



The effect of e-banking service on customer satisfaction: the case of selected commercial banks in Ethiopia

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Statement of Certification-banking

This is to certify that Mr. Mesfin Hailye Aychew has done on the topic of the effect of e- banking on customer satisfaction in selected Commercial Bank in Ethiopia. This study is of his original work and all the resource of material used for the research project paper had been duly acknowledged.

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The effect of e-banking on customer satisfaction in selected Commercial Bank in Ethiopia.

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Statement of Declaration

I Mesfin Hailye declare that the thesis entitled the effect of e-banking on customer satisfaction in selected commercial Bank in Ethiopia carried out by me for my degree of masters in marketing management from Addis Ababa university school of Commerce under the guidance and supervision of Dr. Belaynesh Tefera and certify that this thesis has not previously been submitted for assessment in any other university.

I also certify I have acknowledged all the materials and sources used in the thesis preparation whether they are books, articles, reports, lecture notes, and any other type of documents electronic or personal communication.

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Abbreviation and acronym

ATM	Automated teller machine
MR	Multiple regression
POS	Point of sale
VIF	Variance inflation factor
UNB	United Bank
DB	Dashin Bank
WB	Wegagen Bank
CBE	Commercial Bank of Ethiopia
CSEB	Customer Satisfaction in e-banking
RELAB	Reliability
TRANS	Transaction efficiency
CUSTSPO	Customer support
SERSEQ	Service security
EUSE	Ease of use
PERFORMANC	Performance
CUSTSATISFACTION	Customer satisfaction

Abstract

The purpose of this study was to test the effect of e banking service in customer satisfaction in selected commercial Bank in Ethiopia the researcher used six elements such as transaction efficiency, reliability, Service security, Ease of use Customer Support and performance to investigate effects of e-Banking on customer satisfaction. Convenience sampling was employed to collect questioner for 400 selected sample respondent. The study used multiple regression and correlation after validity and reliability test were performed through the use of SPSS version 25 Software. The correlation outcome show that there were a positive relationship among the independent variable (Transaction efficiency Reliability, Service security, customer support ,Ease of use and performance) and dependent variable (customer satisfaction) the regression result shows that customer support and service security had a significant and positive interaction with customer satisfaction reliability and transaction efficiency had statically insignificant but relationship with customer satisfaction were as ease of use had negative but statically insignificant relationship with customer satisfaction and performance is neither positive nor statically significant relationship with customer satisfaction. The end result of this paper point banks managers to focus on important service quality dimension that influence customer satisfaction.

Key words: E-banking, Customer satisfaction, e-Banking channel, Commercial bank

Chapter one

1 Introduction

1.1 Background of the study

Today the financial industry transforms its service from an old window service to a virtual system with significant retime. This virtual system is called e-banking. E-banking is the delivery and execution of what is given in new and old banking through the Internet without the direct intervention of the intermediaries by the customer through his electronic gadget. (Shahriari, 2014) In Ethiopia the banking system changed rapidly to a virtual system since the country is a mover as other who are making their future (Garedachew, 2010).e -banking plays an influential role over Banks in many perspectives banks has to compete to stay the industry and retain their customer hence banks has to work in the development of e-banking service by considering its contribution over keeping their customer satisfaction. Because satisfied customer will continue their relationship with banks, refer the banking services to others, generating more sales and cause to get more profits. In addition Customer satisfaction is considered a necessary condition for customer retention, loyalty, and service continuance intention. (K. Madavan and Dr. C. Vethirajan, 2020) suggested by (Sintayehu Zeleke and Dr. Sapana Chauhan, 2020)

Previously the banking sector has played a remarkable role through its old system, However the virtual system catalases the exchange to be easy and as fast as the running tiger. Peoples around the world travel to the bank to get services like drawing or credit money, transferring funds, and checking their account balance or lending. (Terefe 2013) suggested by(Sintayehu, 2015)However the expansion of e-payments forces bank customers to make what they need without attending the bank hall i.e. They can pay their bills using mobile money withdraw cash from ATMs using their debit or credit cards transfer money or check their balances using mobile make payment for service and good purchased from inside or outside the country using internet banking in addition Companies and individual also perform different activities like paying employee salary, tax, and payment to their vendors or any return to their customer or extracting their account movement or collect their sales using this platforms.

The impact of technology on financial and service companies is no specifically describe. The application of information and communication technology concepts, techniques, policies, and

implementation strategies to banking services has become a subject of fundamental importance and concern to all banks and indeed a prerequisite for local and global competitiveness in the banking industry. As a result of this technological improvement business environment in the financial sector is extremely dynamic and experience rapid changes and demands banks to serve their customer electronically. Today, almost all banks are adopting electronic banking as a means of enhancing service quality of banking services. They are providing electronic banking to their customers to increase customer satisfaction with banking services. The expansion and growth of e-banking is dynamic each day new approach and way of service are flourished though the infrastructure is not as efficient as needed to address each of the society however Ethiopia despite the economic problem most of the society around the rural area leave in distant to each other so it can worse to make the infrastructure to address for all. (TSION .G, 2016) Indicate in her study the number of e-banking users in Ethiopia's commercial banks was estimated at around 5,000,000 in 2015. Now the number of e-banking reach more than 15,000,000 in the commercial bank of Ethiopia (CBE, 2020/2021), since the customer number raise as listed above the researcher initiated to measure the satisfaction of the customer using this e-banking and see how e-banking service affect customer satisfaction The rise of globalization push the customer to use e-banking because this platform as easy and fast to transfer value so the customer has no option to stick with the bank hall to make alert the exchange of values in the business world.

Therefore in this research, the researcher wants to study the effect of e-banking service on customer satisfaction in selected commercial banks in Ethiopia.

1.2 Statement of the problem

In Ethiopia, banks contest with each other to attract more customers, and customers need to have the one which satisfies their needs. Based on that banks are working on expanding their digital solution continuously in each day the digital service develop by each bank to give unique service to the customer and the type and service customers receive from the digital platform worse the competition between banks. The type of digital service and its user expand continuously.

Today Ethiopian banks brought different types of e-banking platforms however all are not started at the same time most Ethiopian banks instantly introduce e-banking through ATMs .however now banks that open recently deliver different types of e-banks like mobile banking, point of sale

transfers, and internet banking .and mobile money so this makes the competition tough between banks and it enables customers to save time and reduce the cost of incur to perform a transaction using a hall. However, to measure the effect of e-banking service on customer satisfaction studies has to be performed continuously since in Ethiopia still there are limited studies both in scope and numbers beside of this most of the society leave in rural area and the infrastructure and resource are tackling to address the e-banking for the needy population therefore more studies required to understand the effects of e-banking service on customer satisfaction in the country.

(Tsion . G, 2016) Studies the effect of e-banking service on customer satisfaction in four banks in Addis Ababa the researcher used quantitative method data analysis; however the research has still limited since the number of e-banking users immensely as compared to the number of users of e-banking.

(Sintayehu Zeleke and Dr. Sapana Chauhan, 2020)also study the effect of e-banking on customer satisfaction in commercial banks in Hawassa City both are using a quantitative analysis however since this study is recent it is still limited in Hawassa City and another researcher in Ethiopia and other country study this topic however this study differs from the previous one since the researcher believe that the number of e-banking user raise significantly as compared with the previous year's, and different service start using the plat form for payment and collection therefore, the researcher were strived to fill the gap in scope and to reevaluate previous studies.

This study tries to investigate the effects of e-banking on customer satisfaction using dimensions such as reliability, Transactions efficiency, Customer support, service Security, Ease of use, and performance had a significant impact on customers satisfaction researcher to see the gap and aspire to study the effects of e-banking service on customer satisfaction in selected commercial banks in Addis Ababa.

1.3 Research questions

- Does the effect of e-banking on customer satisfaction have a relationship with the demography of the customers of the commercial bank of Ethiopia?
- Which demographic variable of a customer greatly affects customer satisfaction in commercial banks of Ethiopia?
- Does all e-banking service quality dimension affects customer satisfaction in commercial banks of Ethiopia?

- Which e-banking service quality dimension has a strong effect on customer Satisfaction in Commercial banks in Ethiopia?

1.4 Research objective

1.4.1 General objective

The major objective of this thesis is to examine the effect of e-banking service on customers' satisfaction in CBE.

1.4.2 The specific objective of the study

To understand the relationship of the effect of e-banking service with the demographic variable of customers in the commercial Bank of Ethiopia.

To understand which demographic variable of a customer greatly affects customer satisfaction in commercial banks in Ethiopia

To understand the relationship between service quality dimension and customer satisfaction in Commercial banks of Ethiopia.

To identify which service quality dimension of e-banking greatly affect customer satisfaction in commercial bank of Ethiopia.

1.5 Significance of the study

- This study enables commercial banks in Ethiopia as well as those accessing it to identify and understand the variables which significantly affect the satisfaction of customers.
- The study indicates commercial banks to see their limitation and help them to resolve their limitation on their service and enable them to plan what to do to maintain customer satisfaction.
- The study point commercial banks to stick in the competitive environment and retain their customer to use their service.
- The study will use as a milestone for other researchers who study the effect of e-banking services on customer satisfaction in the future and in other geographic areas.

1.6 Scope of the study

This study covered both private and public banks. However, there is only one public bank and more than 18 private banks so the researcher takes this public and three other private banks for its research topic. All the selected banks stay in service for more than 10 years in Ethiopia. In addition, the researcher were focus on those customers who use e-banking for more than two years and it does not include those customers who have an e-payment but do not use it. So this study implements one public bank named commercial bank of Ethiopia and three private banks named Dashen Bank, Wegagen Bank, and United Banks. The study looks at electronic banking systems like ATMs, Mobile banking, internet banking and mobile money and how they were linked with customer satisfaction variables in selected commercial banks of Ethiopia above. The study was focus on customers who use these e-payments in listed banks and the study cover the period from 2020 up to 2022 this period had shown a significant number of users of e-banking since different service companies were starting to collect their fees through this system.

1.7 Limitations of the study

This study has the following limitation.

- The area of study was cover only the populations leave in Addis Ababa which would affect the result of the study.

1.8 Organization of the study

The study organizes into five chapters. The first chapter deals with the background of the study, statements of the problem, the research questions, the objective of the study, the significance of the study, the scope of the study, the limitation of the study, the definition of terms, and the organization of the study. The second chapter presents previous related research conducted on e-banking and customer satisfaction locally and globally. The third chapter explains the types and sources of data that were used for the study, sampling techniques used to determine the sample size, collection tools, and procedure, and data analysis method. The fourth chapter discusses the analysis and results of the study. The last chapter presents a summary of the major findings, conclusions, recommendations of the study and suggestions for further researcher.

Chapter two

2. Literature review

2.1 Theoretical review

2.1.1 Definition of e banking

Today the world is changing in various ways as the same time this change influences the system to create things that facilitate the transaction to go in smooth fast and easy podiums e-banking is the one that plays the lion's share in running the play of the world we live. People are making themselves friendly with these platforms and perform their activities or leave since the growth of e-banking is as fast as expected however once people start using things they adopted and start desiring to get what satisfies themselves so banks are using e-payments to deliver their customers and activate their services accordingly. Different scholars define e-banking in the following ways. E-banking is a form of banking service where each activity of banks are transferred through an exchange of electronic signals within and between financial institutions, rather than exchange of checks, cash or other negotiable instruments (Kamrul, 2009). Electronic banking is the exchange of 'information and services by banks to customers and within a customer via different delivery platforms such as personal computers and mobile phones with browser or desktop software, telephone, or digital Television. Based on this Electronic banking could be categorized into PC banking, Internet banking, TV-based banking, and Telephone-based banking. (Daniel, 1999) In addition, many define e-banking accordingly to the time since the system is not stacked rather it updates in speeds and service variation. Electronic Banking System is seen to be an innovative service delivery mode that offers diversified financial services like payment of utility , cash deposits ,cash withdrawal, funds transfer, and credit card bills, checkbook requests, and other financial inquiries, (Onyedimekwu and Oruan , 2013) Similarly, (liefoh, 2012) sees electronic banking as an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. E-banking generally implies a service that allows customers to use some form of computer to access account-specific information and possibly conduct transactions from a remote location like home or workplace, (Odulaja 2012) as suggested by (Tsion, 2016).

2.2 Types of e-banking

According to the service they enliven and the way people use the platform e-banking systems are termed by different names even though they name varied however some of them convey similar activities for users and in addition, the variation arise based on the time of creation and still the moderation and design continued till now so here the researcher describes some of the recently implied categories' of e-banking such as ATM, **MB**, IB, POS and MM.

Automated teller Machine (ATM)

ATM is an electronic machine in a public place, connected to a data system and related equipment, and enable a bank customer to obtain banking services and information an without going into the banking hall. It allows customers to access banking services such as withdrawals, transfers, inquiries about account balances, requests for checkbooks, account statements, direct deposits, foreign currency exchange, etc.(Fenuga ,2010) cited in (Sintayehu Zeleke and Dr. Sapana Chauhan, 2020) Using an ATM requires an ATM card and a passcode, often referred to as a PIN (Personal Identification Number) (Sintayehu, 2015).ATMs enable people to withdraw money using their debit, credit, and cobranded cards, in addition, it also enables them to use card less withdrawals on cash sent to it through mobile money.

Mobile banking

A plat form that enables bank customer to transfer fund, request credit check balance enquires pay bills of different services using mobile phone is known as mobile banking. Mobile banking save customers time since they can perform activates without going bank halls in addition MB is wireless function in both local and international networks hence customers can accesses their account wherever they are as far as the network is available.in MB the activity report delivered through SMS there for the customer can identify any change in their account and every activity performed in the account from the received SMS.

Internet banking

(Arunachalam and Sivasubramanian , 2007)Content that Internet banking is where customers can access bank accounts via the Internet using a PC or mobile phone and web browser. It is a plat

form that enable bank customers to perform almost all activities offer by bank using web site. Internet banking allow customer to transfer bulk transaction and can extract their monthly or year activity reports in addition internet banking give 24/7 accesses. (Merugu 2018) suggested by (Sintayehu Zeleke and Dr. Sapana Chauhan, 2020) Define the online/Internet banking is becoming a popular tool to attract new customers and deliver customer satisfaction. (Ongkasuwan, M., and Tactichattano, 2002) Defined Internet banking service as a banking service that allows customers to access and perform financial transactions on their bank accounts from their computers with an Internet connection.

Point of sale transfer terminal (POS)

It is an electronic device that enable customers to make payment for the service used or material purchase using their debit or credit cards on the place it is planted to collect fees from sale of service or goods. (Ming, 2019) cited by (Lidiya, 2020). It is managed by sales person and the customer can have the slip that described the amount paid for the service obtained.

Mobile money

Mobile money is a system use to transfer cash pay service bill, and traffic fine, and enable to withdraw and deposit cash from banks and agents without having bank accounts using mobile phones .mobile money is prepared by banks and nonbank institutions and operate using Tele network everywhere that no bank branches exist, in Ethiopia there are different type of mobile money services such as Cbebirr, We birr, Hello cash, Awash birr, Tele birr some of the mobile money is prepared by banks like Cbebirr and awash birr by the CBE and awash bank to reach with the customer which does not have bank accounts and leave in a rural area where only mobile network is available some other are by nonbank financial institutes like credit associations and telecommunication of Ethiopia however all are connected with banks by agreeing to each other to enable customers who have a bank account to send money to the mobile money that has an agreement using mobile banking .since the main purpose of mobile money is to reach those who have no bank access and those who want to use it so mobile money needs agents who enable to facilitate the deposit or withdrawal of cash for the user.

2.3 Customer satisfaction

Customer satisfaction is something that indicates the position of a business stands in the globe and it is not uniquely described within specific parameters however in different literature and books scholars seat how it is looked at accordingly hence (Kotler and Armstrong 1996 as sited by (Girum, 2016) define customer satisfaction as “the person’s feeling when the service obtained has greater value than his/her expectations”. Customer satisfaction also refers to customer response to the state of fulfillment, and customer verdict of the fulfilled state (Oliver, 1997)Customer satisfaction can be directly observed from the achievements of the business.(Pine & Gilmore 1998) indicated that customer satisfaction has a positive effect on an organization’s profitability, loyalty, and customer retention.

2.3.1 Determinant of customer satisfaction

Consumer satisfaction can be determined by several factors some of them are product perceived performance and expectations, fees and charges, service quality, customer care, and many others as discussed below.

Product perceived performance and expectations

A customer is highly satisfied or delighted when the product or service he or she consumed give them higher value than his or her expectation however If the value of good or service below his expectation. (Ulrich K & Eppinger S. D., 2004)Many companies are working for high satisfaction because customers who are just satisfied still find it easy to switch when a better offer comes in. Customer satisfaction not always depends on excellent service rather from customers perceiving that a company delivers a unique service. Achieving this quality of service takes a serious commitment from every employee in the organization through providing excellent service that exceeds customers’ expectations to the extent that they are willing to tell others about their experience. (Oliver, 1980) Found that realizing or undermining customer expectation affect customer satisfaction positively and negatively respectively i.e. realizing customer expectation maintain customer satisfaction. While undermining customer expectation decreases consumer satisfaction.

Service qualities

Customer satisfaction can be determinant by Service quality or perceived service quality. Researchers have different views some researchers state that service quality and satisfaction measure the same underlying concept and therefore are the same. Other authors argue that satisfaction with a specific transaction precedes the perception of the overall quality of the firm and therefore is the antecedent of perceived quality. Finally, others suggest that the concepts of satisfaction and quality are unlike and that it is the perceived service quality that will affect customer satisfaction. (Fornell, 1992) Found that as a general psychological phenomenon, satisfaction is primarily originated from a customer's quality experience with a product or service. So overall it is expected that the greater the perceived quality, the higher the level of customer satisfaction. The present business era is now named as "quality era" because the perceived quality of the product is becoming the most determinant factor in the business world (Bedi, 2010) Perceived service quality refers to the consumers' global attitudes or judgment of the overall excellence or superiority of the service. It is a result of comparisons by consumers of expectations with their perceptions of service (Caruana, 2002). That means it can be termed as the extent of matching or the degree of discrepancy to which the service delivered matches customer expectations (A. Parasuraman, et.al, 1988) suggested by (Tsion, 2016) Delivering quality service means conforming to customer expectations on a consistent basis (Thakur, 2011). It is necessary for service providers to understand how customers evaluate the quality of service. When customers consume a product they compare the quality of the experience with their prior expectations, which leads to their satisfaction or dissatisfaction (Thakur, 2011). Therefore, services marketing researchers based their work on developing a service quality concept focused on consumer behavior instead of using manufacturing quality concepts (Dhandabani, 2010) Thus it had been recognized that customers evaluate service quality by comparing the actual performance with service expectations that they held (Thakur, 2011). In order to meet the needs and desires of customers, the business must know the needs and desires of the customers. This information is vital not only for successful business but also for understanding and improving customer satisfaction.

The perspective of customer

Product and Service Value or the perceived value of the product, is one of the factors that affect consumer satisfaction. (Swaminathan J. & Ananth A, 2010) States receiving a high-quality product with the promised value and service at a rational cost are fundamental components of customer satisfaction. The customer is searching for someone who is well-informed about the product or service in addition to the appropriate product or service. Product uncertainty Customer satisfaction is also influenced by an issue's clarity. Product experience is frequently unclear, for instance when a product's fault is hard to determine. When a commodity, such as clothing or insurance, cannot be evaluated using objective standards, or when a product, such as Diamond may have a variety of subjective characteristics or features, or there may be room for several different interpretations of the product's quality. Determining what is desirable, valuable, or acceptable in a product can be challenging at times. Customers are prone to lack faith in products if they are difficult or unclear to judge.

Fees and Charges

Since human-internet interaction is the primary method of service delivery and communication in the e-banking sector, service quality criteria are significant. Delivering high quality service at reduced price can a competitive edges of e-banking. Accordingly, research by (Rotchanakitumnuai S. & Speece M., 2003) demonstrates that e-banking has successfully decreased working and managerial costs. (Geriach, 2000) Reports that due to cost reductions, e-based banks are able to charge inferior or no service charges and offer better return rates on interest-bearing accounts than traditional banks.

2.3.2 Electronic banking and customer satisfaction in commercial banks

E-banking is quickly becoming a crucial financial tool that, when effectively handled, may boost client satisfaction and provide banks a competitive edge. Knowing how important the service quality component is in relation to other factors might help the banking sector concentrate on what satisfies clients. Through globalization, customer happiness is related to the use of electronic banking the most. In addition to bringing people closer together, this has made it possible for the global economy to unite into one interconnected system. This implies that businesses both domestically and abroad can easily and effectively communicate information. Many banks have

been influenced by electronic banking to use various technological tools to promote or achieve improved customer service delivery that ensures customer happiness, which translates into enhanced profitability and higher return on investment. The beneficial association between electronic banking services and customer satisfaction has given banks the chance to wow clients, which ultimately encourages Even in the most distant regions of the world, it would be rare to find a bank that doesn't offer some type of electronic banking service nowadays. According to (Vaidya, 2011) new technological advancements will make it possible to establish innovative methods for lead generation, prospecting, and deepening client relationships. Electronic banking will also provide a greater customer experience through two-way communication. According to him, the ability to save, move, and invest small sums of money, as well as having access to basic financial services, can significantly improve the lives of people all over the world. Cost effectiveness is another connection between electronic banking and consumer happiness. He clarifies how information technology has aided in computerizing company processes in order to Streamlining operations to create highly efficient and profitable machines. For businesses, e- banking has freed them extra time. This is true in that e- banking has enabled businesses to be open around-the-clock. This implies that a company can be established anywhere at any time, making purchases.

2.4 Definition and future of independent variable

Reliability

The ability to convey the promised service precisely and consistently is referred to as reliability. It include accurately charging, maintaining accurate records, and providing the service at the scheduled time. Providing services as promised, being dependable in addressing customer service issues, responding quickly to client inquiries, providing services at the arranged time, and keeping an error-free record are all parts of being reliable. The most crucial component of conventional service is reliability. (A. Parasuraman, et al. , 1988). Suggested by (Tsiou, 2016)

Transactions Efficiency

The capacity of clients to access every e-banking service, pinpoint their favorite product and the information related to it, and complete their transaction with minimum effort is known as transaction efficiency. Transaction efficiency is also referred to as e-banking performance based

on the following factors: current information, response time, download time, full product information, tutorial/demonstration, and help function. (Leelapongprasut, et al.).

Customer Support

Customer support encompasses both pre- and post-sale assistance. Before a customer makes a decision, the business should offer some help to pique their interest and make them feel welcome. The interaction is more like that of a close friend than a business. After clients purchase the goods or services, the business should address any issues they encountered or provide prompt answers to their inquiries. Depending on the issues, the business should take steps to address them. Support is essential in the e-banking sectors. Not everyone is skilled in using various technologies, thus they want instructions on how to utilize the service. Customers may need support since they may still have questions after using an e-banking service. Support is therefore crucial for clients. (Rangsan & Titida. 2013).suggested by (Girum, 2016)

Service Security

Security is characterized as the absence of risk, danger, or uncertainty. It involves discretion, financial security, and physical safety. Employees that uplift consumers' confidence, make them feel secure during their transactions, are continuously polite, and are knowledgeable enough to respond to questions from customers make up this group. In (Parasuraman A. et al. 1985) suggested by (Tsion, 2016). Furthermore, security is the protection of a customer's and property. Additionally, service providers' confidentiality is upheld (Johnston, 1997). Security is now seen as one of the key elements that influence consumers' decision to utilize electronic banking services. The degree to which e- banking ensures the protection of consumers' financial and private information is a key component of assurance regarding security, an area that has seen growth in recent years. An increase in research interest (Miyazaki A.D. & Krishnamurthy S. , 2002) (Kimery K.M. & McCord M, 2002). The degree of security or danger attached to it, according to (Arwa F.et al., 2004) suggested by (Girum, 2016) is another major aspect influencing the delivery of customer service. Consumer worry for the security of financial transactions made via electronic banking is one of the most significant reasons delaying the development of these services, even in nations where it has been widely adopted. This was proven by an empirical study of Australian customers by (Sara.N 2008) suggested by (Sintayehu, 2015). Trust is a crucial component of

customer connections in today's industry. (Wu, H et al ., 2010). (Supinaha R. et al, 2008) suggested by (Girum, 2016) claim that security worries, a lack of confidence, and other factors contribute to the slow growth of electronic banking services. The same findings from the study of (Booz D. & Hamilton K, 1997) suggested by (Tsion, 2016) show that customer security concerns were the primary barrier to Latin America's non-adoption of electronic banking. Therefore, it is evident that in the banking sector, security has a favorable impact on the provision of customer service. Additionally, banks must adequately inform and reassure their clients about the security of the service in order to reduce customer security worries. (Neal Fleming, 2011) (Tsion, 2016). As a result, factors such as physical access control to the machine, user authentication and authorization, confidentiality, data integrity, safe user information storage, user privacy protection, and other factors were used to evaluate the function of security.

Ease of Use

It is related to customer anxiety about the time and effort needed to learn to use e-banking. (David, 2010). Ease of use is thought to be a factor in the acceptance of e-banking and is associated with simple-to-remember pass codes and URL addresses, well-designed and easy-to-use software, simple site navigation, clear and understandable contents, and terms and conditions (Girum, 2016).

Performance

Performance refers to the operational quality of each e-banking product and service that banks provide. It covers whether or not e-banking services are available in many languages, offer 24-hour service, and permit money transfers between banks. (Garvin, 1987).

2.5 Empirical evidence

Since the researcher's focus was to reevaluate the impact of e-banking on customer satisfaction, and to find out new result it has assessed research on this and related topics in various regions of the ecosystem. However, even though different research has been done here in Ethiopia, the number was still limited. Here the researcher reviewed some of the studies conducted in Ethiopia and in different parts of the world below under two topics.

2.4.1 The Effect of e-banking on customer satisfaction

(Sheferedin, 2018) Addis Ababa University study the effects of e-banking service on customer satisfaction in commercial banks of Ethiopia in Addis Ababa the researcher assess the effect of e-banking service in commercial banks of Ethiopia the research take place in eight branches of commercial banks of Ethiopia it take sample from those who are using e-payment products from the selected branches the researcher use both primary and secondary data and use quantitative method to analyses the data or to evaluate the effect of an independent variable over dependent variable the result show that g of the study reveals reliability, efficiency, responsiveness and contact have significant and positive impact on e banking customer satisfaction.

(Tsion, 2016) Addis Ababa University study the effect of e-banking service on customer satisfaction the study focuses on all commercial banks of Ethiopia however the researcher use four banks named (Commercial Bank of Ethiopia, Dashen Bank, cooperative bank of Oromiya, and Wegagen Bank) the researcher use quantitative method. it's finding show the variables Transaction efficiency, Reliability, Ease of use and Service security advocates that are variables that have a significant effect on customer's satisfaction in commercial banks in Ethiopia e-banking service delivery. However, variables such as Customer support and Performance of e-banking are failed to accept customer satisfaction level in commercial banks of Ethiopia e-banking service delivery.

(Sintayehu Zeleke and Dr. Sapana Chauhan, 2020) *Studied* The Effect Of Electronic Banking Service On Customer Satisfaction: Evidence From Commercial Banks Of Ethiopia Operating In Hawassa City Administration. The researcher used both primary and secondary sources for collected facts and figures relating to the topic under study and an explanatory research design aids the researcher to determine and explain the characteristics of dependent as well as independent variables the finding shows that measurements such as reliability, responsiveness, assurance, empathy, and convenience had a significant effect on customer satisfaction.

In order to determine the impact of e-banking services on customer value and loyalty,(Ammar Sa'eed H. 2012) suggested by (Sintayehu Zeleke and Dr. Sapana Chauhan, 2020)conducted an applied study on Jordanian commercial banks. The analytical descriptive method was the one the researcher had selected and applied. The findings showed that e-banking services favorably impacted client loyalty and value. Additionally, the study found a mediator role for customer value in the indirect relationship between E-Banking Services and Customer Loyalty.

Million. A (2013) suggested by (Tsion, 2016) study on the impact of electronic banking on customer satisfaction was undertaken in two private banks in Gonder City. When assessing the data, the researcher used both descriptive and explanatory statistics. The study's findings suggested that the majority of e-banking customers are young, educated, employed people, and students, although businessmen and women aren't aggressively using the service. The research also demonstrates how e-banking affects customer satisfaction by decreasing the time clients must wait to receive bank services and giving them control over their account activities.

AlaEddin M. and Hassan A.'s (2011) study on e-banking functionality and customer satisfaction results in Jordanian commercial banks intends to examine the uptake of e-banking functionality and examine the impact of e-banking on the results of customer satisfaction. A purposive sampling strategy was used to select clients who represented the required range of demographic traits (such as gender, age, and computer use), levels of prior internet experience, and product-related expertise. The findings of the study demonstrated that the use of e-banking (accessibility, convenience, security, privacy, content, design, speed, fees, and charges) had a favorable impact on Jordanian Commercial Bank customers' happiness.

2.4.2 Challenge and opportunity of e-banking

Recently the researcher can't access studies that assess the challenges and opportunity of e-banking in Ethiopia and other countries however, some researcher previously described the challenges and opportunity as intended below.

(Tekabe Sintayeh Sifrahun and Gadise Gezu ,2016) conducted research at Jimma University on the Challenges and Opportunities of E-payment in the Ethiopia Banking Industry the researcher find out that the challenge the customer in using e- payments are language barriers, frequent power interruption, lack of awareness, and network challenge and it also mentions what the managers put the challenge like low skilled man power, high cost of internet and low internet penetration was the listed challenge in the country.

(Bultuma.A.G, 2014) study, which was done using information acquired from four Ethiopian banks, aims to uncover factors that influence the adoption of e-banking in the country's banking sector. According to the study's findings, security risk, a lack of trust in financial institutions, a lack of legislative and regulatory framework, a lack of ICT infrastructure, and a lack of

competitiveness between domestic and foreign banks are the main obstacles Ethiopia's banking sector has in adopting electronic banking. The study makes a number of recommendations for actions that the banking sector and the government could take to solve the issues it has uncovered. These steps include creating a clear legal framework for the banking industry's use of technology, banks need to be focused on technology innovation competition rather than conventional basis of retail bank rivalry, and the banking industry has to be supported by investments in ICT infrastructure. Risk is a significant determinant of the adoption of Internet banking,

According to (Gerrard P. & Cunningham J. ,2006) in their study in Singapore. The security in internet banking was perceived negatively by all respondents who did not use the services. The respondents thought that utilizing the internet carried a number of security dangers. They were concerned about privacy because they thought all of their financial information might be compromised. In their survey, risk was one of the two factors that respondents brought up the most; all of them expressed concern about risk.

(Garedachew, 2010)Did research on Ethiopia's e-banking prospects and difficulties. The study's major objectives were to evaluate the state of e-banking in Ethiopia and look into the main obstacles and opportunities associated with putting e-banking into practice. The author conducted a assessment on how banks are currently run and identifies some difficulties using the e-banking system, including the lack of appropriate legal and regulatory frameworks for online commerce and payments, political unrest in neighboring nations, high rates of illiteracy, and the absence of financial networks that connect various banks.

(Balach and her e.t.al, 2010) have completed a study on the barrier to internet usage from a corporate customer perspective and found that Lack of trust in security issues was the main barrier. The study shows that corporate customer was the only Internet banking user to a certain extent and feels bank should invest in security infrastructure and that bank should willing to take full responsibility.

To better understand e-payment patterns in underdeveloped nations, (Wondwossen T. & Tsegai G, 2005) also investigated the difficulties and opportunities associated with making electronic payments in Ethiopia. The main barriers to the growth of e-payments are a lack of customer trust in the initiatives, a lack of payment laws and regulations specifically for e-payments, a lack of

skilled manpower, and frequent power outages, according to the authors' investigation of challenges in e-payment of Ethiopian banks using interview and on-site observation. A suitable legislative framework and security framework, according to (Wondwossen T. & Tsegai G, 2005), could promote the usage of e-payments.

The adoption of online banking by Australian customers was the subject of an empirical study by (Sathye, 1999) and security concerns were found to be a major determinant of that acceptance. According to a paper on Internet banking in Australia by (Sathye, 1999) both banks and users are reluctant to use the service due to security concerns.

2.6 Theoretical Frame Work of the Research

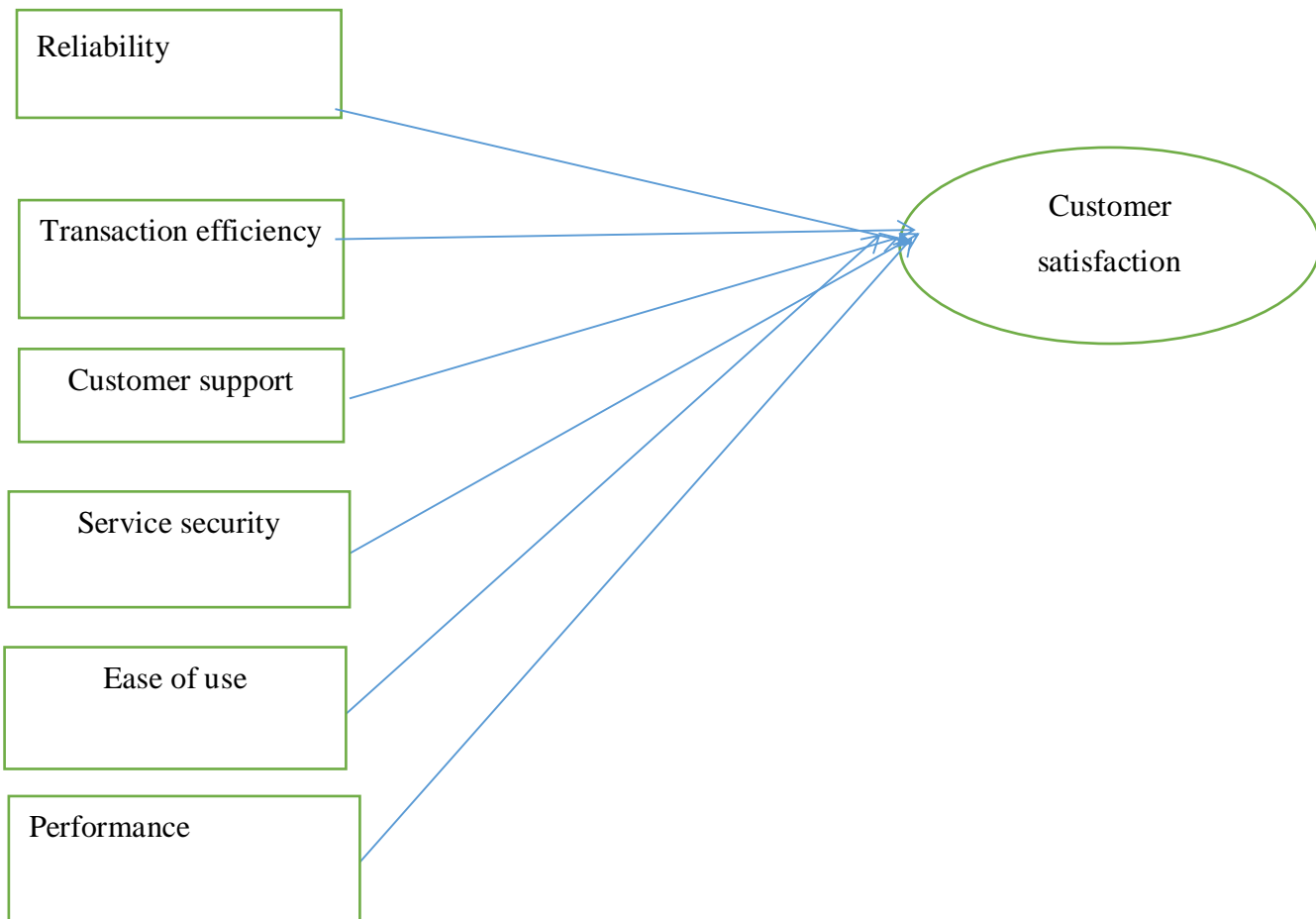


Figure 1 Theoretical frame work

2.7 Hypothesis

H1 Reliability has a significant effect on customer satisfaction of e-banking services in commercial banks in Ethiopia.

H2: Transaction efficiency has a significant effect on customer satisfaction in e-banking services of commercial banks in Ethiopia.

H3: Customer support has a significant effect on customer satisfaction in e-banking services of Commercial banks of Ethiopia.

H4: Service security has a significant effect on customer satisfaction in e-banking services of Commercial banks of Ethiopia.

H5: Ease of use has a significant effect on customer satisfaction in e-banking services of commercial banks in Ethiopia’

H6: Performance has a significant effect on customer satisfaction in e-banking services of commercial banks in Ethiopia.

Chapter three

3 Research Design and methodology

3.1 Introduction

This chapter contain the research methodology adopted throughout this study to meet the research objectives and to address the research questions. It depicts the study area, the choice of particular research designs, the research approach, population and sample size, data source and type, data collection procedure, the method of data analysis reliability and validity test and ethical considerations.

3.2 Description of the research area

This research is intended to take place in Addis Ababa specifically in the west Addis Ababa region the researcher select this area since it is convenient to do the study without spending too many resources and time. In addition, the researcher spent more than 12 years around this place so it was opportunistic for the study to gain relevant data and to distribute questioner to the Right person besides the area contains a sufficient number of banks which the researcher focuses to include under this study and also the area have numbers of school and collages and the population are dense like other parts of the city and also since the studies are the effect of e-banking service in customer satisfaction so the researcher believes that it was easy to get the sufficient sample to represent the whole population and to produce important result that point direction for the country as well as the world which have interest to replicate the study in future or the one which want to measure the effect of e-banking service on customer satisfaction.

3.3 RESEARCH APPROACH

In this study the researcher apply a quantitative research method because it used to establish and study the interaction among two variables or concepts, as the method implied the variables were measured numerically and the outcome were analyses through graphs or statistics. The method used point that the researcher follow a deductive approach and positivist epistemological position hence a high structured data collection techniques were used (Creswell, 2014; Saunders, 2016). Which have an interest to replicate the study in future or the one which wants to measure the effect of e-banking service on customer satisfaction.

3.4 RESEARCH DESIGN

This study aims at understanding the association between the and independent variables such as, Transaction Efficiency, Reliability .Customer Support, service security, Ease of Use, and Performance) and dependent variable Customer Satisfaction. In this study in order to establish the relationship among these two variables and to realize the objectives of the study Explanatory research design was used. Explanatory research is characterized by the prior formulation of specific research questions and hypotheses. The main aim of Explanatory research is to identify any fundamental link between the factors or Variables that belong to a research problem.

3.5 POPULATION AND SAMPLE SIZE

The target population of this study was e-banking users of commercial banks in Ethiopia however the researcher take four banks e-banking customers for this study selected Banks were Commercial banks of Ethiopia Dashin Bank, Wegagen Bank, and United Bank these banks are selected since they are pioneer in a different perspective and based on the number of user of e-banking. In addition, they were convenient for the researcher to get data. Specifically, commercial Bank and Dashin Banks is the pioneer of the country to introduce the first e-banking products. Therefore the target population of this study was the e-banking user of these four banks. The total e- banking user of these Banks in the year 2020/21 were 17 million of these 7.7 million commercial banks of Ethiopia 2.4 million Dashien banks 1.01 million Wegagen banks and 1 million United banks respectively. (CBE, 2020/2021) since the data in the annual report depicts the number of e-banking users in Ethiopia, therefore, the researcher tries to consider the number of e-banking under in specific districts in Addis Ababa since customers under the same district would have an account from two or more commercial banks so the researcher tries to take the study population under the selected district. Of course, the type of division in each bank was varying hence to resolve this the researcher assessed the place of data to be collected following the division of each bank under the study. In addition, the population of e-banking user is vast therefore the researcher takes the study on Addis Ababa city since the researcher believes that it can get data that represent the whole of the population. So the population under this study was the west Addis Ababa district. However, now commercial banks rearranged its district that's why the researcher takes the population of commercial banks in Ethiopia under the kolfe district.

3.6 Sample size and sample technique

The sample size of 400 was determined from those who have been using any of the e-banking services in the selected branches. The researcher used a random sample and use convenience method since the population did not use e-banking that's why the researcher used this technique the sample size was calculated by using a formula provided by (Taro Yamane ,1967).as expressed on (Sheferedin, 2018) The formula is

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

Where n is the number of sample size

N total number of study population

Level of confidence in this case 95%

$$n = \frac{697027}{1 + 697027(0.05)^2}$$

$$= \frac{697027}{1 + 1742.5675}$$

$$= \frac{697027}{1743.5675}$$

$$= 399.77$$

Approximately 400 individuals

Table 3.1 Population and sample size determination

Bank	Population	Percent	Sample
CBE	318374	45.7	183
DB	154638	22.2	89
UNB	128670	18.5	74
WB	95345	13.6	54
Total	697027	100	400

3.7 Procedure for data collection

It was previously known that the majority of Addis Ababa's commercial banks were organized into four districts. However, as the number of commercial banks' branches increased, these districts were reorganized into new groups, and even though the other private banks included in this study did not follow this pattern, their total number of branches increased significantly. In order to obtain a sample of the population that was well-representative of it, the researcher delivered the questionnaire to customers of the three private banks in the west district and kolfe district of commercial Bank of Ethiopia at various times and locations. A total of 400 questions were provided for possible replies, and 367 of them were actually collected and it is 91.75% of respondents. The sample is representative since, generally speaking, 200–300 samples should be sufficient for a thorough examination. (A. Gaur and Gaur (2009). cited by (TSION, 2016) As a result, the questionnaire was distributed to the chosen commercial bank branches in Ethiopia, which are listed in Table 3.2 below.

Table 3.2 List of branch the questioner distributed

	CBE		WB		UNB		DB	
District	Branch name	Case	Branch name	case	Branch name	case	Branch name	case
KOLFE/ WEST	Betel	19	Betel	11	Alembank	15	Betel	18
	Asko	19						
	Keraniyo		Keraniyo	11	Keraniyo	15	Keraniyo	18
	Ayertena adebabay	18					Ayertena	18
	Reppi	19						
	Torhailoch	18	Girar	10	Girar	15	Girar	17
	Tabotmaderiya	18	Alembank	11				
	Tesfadirjit akababi	18						
	Kara kore	18			kara	14		

	Mobil akababi	18	Ayer tena	11	Ayerten a	15	Tabot maderiya	18
	TOTAL	183		54		74		89

3.8 Research model specification

The study thought to measure the effect of e-banking service on customer satisfaction in commercial banks in Ethiopia hence to determine the level of affect and significance multiple linear regression model was used by the researcher and the effect is of each dimension over customer satisfaction on e-banking expressed in formula below I.e.

$$CSEB = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Where, CSEB = Customer Satisfaction in E-Banking

X1 = Reliability

X2 = Transaction efficiency

X3 = Customer support

X4 = Service Security

X5 = Ease of use

X6 = Performance

Here α is constant and β is the coefficient of estimate and ε is the error term. Customer satisfaction in e-banking is a dependent variable on independent variables X1 to X6. The six factors Reliability, Transaction efficiency, Customer support, Service security, Ease of use, and Performance have been established based on reviewed literature and empirical evidence.

3.9 Data source and type

For this study data were taken from e-banking users of selected commercial banks customer of Ethiopia in addition data were obtained from books, journals, the internet, and annual reports of the selected commercial banks' websites and also previously studied thesis and dissertation. Therefore in this study both primary and secondary data used the researcher. Primary data was

real-time data generated by the researcher through surveys, personal, Observations, etc.

Secondary data was data taken from books, journals, the internet, annual reports, website, previously studied theses and dissertations, etc.

3.10 Data collection procedure

As previously mentioned a Primary data was collected from a questionnaire and Secondary data were collected from books, papers, the internet, annual reports of the selected commercial bank's website. A Structured Questionnaire are used an instrument of data collection. The questionnaire is intended for customers of the bank in five-scale Likert measurement. All the questions are positively worded to support in the coding of SPSS. The face validity is checked by pilot testing the questionnaire to customers of the selected commercial banks and by expertise in the banking sector and professionals in academics'. The questionnaire is designed based on previous empirical literature and its consistency is pre-tested using Cronbach Alpha. A 31 Item Measure is used to indicate the customers' degree of agreement for the 31 performance statements, based on their valuations of the e-banking services provided by the banks. a five-point rating scale will be used to measure performance in which the alternatives range from ``strongly disagree " to ``strongly agree" and to measure the level of customer satisfaction additional ten questions were used with responses ranging from 'very dissatisfied' to 'very satisfied'.

3.11 Data analysis

In this study the researcher interpreted the demographic variable of the respondents using a descriptive statics and it used the inferential statics to find the mean score of e-banking service quality dimension and also a multiple regression were used to test hypothesis via SPSS soft wear version 25.

The dependent variable is customer satisfaction and the independent variables are the e-banking service quality measurement dimensions (reliability, transaction efficiency, customer support, service security, ease of use, and performance).

3.12 Validity and Reliability

3.12.1 Validity analysis

According to the empirical results of this study, which was conducted using Pearson correlation, there is a relationship between customer satisfaction and all six characteristics of e-banking service quality at the 0.05 coefficient level. As a result, there is strong evidence supporting the instrument's validity. (See Table 4.8 of Correlation).

3.12.2 Reliability analysis

Reliability refers to the ability of the measurement confirming the same value. (Gaur S & A Gaur, 2009) expressed by (Tsiou, 2016) the conceptual model establishes the dimensions for evaluating the effect of e-banking services described in the literature as reliability, transaction efficiency, customer support, service security, Ease of use, and performance. But the scale needs to be examined to see if it measures what it was intended to measure or not. And hence the Cronbach alpha value indicate the appropriateness and internal consistency and the high value of Cronbach alpha coefficient describe the scale's components "hang together" and can measure the same underlying concept.in addition(Gaur S. and A. Gaur ,2009). a Cronbach alpha value above 0.70 indicate scale reliability therefor as indicated in the table 3.3 below the, Cronbach alpha value each predicates is above 0.70 it can be concluded that all six of the e-banking service quality characteristics have high levels of internal consistency.

Table 3.3 Cronbach alpha test

Variables	Number of item	Cronbach alpha
Reliability	5	.858
Transaction efficiency	5	.858
Customer support	5	.858
Service security	6	.857
Ease of use	5	.856
Performance	5	.853
Total	31	.863

3.13 Ethical consideration

The researcher discloses all important aspects that the respondents need to understand in the introductory parts of the questionnaire i.e. it makes Shure that the respondents were told the purposes of the study and ask their willingness to respond to the questionnaire by mentioning that they are not required to set their name or anything that expressed belongingness and also the researcher confirm data given by respondents keep confidential and the protected from any vernal ability or misuse by any one and reassure that the data is only used for this study.

Chapter four

Data presentation analysis and discussion results

Introduction

In this chapter quantitative method is used to analyze and interpret the data collected from the respondents both descriptive and inferential statistics are used to taste the influence of demographic variables and independent variables over dependent variables respectively. to analyze and interpret collected data with respect to the intended objective of the undertaking study SPSS 25 soft was used. Questioner were distributed to customers of CBE,DNB, WB, and UB with a proportion of their customer size and 91.75% or 367 questions were collected and analysis is made relying on the response of the respondents therefore in this chapter data are presented, and interpreted finally discussion of the result was found.

4.2 Response Rate on Questionnaire

A total of 400 questioner were distributed for customer of commercial Bank in Ethiopia, Dashin Bank, United bank and Wegagen Bank in Ethiopia who using e- payments more than two years to find out the effect of e banking service on customer satisfaction in selected commercial banks in Ethiopia. Out of t the distributed questioner 367 were collected fully from respondents and this is a 91.75 % rate of respondent. This show that most of the respondents were volunteer to fill and return the questioner and deliver the required information useful for answering the research question.

Descriptive findings

4.3.1 Demographic characteristics of respondents and their relationship with the bank

The demographic profile of the respondents (including gender, age, current education level, marital status and occupation are described in table 4.1 below) and beside this the customer relationship with the bank, respondent account type, and e- banking services they used) are described in **Table 4.1** below

Table 4.1 Demographic profile of e- banking customer

Number	Demographics	Frequency	Percent	
1	Gender	Male	258	70.3
		Female	109	29.7
2	Age	18-24	64	17,4
		25-35	272	74.1
		36-50	24	6.5
		51-60	7	1.9
3	Marital Status	Single	195	53,1
		Married	157	42.8
		Separated	9	2.5
		Divorced	3	.8
		Widowed	3	.8
4	Current education level	High school	14	3.8
		TVITY	20	5.4
		University degree	233	63.5
		Master degree	100	27.2
5	Occupation	Un employed	3	.8
		Student	11	3.8
		Salaried	329	93.5
		Businessman /woman	23	6.3
		Pension	1	.3

The researcher incorporate the customer profile in his collection of demographic and other factors that were likely to influence the degree of customer satisfaction concerning the e-banking services offered by the selected banks. There as disclosed in table 4.1 above the sample 70.3 % of e-banking customers were male and 29.7% are female .with respect to age 74.1% of respondents were in the age group of 25- 35 years,17.4% of the respondents were youngsters (between 18 and 24 years). 6% are 36-50 and, 1.9 % are 51-60. This implies the data indicate most e-banking users are young people. Regarding marital status, 53.1% were single 42.8% married, 2.5% were separated 0.8% were divorced and 0.8% were widowed respectively. Furthermore, the education level 63.3% of Respondents were first degree, 27.2% were master's degree holders 3.8 high schools, and 5.4% were TVT respectively, and no respondents were out of education. This ascertain that respondents had sufficient literacy levels for using the products. In respect of occupation, 93.5% of the respondent were salaried 6.3 % were businessmen/women 3.8 % were students, 0.8% unemployed, and 0.3% were pension respectively this indicated that most of the respondents are salaried.

Table 4.2 Respondent relationship with bank

No	Item	Frequency	Percentage	
1	Respondent relationship with the bank	Depositor	357	97.3
		Borrower	2	.5
		Both depositor and borrower	8	2.2
2	Respondent account type with the bank	Saving account	340	92.6
		Checking account	13	3.6
		Both saving and checking account	14	3.8

3	E banking products	ATM	85	22.6
		Mobile banking	5	1.2
		Internet banking	1	.3
		ATM and mobile banking	268	73
		ATM and POS	10	2.7

As shown in the table4.2 above 97. 3% were depositors, 0.5% were borrowers, and 2.2% were both depositors and borrowers. The customer used different account types of these 92.6% were used saving account type 3.6% were used a checking account the remaining 3.8% were used both saving and checking account types beside these the respondents used different e-banking products as disclosed in the table above 22.6% were used ATM, 5% were used Mobile banking, 3% were used internet banking 73 % were used both ATM and Mobile banking and the remaining 2.7 % were used both ATM and POS.

4.4 Descriptive Analysis of e – banking service quality dimensions

The equivalence of the independent variable was described by analyzing the mean and standard deviation of the predicate as (Miyazaki .et al, 2005) described the mean measure as how far the sample group average agreed or disagreed with the each statements and the standard deviation measure variation of each observation with the mean and the small standard deviation indicates a mean is an approach to each sample observation and large standard deviation show high variation between sample observation. A one-sample T-test measure of mean and standard deviation of each six dimension were calculated the result is presented on the table 4.3 below.

Table 4.3 One-Sample Statistics

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
PERFOR	367	3.7226	.89535	.04674
EUSE	367	3.8381	.80127	.04183
SERSEQ	367	3.5599	.66213	.03456
CUSTSPO	367	3.4834	.59389	.03100
TRANS	367	3.5886	.76750	.04006
REALB	367	3.6022	.63366	.03308

As the table 4.3 above displayed each of e – banking service quality dimensions are assessed with a standard deviation of above satisfactory. Since the value of standard deviation is below one this indicates the variation of sample observation and the mean is minimum. As far as the mean values are concerned, all the e-banking service quality dimensions have scored the mean as mentioned in table 4.3 above i.e. Ease of Use 3.8381, Performance 3.7226, Reliability 3.6022, service security 3.5599 , Customer Support 3.4834 and Transaction efficiency 3.5886 and this value indicate each predicate have relatively key roles on e-banking customer satisfaction.

4.5 CUSTOMER SATISFACTION

The researcher measure level of a customer satisfaction of the selected commercial bank in Ethiopia employed the categorical satisfaction level prolonged from highly dissatisfied to highly satisfied and the customer satisfaction variable is used as dependent variable in this study the researcher test the connotation and effect of e- banking service quality dimension’s with customer satisfaction. And hence in the table below the one-sample statistics illustrate respondents for their level of satisfaction, deviation (.59554) of customer’s satisfaction level depicts that there was small variability in overall customer satisfaction in the data.

Table 4.4 One sample Statics of customer satisfaction

	N	Mean	Std. Deviation	Std. Error Mean
Customer satisfaction	367	3.8313	.59554	.03109

4.6 Inferential Statistical Analysis

The Chi-square test for independence can be used in situations where there are categorical Variables therefore this part the researcher measure the relationship between demographic variables and customer satisfaction. The researcher used this test since the variables under the study was a categorical variable. So the chi- Square test is implemented to test the relationship between the demographic variable (age, gender, education occupation, and marital status) with dependent variable customer satisfaction.

Table 4.5 Chi- test for demographic variable

Demography	Value	Df	Sig
Gender	39.574	28	.72
Age	155.859	84	.00
Education	129.215	84	.01
Occupation	76.593	112	.996
Marital status	152.097	112	.07

From the table 4.5 chi-test for demographic variable the p value of each variable depicted and the result direct that age and education level has relation with customer satisfaction because these two variables are statistically significant since their p value s lower and equal than 0.01 respectively. Therefore the p value indicate that there is a meaningful relationship between the education level and age with customer satisfaction. However On the same table above the remaining three variables (sex, marital status and occupation) p values is greater than 0.5 this confirm that the variables are not statistically significant as their p value is greater than 0.01 and even greater than 0.05. Based on this the finding shows that from the given demographic variables only age and

education level has depicted relation with customer satisfaction in e banking. The chi square value for education 129.215 with p value 0.01 specifies that there is strong relation between education level and customer satisfaction. This is consistent with the finding in demographic parts which describes majority (91.7%) of the respondents are educated and have above TVET level. This may happen due to the fact the more the educated the customers are the more they can use the technology easily. Similarly the calculated chi square value for age 155.859 with p value of 0.000 reveals there is also a strong relationship between age and customer satisfaction in e banking. The demographic part also states that majority (91.6%) of e banking users in CBE is below the age of 35 years. So this test result answer the research question one and two respectively that Does the effect of e-banking on customer satisfaction have a relationship with the demography of the customers of the commercial bank of Ethiopia and Which demographic variable of a customer greatly affect the customer satisfaction in commercial banks of Ethiopia.

4.7 Regression Analysis

Regression analysis is a reliable ways or identifying which variable or variables have impact on atopic of interest the process of performing a regression allow to confidentially determine which matter most which factor can be ignored and how the factor influence each other. Therefore the researcher applies regression analysis to understand the relationship between explanatory variables (reliability transaction efficiency, customer support, service security, ease of use, and performance) and customer satisfaction with e-banking and also to differentiate which independent variable has a greater effect over independent variable. However, before the regression analysis, the researcher applied some tests as depicted below.

4.7.1 Diagnosis Test

To a sure the application of regression analysis the researcher has to perform some tests that enable researcher to ensure the appropriateness of data to excite the regression analysis and identifies which variables impact the other hence in this study the researcher made some tests such as multicollinearity linearity and normality testes as follows.

4.7.1.1 Multicollinearity Test between Study Variables

In multiple regression model, before making a regression analysis it is important to test the multi collinearity test. To identify a strong correlation between two or more variable in a regression the

multi-collinearity test have to tested and the assumption can be assessed by examining tolerance and the variance inflation factor (VIF). The value of VIF categorized into three sections this section inform the relationship or it enables to identify weather there is a multicollinearity problem between predicates' i.e. when the value of VIF less or equal to one there is no correlation among variables were as if the VIF value between 1 and 5 the collinearity is in average however if the VIP value greater than 5 it crate a multicollinearity problem. And by using correlation matrix VIF values below 6 and the tolerance statistics above 0.2 can safely to conclude that there is no collinearity within the data (Field, 2009). And also the correlation between the independent variable lies less than 0.8 is an indicator of absence of multi-collinearity within the data thus the model is pass both test. A small tolerance value indicates that the variable under consideration is almost a perfect linear combination of the independent variables already in the equation and that it should not be added to the regression equation. A good regression model must not have a strong correlation among its independent variables or must not have a multi-collinearity problem therefor the value of variance inflation factor (VIF) must have a value between 1 and 10 and the tolerance level should be more than 0.2 the table below show the value of tolerance and VIF and the value assure that there is no multi collinearity problem between the predicate.

Table 4.6 Collinearity Statistics

<u>Model</u>	<u>Tolerance</u>	<u>VIF</u>
Reliab	.554	1.805
Trans	.677	1.477
Custsup	.392	2.551
Serseq	.425	2.350
Euse	.494	2.025
Performance	.474	2.111

4.7.1.2 Linearity Test

Another test that the researcher has to perform before making regression analysis is linearity test it show how dependent and independent variable interact each other or it can be described as a comparison between dependent CSEB and independent variables x1(reliability), x2 (transaction

efficiency), x3(customer support),x4 (service security) x5 (ease of use), and x6 (performance) to measure the effect of the increase or decrease of the independent variable affect the dependent variable and identify the relation of the two variables is linear or not.

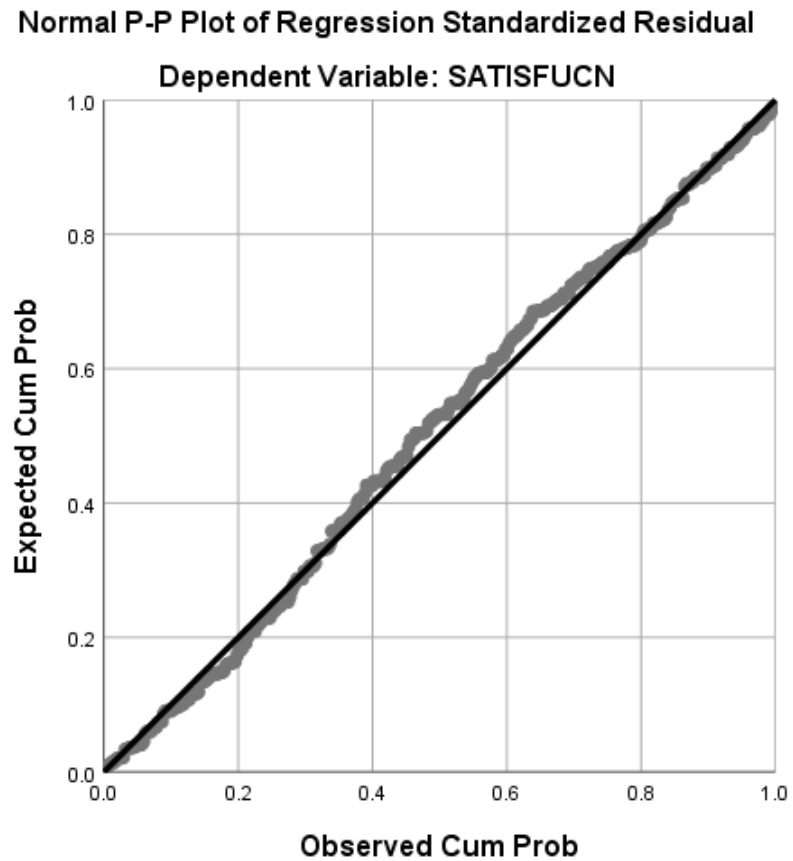


Figure 2 Normal point plot of standard residual

The plot above shows that all most all the point approach the central line this is an implication of nonexistence of a material deviation in residuals in both the left and right side or one can say that there is no significant deviation in residual on both side from left to right instead the points approach the straight line therefore this indicate that both the dependent variable customer satisfaction and the independent variables (reliability, transaction efficiency, customer support, service security, ease of use and performance) are linear to each other.

4.7.1.3 Normality test

A normality test is the test that can be executed before regression analysis is taken place this test determined whether a sample data has been drawn from normally distributed population. The data

is said to be normally distributed when all scores are concentrated around the mean and while the data represented on histogram and the curve drawn through it make Bell shaped around the score and this is known as a normal distribution.

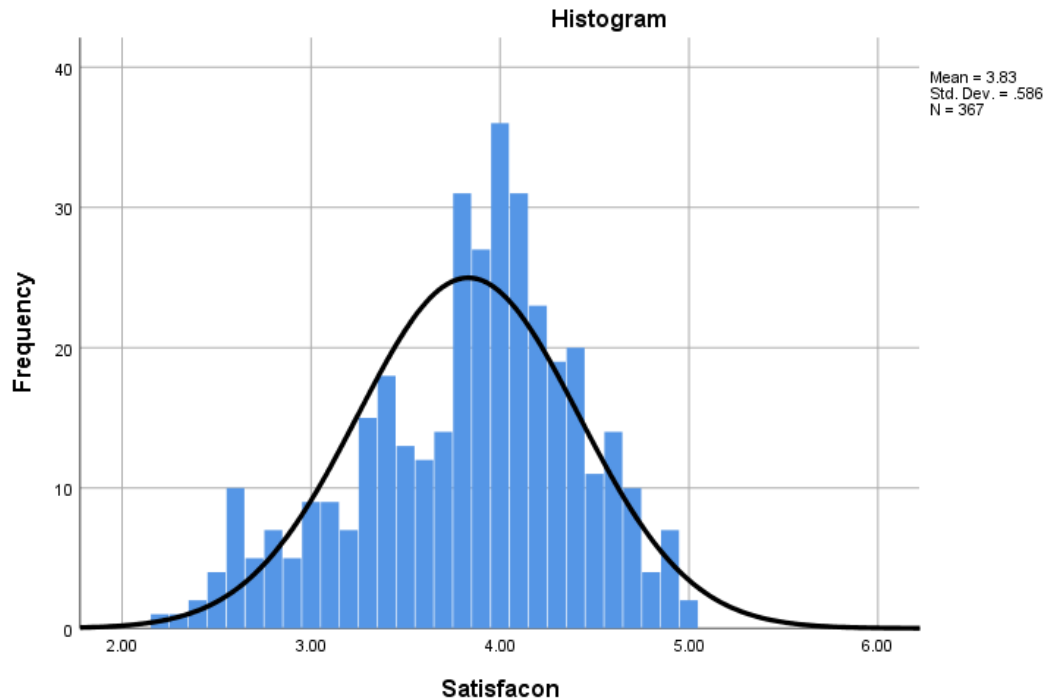


Figure 3 Normality test using histogram

Though the figure 3 above displays some standard residuals are a little bit far away from the curve, many of the residuals are fairly close to the curve, and the histogram is bell-shaped it is an implication of the data to approach the normal distribution as all bars fall around the center or pic as depicted in the above figure 3 shape of the graph basically implies that the majority of scores approach around the center of the distribution (so the largest bars on the histogram are all around the central value. Therefore, this indicates that the residuals or (disturbances or errors) are can be state a normally distributed. Beside to the above graph the normal distribution of the score can be evaluated through using skewness and kurtosis statistics. Skewness is a measure the a symmetry or distortion of symmetric distribution it measure the deviation of the given distribution of a random variable from symmetric distribution. Whereas, kurtosis measures of taildness of a distribution with large kurtosis have more tail data than normally distributed data which appear to bring the tail toward the mean distribution with large have a lower tail data which appear to push

the tail of the bell curve away from the mean. The extent to which observations cluster around a central point. The acceptable range for normality for both statistics is between (-1.0 and +1.0). As depicted in Table 4.7 all variables are within the acceptable range for normality (-1.0 to + 1.0). The kurtosis statistics for all independent variables are within the suggested range of normality (-1.0 to + 1.0).

Table 4.7 Normality of distribution using descriptive statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
CUSTSPO	367	3.4834	.59389	-.261	.127	-.098	.254
REALB	367	3.6022	.63366	-.464	.127	.065	.254
TRANS	367	3.5886	.76750	-.489	.127	-.593	.254
SERSEQ	367	3.5599	.66213	-.540	.127	-.750	.254
EUSE	367	3.8381	.80127	-.897	.127	.722	.254
PERFOR	367	3.6796	.62217	-.200	.127	-.083	.254
CustSatisfaction	367	3.8319	.58594	-.502	.127	-.214	.254

In the above four diagnosis information, we can say that there is no information or there are no data that distract or violate the assumption of multiple regressions.

4.8 Correlation analysis between customer satisfaction in e-banking and e-banking service quality dimensions

Correlation analysis also known as bivariate is primary concerned with finding out whether a relationship exists between variables and then determining the magnitude and action of the relationship. According to (Andy F, 2005), Pearson's correlation coefficient (r) was used to conduct the correlation analysis to find the level and direction of the relationships between the

dimensions of service quality and customer satisfaction. It was also used to rank the variables that have the strongest associations with customer satisfaction to determine the existence and level of association, the researcher used bivariate correlation from which the Pearson correlation coefficient is considered and its value of coefficient falls between range value of -1.0 and +1.0, this indicate indicating the strength and direction of association between the two variables. The value correlation coefficient (r) is grouped into three categories the value set under (0.1-0.29) is weak and the value with, (0.3-0.49) is moderate, and when the value of r is (>0.5) strong. Andy F. (2005) describe that the bivariate correlation of a two-tailed test confirms the presence of statistically significant difference at probability level $p < 0.05$ i.e. assuming a 95% confidence interval on statistical analysis. The Pearson correlation Analysis has shown the service quality indicator variables were significantly (statistically) and positively correlated with Overall customer satisfaction. As described in below table4.8 the correlation analysis between independent and dependent variable depict the correlation value of each variable with customer satisfaction analyses through SPSS and the result depict that Customer support Service security and Reliability has a strong positive relationship with customer satisfaction at ($r=0.678$), ($r=0.609$) & ($r=0.521$) respectively. The rest of the dimensions; Performance, Ease of use & transaction efficiency had a moderate positive correlation with customer satisfaction at value of; ($r=0.435$), ($r=0.386$) & ($r=0.365$) respectively. That means, all the service quality indicators have a positive correlation effect on the level of customer satisfaction though their degree of effect vary each other.

Table 4.8 Correlation between independent variable and dependent variable

	Reliability	Transaction efficiency	customer support	Service security	Ease of use	performance	Customer satisfaction
Reliability	1						
Transaction efficiency	.333**	1					
customer support	.648**	.355**	1				

Service security	.450**	.491**	.579**	1			
Ease of use	.305**	.302**	.504**	.640**	1		
Performance	.428**	.097	.671**	.513**	.579**	1	
Customer satisfaction	.521**	.365**	.678**	.609**	.386**	.435**	1

Source: - SPSS Output

Correlation is significant at 0.01 level (2-tailed).

Hence, in table 4.8 above all the cases the correlation statistics shows the correlation between independent and dependent variable the result confirm the presence of positive relationships of all independent variable to Customer satisfaction which is significant even at the $p < 0.01$ level. This, give the researcher to infer that an improvement in any of the e-banking service quality dimensions by the banks can result in an increase of customer satisfaction. Moreover, the inter-correlations between e-banking service quality dimensions also show a positive and significant relationship. Therefore when banks make changes to one e-banking service quality dimension the association is likely to motivate other e-banking service quality dimensions positively too. With this the researcher found out that all the dimensions have a positive relationship with customer satisfaction therefore it answered the research question three Does all e banking service quality dimension has an effect on customer satisfaction in commercial banks in Ethiopia? . This has the implication for the bank to focus on the dimensions with the highest correlation, that is Customer support and service security at ($r = 0.678$) and (.609) But did not exactly inform the bank on the exact amount of investment it has to make to acquire a desired amount of change in customer satisfaction. Hence, regression analysis was done to assist the management of the bank and also prove the hypothesis made.

4.9 Regression Analysis between customer satisfaction on e -banking and explanatory variables

The main purposes regression is to analyses the impact of variable over the other and it also used to test hypothesis the researcher use multiple regression to test the hypothesis the multiple regression used since the independent variables are greater in number therefore the researcher tested the six hypotheses set out to be tested at the beginning based on the regression analysis and the. The researcher believes that banks can use the result of the regression analysis for future decision-making by identifying which e-banking service quality dimension got the highest effect on customer satisfaction. This answer the last research question of this study. ‘What is the dominant service quality dimension that has a strong relation with customer satisfaction in Commercial Banks in Ethiopia? Since in table 4.6 above Collinearity test result show that the value of tolerance and VIF are found in value above 0 .2 and in between 1 and 5 respectively therefor this value indicate that nonexistence of multicollinearity problem because (Field, 2009). Depicted that whenever the value of VIF is between 1 and 5 and the value of tolerance is above 0.2 there is no multicollinearity problem. Therefore, since the collinearity test assure that the value of the tolerance and VIF value of each variables satisfy the test result therefore all the independent variables Reliability, Transaction efficiency, Customer support, Service security, ease of use, and Performance were selected and included in the regression analysis.

Table 4.9 Multiple Regression Result

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.083	.159		6.788	.000
	REALB	.079	.044	.085	1.779	.076
	TRANS	.020	.033	.027	.613	.541
	CUSTSPO	.461	.056	.467	8.219	.000
	SERSEQ	.322	.048	.364	6.671	.000
	EUSE	-.078	.037	-.107	-2.108	.036
	Performance	-.016	.049	-.017	-.335	.737

Dependent Variable: cust satisfaction

$$CSEB = 1.083 + 0.79REALB + .02TRANS + .461CUSTSPO + .322SERSEQ - .078EUSE - .016Performance + \text{error}$$

In the above formula the coefficient indicate the effects of each independent variable while maintaining other variable constant i.e. 1% increase in variable reliability, transaction efficiency, customer support and service security the result show 7,9%,2%,46,1% and 32,2% increase in customer satisfaction however the unstandardized coefficient of Ease of use and performance is negative therefore both affect unfavorably.

H1 Reliability

The multiple regression result in the above regression table 4.9 displayed the value of the coefficient of reliability and its p value scored 0.85 and 0.076 respectively the result be interpreted that, maintaining other explanatory variables constant, reliability was found to have a statically insignificant and positive association with Customer Satisfaction. As a result, the researcher rejected the hypothesis that stated reliability has a positive and significant effect on customer satisfaction in e-banking customers. The result indicates that reliability is positive but not much significant trait to influence the satisfaction of customer hence the bank has to work on other qualities which influence customer satisfaction in addition this study show contrary to (TSION.G , 2016), (Lidiya, 2020)and (Sintayehu Zeleke and Dr. Sapana Chauhan, 2020) studies that state reliability has a positive and significant effect on customer satisfaction.

H2 Transaction efficiency

As indicated in the above regression table 4.9 the coefficient of Transaction efficiency is 0.20 along with its p-value of 0.541 it can be inferred that maintaining other explanatory variables constant, Transaction efficiency was found to have an insignificant and positive association with Customer Satisfaction. As a result, the researcher rejected the hypothesis that stated Transaction efficiency has a positive and insignificant effect on customer satisfaction.in addition to the reliability though it is positive however transaction efficiency also has no significant effect on customer satisfaction so it indicates that banks have to do on those qualities that contribute to customer satisfaction. Besides the result is also contrary to the previous study by (TSION.G 2016) that states transaction efficiency has a positive and significant effect on customer satisfaction.

H3 Customer support

As indicated in the above regression table 4.9 the coefficient of Customer support is 0.461 along with its p-value of 0.00 It can be inferred that maintaining other explanatory variables constant, customer support was found to have a significant and positive association with Customer Satisfaction. As a result, the researcher accepted the hypothesis that stated customer support has a positive and significant effect on Customer 'satisfaction. However, this finding contradicts the finding of (TSION.G, 2016) that customer support has an insignificant and negative effect on customer satisfaction.

H4 Service security

As indicated in the regression above table 4.9 the coefficient Service security is 0.322 along with its p-value of 0.00 It can be inferred that maintaining other explanatory variables constant, customer support was found to have a statistically significant and positive association with Customer Satisfaction. As a result, the researcher accepted the hypothesis that stated Service security has a positive and significant effect on Customer 'satisfaction. This result points out that the bank has to do with ways that maintain the security of the service since it affects customer satisfaction. So the researcher accepted the hypothesis that stated Service security has a positive and significant effect on Customer 'satisfaction. This finding agrees with the finding of (Tsiou.G, 2016) that Service security has a statically significant positive effect on customer satisfaction.

H5 Ease of use

As depicted in the above table 4.9 the coefficient of Ease of use is -0.78 along with its p-value of 0.036 it can be inferred that, maintaining other explanatory variables constant, Ease of use was found to have a statistically significant and negative association with Customer Satisfaction. As a result, the researcher rejected the hypothesis that stated Ease of use has a positive and significant effect on customer satisfaction. This finding is contrary to the previous study by (Tsiou,G, 2016) (Raji, A. A., Zamani, A., & Abdulwakil, M. M. 2021) that state ease of use has a statically significant and positive effect with customer satisfaction.

H6 Performance

As indicated in the above regression table 4.9 the coefficient of performance is -0.16 along with its p-value of 0.737. It can be conclude that retaining other explanatory variables constant, Performance was found to have a statistically insignificant and negative association with Customer Satisfaction. As a result, the researcher rejected the hypothesis that stated Performance has a positive and significant effect on customer satisfaction.in addition, the result of this finding confirms the results of a previous study by (Tsiou .G, 2016) which state that performance has no significant effect on customer satisfaction

4.10 Summary of Hypotheses Test

As can be shown in the table above, the result of regression and correlation, two variables i.e. Customer support and service security have a high value of significance and support the stated hypothesis while reliability transaction efficiency were found to be positive but had statistically insignificant in Addison ease of use had statistically insignificant but negative correlation with the hypothesis and also performance was both statistically insignificant and negative with previously hypothesized sign. Therefore the four variables reliability transaction efficiency ease of use and performance was insignificant effects on customer satisfaction and were rejected due to their insignificance.

Table 4.10 summery of hypothesis

No	Hypotheses	Index of variable	significance	Status
H1	Reliability have a positive and significant effect on customer satisfaction	REALB	.076	Rejected
H2	Transaction efficiency have a positive and significant effect on Customers' satisfaction.	TRANS	.541	Rejected
H3	Customer support have a positive and significant effect on Customers' satisfaction.	CUSTSPO	0.00	Null hypotheses rejected
H4	Service security have a positive and significant effect on Customers' satisfaction.	SERSEQ	0.00	Null hypotheses rejected
H5	Ease of use have a positive and significant effect on Customers' satisfaction.	EUSE	.036	Null hypotheses rejected

H6	Performance have a positive and significant effect on Customers' satisfaction.	Performnc	.737	Rejected
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4.11 Discussion of the result

In this study the researcher applied person correlation and regression to identify the relationship between the effect of e-banking on customer satisfaction the study use the six dimension such as reliability Transaction efficiency customer support service security ease of use and performance to identify which dimension properly implement and exile customer satisfaction in commercial banks of Ethiopia .this banks applied the dimension and other researchers were try to measure the effect of each dimension so the researcher reevaluates it test both correlate and regression between the dimensions and customer satisfaction and fund that all the independent dimension have Positive correlation within and with dependent variable however some variable show high correlation and some of them show variation within the dimension .i.e. customer support with performance, and reliability ease of use with service security have a better correlation than the rest of the dimension in addition customer support and service security had a greater correlation with the dependent variable of customer satisfaction. At last this studies found to be congruent with the finding of other studies that employ the same variables to measure customer satisfaction. For instance, (TSION.G, 2016) assessed that all the independent variables i .e. reliability, transaction efficiency, customer support, service security, ease of use, and performance has a positive correlation with customer satisfaction and the test assures what stated in the study, however, this study also depict some contradiction concerning the positive and statically significant effect of the independent variable over dependent variable. For instance, (TSION.G, 2016) had shown that reliability and transaction efficiency had a positive and statically significant effect on customer satisfaction however in this study both of them had statically insignificant effects over the variable.

Chapter five

5 Summary, Conclusion and Recommendation

The main objective of this study was to depict the effect of e-banking services on customer satisfaction in commercial banks in Ethiopia. Hence based on the analysis and interpretation made in the previous chapter the following summary, conclusion and recommendation are made.

5.1 Summary

To achieve the objective of the study four research question were raised, as directed below.

Does the effect of e-banking on customer satisfaction have a relationship with the demography of the customers of the commercial banks in Ethiopia?

Which demographic variable of a customer greatly affects customer satisfaction in commercial banks in Ethiopia?

Does all e-banking service quality dimension affects customer satisfaction in commercial banks of Ethiopia?

Which e-banking service quality dimension has a strong effect on customer Satisfaction in Commercial banks in Ethiopia?

The researcher distributed 400 questionnaires to the sample of this 367 questions were collected from the respondents and this is 92.5 % of the total sample size there it is sufficient to proceed with analysis and the researcher found that most of the respondents are committed to giving information for the research under this study. In demographic analysis age between 25-35 it took 74.1% of the respondents. Of all of the respondents 42.8 % were married and 51.2 % were single and it indicated that both of them are an active user of e-banking the number of separated divorced and widowed respondent were minimum. With respect to educational status, 63.5% and 27% are degree and master degree holder which indicate most of the respondents are literate and can access e-banking without difficulties I.e. there is no illiterate user of e-banking among the respondents. With respect of relation between the bank and the customer, all the respondents are use e-banking for more than two years in addition 92.6% were depositor and the account type they used were a saving account in addition from the respondents 73 % used both mobile banking and ATM. And some of them use POS and ATMs. The mean of each independent variable was calculated using

one sample mean statistics Ease of use score had the highest mean of 3.838 and the customer support score had the lowest mean of 3.44 this indicates that the user is literate and can operate the e-banking in a simplified way. The inferential statistics Chi-square test for the demographic variable was applied and the test result showed that age and education level had statistical significance on e-banking satisfaction since their p-value was 0.00 and 0.01 respectively this showed that education and age play a significant role to understand and use things as easy as possible. However marital status, Gender and occupation had no statistically significant role on customer satisfaction as observed in the data collected. Besides regression analysis of a multicountry test that had been done between the independent variables (predicates), the result shows that the test value below .08 indicated that there is no multicollinearity problem among the predicates. The researcher test linearity as well as the normality tests using skewness and kurtosis then it is found that the data was linear and normally distributed. Besides this person correlation analysis was implemented in order to test the relation between dependent and independent variable the result depicted that customer support Service security and reliability has a strong and positive correlation with customer satisfaction. And finally to test the hypothesis multiple regression analysis had implemented the result show that customer support and service security have a positive and statistically significant relation with customer satisfaction, and reliability and transaction efficiency has positive but statistically insignificant relation with customer satisfaction. However, ease of use has a negative but statistically significant relation with customer satisfaction and performance had negative and statistically insignificant relation with customer satisfaction.

5.2 Conclusion

In this study what is detected all the independent variables Reliability, transaction efficiency, customer support service security ease of use and performance are positively correlated with the dependent variable customer satisfaction. In demographic variables age and education level has a statistically significant relation with customer satisfaction and in the study, many of the respondents are in the age between 25-35 this indicates the younger used e- payment service insignificant number, in addition, most of the respondents are degree and master degree holder and no illiterate are using this platforms. Besides this in the study most of the customers are depositors and they used saving account types and most of them use both ATM and mobile banking. The multicollinearity test between the predictor is below .08 which assures that there is no

multicollinearity problem. the mean and standard deviation of the independent variable (predicate tested by using a single sample mean so ease of use has a maximum mean of 3.8381 and customer support has a minimum of 3.4834. the level of customer satisfaction was measured using a one-sample test and its mean value depict that 3.8313. the correlation analysis between the dependent and independent variables was positively correlated. The multiple regression analysis confirmed that customer support and service security had a positive and statically significant relation with customer satisfaction. Whereas reliability and transaction efficiency are positive but statically insignificant relationships with customer satisfaction. However, ease of use has a negative but statically significant relation with customer satisfaction and performance has both negative and statically insignificant relation with customer satisfaction. Hence based on the multiple regression analysis result show two hypotheses were accepted and the rest are rejected.

5.3 Recommendation

The purpose of this study was to examine the effect of e-banking on customer satisfaction in commercial banks in Ethiopia. It is true that every bank wants to transform its service into digital platforms so to make it right all commercial banks has to make e-payments attractive to their customer and got their business successful. Hence In this study the researcher used dimensions reliability, transaction efficiency, customer support, ease of use and performance as the finding showed that all the dimension has a positive relation with customer satisfaction therefore the bank has to focus on each dimension so as to maintain the satisfaction of its customer.

The finding suggests that customer support and service security has a positive and statically significant effect on customer satisfaction so the bank has to strongly work when customer face difficulties it has to strengthen its call center and staff to resolve customer problem as fast as possible and it has to enable the customer to check his account whenever the customer wants to verify his transaction and activities in their account.

Most of the bank customers use ATM and mobile banking as shown in the study therefore the bank has to work to enable its customer to use other e banking like credit card, cobranded cards, internet banking, and POS by creating awareness on the service and the advantage Owen by teaching how to use and making the service available.

The bank has to strongly work to include all age group which has the capacity to use, education as well as occupation to use e-banking by reaching out and teaching them about e-payment products and studying the dimension that attracts and influence the group to use e-banking.

Since customer support has a positive and significant effect over maintaining customer satisfaction it has to mean that banks has to work on elements that used to support its customer while using e-banking i.e. the bank has to work in its employee professional level to respond and give information a clear awareness for customer while they ask professionals support how to operate or conduct certain transaction or changes certain future like changing their password or ask any question related to e-banking service. Beside the bank has to work on the service provided by its e- banking plat form to enable its customer to use verity service because it is recent true that different organization start payment through e –banking therefore the bank has to work with different organization that has frequent relationship with society so that customer can pay their duties through e payments more of this the bank has to provide responsible person that can give response or enable the customer feel confidence for all problem happened during using of e-payments.

Since service security has a positive and significant impact to maintain customer satisfaction so banks has to do and give duo attention in their e-banking service efficiency over keeping accurate record of transaction ,security and privacy of transaction ,avoiding problems or solving problem immediately, enable their plat form to feel secure their customer during or after usage beside banks have to enable the society to accesses past transaction whenever they need to check their incoming or outgoing transaction because customer need to avoid risks therefore banks has to work in all possible situation that will directed customer to feel un secure while using e-banking.

5.4 Suggestions for Future Research

This study measures the effects of e-banking service on customer satisfaction as the finding depicts it has a variation from some previous studies also the future and type of e-banking are updated each day and year and also the number of users increased significantly in addition to this the variable in this study explain 54.4% variance hence the rest 45.6% variance must be due to other factors. Therefore another researcher in this area has to focus on other factors of customer satisfaction is not covered by this study.

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Appendix

Addis Ababa University School of Commerce

Marketing Management Graduate Program

Dear Respondents,

This questionnaire is designed specifically to carry out a research on the effect of e-banking on customer satisfaction the case of selected commercial banks in Ethiopia. The purpose of this study is to find the electronic banking service dimensions that affect the level of customer satisfaction in Commercial Bank of Ethiopia, Dashen Bank, United Bank and Wegagen as partial fulfillment of the requirements for the degree in Masters of Marketing Management. Here I kindly request you to attempt all the items in the questionnaire. Whatever information is provided will be treated with utmost confidentiality for an academic purpose.

There is no need to write your name.

I thank you in advance

Mesfin hailye

Tell: 0913207741

Email: hailyemesfin@gmail.com

If you have any question with regard to the questionnaire please contact me using the above mentioned address.

Part I

Background Information

Please put right mark (√) information of your choice box that express yourself

1. Gender: Male Female

2. Age:: 18—24 25—35 36—50 51—60

3. Marital status: Single Married Separated Divorced Widowed

4. Current education level

Illiterate Primary High school TVET University degree Master Degree Doctorate Degree

5. Occupation: Unemployed Student Salaried Business man/woman Pensioner other

6. Which type of customer you are with the bank? Depositor Borrower both depositor & borrower other service seeker

7. If you are depositor, which type of account do you maintain with the bank? Checking Account Saving Account both saving and checking account

8. Which type of electronic banking service delivery do you use? ATM POS Mobile banking Internet banking ATM&mobile ATM &POS

No		<i>Strongly disagree</i> <i>1</i>	<i>Disagree</i> <i>2</i>	<i>Undecided</i> <i>3</i>	<i>Agree</i> <i>4</i>	<i>Strongly Agree</i> <i>5</i>
	Reliability					
1	e banking completes a task accurately					
2	e banking deliver service exactly as promised					
3	e banking perform service right at the first time					
4	The bank website do not freezer after customer put in all the information					
5	Information provided on web site					

	<i>Transactions efficiency</i>					
1	E banking provide complete help function					
2	Process of the transaction is fast					
3	E banking deliver efficient transfer of funds					
4	In e banking there is fast log in facility					
5	E banking complete its process efficiently					
	Customer support					
1	E banking contain enough service					
2	Case of problem happen can contact staff immediately					
3	E banking contain responsible section to guide for common problem					
4	E banking provide knowledgeable staff to solve problem					
5	Staff can describe step to use condition to use clearly					
	Service security					
1	E banking keep accurate record of transaction					
2	E banking provide security for transaction data and privacy					
3	No problem during using E banking service					
4	E banking is secure					
5	Feel safe while use e banking					
6	Can check validity and detail of past transaction every time					

	Ease of use					
1	Easy to find information in e banking system					
2	E banking is easy to use					
3	The language in e banking display easy to understand					
4	Information and text are clear and easy to understand					
5	E banking system provide clear instruction					
	Performance					
1	E banking provide multiy language					
2	E banking provide 24 hours 7 days service					
3	E banking allow transfer between the same banks					
4	E banking performance of plastic cards (ATM debit /credit cards) is as promised					
5	E banking leave the operation un finished.					

2. Please put right mark (√) for response of your satisfaction level in relation to each dimension

no		Highly un Satisfied	Un satisfied	neutr al	Satisfie d	Highly satisfied
1	How satisfied are you with e banking technological performance of the bank					

	(Software application, ATM and POS machines)					
2	How satisfied are you with e banking services accessibility (accessibility of POS and ATM services)					
3	How satisfied are you with the e banking completion of a task accurately					
4	How satisfied are you with the speed of e banking transaction processing					
5	How satisfied are you with e banking guidance for common problem					
6	How satisfied are you with e banking security for transaction data and privacy					
7	How satisfied are you with e banking easiness to use					
8	How satisfied are you with e banking service functionality 24/7 (functionality of POS and ATM services)					
9	How satisfied are you with the e banking wide range of products and services provided					
10	What is your overall satisfaction with the e-banking services provided by the bank?					

