



Addis Ababa University
College of Business and Economics
Department of Accounting and Finance

**Influence of E-banking service quality on customer satisfaction in
Ethiopian banking industry: - in case of Nib international bank S.C
Addis Ababa**

**Thesis submitted to the department of Accounting and Finance in
partial fulfillments for the requirements of masters of Science in
Accounting and Finance**

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Declaration

I, Worku Tadege declare that the undersigned thesis entitled “The influence of E-Banking Service Quality on Customer Satisfaction in Ethiopian banking industry in case of Nib International bank S.C Addis Ababa” under the supervision of Sewale Abate (PhD) is my own original work and that all sources have been accurately reported and acknowledged, and that this document has not been submitted for a degree in any other universities.

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Acronyms and Abbreviations

NBE= national bank of Ethiopia

NIB=Nib international Bank

ATM= automated teller machine

CPO= casher payment order

RTGS= Real time gross settlement

EATS=Ethiopian automated transfer system

POS= point of sales

PIN= personal Identification number

PSS=premier switch solution

Abstract

The main purpose of the study is to examine the influence of e-banking service quality on customer satisfaction. The study conducted in Nib International bank Addis Ababa city selected branch. The sampling technique that the researcher was used convenience sampling due to time scarcity. The method of data collection was questionnaire and source of data was primary data. Regression, correlation and descriptive analysis was used to analyses the influence of e- banking service quality on customer satisfaction by using SPSS. The researcher used four independent variables such as reliability, convenience, responsiveness and speed. From the four variables convenience is the most significant effect on customer satisfaction followed by speed and responsiveness even though speed is negatively affected customer satisfaction. Reliability is the least significant effect on customer satisfaction. The higher service quality leads the greater customer satisfaction. The researcher recommends NIB to conduct ongoing research on service quality and customer satisfaction in order to understand customer level of satisfaction on what to be done and what strategies to be implemented and launch new product and service since customer now the service provided by NIB and other banks.

Key words: - customer satisfaction, e- banking, service quality

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The main purpose of the study is to investigate the influence of e-banking service quality on customer's satisfaction in case of Nib international bank S.C. The enhancement of Electronic banking in a country depends on various factors, like success of internet access, new online banking features, household growth of internet usage, legal and regulatory framework. E-banking can offer fast, quicker and dependable service to the customers for which they may be relatively satisfied than manual system of banking (Nupur, J.M, 2010).

Today, almost all banks are adopted ICT as a means of enhancing service quality of banking services. And they are giving ICT based electronic services to their customer who is called electronic banking, internet banking or online banking. It brings connivance, customer centricity, enhance service quality and cost effectiveness in the banking service and increasing customer's satisfaction in banking service (Kumbhar V.M (2011).

The fast advancing international information infrastructure, information technology and computer networks such as the internet and telecommunication systems, enables the development of electronic commerce at global level (Uvaneswarn.S.M et al, 2017).

Parasuraman et al (1985, 1988, and 2005) they give an argument on customer satisfaction, if expected service quality and actual received performance is equal or nearly equal it can say customers are satisfied, whereas the variation between perception and expected performance leads to dissatisfaction of the customer by creating negative discrepancy but positive discrepancy causes to customer delight. In such case expectation performance analysis is essential concept to investigate the level of customer satisfaction in service industry.

As studies shows E-banking reduce cost of transaction to bank that is actually done by the human teller and also it has a tendency done high transaction than human tellers. ATMs are efficient method providing higher profitability as they accomplish higher efficiency per duration of time than human tellers (ATMs can make 6,400 transactions per month)where as human tellers can make 4,300 transactions per month(Rose,1999).

The development of e-banking is not far more history in the world especially in Ethiopia is more recent. Finland is the first country take a lead in adopting e-banking. In Malaysia the central bank of Malaysia give an approval to commercial banks to offer e-banking service in different manner in June 2000 (Sohail and Balachandram,2003).

The emergence of E-banking in Ethiopia goes back to the late 2001, when the largest state owned commercial bank of Ethiopia (CBE) introduced ATM to deliver service to local users. In spite of being the pioneer in starting ATM based payment system and acquired visa membership, in 2006 the other competitor private banks Dashen Bank, which worked aggressively to maintain its lead in electronic payment system (Gardachew Worku, 2010).

Nib international bank is one of the first private bank in Ethiopia adopt E-banking technology in order to compete with other banks and to satisfy customer willingness by giving quality service. Although E-banking technology have several challenges to provide quality service NIB doing all of its effort to solve the challenges faced and to continue its competitiveness.

In 2009 NIB is the of the three including awash bank S.C and united bank S.C member in establishing PSS premier switch solution in 165 million birr capital with the aim of giving common operational function and control service not only own bank ATM and POS but also with the other i.e the member bank that is benefiting both the bank and the customers. Later on in 2011 the other three private bank included in the PSS member Berhan international bank S.C, Addis international bank S.C and cooperative bank of Oromia S.C .after that in 2011 Ethi-switch Company was established by the 16 banks in providing common service payment and clearing system for all existing banks (Habtie. A, 2019).

In Ethiopia the growth of e-banking is not well studied in order to know whether it is sufficient or not in reducing cost, increasing productivity and fulfilling the demand of the customer as well as their technology advancement. So studying about e-banking played an important role not only to the bank but also to the country economy by creating cashless environment. For example the current rule of National Bank of Ethiopia regarding with the float of cash that is applied in may19, 2020, in which an individual cannot withdraw more than ETB 200,000 per day, 1,000,000 per month and corporation also cannot withdraw more than ETB 300,000 per day, 2,500,000 per month from the bank per day regardless of other options such as fund transfer,

payment with CPO, EATS, RTGS etc. is the one way of upgrading the usage of e-banking among society (NBE report, 2020).

1.2 Statement of the problem

E-banking provides wide range of service for both the bank and the customers, Such as reducing the queues of the clients and the number of tellers that made the service to clients, in such case the bank can gain cost minimization and the clients receive the advantage of cost and time saving because it cannot go far to the branch rather get ATM and POS in different hotels, gas stations, malls, in various retailer and supermarket. In addition to this E-banking enables the customer to make fund transfer, balance enquires, viewing previous transactions and other service in its own home without going to the bank hall by using mobile and internet banking with the exception of cash withdrawal. But problems of swallowing the card, unable to give cash after deducting from account, network failure and ATM out of service and order create complain from the customer.

According to Daniel (1999) the introduction of e-banking in the banking sector enables to capture customer satisfaction and increase the profitability of banks as compared to the traditional banking. And also it gives a competitive advantage by reducing cost and providing satisfaction to the customer.

Most of the study conducted previously had used the service quality model that is done to the quality service in general with their dimension such as tangibility, reliability, assurance, empathy and responsiveness. Example Habtie, (2019) effect of ATM service quality on customer satisfaction on banking industry in Ethiopia; reliability, tangibility and assurance have significant effect on customer satisfaction J.M.Nupur (2010) verified the impact of e-banking on customer satisfaction in Bangladesh and Selimi .T.M (2018), argued that reliability, responsiveness, assurance, empathy and tangibles are the main service quality dimensions for customer satisfaction in e-banking. S.John, (2016) studies on the influence of ATM service quality on customer satisfaction, uses the above listed variables from five only reliability is insignificant. A.Toor et al, (2016) studies on impact of e-banking on customer satisfaction in Pakistan, in this study reliability; responsiveness and assurance have significant effect on customer satisfaction. But the researcher was conduct with a combination of other variables affecting customer satisfaction of service quality such as reliability, convenience, responsiveness and speed.

In our country there was limited number of studies conducted as compared to the other countries regarding with E-banking so as to give quality service and to retain customer satisfaction, loyalty and positive word of mouth, however it doesn't mean that the number of study is too small rather e-banking needs more study. Most of the study focus on CBE (commercial bank of Ethiopia) and the frequent complain of customer around the office area in case of electronic banking service quality by comparing the service provided by awash, Abyssinia and Dashen bank initiate the researcher to study on e-banking. Due to this the study was focused on examining the influence E-banking service quality on customer satisfaction in Nib international bank S.C.

1.3 Research question

- ✚ What level of NIB e-banking service customer satisfaction in Addis Ababa?
- ✚ Which service quality attribute affect customer satisfaction?
- ✚ Is there any relationship between customer satisfaction and service quality dimensions of e-banking?

1.4 Objective of the study

The main objective of the study is to assess the influence of E-banking service quality on customer satisfaction. Specific objectives are:-

- ❖ To determine the satisfaction level of E-banking customer of NIB bank in Addis Ababa.
- ❖ To examine which service quality attributes affect customer satisfaction.
- ❖ To show the relationship between customer satisfaction and service quality dimensions of e-banking.

1.5 Significance of the study

It helps the bank management because it will helps to identify the problems faced by the bank and complains of customers and also to policy maker to develop and implement effective service quality strategy in providing quick access to the customer by avoiding the problem encountered. Following remedies to the problem bank can achieve strategic goal and objectives. That is advantageous for the consumer in getting quality service because it can save time and cost.

1.6 Scope of the study

The scope of the study is on E-banking and customers who use ATM, POS, mobile banking, and internet banking in Addis Ababa. Cause of boundary limitation are the access of electronic banking service is higher than other cities, high number of peoples uses its service and most of the bank branches, head quarter, ATM and POS are located in Addis Ababa.

1.7 Organization of the study

Chapter one include introduction, problem statement, research question, objective of the study significance of the study, and scope of the study. Chapter two include the review of literature that shows the theoretical as well as Empirical analysis regarding with E-banking service quality and customer satisfaction. Chapter three is about the methodology of research. Chapter four is analysis and interpretation chapter five finding, conclusion and recommendations.

Chapter two

Literature review

2.1 Introduction

This chapter contains three parts such as theoretical, Empirical literature and conceptual framework on e-banking. The theoretical parts show concept, definition of e-banking, components of e-banking, challenges and opportunities, service quality and customer satisfaction. The second part Empirical analyses were in the works of previous researchers about e-banking and customer satisfaction. The third part conceptual framework the attributes of service quality.

2.2 Theoretical reviews

2.2.1 Concept of E-banking

With the advancement of technology numbers of companies come into the banking industry to provide quality service to the customers in worldwide basis and to enhance their own profitability. For instance Citibank obtain more than half of their income over the overseas operations, several international banks (e.g. Hong Kong bank, Banque de Paris) have been entering into the American market and also like this bank from Europe such as London-based standard chartered bank have been recently taken over control or bought the banks in Thailand, New Zealand and Australia. This makes a great opportunity to consumers that is aided by technological developments banks have responded to the challenge by adopting strategy, which focus on attempting to build customer satisfaction through providing better product and service and simultaneously reducing transaction costs. In this case understanding the consumer preference is one way of developing the banking sector (Sohail and Balachandram, 2003).

There are various definitions about E-banking by different authors. Daniel (1999) electronic banking is the transfer of bank information and data to consumers by ways of various terminal devices may be personal computers, mobile phone, telephone or digital television.

Pikkarainen et al (2004) defined e-banking is an online portal in providing a lot of or sort of banking service to the customer like making bill payment, online fund transfer up to creating large investment activities. With the exception of withdrawing cash customers can perform most of the bank service and transactions.

Shah et al, (1996) describe e-banking as an electronic network with in the bank and customer in the way to handle, analyze and controlling financial transactions and data. Currently e-banking begin new stage of competition because of its characteristics such as speed, efficiency, reducing expense and gaining benefit with unique opportunities.

E –banking is a term used for new age banking system, showing an automated transfer of modern and traditional banking products and services directly through electronic channels or networks. It is the service that provides an opportunity the customer to access their accounts, gain information on financial products and services via public or private networks. They are various terms used in referring to e-banking including: personal computer (PC) banking, internet banking, virtual banking, online banking, web banking, home banking, phone banking, remote electronic banking, mobile banking and other are used interchangeably (Driga.I, 2014).

E-banking is an improvement over the traditional banking system because it has reduced the cost of transaction processing, improved payment efficiency, financial service and customer relationship (Alsamdai. J.M et al 2012). The difference with the traditional banking lack of direct contact between employees and customers and also e-banking provide quality service than traditional.

According to Allen et al (2001) electronic banking refers to the provision of information or service by a bank to its customers, via a computer or television. (Keivani et al. 2012) describe e-banking as an umbrella term for the process by which a customer may perform banking transactions electronically without going to the financial institutions. Most researchers agree that e-banking can access 24 hours per day and 7 days in a week.

E –banking is currently the main element for enhancing efficiency and productivity in both private and government banks in order to strengthen the national economy. E –banking enables banks, customers of the bank, individuals and business to access accounts, making business transaction, and retaining financial information and services through either private or public networks. Customers access e-banking services using electronic device such as a personal computer (PC), personal digital assistant(PDA), automated teller machine(ATM) and telecommunication routs (Addai et al,2015).

2.2.2 Component of E-banking

According to Driga .I (2014) the components of e-banking include: home banking, PC banking, internet banking and mobile banking.

Home banking:-refers to the practice of conducting transactions from home rather than at branch locations that allows customers to obtain information about personal accounts via a phone call; it is based on the existence of a telephone line a customer passwords and personal code that provides access to data or information; clients are able to request account balances, transfer money with in their accounts and conduct multiple transactions.

PC banking: - a form of banking that enables customers to perform bank transactions from a PC by providing a proprietary software program that allows the customer to perform financial transactions from his or her home computer via a modem.

Internet banking:- referred to as online banking, web banking or virtual banking, an outgrowth of PC banking, is a more developed service ,a system that enable the bank customers to access their accounts and general information on bank products and services or perform account transactions directly with the bank through a personal computer using internet as the delivery channel, and the customer can conduct banking activities like transferring funds, paying bills, viewing account balances, purchasing financial statements and certificates of deposits.

Pikaraianen et al (2004) “define internet banking as an internet portal, through which customers can access various types of banking service. With the exception of cash withdrawal, internet banking gives access to customers to almost any types of banking transaction at the click of mouse. Bank use online banking as it is one of the cheapest delivery channels for banking products.

Ling, G et al (2015) as Hamid et al (2018) cited interpret the importance of applications of internet banking as a viable tool to improve and create customer satisfaction. This study shows the main problem is the large numbers of customers are not willing to use internet banking service offered. Beside this the researcher find five factors that influence customer satisfaction towards the use of internet banking include convenience and speed, security and privacy, web design and content and service quality.

Mobile banking:- is a system that allows bank customers to conduct different financial transactions via a mobile device ,being the newest service in e-banking ; mobile banking relies on wireless application protocol technologies because a mobile device requires a WAP browser Installed in so as to permit access to information(Driga .I ,2014).

Mobile banking is more preferable and attractive than the other online banking because of its unique characteristics, customers can use anytime and anywhere or ubiquity by using telecommunication network rather than the internet usage (NIB brochure).

Based on (Diraga.I, 2014) studies mobile banking adoptions among consumers is much faster than the adoption of internet banking as banks have educated their customers and have invested a great deal of mobile banking technology ,security and smart phone applications development.

In Ethiopia the application of mobile banking is for the purpose of balance enquiry, to see current foreign currency exchange, fund transfer from one customer account to the other, utility payment, for buying mobile card/air time, for buying plane ticket and others (Gardachew, 2010).

ATM: - here the name automatic teller machine is an electronic terminal or telecommunication device used by a plastic card with security number we call it PAN number (personal identification number) and use for customer to conduct various transactions via ATM card such as cash withdrawal, balance enquiry, fund transfer, to take mini statements, deposit of cash even though this is not developed in Ethiopia (NIB bank brochure).

POS: - refers to point of sales applied to conduct transactions through ATM card in the bank branch, in hotels and restaurant and supermarket for the purchase of goods and service without carrying cash (NIB bank brochure).

Agent banking:-is a retail service contracted by a financial institution or a mobile operator to process customer transactions in such case the agent making service in the behalf of the bank. Banking agents are usually well trained with a combination of POS card reader, mobile phone, barcode scanner to scan bills for bill payment transactions, and it is going to be personal computers (PCs) that connect with the bank's server applying a personal dial-up or other data network. To enable clients to convert cash into electronic money and vice versa which can be sent over their mobile phone, clients will have to visit a branch, ATM, or banking agent (Addisu.B, 2018).

2.2.3 Challenge and benefits of E-banking

The improvement of online banking and its increased use by consumers worldwide has made this service a great opportunity for cyber criminals although banks have set up security systems to assure that transactions conducted online are free from internet security attacks. This leads to significant hazards such as hackers and computer viruses (Driga. I, 2014).

According to Romney et al (2016) pp, 157 all computers connected to the internet, especially those with important trade secrets or valuable it asset, are under constant attacks from hackers, foreign governments, terrorist groups, disaffected employees, industrial alias and competitors. This enables attackers to harm valuable data or computer systems of the bank. For instance one time Russian hackers broke into Citibank and stole \$10 million from customer accounts. Scientist says in the future 61%of technology experts expect a major cyber-attack that will cause significant loss of life or property in tens billions of dollars.

The challenges of e-banking are inadequate ICT infrastructure, inadequate funding ,Absence of appropriate legal and regulatory framework, High cost of bandwidth/telephone lines/internet access, Service inter-exchange congestion and slow internet connectivity due to high international tariffs, Unexpected system failure, Complacency/illiteracy, Security (Cyber security, data integrity, protection of customer's confidential information and identity theft (Nwaze. C, 2009).

One of the main challenges in Ethiopian banking sector is weakness in its capital to build technological infrastructure even though there is regulation in NBE. So as to avoid this problem merging of banks is one solution in order to face the stiff competition from foreign banks and to make them competitors. As studies shows in Malaysia the government has encouraged consolidation of bankssince1994 and in 1999 cutting down of 23 domestic banks into 10 with the aim to make the bank stronger and more stable, with the expectation that it will be more industry resilient (Sohail and Balachandram, 2003).

Despite the challenge e-banking has several benefits to the consumers, this make a preference with its usage. Based on (EY, 2014) global banking survey, consumers have various choice in using e-banking, for everyday customers have several alternative channels based on needs and experiences while in weekly consumers prefer internet, mobile and ATM banking, for weekly basis use ATM and online channels more frequently than others but for monthly usage branch

banking is the most preference. Ojokuku and Sajuyigbe, (2012) cited by Balogun, O. J et al (2013) electronic banking facilitates the customers' access to their accounts and executing transactions electronically in an easier way through visiting the bank websites at any given time.

Based on Balogun, O. J et al (2013) study e-banking has several benefit such as: reduced costs in accessing and using the banking services, increased comfort and timesaving, quick and continuous access to information, better cash management, speed and funds management.

2.2.4 Service quality dimension of E-banking

- Reliability: the company's ability to provide service accurately and dependably.
- Convenience: easily accessing the information of institution.
- Responsiveness: the company's willingness to support customers and provide its promised service.
- Speed: quickness of the company in providing its service.

Source: (A.Toor et al, 2016)

2.2.5 Customer satisfaction

Customer satisfaction is difficult and abstract concept; actual manifestation of the level or extent of satisfaction will vary from person to person, product to product and service to service. The level of satisfaction based on a numbers of things like psychological, economic and physical factors (Kumbhar V.M 2011).

Service marketing in general , and particularly banking service in particular has become one of the most significant and modern areas which has been a substantial growth during the last years globally especially in E-banking area (Adddai et al,2015). Due to this the banking services upgraded in their standard and broaden in its service coverage and technology so as to satisfy the customer.

Customer satisfaction refers to the consumer's response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product as perceived after its consumption. A satisfied customer with e-banking service will come back and refer the e-banking service to other as well generating more sale and profits (Tse and Wilton1988).

Kumbhar V.M (2011) argued that perceived value brand perception, cost effectiveness, easy to use, convenience ,problem handling, security or assurance and responsiveness are important

factor in customer satisfaction in e-banking. On the other hand J.M.Nupur (2010) verified the impact of e-banking on customer satisfaction in Bangladesh and Selimi .T.M (2018), argued that reliability, responsiveness, assurance, empathy and tangibles are the main service quality dimensions for customer satisfaction in e-banking.

According to Parasuraman et al (1985,1988,2005) they give an argument on customer satisfaction, if expected service quality and actual received performance is equal or nearly equal it can say customers are satisfied, while there is negative discrepancy between perceptions and expectations performance gap exist it causes dissatisfactions, a positive discrepancy leads to customer delight. In such case expectation performance analysis is essential concept to investigate the level of customer satisfaction in service industry. Customer satisfaction has three levels such as pre transaction level, transaction level and post transaction level. Pre transaction level means service customer expects benefits even before the actual transaction, transaction level as the name indicate the service at the time of transaction while post transaction means the service that the customer expects benefit from after transaction (John. A.S. 2016).

2.2.6 Relation between service quality and customer satisfaction

Customer satisfaction can be seen as multi-dimensional construct while service quality can occur at multi-level in an organization (Sureshchandar et al., 2002).

Parasuraman et al., (1985) When service quality is high it will increase customer satisfaction or service quality leads to customer satisfaction. Both service quality and customer satisfaction have positive effect on customer's support intentions showing that both of them play a critical role on competitive business market (Fen, Lian, 2005).

Su et al., (2002) carried a study to find out the link between service quality and customer satisfaction, from their study, they came up with the conclusion that, there is a great dependency between the two and that an increase in one is likely to lead to an increase in another. Also, they pointed out that service quality is more abstract than customer satisfaction since customer satisfaction reflects the customer's feelings about many encounters and experiences with service firm while service quality may be affected by perceptions of value or by the experiences of others that may not be as good.

2.2.7 E-customer

The term e-customer refers to the online purchaser/users whether it is an individual or corporate one who is using e-portal to purchase, ordering receiving information and paying price/charges through various types of electronic channels like internet banking, mobile banking, ATMs, credit cards, debit cards and other electronic device (Kumbhar V.M, 2011).

2.2.8 Service

Service is an activity that one individual or organizations offers to another that is intangible, invisible and does not result the ownership of anything and it may or may not be tied to a physical product. Service is a process of doing activities to individual or a certain company that is intangible or it is difficult to measure. There are different characteristics regarding with service, such as intangibility, inseparability, perishability, and variability (Armstrong and Kotler, 2011) as cited by (Yidnekachew. G, 2019).

Service intangibility is that the service that invisible, not to be tasted felt heard or smelled before they bought. Due to this consumers are try to evaluate the quality of service by seeing at the tangible component like place, people, price and equipment.

Service inseparability refers to service that cannot be separated from the service provider whether the providers are people or machines. It means service is able to be occurred with alive of the service provider.

Service variability refers to the quality of service depends on who provides them as well as when, where and how they are provided. i.e the service activity depends on its provider that is service provided by one company or individual is vary from the other.

Service perishability refers to the service that cannot be keep or hold for later sale or use. But it does not mean that each service is not stored for later use.

2.2.8.1 Service quality

Service quality is an important concept in service provider companies especially in the banking industry in order to gain its competitive edges. It is an essential factor for attracting customers and to satisfy its demand, cost reduction, loyalty, customer relationship and retention and profitability (Aghdaie A.S.F et al, 2012).

Many researchers suggested that quality results from a comparison of perception about received service with prior expectations of what those services should provide. In the modern competitive environments, delivering high service quality is the key for sustainable competitive advantage. Customer satisfaction has a positive effect on the organizations profitability. When the customers of a business is satisfied it can provide various contribution to the organizations indirectly, such as repeat repurchase, show brand loyalty, and give positive word of mouth (Aghdaie A.S.F et al, 2012).

2.3 Background information of E-banking in Ethiopian banking industry

The occurrence of e-banking starts in 2001, CBE the pioneer bank in the introduction of ATM located in Addis Ababa giving service for local users. After this Dashen bank (DB) in 2006 provide service for both local and international Dashen visa card holders who come to in Ethiopia (Gardachew .W, 2010). United bank is the first in introducing Tele-banking like text messages or SMS by the end of 2008.

Zemen bank has launched prepaid bank cards which can be used without opening an account with deposit at the bank .the card will have preloaded funds, which can be withdrawn from ATM or used to make purchase from POS terminal. The prepaid card will be given to the card holders with pin to withdraw cash. The card preloaded with minimum of 100 birr and a maximum of 50,000, most of the time this service is used for salary purpose and bank can gain a commission from the prepaid card, after fully utilized reloaded again(Addisu.B,2018).

In 2009 three banks including NIB bank, awash bank S.C and united bank S.C member in establishing PSS premier switch solution in 165 million birr capital with the aim of giving common operational function and control service not only own bank ATM and POS but also with the other i.e the member bank that is benefiting both the bank and the customers. Later on in 2011 the other three private bank included in the PSS member Berhan international bank S.C, Addis international bank S.C and cooperative bank of Oromia S.C .after that in 2011 Ethi-switch Company was established by the 16 banks in providing common service payment and clearing system for all existing banks (Habtie. A, 2019

2.4 Empirical literature

Worku et al, (2016) studies on the impact of electronic banking on customer satisfaction in Ethiopian banking industry and they found problems related with ATM and other services such as machine out of order, machine out of cash, frequent breakdown of ATM service, unreliability of ATM service, lack of sufficient technicians in bank who solve the breakdown of machine, lack of sufficient alternative system which substitute ATM service for the customer when temporary problem happen in the machine, lack of mobile banking service , underdevelopment of technological infrastructure, low level of knowledge creation and innovation , network failure, fear of risk and lack of fair distribution of e-banking service all over Ethiopia.

Sohail and Balachandram,(2003): E-banking and customer preferences in Malaysia: variables are accessibility, reluctance cost, trust, security, convenience and ease of use in. the finding shows that accessibility , reluctance to change and security are significant factor affect the adoption of e-banking.

Hammoud et al, 2018, impact of e-banking service quality on customer satisfaction evidence from Lebanese banking sector. Variables are efficiency, reliability, security and privacy, responsiveness and communication in such case all the independent variables are significant effect on customer satisfaction.

Kumbhar V.M, (2011) factor affecting the customer satisfaction in e-banking: some indication from Indian banks. Variables are system availability, E-fulfillment, accuracy, efficiency, security, responsiveness, easiness, convenience, cost effectiveness, problem handling, compensation, contact, brand perception and perceived value. From this perceived value, brand perception, cost effectiveness, easy to use, convenience, problem solving, security and responsiveness are important factors in customer's satisfaction in e-banking. The remaining is less important in affecting customer satisfaction.

Ahmed.K.Meet al, (2011) e-banking functionality and outcomes of customer satisfaction: an empirical investigation in Jordan commercial bank. Variables are accessibility, convenience, privacy, security, design, fees and charges, content and speed. Among this all of the above

variables have positive impact on customer satisfaction of e-banking but the most significant variables are security privacy and content.

2.4 Conceptual framework of the study

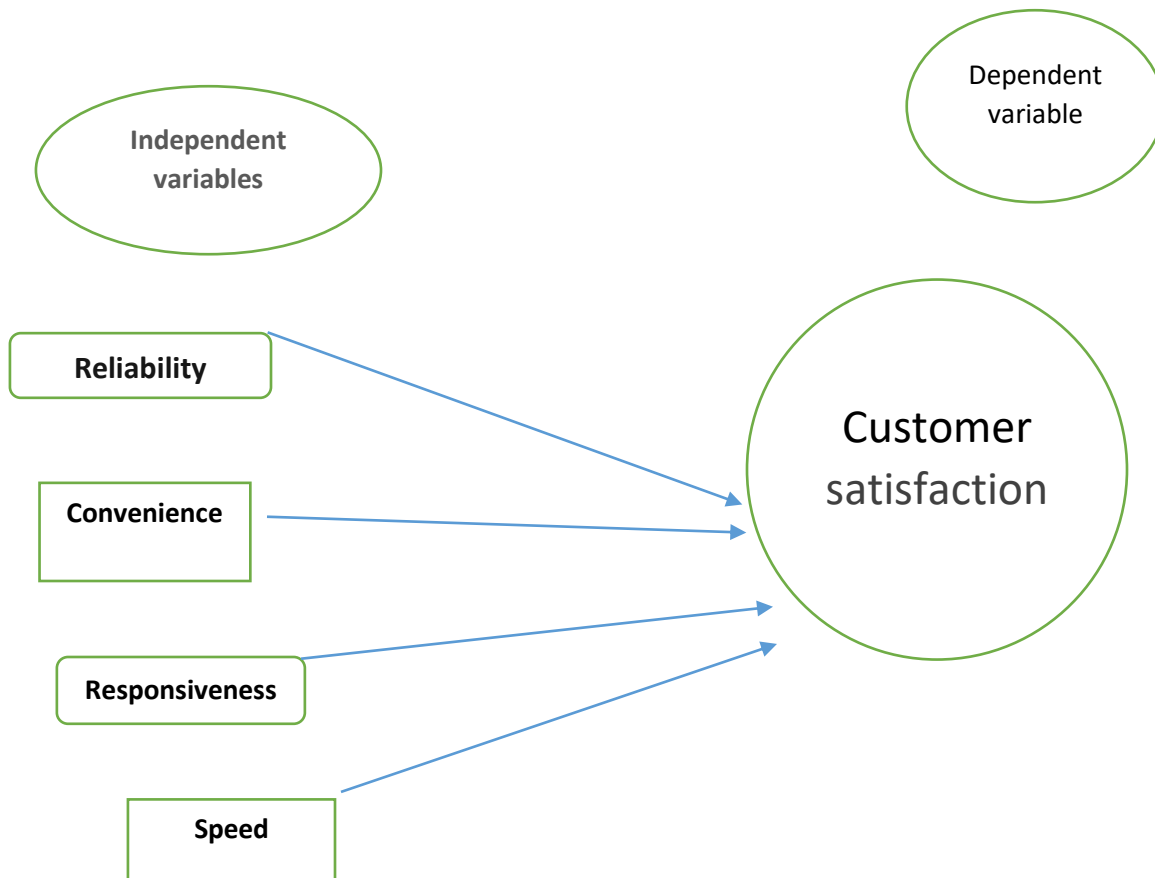


Figure 2.1 Conceptual framework (adopted from Ahmed. K.M, (2011) and KumbharV.M, (2011)

2.5 Hypothesis

H1= Reliability of e-banking has positive significant effect on customer satisfaction

H2=Convenience of e-banking has positive significant effect on customer satisfaction

H3= Responsiveness of e-banking has positive significant effect on customer satisfaction

H4=Speed of e-banking has positive significant effect on customer satisfaction.

Chapter three

Research methodology

3.1 Research design

A research design is that the arrangement of conditions for gathering and analysis of information or data in a manner that aims to mix relevance to the research purpose with economy in procedure. It is a plan that specifies the source and types of information relevant to the research problem and also it is the strategy specifying which approach will be used for gathering and analyzing the data. It is the blueprint for the collection, measurement and analysis of data with respect of what is the study about, why the study is being made, where the study will be carried out, what types of data is required, where can the required data be found, what period of time the study will include, what will be the sampling design, what technique of data collection will be used and how the data will analyzed (C.R.Kothari, 2004).

Both Descriptive and explanatory research design were applied in this research. To describe the relationship between customer satisfaction and e-banking service quality with their demographic characteristics and others that is either quantitative or qualitative. Descriptive research design helps the researcher to understand the characteristics a group in a given situation (Uma Serkan and Roger, Bougie, 2016). Explanatory researches show the causal relationship between e-banking service and customer satisfaction.

3.2 Target population

Target population must be defined in terms of elements, geographical boundaries, and time (Uma Serkan and Roger, Bougie, 2016). The target population of the study was the e-banking customer of NIB bank in Addis Ababa north east district thirteen branches namely Megenagna, Gurd Sholla, CMC, Ayat Adebabay, Beshale, Yerer Ber, Sealite Mihret, Jacros Beshale, Yerer Goro, Goro, Derartu and Meri Loke in the concept of service quality and its satisfaction of customer.

3.3 Sampling technique and Sample size

Sample design is a definite plan determined before any data are actually gathered for getting a sample from a given population. Samples might be either probability samples or non-probability samples. With probability samples every element has a known to be probability of being included in the sample but the non-probability samples do not access the researcher to determine this probability (C.R.Kothari 2004). The methods of sampling technique the researcher was use

done of the types of none probability convenience sampling because it help the researcher to get data with ease of accessibility from customers about the e- banking and customer satisfaction due to time and cost. The researcher select e-banking customer of NIB by preparing questionnaire only for them and by asking the customer are user of e-banking or not if yes ordered to fill if not don't order because the question is about e-banking. But convenience sampling may be bias that is difficult to generalize the research result. The sample size was based on Yamane 1967 formula.

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

Where n =sample size, N =total population and e^2 = margin of error

As the information obtained from the e-banking department the target population that means e-banking customer of NIB bank in Addis Ababa up to May 30 2020 is equal to 217,883, from this population the researcher takes a sample size of 277 at margin of error 6% based on the above formula.

$$n = \frac{217,883}{1 + 217,883(0.06)^2}$$

$$n = \underline{\underline{277}}$$

The sample size is not sufficient to study as compared from the total population, however due to shortage of time the researcher use the above sample size. From the sample the researcher can collect 161 or 58.12% completed questioners because of the unwillingness and negligence of customers to fill the questioners

3.4 Model specification

According to hair et al (2005) to analyze the relationship between one dependent and several independent variables multiple regression analysis can be applied.

$$CS = \beta_0 + \beta_1 REL + \beta_2 CONVE + \beta_3 RESP + \beta_4 SP + e$$

Where CS= customer satisfaction, REL=reliability, CONV= convenience, RESP=responsiveness, SP=speed, β_0 =constant β_1 - β_4 =coefficient, e= error term.

3.5 source of data collection and analysis

The researcher was used mainly primary data source by using questionnaire adopted from previous researcher with some modification that was distributed to the customer regarding with customer service quality and its satisfaction. And data collected from articles of various business journals thesis and text books. The analyses were using regression, descriptive analysis and correlation between independent variables and validity and reliability analysis to show the consistency of data. The analysis was done by using SPSS 20 software using five point likert scale data from strongly disagree 1, disagree 2, neutral 3, and agree 4 to strongly agree 5 adopted from the previous researcher.

3.6 Validity and Reliability

Validity is the accuracy and appropriateness of the collected data. The reliability of a measure indicates the extent to which it is without bias (error free) and hence ensures consistent measurement across time and across the various items in the instrument (Uma Serkan and Roger, Bougie, 2016). Validity and reliability should be reflected in the measurements and variables of the research, in particular, and in the findings in general. The measurements should be reliable and precise, so that if another researcher uses the same instruments or measurements, that researcher should obtain the same results. The concept of validity of the questionnaire was ensured by an extensive review of related literature (Saunders et al, 2009).

Cronbach's alpha is the most important measure of scale reliability Field et al (2008). The values assumed by Cronbach's alpha range between zero and one (0-1). Higher values indicate a higher reliability of the scale and lower values indicate lower reliability of the scale. As a general rule for good reliability, Hair et al, (2005) recommend that Cronbach's alpha values should be 0.70 or more. The question raised in the questionnaire is tried to meet the objective of the study.

Table 3.1 reliability statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.844	5

Source: SPSS result, 2021

Reliability statistics measures the internal consistency of any instrument used in research studies in order to measure such reliability of the questionnaire used in the study, the researcher use alpha coefficient. From the above table highest Chornabach alpha coefficient or high reliability in both service quality dimension and customer satisfaction since the value of alpha is greater than 0.7.

3.7 Ethical consideration

The questionnaire distributed was not made any bias regarding with sex, religion, political, ethnic and personal views. Confidentiality was the main concern of the researcher in keeping any secrets of the respondents.

Chapter four

Data analysis and interpretation

This chapter focuses on the analysis of data raised in the objectives of the study, methodology and about respondent characteristics. Mean score for customer satisfaction level, demographic characteristics using descriptive statistics while multiple regression and correlation for the relationship between customer satisfaction, e-banking and attributes of service quality. The analysis of data is based on the response of 161 respondents which is 58.12% of the distributed questionnaire. `

4.1 Questionnaire response

Table 4.1 questionnaire response

Questionnaire response	Frequency	Percentage
Filled questionnaire	161	58.12%
Unfilled questionnaire	116	41.88%
Total	277	100%

Source: own survey 2021

Table 4.1 show the response of distributed questionnaires to the respondent with the response rate of 58.12%.Mugenda and Mugenda (2003) explains that for hypothesis a response rate of half is pleasant for examination and reporting, 60% is extraordinary and a response rate of 70% and over is amazing. From this 58.12% is above the satisfactory level for analysis.

4.2 Demographic characteristics of the respondents

Table 4.2Demographic characteristics of the respondents

		Frequency	Percent	cumulative percent
Gender	Male	83	52%	52%
	Female	78	48%	100%
	Total	161	100%	
Age	18-25	55	34%	34%
	26-35	72	45%	79%
	36-50	31	19%	98%

	above 50	3	2%	100%
	Total	161	100%	
educational status	10-12'	21	13%	13%
	Diploma	23	14%	27%
	Degree	85	53%	80%
	Master	24	15%	95%
	Other	8	5%	100%
	Total	161	100%	

Source: own survey, 2021

From the above table the respondents' gender status is almost equal 48% are female and 52% are male. Age of respondents 34% are within the age of 18-20, 45% are within the age of 26-35, 19% are within the age of 36-50 and 2% are in the age of above 50 from this 79 % of respondents' are within the youngest stage in my point of view it is important for the bank for future by continuing as a customer while getting quality service.

When we see the educational status of the respondents' 13% are grade 10-12, 14% are diploma, 53% are degree, 15% are masters and 5% are other this shows the degree and masters holder is higher from the total of respondents that is knowing the service of e-banking delivered by the bank.

4.3 Customer status on e-banking

Table 4.3 descriptive statistics of customer status in e-banking

		frequency	Percent	cumulative percent
year of the customer use NIB bank	below 1 year	34	21%	21%
	1-5	93	58%	79%
	5-10	32	20%	99%
	above 10year	2	1%	100%
	Total	161	100%	
types of e-banking used	ATM MB	26	16%	16%
	ATM MB POS IB	1	1%	17%

	ATM MB POS	17	11%	27%
	ATM POS	11	7%	34%
	ATM	68	42%	76%
	MB	26	16%	93%
	IB	4	2%	95%
	OTHER	8	5%	100%
	TOTAL	161	100%	
Satisfaction of e-banking	ATM	68	42%	42%
	MB	36	22%	65%
	POS	4	2%	67%
	IB	2	1%	68%
	ATM MB POS IB	1	1%	69%
	ATM MB POS	6	4%	73%
	ATM MB	5	3%	76%
	MB POS	1	1%	76%
	ATM POS	5	3%	80%
	OTHER	33	20%	100%
	TOTAL	161	100%	
network status	EXCELLENT	11	7%	7%
	V. GOOD	44	27%	34%
	GOOD	66	41%	75%
	POOR	40	25%	100%
	TOTAL	161	100%	

Source: own survey, 2021

Table 4.3 shows the customer who use NIB bank 21% below 1 year, 58% of the respondent are 1-5 year, 20% 5-10 year 1% are above 10 years. From this 79% of the respondents use NIB bank in the year between 1-10 years and above. Due to this the banks take this advantage by developing their service strategy to continue for more years.

In terms of Types of e-banking use ATM 42% is the highest followed by mobile banking 11% and internet banking 2%. This shows internet banking usage of customer is very low as compared to the other e-banking service. The satisfaction of customer when using e-banking ATM 42% mobile banking 22%, POS 4% internet banking 1% other service other than mobile banking ATM, POS and internet banking is 20%. The service level of internet banking is very low as

compared to the other e-banking service facilities. From this the bank should not focus on the development of internet banking service or low customer awareness about internet banking.

Network system of the bank from the respondent answer is 7% excellent, very good 27%, good 41% and poor 25%. The system found at minimum level.

4.4 Descriptive statistical analysis of service quality dimension

Table 4.4 Descriptive Statistics

	N	Mean	Std. Deviation
1 e-banking increase the quality of service	161	3.66	1.183
2 Nib ATMs provide quality service	161	3.29	1.081
3. e-banking provide service when the promise	161	3.11	1.105
3. I can access at any time & any where	161	3.43	1.155
4. no queue	161	3.77	1.044
5. easy to use	161	3.84	.980
6. e-banking save time	161	3.89	.985
7. the money transfer become easier through e-banking	161	3.51	1.210
8. i can check my transaction details and statements regularly	161	3.40	1.097
9. e-banking handles the problems when it happens	161	3.20	1.145
10. e-banking services take care of problems promptly	161	3.25	1.129
11. give immediate answer to my questions	161	3.09	1.150
13. NIB staff is willing to answer any question or concerns of customer on e-banking	161	3.44	1.123
14. ATMs are enough cash in case of holiday	161	3.44	1.156
15. frequent connection breakdown	161	3.49	1.236
16. no waiting time	161	3.50	1.113

	N	Mean	Std. Deviation
17. response speed to compliant is satisfactory	161	3.15	1.216
18. speed of e-transactions flow is faster than the traditional banking channel	161	3.53	1.204
Valid N (listwise)	161		

Source SPSS result, 2021

Based on, Best (1997) the mean score that ranges from 1-1.80 is considered to be lowest, from 1.81-2.61 is lower, from 2.62-3.41 is deemed to be average/moderate, from 3.42-4.21 is good/high and from 4.22-5 is going to be considered as very good/excellent.

In the table above the mean score of each question is above the minimum i.e the minimum level is it average 3. From each parameter of service quality e-banking saves time is the highest with mean score of 3.89, which means when the development of e-banking technology increase, the customer can save time and its unnecessary cost because it can reduce visiting bank branch. The second highest mean score is ease to use with its mean 3.84 and no queue mean of 3.77. The lowest mean score is give immediate answer to my questions with mean score of 3.09; even though it is greater than 3 the department of electronic banking has the problem of giving quick response to the consumer question as compared to the other parameter. So NIB bank should give attention to the question and any suggestion of customers to do more beyond existing service. In general the overall mean score value of each question is above the average level so it can rank as good.

Table 4.5 summary of mean and standard deviations

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
customer satisfaction	161	1.00	5.00	3.4472	1.04224
Reliability	161	1.00	5.00	3.3520	.90081
Convenience	161	1.00	5.00	3.6408	.77919
Responsiveness	161	1.00	5.00	3.2845	.88956
Speed	161	1.00	5.00	3.4177	.87802
Valid N (listwise)	161				

Source: SPSS result 2021

From the above table the mean of each dependent and independent variables is greater than the minimum level. That means mean of reliability is $3.35 > 3$, convenience $3.64 > 3$, responsiveness $3.28 > 3$, speed $3.4 > 3$ and customer satisfaction $3.45 > 3$.so the independent variable used in this study is highly influence customer satisfaction on the usage of e- banking. From the elements of service quality is the highest mean score convenience 3.64 S.D 0.78, followed by speed 3.4 S.D 0.88, reliability 3.35 S.D 0.9 and responsiveness 3.28 S.D 0.88. According to (Best 1997) it can

rank as moderate for reliability and responsiveness and good for customer satisfaction, convenience and speed.

4.5 Descriptive statistics on customer satisfaction

Table 4.6 Descriptive Statistics on customer satisfaction

	N	Minimum	Maximum	Mean	Std. Deviation
I am satisfied with NIB e-banking service quality	161	1	5	3.45	1.042
Valid N (listwise)	161				

Source SPSS, 2021

The above table explains the overall satisfaction of customers on e- banking service quality have a mean score of 3.45 it can say the service provided by e- banking is good .

4.6 Customer satisfaction level

Customer satisfaction refers to the consumer’s response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product as perceived after its consumption. A satisfied customer with e-banking service will come back and refer the e-banking service to other as well generating more sale and profits (Tse and Wilton1988). The level of satisfaction varies from person to person and also service to service.

In order to measure the level of satisfaction of customers “with the statement of I am satisfied with the e- banking service of NIB bank” with the preference strongly agree, agree, neutral disagree and strongly disagree.

Table 4.7 level of customer satisfaction

customer satisfaction				
	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	59	36.6	36.6	36.6
Disagree	19	11.8	11.8	48.4
Valid Neutral	51	31.7	31.7	80.1
strongly agree	24	14.9	14.9	95.0
strongly disagree	8	5.0	5.0	100.0

Total	161	100.0	100.0
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Source: SPSS result 2021

From the table 36.6% of respondents are satisfied and 14.9% are highly satisfied 11.8% are not satisfied, 5% are highly not satisfied and 31.7 % of respondents are neither of the two. By adding strongly agree with agree 51.5 %(14.9+36.6) and strongly disagree with disagree 16.8% (5+11.8), in this frequency table 51.5% of respondents are satisfied while 16.8% of respondents are dissatisfied, it can say something good but not sufficient. In order to satisfy the dissatisfied customer the bank should work highly by improving e-banking technology and its service quality.

4.7 Correlation analysis

To show the correlation between independent variables and dependent variable correlation matrix is necessary by using correlation coefficient. Correlations coefficient is a statistical tool that used to measure the relation between two variables the result found between -1to 1. When the correlation coefficient is -1 there is perfect negative correlations, 0 no correlation and 1 perfect positive correlation between variables (M.Wooldbridge, 2012). The correlation analysis is made by using the mean of each service quality dimensions .Hence the correlations in the table below are positive; there is better service quality it leads to more customer satisfaction. So the correlation between customer satisfaction and dimensions of service quality is positive that is shown below in the table 4.8

Table 4.8 correlations between service quality dimension and customer satisfaction

Pearson Correlation	customer satisfaction	Reliability	Convenience	Responsiveness	Speed
Reliability	.450**	1			
Convenience	.529**	.680**	1		
Responsiveness	.500**	.627**	.704**	1	
Speed	.199*	.508**	.583**	.596**	1
** . Correlation is significant at the 0.01 level (2-tailed).					
* . Correlation is significant at the 0.05 level (2-tailed).					

Source: SPSS, 2021

The table shows correlation between independent variables and also between dependent and independent variables. The dependent variable is customer satisfaction while the independent variables are reliability, convenience, responsiveness and speed. From this the highest correlation is between responsiveness and convenience 0.7 the lowest correlations is between speed and customer satisfaction 0.19.

4.8 Multiple Regression analysis

Multiple regressions are the regression of two or more independent variables. The purpose of the analysis is to examine dimension e-banking of service quality toward customer satisfaction and which dimension have significant effect on customer satisfaction.

Table 4.9 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.602 ^a	.362	.346	.843

a. Predictors: (Constant), speed, reliability, responsiveness, convenience

The model summary show how much customer satisfaction explained by the dimension of service quality. 36.2% of dependent variables explained by the independent variables while the remaining 63.8% explained by other variables. 0.602 show the correlation between dependent and independent variables.

Table 4.10 ANOVAtable

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	62.943	4	15.736	22.143	.000 ^b
	Residual	110.858	156	.711		
	Total	173.801	160			

a. Dependent Variable: customer satisfaction

b. Predictors: (Constant), speed, reliability, responsiveness, convenience

The ANOVA tables show the overall significance of the regression model in terms of goodness of fit. F value significant at 0.05 indicates the service quality attributes significantly predict customer satisfaction (F 4,156=22.14).

Table 4.11 Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.999	.334		2.991	.003
1 Reliability	.162	.106	.140	1.531	.128
Convenience	.501	.137	.374	3.655	.000
Responsiveness	.366	.115	.313	3.192	.002
Speed	-.328	.099	-.276	-3.308	.001

a. Dependent Variable: customer satisfaction
Source: SPSS result, 2021

Table shows the relationship between the dependent variable and each independent variable. Convenience B=0.5 sig value 0.000, responsiveness B=0.366, sig value 0.02 and speed B=-0.328 sig value 0.01 are below the significant level i.e.<0.05 the t values also have greater than 2, from the three variables convenience have the highest significant effect on customer satisfaction followed by speed and responsiveness. While the remaining variable reliability is not significant effect on customer satisfaction even though the overall significant values of F is significant. But there significant effect is varying among the variable either positive or negative. From this convenience and responsiveness is positive effect while speed is negative effect.

Model CSE =B0+Relx1+ Convx2+Respx3+spx4

CSE=0.99+0.16Rel+0.5Conv+0.36Resp-0.32Sp

B0 = all other variables remain constant the changes of customer satisfaction increase by 0.99 unit. Relx1= one unit change in reliability there is a change in customer satisfaction by 0.16 unit on average. Convx2= one unit change in convenience results 0.5 unit change on average in customer satisfaction. Respx3= one unit change in responsiveness there is a change in customer satisfaction by 0.36 unit on average. Spx4= one unit change in speed there is changes in customer satisfaction by -0.32 unit on average.

4.9 Hypothesis testing

H1: Reliability of e-banking has positive significant effect on customer satisfaction.

From the regression analysis there is a positive relationship between customer satisfaction and reliability since the value of beta coefficient is positive but it is not significant at 0.05 levels even

at 0.10 affect customer satisfaction. So the improvement quality of e-banking service, the quality of NIB ATM service and the promise of e-banking so as to provide its quality have positive relation with customer satisfaction. Based on the analysis I cannot accept the first hypothesis.

H2: convenience of e-banking has positive significant effect on customer satisfaction.

There is positive correlation between convenience and customer satisfaction since the value of beta is positive. In terms of access at anytime and anywhere, no queue, e-banking save time, check statements and transaction regularly and the money transfer becomes easier in e-banking have positive relation with customer satisfaction and also significant effect on customer satisfaction since p value 0.000 is less than 0.05. The above hypothesis is supported by (Ahmed et al 2011). As the regression result shows NIB bank give the above elements of convenience effectively .Due to this NIB bank should highly work in e- banking regarding with quick service to develop its service beside the existing activities. As concerns from the analysis the proposed hypothesis H2 is accepted.

H3: responsiveness of e- banking has positive significant effect on customer satisfaction.

The correlation between responsiveness and customer satisfaction is positive and also responsiveness has significant effect on customer satisfaction since the beta value is positive and t- value greater than 2 and p value is 0.002 which is below 0.05. due to this responsiveness has positive significant effect on customer satisfaction with the measure of handling the problem when it happen, give immediate answer to the questions of customer, sufficient amount of cash in ATM in case of holiday and staff willingness to answer the concerns of customer. As concerns from analysis NIB bank is answer the question of customer. But for the future it's not sufficient to compete with other bank due to advancement of technology and service quality and to continue its service in addition to the existing the bank should give high emphasis to the customer. From the analysis the hypothesis H3 is accepted.

H4: speed of e-banking has positive significant effect on customer satisfaction

Speed of e- banking has significant effect on customer satisfaction, with in which the effect is negative at p- value of 0.001 It significance is in terms of, goodness of compliant response, and speed flow of transaction is higher than the traditional banking and waiting times of customer. The proposed hypothesis H4 is accepted. .

4.10 Diagnostics test result

4.10.1 Multi Collinearity

Multi collinearity refers to the correlations between independent variables in multiple regression models it usually happen when the correlation is too large in multiple regressions. Perfect collinearity exist one independent variable is the exact linear function of the other independent variables and also one variable constant multiple of the other variables. Tolerance measures the influence of one explanatory variable over all the other explanatory variables. The level of tolerance ranges from 0 no independence to 1 completely independence. As squared correlation r^2 increase to 1 the problems of multi collinearity also increase correspondingly. VIF is the reciprocal of tolerance vice versa (M.Wooldbridge, 2012).

As concerned from regression table there is no multi collinearity problem in this study because multi collinearity problem happen when VIF (Variance inflation factor) is greater than 10 and tolerance level is below 0.1. So the result of VIF is $8.66 < 10$.

Table 4.12 collinearity statistics

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Reliability	.488	2.049
	Convenience	.390	2.563
	Responsiveness	.426	2.348
	Speed	.586	1.708

a. Dependent Variable: customer satisfaction
Source: SPSS, 2021

4.10.2 Heteroscedasticity

Heteroscedasticity is the systematic patterns of errors in which the variance of the error is not constant. It is a problem thorough which the confidence interval and hypothesis test of standard errors are wrong.

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of customer satisfaction

chi2 (1) = 2.71

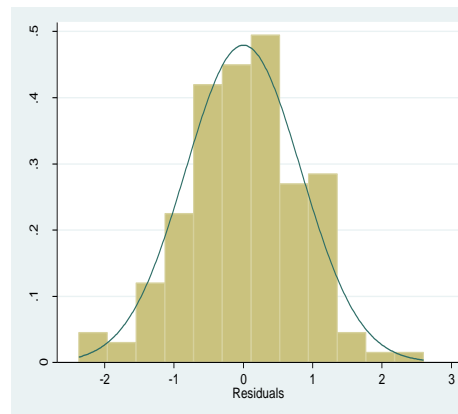
Prob>chi2 = 0.0999

To show how the study is not Heteroscedasticity problem the p-value should be greater than 0.05 in order to not to reject the null hypothesis of homoscedasticity. So in this study there is no Heteroscedasticity problem because $\text{prob} > \chi^2$ 0.099 is greater than the 0.05.

4.10.3 Normality

The model assumes that the random variable u has a normally distributed. Symbolically: $u \sim N(0, U)$, which reads: u is normally distributed around zero mean and constant variance. As depicted from the figure customer satisfaction has normally distributed residuals with the mean of zero.

Figure 4.1 normality



4.11 Customer suggestion of e- banking service quality

As concerned from the respondent e-banking service of NIB bank is lower than its competitors such as bank of Abyssinia, Dashen bank and Awash bank S.C regarding with the quality of service quality even though the willingness of staff to provide quality service is very high. as the respondent explanations there is a problem on ATM like swallowing card, unable to dispense the cash on time , deducting the account balance without giving cash ,ATM out of service , the quickness of response on deducted balance is very low, frequent breakdown of system etc. the initiatives of employee is good there is some delay around head office. The management of bank is not discussing with its employee around the branch when problem is occur. There is some knowledge gap on the employees so it needs training to fill the gap. The system is outdated. In general more of the customer suggestion is about the frequent failure of networks.

Chapter five

Summary, conclusion and recommendation

5.1 Summary of finding

Studying about e-banking is a general and abstract concept since there are advancements of updated technology from day to day. The study focus on the influence of electronic banking service quality on customer satisfaction by using four service qualities attributes such as reliability, convenience, responsiveness and speed.

From the four variable conveniences is significant effect on customer satisfaction followed by speed and the lowest significance is reliability. Speed is negative effect on customer satisfaction because of negative beta coefficient.

In this study alpha value is high that means there is consistency of inputted data. e- Banking service quality has an influence on customer satisfaction.

From the correlation analysis there is a positive correlation between the dimensions of service quality such as reliability, convenience, responsiveness and speed and customer satisfaction.

The overall satisfaction level of customer on e- banking service quality is good since the mean score value is above the minimum level which is 3.45. And also the mean score of service quality dimensions is between 3.28-3.6 that means the customer agreed with the attributes of service quality.

5.2 Conclusion

Study confirms that from the four variables reliability, convenience, responsiveness is positive effect customer satisfaction but speed is negative effect on customer satisfaction.

I can also conclude that service quality of the bank leads to greater customer satisfaction and the bank can get competitive advantage by giving quality service that is sustainable with the current world.

Knowing how customers perceive service quality and able to measure this quality helps the company to provide beyond the existed service. Measuring service quality enables the organization to give reliable data and improve its service quality. In order to get better customer satisfaction NIB bank should focus on developing service quality that is done by giving training to its staff to upgrade its knowledge and capability to provide service in a skill and confident manner.

As adopted from the respondents frequent network problem that is highly affect the overall operations of the bank activities as well as the customer cannot doing their activities effectively because it cannot get their money when it needed even though the problem of network is still not answered in Ethiopia due to poor telecommunication infrastructure.

5.3 Recommendation

In most banks the product and service is almost similar, The researcher recommend NIB to launch new way of customer attraction mechanism by promoting new product and service since customer adapt the product and service delivered by banks.

NIB bank should conduct continuous research on service quality and customer satisfaction in order to understand customer level of satisfaction on what to be done and what strategies to be implemented.

The bank should develop awareness to employees on the product and service and solving the network problem in collaboration with Ethio-telecom to improve the service quality of e-banking.

5.4 Recommendation to future researcher

The researcher study area or scope was limited to Addis Ababa city and also its study coverage only in Nib International bank, convenience sampling technique due to time shortage and working condition. I advise future researcher to study with large sample so as to cover all population and cover all commercial banks in Ethiopia with various demographics characteristics.

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APPENDIX I

Addis Ababa University
College of Business and Economics
Department of Accounting and Finance

Questioners for respondents in partial fulfillments of requirement of MSC degree in Accounting and Finance. Title” **THE INFLUENCE OF E-BANKING SERVICE QUALITY ON CUSTOMER SATISFACTION IN CASE OF NIB INTERNATIONAL BANK S.C**”. The study will be conducted for academic purpose only with in a high confidentiality; your assistance will highly appreciated.

Thank you in advance.

Worku Tadege

i. Demographic characteristics of respondent

Please put the symbol “√” in front of the box

(እባክዎትን መምረጥ የፈለጉትን የ“√” ምልክት ከጥያቄ ወሬት ለፊት ያለውን ሰጥን ይጠቀሙ)

1. Sex(ጾታ): - male(ወንድ) female (ሴት)
2. Age እድሜ: - 18-25 26-35 36-50 above 50(ከ50 በላይ)
3. Educational status(የትምህርት ደረጃ): - 10-12 grade(10_12 ክፍል) diploma(ዲፕሎማ)
Degree (ዲግሪ) Masters (ማስተር) others (ሌላ)

ii. General questions

1. How many years as a customer of NIB

የንብደት ተኮሮ ስምንት ዓመታት ያህል ሆነዎት

- Below 1 year (ከ1 አመት በታች) 1-5 5-10 above 10(ከ10 አመት በላይ)

2. Which types of E- banking use?

ከሚከተሉት የኢ-ባንክ ንግድ አይነቶች የጠቀማሉ

- ATM (ኤቲኤም) mobile banking (ሞባይል ባንክ ንግድ) internet banking
(ኢንተርኔት ባንክ ንግድ) POS (ፖስ) other (ሌላ)

3. By what E-banking service are satisfied?

በየትኛው የኢ-ባንክ ንግድ አገልግሎት እረከተዋል

- ATM (ኤቲኤም) mobile banking (ሞባይል ባንክ ንግድ) internet banking
(ኢንተርኔት ባንክ ንግድ) POS (ፖስ) other (ሌላ)

4. How do you judge NIB general network system?

የንብንአጠቃላይኔትወርክሲስተም እንዴት ይገመግሙታል

Excellent (እጅግ በጣም ጥሩ) very good (በጣም ጥሩ) good (ጥሩ)
 poor (ደካማ)

iii. How do you rate NIB E-banking service quality on the basis of the following? (የንብንአ-ባንኪንግ አገልግሎት ጥራት እንዴት ይገመግሙታል)

Please put the right symbol “√” that you need to select in front of the box in table below
 (እባክዎ ትንመምረጥ የፈለጉትን የ“√” ምልክት ከጥያቄ ወሬት ለፊት ያለውን ሰጥን ይጠቀሙ)

e-banking Service quality attribute	Strongly disagree በጣም አልስማማም	Disagree አልስማማም	Neutral በመጥኑ እስማማለው	Agree እስማማለው	Strongly agree በጣም እስማማለው
Reliability					
1. E- Banking increase the quality of banking service ኢ_ ባንኪንግ የባንክ አገልግሎት ጥራትን ይጨምራል					
2. NIB ATMs provide quality service የንብኤቲኤም ጥራት ያለው አገልግሎት ይሰጣል					
3. E-banking provide service when they promised ኢ_ ባንኪንግ ቃል የገባውን አገልግሎት ይሰጣል					
Connevinance					
4. I can access any time and any where በማንኛውም ጊዜና በታመጠ ቀም እችላለሁ					
5. No queue ሰልፍ የለውም					
6. Easy to use ለመጠቀም ቀላል ነው					
7. E-banking save time ሰአት ይቆጥባል					
8. The money transfer becomes easier through using e-banking. በኢ_ ባንኪንግን ዘብማስተላልፍ ቀላል ነው					

9. I can check my transaction details and statement regularly ግብይቶችንና እቱ ትመንት በሰአቱ ማየት እችላለሁ					
Responsiveness					
10. E –banking handles the problem when it happen ኢ_ባንኪንግ ለችግሮች አፋጣኝ ምላሽ ይሰጣል					
11. e-banking service take care of problems promptly ኢ-ባንኪንግ ለችግሮች ትኩረት ሰጥቶ ይሰራል					
12. Give immediate answer to my questions ለጥያቄዎች አፋጣኝ መልስ ይሰጣል					
13. NIB staff is willing to answer any question or concerns of customer on e-banking የንብሰራተኞች የደንበኞችን ኢ-ባንኪንግ ጥያቄ ለመመለስ ዝግጁ ናቸው					
14. ATMS are enough cash in case of holiday ኤቲኤምቶች በበክልቀን በቂ ገንዘብ አላቸው					
Speed					
15. Frequent connection breakdown ተደጋጋሚ የኔት ወርክ መቆራረጥ አለው					
16. No waiting time በተሰከት አልጠብቅም					
17. Response speed to compliant is satisfactory ለቅሬታዎች መልስ የሚሰጥበት ፍጥነት ያረካኛል					
18. Speed of e-					

