Addis Ababa University

College of Business and Economics

Masters of Business Administration

"The Effect of Mobile Banking Service Quality on Customer Satisfaction (The case of Awash, Abyssinia and Zemen Banks in Selected Branches) in Addis Ababa, Ethiopia

A Thesis submitted to Addis Ababa University in Partial Fulfillment of the requirements for the award of Master's Degree in Business Administration

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DECLARATION

I, the undersigned, hereby certify that the thesis entitled “The impact of Mobile Banking Service Quality on Customer Satisfaction“ is prepared under the supervision of Tilahun Teklu (PhD). All sources were noted, referenced, and included in the list of references. I declare that this thesis is my original work and was not submitted in part or in whole to any other higher-learning institution for the purpose of earning a degree.

Leyou Sirage _____

Signature & Date

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College of Business and Economics

Masters of Business Administration

This is to certify that the thesis entitled "The Effect of Mobile Banking Service Quality on Customer Satisfaction"carried out by Leyou Sirage , submitted in partial fulfillment of the requirements for the Degree of Master of Business Administration. It complies with the regulations of the university and meets the accepted standards with respect to originality and quality. Approval of Board of Examiners

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List of Acronyms

NBE	National Bank of Ethiopia
CBE	Commercial Bank of Ethiopia
BOA	Bank of Abyssinia
ATM	Atomated Tailor Machine
SPSS	Statistical Package for Social Sciences
IDT	Innovation diffusion trheory
TAM	Technology acceptance model
UTAUT	Unified theory of acceptance
TPB	Theory of planned behaviour
TRA	Theory of reasoned action

ABSTRACT

Customer satisfaction is a measure of how happy customers are with a product or service, it is an important goal for all businesses. By focusing on customer satisfaction, banks can improve their bottom line and create a more positive customer experience.. This study was conducted with the objective to assess the effect of Mobile Banking Service Quality on Customer Satisfaction of customers of Zemen Bank, Awash Bank, and Bank of Abyssinia in Addis Ababa. A self-administered, structured questionnaire was used to collect data from respondents which were sampled out of 384 customers targeted in the study, there were 338 completed questionnaires representing 88% response. The statistical part of analysis is based on descriptive statistic and and regression analysis. To analyze the results, SPSS version 25 was used. Results show that Reliability, perceived usefulness, pivacy and securitys, and Ease of use are important variables that have a significant impact on customer satisfaction. The findings of the study demonstrated a favorable and substantial association between the independent variables of Reliability, perceived usefulness, pivacy and securitys, and Ease of us and the dependent variable of customer satisfaction. Finding of the study concludes majority of respondents were satisfied with overall mobile service. It's recommended to focus on quality, to listen customers and to be responsive.

Key terms: selected banks, mobile banking service quality and customer satisfaction

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

“Mobile banking is as a way of making financial transaction by using mobile devices for creating value by customers .“((Rahmani, 2012)).Mobile banking Service quality is the the best way to mobile service are given according to the customers need. The banking sector should play a great role in one country’s economy by providing effective financial services. To go along with the globalization, the banking sectors in Ethiopia must change on both a practical and an informational level. This should include transition from old fashioned way of banking to electronic banking system. “The banking sector is rapidly changing continueslly , this rapid change in the sector brings into question whether the old banking method, and the current structure existence will continue or even survive “ (Lustsik, 2003).

Mobile banking helps users to conduct banking transactions using a mobile apparatus at anytime, wherever the user are . Now a days most Ethiopian banks has started giving service through mobile so that customer satisfaction increase . Therefore, Mobile Banking is one of the tools to attaract customers and increase competitiveness . “Customer satisfaction is how much the customer needs are fulfilled or pleased by the product or the service provided by the organization” (Simon, 2016) .How much users are satisfied differs from person to person, . “Customer satisfaction is met when the the company fullfiless the customers expectation”. (Kotler, 2016)Therefore, Mobile banking is regarded as the highest value addition of the banking. By using face-to-face banking transactions has decreased, even though it not fully solved.

Digital technology is evolving quickly and is having a big impact on every element of human existence (Makridakis, 2017). Technology has become a heartbeat for commercial sectors predominantly in banking, to serve quality service and boost their customers’ satisfaction level. The banking sector is using unique technologies as one of their tools to retain their customers and compete with other banks. The banks that are the first to have new and convenient technology and payment system can attract and retain new customers than others. Mobile Banking is considered to be the most valuable system to use now a days .

Nowadays mobile banking in Ethiopia is increasing. Additionally, the projected total number of mobile banking customers over the next seven years i.e. by 2025 will be 2.3 million users with 1.27% penetration rate.((Birku, 2019)).Banks for the past few years are using new technology. The use of mobile banking increased from 2017/8 to 2019/20: in 2019/20 transactions worth ETB 15billion ($290million) have been conducted using Mobile banking, an increase from ETB 1.8 billion ($25million) from the previous time. Despite this, from the previous year, over 80% of people still visit a bank to withdraw money, and 98% of transactions are still made in cash. Ministry of Innovation and Technology**.** (Richie Santosdiaz, 2022) M birr is the first mobile money service that is lounched commercially in Ethiopia in 2015.But nowadays most of the Ethiopian Banks have mobile banking service. As shown in Figure 13, Ethiopia has experienced recent growth in these transactions, but there is still a significant opportunity for additional growth.

1.2 Statement of the problem

Technology became mandatory for business primarily in banking, to enhance customer satisfaction and serve quality service. For a long time people have been using traditional banking system in the world . Traditional banking is characterized by physical decentralization, with branches scattered around populated areas to give customers easy geographical access (Ainin et al, 2005). Every organization in the world is receiving knocks from the quickly expanding information and communication technology (Booz & Hamilton, 1997). This is also applied to Ethiopian Banking sectors. As mobile banking technology is growing in the world, Ethiopian banks are putting their maximum exertion to be part of this global technological advancement of mobile banking services (Teshome, 2016).

But now a days, customers are progressively mindful of observing gaps among banks corresponding to their mobile service quality and how utilizing proficient innovations and updating/redesigning its status intermittently when required. The customers will have many choices and have a chance to choose one of the good banks to get good service. Customers are using apps more and more due to the incorporation of banking with mobile devices. This will allow customer to access their bank account without their physical presence. But still long lines are still seen in banks even if these services have been introduced. Since mobile banking is new for most of the banking sector in Ethiopia, Service quality to satisfy customer need is a crucial concern for

long-term sustainability and growth. Banking sector that provides mobile banking should know how much their customers are so that they can improve their service.

Therefore, one of the useful tools to satisfy customers' needs has nowadays become Mobile Banking. High-quality m-banking services significantly impact trust towards the bank, and it can influence the level of customer satisfaction.

And also banks need to create powerful mobile strategies to draw in and hold mobile clients for example, advancing features advantages and value of the mobile services (Laukkanen, 2016). In other words increasing the level of customer satisfaction can be linked to customer loyalty. The relationship between customer satisfaction and customer loyalty is stronger where customers are satisfied (James L. Heskett, 2008). To realize the above benefits, bank's needs to have measuring tool not only to know the level of satisfaction by its customers but also to put a solution when problem is found. A study showed that customers' attribution about the stability, locus and controllability of service failure are useful in predicting expectancy retention, marketplace equity reactions and anger reactions, (Folkes, 1988)

Therefore, banks should provide the best technology that will serve well than the other so that they will satisfy their needs. By fostering close relationships with its customers and offering new, high-quality services, Bank of hopes to gain a competitive edge in both the domestic and global markets.

1.3. Research Questions

According to the problem mentioned above, the addressed research questions are Following:

1. What is the impact of reliability of mobile service quality on customer satisfaction?
2. What is the impact of perceived usefulness of mobile service quality on customer satisfaction?
3. What is the impact of privacy and security of mobile service quality on customer satisfaction?
4. What is the impact of ease of use of mobile service quality on customer satisfaction?

1.4. Objectives of the study

1.4.1 General Objective

The general objective of the study is to assess the Effect of Mobile Banking Service Quality on Customer Satisfaction in selected banks.

1.4.2 Specific Objectives

The specific objectives are the following:

- To identify if reliability have association with customer's satisfaction of Mobile banking services
- To identify if Perceived usefulness have association with customer's satisfaction of Mobile banking services
- To identify if privacy and security have association with customer's satisfaction of Mobile banking services
- To identify if ease of use have association with customer's satisfaction of Mobile banking services

1.5. Significance of the Study

Since banking service is the backbone for every sector, conducting this research is significantly important and the outcome of the study will help policy makers to have insight in relation to customer needs which could serve as early triggering force to manage problems from customer perspectives and also help improve overall service delivery, particularly in areas where the gap between expectation and perception so wide to improve customer satisfaction. This will put in place the necessary policies & practices to manage problems. Provide good insight to those who want to undertake further research on the area of banking industry and will utilize the study as a source of secondary information. This research identified the important quality dimensions to Commercial Banks of Ethiopia to enable the bank to develop strategies and improve the quality of service delivery. Commercial bank of Ethiopia can develop a customer-centric approach to deal with customer service, avoid the tendency of existing customers, and switch to a competing bank. The study would be used as sources of reference material besides suggesting areas where future research may be conducted.

1.6. Scope of the study

The scope of the study concentrates on two major areas. This comprises of the contextual and geographical scope of the study. Contextually, the research had emphasize how customers satisfaction is affected by mobile banking service quality . This study is carried out at the Selected Branches of Awash bank, Bank of Abyssinia and Zemen Bank in Addis Ababa. Therefore, the study's geographic reach is restricted to mobile banking users at a few selected banks in Addis Ababa districts customers who are using mobile banking. Since it is difficult to address all concerned customers in the selected branch, the study delimits itself only to those who exist at bank at time of data collection .

1.7. Limitations of the study

The study has encountered a number of limitations. Some of the limitations are as follows: a) Time constraint is the main limitation of the study. There should have sufficient time to conduct a study through a standard research protocol. b) Budget constraint is also a vital lacking of this study. Sufficient budget allocation is required for collection of data and information from the primary sources.

1.8. Organization of the Study

The central theme of the thesis lies on assessment how customers satisfaction is affected by mobile banking service quality. The **First chapter** contains introduction part of the thesis and incorporates background information, statement of the problem, research questions, objectives ,scope of the study and limitation of the study. The **Second chapter** discusses and organizes literature review. It shows reviewed previously published resources in relation to the subject matter. The **Third chapter** illustrate the methodology part where research design, area, population, sample size, sampling techniques, data collection methods and data analysis. The **Fourth chapter** presents the feedback and analyzed data are discussed and interpreted. The **Fifth chapter** presents summary of major findings, conclusion, and recommendations on the bases of the research findings.

Chapter Two

Literature review

Chapter two is based on many concepts. This chapter begins by explaining the fundamental terms used in mobile banking and the history of the underlying technology. Then, it offers information on mobile banking in the Ethiopian context. The mobile banking service quality is explored together with the opinions of other authors and earlier studies. and other particular elements that are recognized as influencing elements of mobile banking,

2.1 Theoretical Review

2.1.1 Concepts and Definitions

2.1.1.1 Mobile banking

In Regard to meeting customer need Information Communication Technology is one of the factors that dramatically affect the banking Sectors. Mobile Banking is a gift from Information Communication Technology to the world. "Mobile banking (also known as M-banking) is a terminology used for undertaking balance checks and other transactions, payments, through a mobile device such as a mobile phone" (Adewoye, 2013). Mobile Banking is a platform where banks used to give service to customers without physical presence in the bank. Using wireless application protocol to access banking networks from mobile terminals like smartphones and personal digital assistants is known as mobile banking (or m-banking) (Zhou et al., 2010). The earliest mobile banking services were offered over SMS, a service known as SMS banking. Mobile banking is used in many parts of the world with little or no infrastructure, especially remote and rural areas. This aspect of mobile commerce is also popular in countries where banks can only be found in big cities, and customers have to travel several miles to the nearest bank. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information (Tiwari&Buse, 2007). Mobile banking is most often performed via SMS or the Mobile Internet but can also use special programs called clients downloaded to the mobile device. The standard package of activities that mobile banking covers are: mini-statements and checking recentaccounttransaction; alerts on account activity or passing of set thresholds; monitoring of term deposits; access to loan statements; access to card statements; mutual funds/equity statements; insurance policy management;

pension plan management; status on cheque, stop payment on cheque; ordering check books; balance checking in the account; recent transactions; due date of payment (functionality for stop, change and deleting of payments); PIN provision, change of PIN and reminder over the internet; blocking of (lost/stolen) cards; domestic and international fund transfers; micro-payment handling; mobile recharging; commercial payment processing; bill payment processing; peer to peer payments; withdrawal at banking agent and deposit at banking agent (Rahman, 2006)

2.1.1.2 Service Quality

According to Fogli (2006, p. 4), "service quality is subjective to a specific service; the customer's insight of a given organizations relative standards of its services." Service quality is One of the main triumph that helps an organization's ability to compete . A bank can set itself apart from rivals by offering superior customer service.

2.1.1.3 Features of service quality

Fair number of research in the field of mobile banking have discovered certain mobile banking aspects that have an impact on consumers' happiness. Yang et al. (2004), Cronin & Taylor (1992), Madu (2002), and Santus (2003) are a few of the studies that contributed. The following is a description of important elements for Ethiopia's banking industry. The ease of use, dependability, privacy and security, perceived usefulness, and service relative benefits are the most frequent qualities of mobile banking services.

Reliability

In 2005, Zhao and Saha stated that " trust ability refers to the various factors that affect the quality of service". These include the uniformity of the service provision and the commitment and responsibility of the staff. In 1988, Parasuramanetal also considered the importance of trust in the quality of service. The exploration of new technologies and computers that have similar characteristics can affect the performance of a company or individual. For instance, the level of trust that guests have in the quality of service is also related to on time facilitation services. This comprises fulfilling commitments and providing good specialized functionality (availability and usability). Availability is a broad phrase that essentially relates to how easily most users can use a

system without any modifications. “Usability is the degree to which a system is hampered in offering service to customers consequence of defectiveness in its different parts”. “Trust ability of services is the capacity of the service garanted in an accurate, on time, and reliable manner”. The capability to carry the confirmed services correctly, consistently, and nonstop is referred to as trust ability. banks' new innovation users will expect to get suitable, prompt, and best quality services. A new product's capacity to satisfy comparable prospects is measured by its trust ability. The ability to follow initial agreements is another important aspect of trust. That is, a bank should keep its promise to its users, and should satisfy them (Mansoori&Baradaran, 2007).Eventually, Dabholkar (1996) in his study exposed that “trust ability and gracefulness are valid measure for judging technologically related services”. This indicatesthat if customers doesn’t trust the technology, they may not use it So, we can say that trust ability has a constructive association on customer satisfaction using-banking service

Perceived usefulness

Utilization of a technology depends on the users believe that the technology helps in improving and easing there professional performance in day to day activity. (Doll etal., 2008).

Thus “performance is the efficacy of stoner’s commerce with the newly introduced product and aids they accomplish through this commerce”. Horton et,al.(2001) believe that the aim to use is influenced by perceived utility . In 2008, Carter assessed the goods of three factors perceived utility, ease of use, trust, perceived utility is the truly important concept to use new product when compared to other constructs. If a product is designed good it will increase worthiness and affect the success of new product. Thus, in order to attract new customers the new products should give wholesome services and make necessary information available. The main reason why customers use the new product is the utility factor.

Privacy and Security

Trust is essential for users to adopt new products. Trust includes security and confidentiality, which are important factors for users to feel comfortable using new products.

Even with technical improvements such as message encoding, digital signatures, and certificates, users still feel insecure about using new products. This is because the internet is open to everyone, and there is always the risk of hackers stealing personal data.

Addressing security issues can lead to greater user satisfaction. Security is also essential for building relationships with customers.

Customers are concerned about the security of their personal data when shopping online. They worry that hackers may steal their information.

Security is another significant concern for customers when deciding whether to use internet banking. In most studie, Its found that most people are aware of the security risks associated with internet banking, but they have a hazy understanding of these risks.

Customers have less confidence in using internet-based technology than they do in the banks they use.

Finally, most study found that the main challenge of using e-banking services is the fear of higher risks from using the web.

Ease of use

According to Davis (1986), ease of use relates to how simple it is for users to manipulate new products. The degree to which someone feels that using and working with a certain system only requires a small amount of mental effort is referred to as their perception of the system's ease of use. Numerous studies on information systems have shown that user-friendliness has an association on customer satisfaction. The simplicity of new products in banks depends on a number of factors, including how simple it is for the user to manage the system, how simple it is to remember fundamental operations, how efficient the product design is, how much of a mistake is reduced, and how satisfied the user are is with the overall management (Chau, 2007).

According to Guriting (2006), "perceived usefulness and ease of use are key in deciding the acceptance and use of different information technologies." According to Dabholkar (1996), people are mainly worried with usability not only to lower the time of use and effort but also to minimize societal risk.

According to the authors, ease of use appears to be a crucial component of happiness with online banking.

2.1.1.4 Customer Satisfaction

Customer satisfaction is how much customers like their experience with a company, product, or service. It can be measured by the percentage of customers whose experience exceeds their expectations. This definition is important because it makes customer satisfaction a measurable concept and allows companies to set specific goals for improvement.

The cognitive theory of expectation disconfirmation explains how customer satisfaction is formed. It says that customers compare their expectations of an experience to their actual experience. If the actual experience exceeds expectations, the customer is satisfied but the customer will be disatified if it doesn't meet their expectation.

2.1.2 Theoretical Framework

2.1.2.1 Bank Business Models

Banking supervisors are responsible for making sure that banks are stable and can withstand financial shocks. This means constantly monitoring their current operations and ensuring that they are well-positioned for the future.

how banks adapt their business models to changes in the economic environment is One of the most vital things that supervisors watch out for. This is especially important during times of uncertainty, when businesses need to be able to quickly pivot to new strategies.

Supervisors have found that some banks are better at adapting their business models than others. For example, a study by Magutu (2009) found that one in four banks failed to benefit from higher interest rates because their internal controls and business mix were not aligned with the new economic conditions.

Banks differentiate themselves from each other by choosing different business models. They tailor their balance sheets and activities to match their specific goals. For example, some banks focus on retail banking, while others focus on investment banking or commercial lending.

Banks choose business models that leverage their strengths and allow them to compete effectively. This means understanding their organizational capabilities and using them to pursue growth opportunities

2.1.2.2 Theory Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theory about why people use technology. It was inspired by two other theories: the Theory of Reasoned Action and the Theory of Planned Behavior. TAM says people by their nature prefer to use technology that they believe are important and user friendly.

TAM has been used to study how people use a broad choice of technologies, including computers, telemedicine services, digital technologies for teachers, phone apps, and e-learning platforms.

The two major factors that forecast whether or not people will use a technology are perceived usefulness and perceived ease of use according to TAM. Perceived usefulness is how people think the level of technology help the to meet their goals. Perceived ease of use is how easy people believe it will be to learn and use a technology.

If people believe that a technology is useful and easy to use, they are more likely to intend to use it. And if people intend to use a technology, they are more likely to actually use it.

2.1.2.3 Innovations Diffusions Theory

Diffusion of innovation theory (DIT) is a framework for understanding how new ideas and technologies spread. It says that people are usually to accept an innovation if it is seen as better than the old way of doing things, is easy to use, is compatible with their existing values and beliefs, can be tried out before committing to it, and is visible to others. Mobile banking is a new technology that has been rapidly adopted in many countries. Researchers have used DIT to study the factors that influence people's adoption of mobile banking.

Relative advantage is the grade to which an invention is seeming as better than the old way of doing things. For example, mobile banking is seen as more convenient and accessible than traditional banking methods.

Complexity is the grade to which an invention is Hard to Gasp and use. Mobile banking is generally perceived as being easy to use, but some people may find it difficult to set up or use certain features.

Compatibility is the grade to which an innovation is steady with people's prevailing values and beliefs. Mobile banking is compatible with many people's values, such as convenience and efficiency.

Trialability is the degree to which an innovation can be tried out before committing to it. Mobile banking can be tried out by downloading a mobile banking app and using it for a few transactions.

Observability is the grade to which the outcome of using an innovation are noticeable to others. People accept an innovation without much doubt if they see others using it and benefiting from it. Researchers have found that relative advantage, compatibility, and ease of use are the most important factors for the adoption of mobile banking.

2.1.2.4 The Unified Theory of Acceptance and Use of Technology (UTAUT) Model

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a model that explains how people adopt and use new technologies. It combines elements from eight other models of user acceptance and uses them to create a single model with four key variables:

Perceived usefulness: refers to the consumers consideration in the technologies usefulness

Perceived ease of use: How easy the user believes the technology will be to use.

Social influence: How much the user believes that other people are using and recommending the technology.

Facilitating conditions: The resources and support that the user has available to use the technology.

UTAUT says that these four variables directly predict a user's intention to use a technology and their actual usage behavior.

Privacy risk: The risk of losing personal or financial information due to fraud or hacking.

Financial risk: The risk of losing money due to problems with the mobile banking system.

System risk: The risk of problems with the mobile banking system, such as errors or outages.

Physical security risk: The risk of physical harm or financial loss due to attacks on mobile banking users.

Trust: The belief that a vendor will perform as expected.

Building trust in mobile banking:

Anonymity: The user's identity should not be revealed to the vendor or other users.

Security: The user's financial information should be protected from fraud and theft.

Reliability: The mobile banking system should be reliable and easy to use.

Trust in mobile payments:

Confidentiality: The user's data should be kept confidential.

Geffen et al. (2003) found that trust is an important factor in the adoption of e-commerce. Gefen also used trust to study technological adoption and behavioral intentions.

Pousttchi (2003) found that 96% of respondents wanted their data to be kept confidential when using mobile payments.

2.1.3 Justification of model used

The technology acceptance model (TAM) is a popular model for studying how people adopt new technologies. However, some researchers have argued that TAM is not enough to explain why people adopt some technologies and not others.

One way to improve the predictive power of TAM is to combine it with other theories, such as the diffusion of innovation theory (IDT). IDT explains how new ideas and technologies spread through a population.

Other researchers have suggested adding new variables to TAM to improve its predictive power. For example, Akturan and Tezcan (2012) added perceived advantages and perceived dangers to TAM to study the uptake of mobile banking. Wessels and Drennan (2010) added compatibility and perceived risk to TAM to study consumers' acceptance of mobile banking.

This study combines TAM and IDT to examine factors that impact employees' use of mobile banking. The factors that are hypothesized to impact the use of mobile banking in this study are:

Perceived utility: How useful employees believe mobile banking will be.

Perceived ease of use: How easy employees believe it will be to use mobile banking.

Relative advantage: How much better employees believe mobile banking is than traditional banking methods.

Perceived risk: How much risk employees perceive in using mobile banking.

Perceived trust: How much trust employees have in their bank's mobile banking system.

Awareness: Employees' awareness of mobile banking services and features.

2.2 Empirical Studies

Table .1 Empirical and theory-based empirical research in mobile banking

Authors	**Theories**	**Sampling & Countries**	**Main Findings**
Brown et al. [2003]	IDT	162 questionnaires collected from convenience and online sampling in South Africa	mobile banking adoption is significantly influenced by the degree to which a new product is superior to an existing one, loyality, number of banking services, and threats .
Suoranta and Mattila [2003]	Bass diffusion model and IDT	1253 samples drawn from one major Finnish bank by the postal survey in Finland	mobile banking adoption. Is significantly affected by Information sources (i.e., interpersonal word-of-mouth), age, and household income .
Laforet and Li [2005]	Attitude. Motivation, and behavior	300 respondents randomly interviewed in the streets of six major cities in China	mobile banking adoption is prominently affected by Awareness, privacy and the use of computer before and new technology.
Luarn and Lin [2005]	Extended TAM	180 respondents surveyed at an e-commerce exposition and symposium in Taiwan	Intention to adopt mobile banking has been remarkedly affected by Perceived self -assurance, cost of finance, Dependability, easy-of-use, and usefulness .
Amin et al. [2008]	TAM	156 respondents obtained via convenience sampling in Malaysia	The adoption of mobile banking is significantly affected by Perceived usefulness, user friendliness, dependability, quantity of information, and mimetic pressure

Shi Yu (2009)	TAM	250 questioners distributed in AUT university students in New Zealand	user insights about the importance of SMS mobile banking is influenced by quality and service awareness which intern affect the intention to use and adoption to mobile banking .
Koenig et al (2010)	TAM	155 responses from all the questionnaires in Germany	The study made in Germany indicated that the indicators to adopt Mobile banking systems are compatibility, perceived usefulness, and threat.
Chian-Son Yu (2012)	UTAUT	441 respondents inTaiwan	social Effect, perceived financial cost, performance expectancy, and perceived credibility in their order of influencing strength significantly affected individual intention to adopt mobile banking according to This study.
Dineshwar and Steven (2013)	TAM and IDT	Convenience sampling method on 211 people in Mauritius	Perceived security risk and reliability were negatively associated with mobile banking usage; Convenience, compatibility and banking needs were positively associated but age, gender and salary had no Effect on adoption on mobile banking usage .
Kazi and Muhammad (2013)	TAM	372 respondents in Pakistan	factors such as perceived usefulness, perceived user friendliness, compatibility and trust have an Effect on behavioral attitude to adopt mobile banking. And Attitude and perceived behavioral control were the only two important factors according to The result of this study

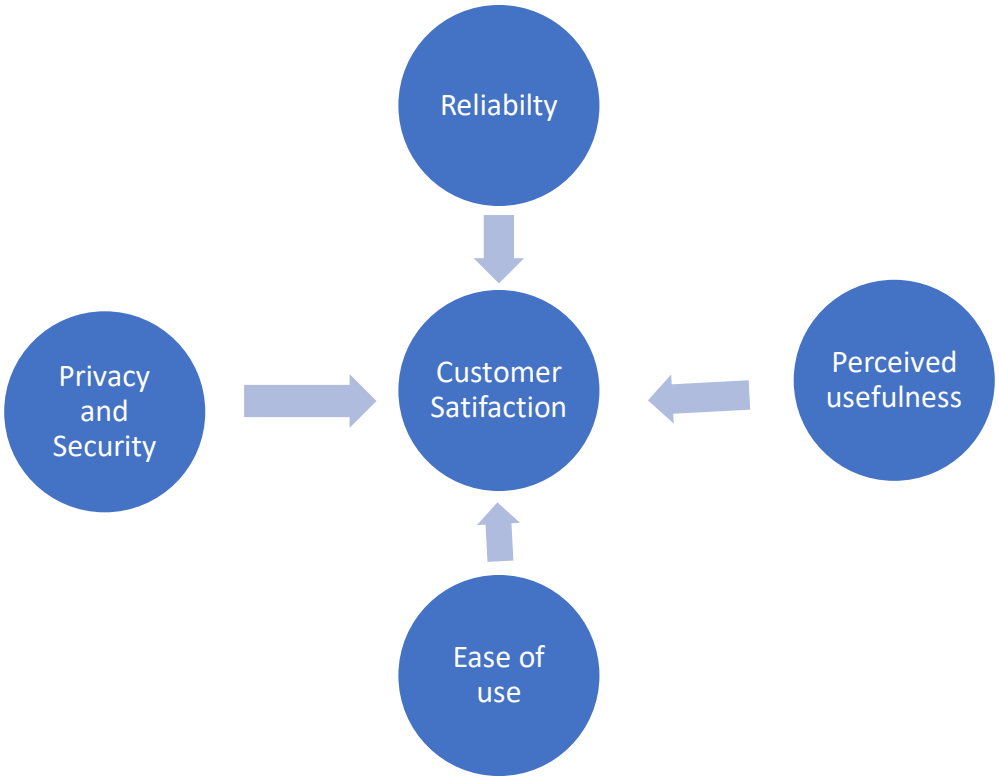
Mohamed et al (2013)	TAM and TPB	119 respondents in Dubai, UAE	Attitude has a positive significant impact toward mobile banking and perceived social pressure on mobile banking adoption. The effects of behavioral control and usefulness on mobile banking adoption were insignificant as well according to the result
Mahmood et al (2014)	TAM and IDT	56 respondents in Jordan Banks	the inhibiting factors on the usage of mobile banking services the negative impact encouraging factors on the usage of mobile banking services the positive impact
Grace (2014)	TAM and IDT	150 respondents from customers in Tanzania	the determining factor in influencing consumers' adoption decisions are perceived threat, relative advantage and convenience as the results suggested .
Agbemabiese et al (2015)	TAM, IDT and TRA	150 respondents from Access bank in Ghana	Awareness, perceived usefulness, compatibility, social Effect, perceived trustworthiness, perceived Confidence & self-assurance and perceived cost financial had some level of significant effect on consumer intention to adopt and use mobile banking services according to the results from the study.
Laekemariam (2015)	UTAUT	383 samples from Commercial Bank of Ethiopia Customers	users having intention to adopt mobile banking was affected by Performance expectancy, Perceived risk, perceived cost, Effort expectancy and Trust according to the finding of the study

			whereas the Mobile banking service quality was found to be insignificant in this study.
Kalkidan (2016)	TAM and IDT	383 respondents obtained through convenience sampling in Ethiopia, Addis Ababa	Major affecting factors for mobile banking adoption are found to be relative advantage, compatibility, perceived trust, perceived usefulness, and perceived risk according to the results of the study.

As it is shown in the table 2.1, there are different studies that are conducted using different kinds of models. Some of the models that are used by different scholars which are listed in the empirical literature include

- The unified theory of acceptance and use of technology model (UTAUT): is a technology acceptance model formulated by Venkatesh. It aims to explain users' intention to use an information system and subsequent usage behavior.
- The theory of reasoned action (TRA) is a model that defines the links between beliefs, attitudes, norms, intentions and behavior of individuals.

2.4 Conceptual Framework



The picture below is drawn to show a diagrammatic relationship among the variables under the2 study

fig 2.1 Conceptual Framework

Source: (Z. Saleem, K. Rashid – Relationship between Customer Satisfaction and Mobile Banking Adoption in Pakistan, 2011)

2.5. Hypotheses of the study

H1: Reliability has positive significant effect on Customer satisfaction.

H2: Perceived Usefulness has positive significant effect on Customer satisfaction.

H3: Privacy and Security has positive significant effect on Customer satisfaction.

H4: Ease of use has positive significant effect on Customer satisfaction.

Chapter Three

Research Methodology

This chapter describes how the study was conducted. It includes information on the respondents, the data collection tools, the research design, and the data analysis procedures. It also discusses the safeguards that were put in place to ensure the reliability of the data.

3.1 Research Design

The researcher used Explanatory research design, because, it is suitable to explain the relationship between variables as quoted in Mark, Philip & Adrian (2009). Explanatory research helps to establish the relationship between independent and dependents variables. The researcher also used descriptive studies to describe the characteristics of the sample by using mean, percentages and frequency. There are two basic approaches, these are qualitative and quantitative. The quantitative research approach makes use of statistics and numbers which are mostly would present in figures whiles qualitative approach relies on describing an event with the use of words. According to Yin (1994), a research approach chosen shall be doing according to the research questions in the particular situation since each approach has its own advantage and dis advantage and how empirical data is would be collecting and analyzing. In conducting study researcher used quantitative research approaches were used.

3.2.1 Target Population

In research methods, population is the entire aggregation of items from which samples can be drawn. In this study, the target population is comprised of mobile banking users at a few selected branchs of Zemen ,Awash and Abyssinia banks in Addis Ababa districts customers who are using mobile banking. Since it is difficult to address all concerned customers in the selected branch, the study delimits itself only to those who exist at bank at time of data collection .

3.2.2 Sample Design and Size

Researchers often need to make generalizations about large groups of people, but it is not practical to survey everyone. So, they select a sample, which is a smaller group that represents the larger group.This study used a non-probability sampling method called convenience sampling. This means that this study selected the sample based on their convenience, rather than using a random selection method.

The study chose to survey customers from grade 4 and 3 city branches and district offices which have more mobilr banking users.
According to the preliminary investigation, currently the selected branches has around 2 million customers .

Based on the number of customers the researcher uses Taro Yemane's formula (1967), in order to determine the sample size of the population.

Sample Size = $N /(1+N (e)^2)$

Input: N=size of population

Based on the above formula , that considers the confidence level, standard deviation, and margin of error. The researchers chose a confidence level of 95%, a standard deviation of 0.5, and a margin of error of 5%.

The sample size is 384 after substituting the values in the above formula. Based on the data presented above, 384 questionnaires were distributed to the subscribers 338 were collected.

3.3 Model Specification

This study use multiple regression analysis to examine the relationships between the main factors that influence mobile banking usage and the actual usage of mobile banking.

The Study identified the main factors that influence mobile banking usage in the previous chapter. And developed model that will help to study the relationship between these factors and mobile banking usage.The linear multiple regression line based on previous model designed by (Rokibul

2013) is modified using the variables from the above conceptual framework and is stated as follows:

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \ldots.. + \beta nXn + \varepsilon i$

Where,

Y is dependent variable which is explained by the independent variables

β0 is constant

β1… βn are the coefficient of the independent variables X1 to Xn.

εi is an error term

Specifically, model for this study can be expressed as follows;

$CS = \beta 0 + \beta 1EU + \beta 2RL + \beta 3PS + \beta 4PU + \varepsilon i$

Where CS = Customer Satisfaction

EU= Ease of use

RL=Reliability

PS=Privacy and security

PU= Perceived Usefulness

3.4. Data Collection Method

3.4.1 Primary Data

Primary data is collected from selected customers who were currently at Zemen Bank, Awash Bank, and Bank of Abyssinia branches and who use mobile banking using a self-administered questionnaire.

The questionnaire was closed-ended, and carefully reworded all items to meet the context of mobile banking service quality in Addis Ababa. This study adapted the items from prior studies to ensure the content validity of the questionnaire.

The five-point Likert scale ranged from 1 (strongly disagree) to 5 (strongly agree). As stated in the introduction to the questionnaire that the research was for academic purposes only. And assured respondents of confidentiality and encouraged them to provide unbiased comments.

Table 3.1 Questions used and the source

Questions	Variable
Q1-Q7	Demographic information
Q8-Q12	Reliability
Q13-Q15	Presided usefulness
Q16-Q18	Privacy and security
Q19-Q21	Ease of use (user friendly)

3.4.2 Secondary Data

Secondary data is past data collected for a different purpose, it is very helpful in literature review to clarify gaps existing in the available literature. Different kinds of secondary data were used. Such as journal articles, books and published literatures that can support the study from empirical & conceptual backgrounds., library books and annual report of the selected banks .

3.5. Data Analysis Methods

The demographic profile of the respondents was evaluated using descriptive statistics, such as frequency distribution, to make the analysis more insightful, understandable, and clear. Researchers can present the data they have collected in a systematic, accurate, and summary way using descriptive statistics. Statistics Package for Social Sciences (Version 25) statistics software was used to help analyze the data.

3.6. Validity and Reliability Checking Methods

3.6.1 Reliability

Reliability refers to a degree to which measurements used can yield suitable results because they are free from errors. According to Hair et al, (2006) reliability is the assessment of the degree of consistency between multiple measurements of a variable. For this research, internal consistency is the appropriate reliability test. The most common measure of internal consistency used by researchers is a statistic called Cronbach's α (the Greek letter alpha). A value of +.80 or greater is taken to indicate very good internal consistency (Hair et al., 2015). A value of +.80 or greater is taken to indicate very good internal consistency (Hair et al., 2015).

Table 3.2 Reliability score of variables

Reliability Statistics

No.	Variable Name	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
1	Reliability	.788	.793	4
2	Perceived Usefulness	.558	.576	4
3	Privacy and Security	.721	.722	3
5	Ease of use	.770	.770	3
	Customer Satisfaction	**.911**	.909	19

Source: Own survey, 2023

3.6.2 Validity

Validity is about having some level of similarity in the original idea of research and the actual idea after getting the results. According to Saunders et al (2000) the concept of validity measures whether the findings in the research are really about what they appear to be about and check the relationship between variables. The reliability and validity test are discussed in chapter four in detail.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

384 questionnaires were distributed to users of mobile banking in Addis Ababa, and 339 were completed and fully answered, the response rate was 88.28%. to analyze the data I used both descriptive and explanatory analyses methods.

4.1 Demographic Information

According to Table 4.1 below, there were 71.1% male respondents and 28.9% female respondents. 18.9% of the respondents fall into the 18 to 30 age range.

44.2% and 30.1% of respondents, with ages ranging from 31 to 45 and 46 to 60, respectively, were polled. However, just 9.7% of the responders are over 60. Only 1.2% of those surveyed hold a high school diploma. 28.9% of those surveyed had a diploma in their hands. The remaining 24.5% of respondents, who have master's degrees or higher in their educational background, make up the remaining 45.4% of respondents with university degrees.61.9% of respondents said they utilize the banks' mobile banking services. Mobile banking is used by 26.5% of the respondents. However, only 11.5% of respondents said they utilize online banking. This suggests that among e-payment systems, ATM services are primarily used by customers through banks. Twenty.4% of the respondents have used the goods for less than a year. 49.6% of respondents said they have used the product for between one and three years. But 30.1% of the participants had more than three years' experience.

Table 4. 1 Demographic information of Respondents

Indicator	Groups	N	percentage
Gender	Male	241	71.1
	Female	98	28.9
Age	18-30	54	15.9
	31-45	150	44.2
	46-60	102	30.1
	Above 60	33	9.7
Education	High school	4	1.2
	Diploma	98	28.9
	University degree	154	45.4
	Master's degree and above	83	24.5
Mobile banking user	Mobile banking	90	26.5
	Internet banking	39	11.5
	ATM	210	61.9
Experience	Less than one year	69	20.4
	one year to three	168	49.6
	More than three	102	30.1

Source: own survey, 2023

4.2 Description about mobile banking services quality and customer satisfaction

This part portrays customer perception on the features of mobile banking service quality .This includes reliability, privacy and security, perceived usefulness and ease of use (user friendly)

4.2.1 Reliability

Table 4. 2 Reliability of the service

Question		Response of Respondents							
		SD	D	N	A	SA	**Total**	mean	Std.devison
I prefer using mobile banking instead of visiting branch for making my transaction	Zemen	0	21	20	11	10	**62**	3.944	0.873
	Awash	0	11	34	32	7	**84**		
	BOA	0	8	44	56	84	**192**		
	Total	**0**	**40**	**98**	**99**	**101**	**338**		
The use of e banking is reliable	Zemen	0	0	18	27	17	**62**	3.753	0.712
	Awash	0	4	29	37	14	**84**		
	BOA	7	19	55	61	50	**192**		
	Total	**7**	**23**	**102**	**125**	**81**	**338**		
Mobile banking provide security for transaction data and privacy	Zemen	0	0	9	41	12	**62**	3.745	0.872
	Awash	0	0	17	41	26	**84**		
	BOA	0	0	42	71	79	**192**		
	Total	**0**	**0**	**68**	**153**	**117**	**338**		
Mobile banking service completes a task accurately	Zemen	0	0	21	26	15	**62**	3.732	0.941
	Awash	0	12	34	21	17	**84**		
	BOA	0	0	24	97	71	**192**		
	Total	**0**	**12**	**79**	**144**	**103**	**338**		
The system timely responds to enquiry	Zemen	0	0	5	32	25	**62**	3.381	0.822
	Awash	0	0	18	41	25	**84**		
	BOA	0	0	43	78	71	**192**		
	Total	**0**	**0**	**66**	**151**	**121**	**338**		

Table 4.2 shows respondants response about reliability of mobile banking services quality.

Source: own survey, 2023

62 participants from Zemen Bank responded to the question, "I prefer using mobile banking instead of visiting a branch for making my transaction," with 10 highly agreeing, 11 agreeing, 20 indifferent, and 21 disagreeing Additionally, out of 84 individuals' responses to the question, 11 strongly disagree, 34 neutral, 32 agree, and 32 agree. 192 clients engage in the bank of Abyssinia's survey; for the same topic, 8 customers disagree, 44 are indifferent, 56 agree, and 84 strongly agree.

Customers of Zemen Bank responded with 18 indifferent, 27 in agreement, and 17 strongly in favor of using mobile banking. Four clients of Awash Bank disagreed, 29 were neutral, 37 agreed, and 14 were firmly in agreement. In contrast, consumers of the Bank of Abyssinia responded with 7 strongly disagreeing, 19 disagreeing, 55 neutral, 61 agreeing, and 50 highly agreeing. The third query was "Does mobile banking offer security for transaction data and privacy?" Customers of Zemen Bank responded with 9 neutral votes, 41 in agreement, and 26 highly in favor. Responses from bank customers flooded in: 17 were impartial, 41 agreed, and 26 strongly agreed. The responses from Bank of Abyssinia clients are 42 in favor, 71 against, and 79 strongly in favor.

For this query, mobile banking service accurately completes a task. Participants were 62 from Zemen Bank, 84 from Awash Bank, and 192 from Abyssinia Bank. Awash Bank received responses from 12 disagrees, 34 neutrals, 21 agrees, and 17 highly agrees, indicating that Awash Bank has to improve its accuracy when comparing itself to other banks. The system promptly responds to inquiries regarding the last inquiry, and every response demonstrates a favorable outcome.

4.2.2 Privacy and security

Three questions were posed regarding privacy and security. The first was, "Is the mobile banking service secured for this question?" to which the customer responses from those banks were favorable. The second was, "The mobile banking service provides security for transaction data and privacy for this question," to which the customer responses from those banks were favorable. The third question was, "The mobile banking service keeps accurate record of transaction in case of this the result indicates that both Awash Bank and Abyssinia Bank need to improve their accuracy.

Table 4.3 shows respondants response about privacy and security of mobile service quality.

Table 4. 3 Description about Privacy and Security of the services

Question		Response of Respondents							
		SD	D	N	A	SA	**Total**	mean	Std.devison
the mobile banking service is secured	Zemen	0	0	0	41	21	**62**	3.046	0.931
	Awash	0	0	0	52	32	**84**		
	BOA	0	0	0	118	74	**192**		
	Total	**0**	**0**	**0**	**211**	**127**	**338**		
The mobile banking service provides security for transaction data and privacy.	Zemen	0	0	0	33	29	**62**	3.761	0.752
	Awash	0	0	0	46	38	**84**		
	BOA	0	0	0	99	93	**192**		
	Total	**0**	**0**	**0**	**178**	**160**	**338**		
The mobile banking service keeps accurate record of transaction	Zemen	0	0	5	37	20	**62**	3.661	0.733
	Awash	1	6	0	29	48	**84**		
	BOA	7	4	13	82	87	**192**		
	Total	**8**	**10**	**18**	**148**	**155**	**338**		

Source: own survey, 2023

4.2.2 Perceived usefulness

The table below displays the perceived usefulness of mobile banking services in terms of privacy and security. Three questions were posed to bank customers regarding perceived usefulness. For example, when asked whether the mobile banking they use keeps accurate records of transactions, Zemen Bank customers responded favorably, whereas the responses from the other two banks could use some work. In the following query the transaction service provided by the mobile banking I use is exactly what I promised in this inquiry, although Bank of Abyssinia and Awash

Bank might need some improvement. All three banks must improve system speed in order to handle the last question.

Table 4.4 shows respondants response perceived usefulness of the mobile banking service.

Table 4.4 Perceived usefulness of the service

Question		**Response of Respondents**							
		SD	D	N	A	SA	**Total**	mean	Std.devison
The mobile banking that I use keeps accurate record of transaction	Zemen	0	0	0	40	22	**62**	3.612	0.711
	Awash	0	0	10	44	30	**84**		
	BOA	0	0	31	87	74	**192**		
	Total	**0**	**0**	**41**	**171**	**126**	**338**		
The mobile banking that I use performs transaction service exactly as I promised	Zemen	0	0	0	34	28	**62**	3.429	0.734
	Awash	0	0	8	38	38	**84**		
	BOA	0	0	23	96	73	**192**		
	Total	**0**	**0**	**31**	**168**	**139**	**338**		
Mobile banking service completes a transaction process fast and accurately	Zemen	0	6	17	21	18	**62**	3.851	0.926
	Awash	0	24	27	22	11	**84**		
	BOA	9	37	66	43	37	**192**		
	Total	**9**	**67**	**110**	**86**	**66**	**338**		

4.2.3 Ease of use (user friendly)

Table 4.5 shows respondants response about ease of use or user friendly of using the mobile banking service.

The system interface for the query is appealing and clear. 62 individuals who were Zemen bank clients provided the following responses: 6 strongly disagree, 12 disagree, 21 neutral, 14 agree, and 9 strongly. 18 strongly agree, 23 disagree, and 35 are neutral. Out of 84 individuals who are awash bank clients, 7 agree. Out of 192 participants who were Abyssinia bank clients, 13 severely disagreed, 27 disagreed, 88 were indifferent, 42 agreed, and 22 highly agreed. This indicates that all three banks, especially Awash Bank, need to improve their system interface.

The query that follows is Easy to find information in the system. Of the 338 customers of the three banks, 75 strongly disagreed, 65 disagreed, 67 were neutral, 76 agreed, and 55 strongly agreed. This indicates that all three banks should take their customer base into account. For example, how many of my customers are young, educated, etc. As was evident prior to the third question the system's information and texts are simple to understand, and the responses are all identical. Much of the responses 22 strongly disagree, 40 disagree, 135 neutral, 83 agree, and 58 highly agree most are neutral since mobile banking customers are more likely to reside in urban areas, although the system's instructions and texts should be translated into more regional tongues or languages.

The system offers clear instructions for the fourth question. From 62 Zemen Bank clients, 7 were indifferent, 12 agreed, and 43 were strongly in agreement, indicating that the system is well-instructed. From 84 participants, 4 disagree, 49 remain neutral, 21 agree, and 10 strongly agree, indicating that Awash Bank is better than Abyssinia Bank. The system is user friendly is the final question in this section. According to 192 respondents from the Bank of Abyssinia, the system is not user friendly and needs to be improved. Among the other two banks, 61 respondents strongly disagreed, 57 disagreed, 43 neutrally agreed, 31 agreed, and 0 respondents strongly agreed.

Table 4. 5 Descriptions about ease of use of mobile banking services

Question		Response of Respondents							
		SD	D	N	A	SA	**Total**	mean	Std.devison
The system interface is attractive and visible	Zemen	6	12	21	14	9	**62**	3.814	0.552
	Awash	19	23	35	7	0	**84**		
	BOA	13	27	88	42	22	**192**		
	Total	**38**	**62**	**144**	**63**	**31**	**338**		
Easy to find information in the system	Zemen	8	10	4	12	28	**62**	3.716	0.743
	Awash	26	17	9	25	7	**84**		
	BOA	41	38	54	39	20	**192**		
	Total	**75**	**65**	**67**	**76**	**55**	**338**		
Information and texts in the system are clear and easy to understand	Zemen	0	14	5	20	23	**62**	3.463	0.713
	Awash	3	3	48	21	9	**84**		
	BOA	19	23	82	42	26	**192**		
	Total	**22**	**40**	**135**	**83**	**58**	**338**		
The system provides clear instructions	Zemen	0	0	7	12	43	**62**	3.852	0.778
	Awash	0	4	49	21	10	**84**		
	BOA	22	27	98	36	9	**192**		
	Total	**22**	**31**	**154**	**69**	**62**	**338**		
The system is user friendly.	Zemen	4	3	6	35	14	62	3.820	0.808
	Awash	19	31	2	28	4	84		
	BOA	61	57	43	31	0	192		
	Total	**74**	**91**	**51**	**94**	**18**	**338**		

Source: own survey, 2023

4.3 Description about customer satisfaction of mobile banking users

The descriptive analysis result shows customers are using mobile banking to do different transactions and that they plan to use in the fuure too because they think that it is valuable and meaningful to use mobile banking service .

Table 4. 6 customer satisfaction by using the services

Question		**Response of Respondents**							
		VD	D	M	S	VS	**Total**	mean	Std.devison
This is one of the best products I use	Zemen	0	0	4	30	28	**62**	3.823	0.965
	Awash	0	2	5	44	33	**84**		
	BOA	0	0	45	77	70	**192**		
	Total	**0**	**2**	**54**	**151**	**131**	**338**		
I am satisfied with my decision to use this product	Zemen	0	0	0	51	11	**62**	3.914	0.804
	Awash	0	0	10	51	23	**84**		
	BOA	0	0	43	80	69	**192**		
	Total	**0**	**0**	**53**	**182**	**103**	**338**		
I have truly enjoyed this product	Zemen	0	0	12	37	13	**62**	3.716	0.743
	Awash	0	2	29	31	22	**84**		
	BOA	0	8	46	74	64	**192**		
	Total	**0**	**10**	**87**	**142**	**99**	**338**		

Source: own survey, 2023

4.4 Effect of mobile banking service quality on customer satisfaction

Before making interpretation on estimation result, appropriateness of the model was checked by using model tests.

4.4.1 Normality test

The expectation that the error component would have a normal distribution, its expected value will be zero (E(UT)=0), or both, is one of the fundamental premises of conventional linear regression models. The histogram test, which displays the distribution of residuals, was used to conduct this test. Figure 4.1 below shows the results of the normalcy test.

The bell-shaped histogram demonstrates that scores fall in the middle of the distribution, as seen in figure 4.1 below. The conventional residuals, which show that residuals are closer to the normalcy curve, are not very far from it. The centre value is surrounded by the histogram's largest bars. As a result, this suggests that the residuals are distributed regularly.

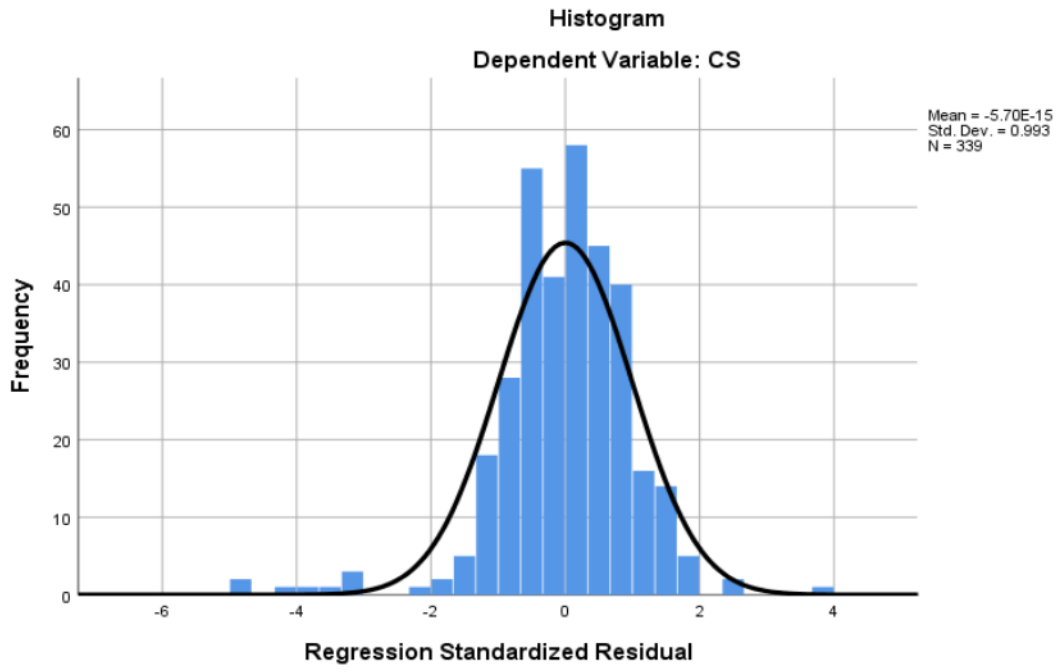


Fig 4.1 Test of Normality

4.4.2 Multicollinearity Test

Multicollinearity, according to Brooks (2008), will happen if some or all of the independent variables have a significant correlation with one another. It demonstrates that the regression model has trouble identifying the independent variables influencing the dependent variable. If a model's multicollinearity issue is too severe, either another significant independent variable should be introduced or a minor independent variable should be removed. To find the presence of a multi-collinearity problem, numerous methods are frequently proposed. Variance inflation factors (VIF) were utilized in this study to check for the presence of a multicollinearity issue. The values of VIF, as shown in table 4.8, are significantly below 10, indicating that multicollinearity between the study's independent variables is not an issue.

Table 4. 7 Multicollinearity Test

Variables	Collinearity Statistics	
	Tolerance	VIF
Reliability	0.678	1.474
Perceived usefulness	0.547	1.829
Privacy and security	0.524	1.907
Ease of use or user friendly	0.373	2.683

Source: own survey, 2023

4.4.3 Linearity test

The assumption that the error term should be linear to the expected value of the error term is one made by traditional linear regression models. The P-P plot of residuals, as shown in figure 4.3 below, demonstrates that there is little to no variance in the residual spread and that nearly all residuals lie on the linear straight line. The relationship between the independent variables and the dependent variable is therefore shown to be linear by this.

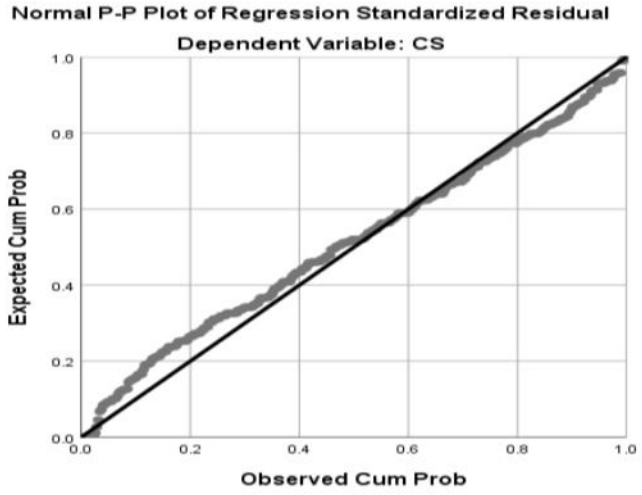


Fig. 4.2 Linearity Test

4.5 Econometric Estimation Result

According to the table, R squared is 0.707 and adjusted R squared is 0.703, indicating that the independent variables employed in the model can explain 70.3% of the variation in the dependent variable. This suggests that factors including reliability, perceived usefuless, privacy and security, ease of use

Table 4.9 below summarizes model of the study by R-squared and Adjusted R squared.

Table 4. 8 Model Summary

R	**R square**	**Adjacent r square**	**Std error of the estimate**
0.814	0.707	0.702	0.392

Source: own survey, 2023

Table 4.9 ANOVA

Model	**Sum of squares**	**Df**	**Mean square**	**F**	**sig**
Regression	123.592	5	24.719	160.71	.000[b]
Residual	51.218	333	0.154		
Total	**174.811**	**338**			

Source: own survey, 2023

additionally, this analysis is used to detect appropriateness of the model in guessing the effect of mobile banking service on customer satisfaction. To run regression analysis multivariate linear regression method was used in this study. F-statistic is significant at 0.01 indicating that the model used is appropriate to identify the effect of mobile banking service quality on customer satisfaction. The result showed customer satisfaction is significantly affected by mobile service quality.

The effect of individual feature of the service is presented in table 4.10 below.

Table 4. 10 Coefficients

	Unstandardized coefficients		standardized coefficients	t	Sig.
	B	Std error	Beta		
(constant)	-0.999	0.176		-5.674	0.000
RL (reliability)	0.239	0.036	0.237	6.587	0.000
PU (perceived usefulness)	0.104	0.038	0.109	2.717	0.007
PS (privacy and security)	0.275	0.049	0.229	5.587	0.000
EU (ease of use)	0.555	0.068	0.396	8.147	0.000

Source: own survey, 2023

Based on results in the table the specific objectives are delivered and research questions are answered. All variables used have shown positive association and statistically significance implying that they have significant positive effect on satisfaction of users of the service.

4.6 Hypothesis Summary

I summarized the study hypotheses in table 4.12 below based on results from table 4.11 above. I tested hypotheses by using p-value.

Table 4.11Hypothesis Summary

No	Hypothesis	Sig	decision
Hypothesis 1	Reliability of mobile banking has positive effect on customer satisfaction	0.000	Accepted
Hypothesis 2	Perceived usefulness of mobile banking has positive effect on customer satisfaction	0.007	Accepted
Hypothesis 3	Privacy and security of mobile banking has positive effect on customer satisfaction	0.000	Accepted
Hypothesis 4	Ease of use of mobile banking has a positive effect on customer satisfaction	0.000	Accepted

Source: own survey, 2023

4.7 Discussion

Customer satisfaction has importance in organizational success. To make the customers satisfied it is important to provide them best services. The objective to conduct this research is to assess the effect of mobile service quality of cutomer satisfactiona. In this study, a research model was developed to examine the nature and strength of the relationship between the variable Service quality (Reliability, perceived usefulness, Privacy and security and ease of use) and Customer Satisfaction. (Parasuraman A. G., 2000),

Reliability

Reliability is defined as the ability to perform the promised service dependably and accurately. Reliability is important to customer satisfaction because it is a measure of how well a company can meet the expectations of its customers. When a company is reliable, customers can be confident that they will receive the service they need when they need it. This can lead to increased customer satisfaction and loyalty. Mobile banking services that are reliable and complete transactions without errors are more likely to satisfy customers. This finding is consistent with previous research by (Cheng, august 2021)

There are a number of ways that companies can improve their reliability. One way is to invest in training and development for employees so that they are able to provide accurate and consistent service. Another way is to implement systems and procedures that help to ensure that service is delivered on time and accurately. Companies can also improve their reliability by listening to customer feedback and taking steps to address any issues that are raised. By taking these steps, companies can show customers that they are committed to providing reliable service. As per Table 4.11 the reliability coefficient of 0.239 indicates that, when all other variables are held constant, a one-unit increase in reliability is expected to be associated with a 0.239 point increase in customer satisfaction. The finding of this study is in line with the findings of : A study by (parasuraman, 1988) Zeithaml, and Berry (1988) found that reliability was the most important dimension of service quality for customers. A study by Cronin and (Taylor ,1992) found that reliability was the second most important dimension of service quality for customers. A study by (Teas, 1993)found that reliability was the third most important dimension of service quality for customers. These studies suggest that reliability is an important factor in customer satisfaction. Companies that can provide reliable service will have satisfied customers.

Perceived usefulness

As per Table 4.11 the perceived usefullness coefficient of 0.104 indicates that, when all other variables are held constant, a one-unit increase in reliability is expected to be associated with a 0.104 point increase in customer satisfaction.Customers are more satisfied with mobile banking services that they find useful and helpful. This finding is consistent with previous research by (Sathya, 2015)Utilization of a technology depends on the users believe that the technology helps in improving and easing there professional performance in day to day activity. (Doll etal., 2008). These studies suggest that perceived usefulnesis an important factor in customer satisfaction. Companies that can provide usefull service that is needed by customers will have satisfied customers.

Privacy and security

As per Table 4.11 the perceived usefullness coefficient of 0.275 indicates that, when all other variables are held constant, a one-unit increase in reliability is expected to be associated with a 0.275 point increase in customer satisfaction.Customers are more satisfied with mobile banking services that they feel are secure and their personal information is protected. This finding is consistent with previous research by (Beghis, 2019)and (Molina, 2016)

Ease of use

As per Table 4.11 the perceived usefullness coefficient of 0.555 indicates that, when all other variables are held constant, a one-unit increase in reliability is expected to be associated with a 0.555 point increase in customer satisfaction.Customers are more satisfied with mobile banking services that are easy to use and navigate. This finding is consistent with previous research by (Sathya ,2021) and (Belghis ,2019).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

This is the final chapter, and it provides the study's Summary of major findings, conclusion, and Recommendation

5.1 Summary of Major findings

The main objective of the study was to analyze the major variables that influence Awash, Abyssinia and zemen bank customer satisfaction in Ethiopia. The following research questions were addressed in the study:

5. What is the impact of reliability mobile service quality on customer satisfaction?
6. What is the impact of perceived usefulness mobile service quality on customer satisfaction?
7. What is the impact of privacy and security mobile service quality on customer satisfaction?
8. What is the impact of ease of use mobile service quality on customer satisfaction?

As per the literature review, four dimensions of Service Quality have been established (Reliability, perceived usefulness, privacy and security and ease of use).

To meet the objective quantitative research strategy was adopted and a non-probability convenience sampling technique was used to collect the data from customers. Descriptive statistics like mean, and multiple regression were employed to analyze the background information of respondents, respondents' perception of the variables, and customer satisfaction, to determine the relationship and its impact between the variables and the customer satisfaction.

As per the descriptive analysis, the result shows that male respondents were 71.1%, most of the respondents were in the age range of 31-45 years and 45.4% of the respondents are degree, masters, and above holders.

Before analysis of the study was conducted, a reliability test was conducted to check if the questionnaire was reliable or not, as illustrated in Chapter 3 all variables were reliable and acceptable with the overall Cronbach's Alpha result .911. The three linear regression model assumptions were meet accordingly in the model. Multiple regression method were employed to

answer the research objective. The study used quantitative research approach by using survey. The study mainly employed both descriptive statistics methods. The reason is that these methods are suitable to explain and interpret relations of variables in the study.

As per the finding 70.3% of the variation in customer satisfaction is explained by the independent variables in the model. The ANOVA table shows that the model is significant, as the F-statistic is 160.71 and the p-value is <0.05.

As the standardized coefficients indicate, reliability and Ease of use have the highest value followed by privacy and security and perceived usefulness.

5.2 Conclusions

The main aim of this research was to analyze factors influencing customer satisfaction in Awash, Abyssinia and Zemen Bank. From the above results, the following conclusion is drawn. According to the results of this study, no attribute had a customer satisfaction rating that was lower than the overall level of dissatisfaction. Additionally, it is important to note that customers were satisfied with the bank Mobile Service. Customer satisfaction is positively affected by the reliability of mobile banking service quality by ensuring complete and error-free transactions. Due to the utility of mobile banking, customers of banks are pleased with it. Customers felt that the product was helpful, which increased their level of satisfaction. The users benefit when the service is made more useful. The banks have created helpful mobile banking facilities for their users. Customers at Zemen, Awash and Abyssinia Banks who use mobile banking are happy with the service's security and privacy. Customers are positively satisfied with the services because they are secure. The happiness of customers utilizing mobile banking services is increasing as a result of the service being more secure Mobile banking not only offers facilitates like balance check, or do transactions they are also affecting customer behavior Integration of banking with their personal mobile devices, customers are engaging themselves in apps more than ever. . The service is relatively more advantageous than the using the service in the bank. Customers are satisfied with the better advantage they earn from using the branches.

5.3 Recommendations

As presented in the findings of the study the four dimensions have significant and positive impact on customer satisfaction. Hence, working to improve these dimensions will contribute to the overall customer satisfaction. Based on the survey results, the following recommendations are given.

- Increase service reliability by expanding the network and improving service performance. Conduct regular testing and maintenance to identify and fix potential problems.This will make mobile banking more reliable and satisfying for customers.
- Offer more packages of services. This will increase the perceived usefulness of mobile banking and make it more attractive to customers.
- Improve the security features of mobile banking products, such as stronger passwords. This will make customers feel more confident using mobile banking and improve their satisfaction.
- Make mobile banking products easier to use by introducing more languages and shortening the transaction time. This will make mobile banking more convenient and enjoyable for customers.
- Set lower service fees for mobile banking than for branch banking. This will make mobile banking more competitive with branch banking and encourage more customers to use it.

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Appendix I

Questionnaire

Dear Respondent,

The aim of this questionnaire is to collect data in order to identify mobile banking service quality on customer satisfaction. The results of the study are expected to supply to the understanding on the mobile banking usage satisfaction on selected banks in Addis Ababa. I would like to assure you that the information you provide will be used only for the purpose of achieving academic award.

Thank you for your participation.

Best Regards,

Leyou Sirage

Section A: Demographic Information

1.Gender

 Male

 Female

2. Age

 18 up to 30

 31 up to 45

 46 up to 60

 Above 60

3. Education level:

 Primary

 High school

 Diploma

 University degree

 Master Degree and above

4. Which type of e-payment service do you use (you can have more than one answer?

 Mobile banking

 Internet banking

 ATM

5. For how long have you been using the mobile banking service (in years)?

 Less than one year

 One year to three

 More than three

Section B: Quality of mobile banking Service

To what extent do you agree with following statements regarding the mobile banking service you are using? Please tick (√) your appropriate answer based on the following rating.

1= strongly disagree **2**= disagree **3**= neutral **4**= agree **5**= strongly agree

Reliability	**1**	**2**	**3**	**4**	**5**
I prefer using mobile banking instead of visiting branch for making my transaction					
The use of e banking is reliable					
Mobile banking provide security for transaction data and privacy					
Mobile banking service completes a task accurately					
The system timely responds to enquiry					

Perceived usefulness	**1**	**2**	**3**	**4**	**5**
The mobile banking that I use keeps accurate record of transaction					
The mobile banking that I use performs transaction service exactly as I promised					
Mobile banking service completes a transaction process fast and accurately					

Privacy and security	**1**	**2**	**3**	**4**	**5**
the mobile banking service is secured					
The mobile banking service provides security for transaction data and privacy.					
The mobile banking service keeps accurate record of transaction					

Ease of use (user friendly)	**1**	**2**	**3**	**4**	**5**
The system interface is attractive and visible					
Easy to find information in the system					
Information and texts in the system are clear and easy to understand.					
The system provides clear instructions.					

The system is user friendly.					

Section c: Customer Satisfaction

Please indicate your level of satisfaction for using this product

(Where **VD = Very Dissatisfied, D = Dissatisfied, M = Moderate, S = Satisfied, VS = Very Satisfied**).

Customer satisfaction	**VD**	**D**	**M**	**S**	**VS**
This is one of the best products I use					
I am satisfied with my decision to use this product					
I have truly enjoyed this product					

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Appendix II

Users of Mobile banking by channel

Registered Customer Grouped by Channel		
No	Channel	Cumulative
0	USSD	975,775
2	XHTML	13,573
3	Android	97,329
1	iPhone	2,815
Grand Total		**1,089,492**

Source: Bank of Abyssinia