions and loyalty. So business firms can screen out where and how to invest essential resources in providing techno based banking service quality.

Results of the Specific Objectives:

In this study, the designed specific objectives were achieved. The specific objectives which dealt with the analyses, exploration and investigation of the effect of ATM service quality dimensions on customer satisfaction and future prospects of ATM and the effect of customer satisfaction on future prospects were attained with remarkable results.

More than 59% of the respondents signed on positively showing that customers have interest and found out convenient to use the banking technology instead of having interaction with human tellers.

The results show that the effect of ATM service quality dimensions has direct and significant effect on customer satisfaction and future prospects of ATM. Also the effect of customer satisfaction on future prospects of ATM is significant.

Finally, it can be concluded that as the overall result is positive the application of Dashen ATM banking has a bright future in the Ethiopian banking industry and also Dashen bank has to work hard to exceed and go beyond the expectations of customers.

5.3 Recommendations

This study has demonstrated that the effect of ATM service quality on customer satisfaction and customer loyalty (future prospect) in DB. In light of the findings and conclusions made above, the following possible recommendations are suggested as being valuable to the bank for improving their ATM service quality to assure customer loyalty.

- Enhancing ATM banking service facilities in such a way that to speed up the machines to save the customer time and enable customers transact banking service at ease.
- Providing sufficient security and making the ATM stations area secure enough especially during night time to increase safety of customers.
- Improving the customer experience in using the technology based services and facilitating awareness creation ventures in such a way that customers may learn and get aquatinted with the technology and the use of techno- based banking will be availed by the general public.

- The results show that the effect of ATM service quality dimensions on customer satisfaction and future prospects of ATM is direct and significant. So the bank has to pay attention to the ATM service quality dimensions
- Also as the effect of customer satisfaction, future prospects of ATM is direct and significant and about 57.3% of customers get satisfied with bank. So the bank should use the satisfaction of customer to develop sense of loyalty in such a way that to sustain the future prospects of the application of ATM.
- As the results of the study show convenience and support service are the most important dimensions so the bank has to pay attention on these areas for more achievements.
- Moreover , as customers preference in using the technology is increasing, the bank need to diversify and increase features and upgrading its service delivery through the application of ATM so that it is possible to suit customers desire.

5.4 Implications and Suggestion for Future Research

- The research outcome will aid managers to rectify the observed problems regarding the Dashen ATM banking service delivery.
- Also the study provides more insights regarding customer's needs and wants which is essential for managers to learn customer's needs and delivery the required service accordingly to fill that need and hence satisfy them.
- As the use of the technology based banking service is get accustomed by customers and its application is fully employed in the future ,the behavioral intentions such as loyalty, tendency to switch ,barriers to switch and other similar issues can be examined.

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APPENDIX

ST.MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

"The Effect of ATM Service Quality on Customer Satisfaction and Future Prospects": The case of Dashen Bank S.C, Addis Ababa.

Sinishaw Asfaw

Dear Dashen Bank ATM-Banking customers,

First of all, I would like to express my gratitude for agreeing to cooperate in filling out this questionnaire. This questionnaire is developed and forwarded to you to assess the application of Automatic Teller Machine (ATM) in Dashen Bank for the partial fulfillment of MA in GENERAL BUSINESS ADMINISTRATION from ST.MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES. Please take a few minutes of your time to answer this questionnaire. Your willingness and cooperation in giving genuine information is well appreciated and the information you provide will be used for academic purpose and will be kept in strict confidentiality.

For further information please contact the student researcher telephone: +251911565416 and email: aabi5654@gmail.com

General Instruction:

- There is no need to write your name
- I thank you for your participation in advance

Part one

I. Please tick in the box of your response for the following questions.

1. Gender: Male Female

2. Age: <20 years 21-30 years

31-40 years >40 years

3. Monthly income: Less than Br1,200 Between Br 1,200- Br 2,500

Between Br 2,501- Br 7,500 Greater than Br 7,500

4. Period for which respondents are customers of the bank:

Less than 6 months

Between 6-12 months

More than 1 – up to 3 years

More than 3 years

5. Frequency of monthly usage: Up to 5 times More than 5 – up to 10 times

More than 10 – up to 20 times More than 20 times

6. Service types used: Checking account

Savings account

Internet Banking

Mobile banking

Loan

Others – mainly debit card, ATMs

Part Two

1. Survey Questions

Based on the experience you have as an ATM-banking user, please assess your perceptions regarding the service rendered with Dashen Bank ATM. Lists of statements are given below and the student researcher is interested in a number that indicates your feeling concerning the perceptions of the ATM-banking of the Dashen Bank on a scale of 1-5.

Each statement is ranked in the following ways:

Item	Strongly Disagree(1)	Disagree(2)	Neutral(3)	Agree(4)	Strongly Agree(5)
1. The technology provided by my bank is easy to use					
2. The technology provided by my bank is user-friendly					
3. The technology provided by my bank works accurately and is error-free					
4. My bank's technology is reliable					
5. My personal information exchanged while using technology is not misused by my bank					
6. My bank's technology is personalized					
7. My bank's technology provides the precise information I need					
8. My bank's technology provides sufficient information					
9. My bank's technology provides the reports I need					
10. My bank's technology is accessible beyond regular business hours					

11. My bank's technology gives me more freedom of mobility					
12. I find it more convenient to use technology than interacting with branch employees					
13. My bank's technology allows me to complete transactions quickly					
14. My bank's technology saves me a lot of time, especially when I am pressed for time					
15. When I contact my bank's customer service (e.g. call centre either through phone or online), my requests are always anticipated properly					
16. When I contact my bank's customer service, my calls are always answered promptly					
17. When there are problems, my bank's customer service people are sympathetic and reassuring					
18. My bank resolves my complaints quickly					
19. My bank offers a fair compensation for its mistakes					
Satisfaction					
20. Overall I am satisfied with my bank					
21. I think I did the right thing when I chose this bank					
22. My bank's services meet my expectations					

23. I am delighted with my bank					
Future Prospects					
24. I would recommend my bank to others					
25. I will always consider this bank as my first choice					
26. I expect to do more business with my bank in the future:					

Thank you for your cooperation!