



Addis Ababa University  
አዲስ አበባ ዩኒቨርሲቲ

SEEK WISDOM, ELEVATE YOUR INTELLECT AND SERVE HUMANITY!

**ADDIS ABABA UNIVERSITY**

**COLLEGE OF BUSINESS AND ECONOMICS**

**SCHOOL OF COMMERCE POST GRADUATE PROGRAM**

**FACTORS INFLUENCING CUSTOMERS' LOYALTY OF  
MOBILE BANKING: THE CASE OF HIBRET BANK S.C.**

A Thesis Submitted to the school of Graduate Students Of Addis Ababa  
University School Of Commerce in Partial Fulfillment of the Requirements for  
the Degree of Master of Arts in Marketing Management

**By: Tewodros Bekele Beyera**

**Advisor: Dr. Andinet worku**

**June 2022**

**Addis Ababa, Ethiopia**

ADDIS ABABA UNIVERSITY  
SCHOOL OF COMMERCE  
DEPARTMENT OF MARKETING MANAGEMENT

Factors influencing customer's loyalty in the case of mobile banking  
inHibretbankKalitySheger branch.

By: TewodrosBekele

Approved by The Board of Examiners:

Advisor Andinet worku (PhD) Signature \_\_\_\_\_ Date \_\_\_\_\_

Internal examiner signature \_\_\_\_\_ Date\_\_\_\_\_

External examiner signature \_\_\_\_\_ Date \_\_\_\_\_

## Declaration

I, TewodrosBekele, hereby declare that the thesis entitled **factors influencing customers loyalty in case of mobile banking at Hibret bank KalitySheger branch**, is the outcome of my effort and that all sources of materials used in the study have been duly acknowledged. It is offered for the partial fulfillment of the requirement for the degree in Masters of MarketingManagement (MAMM).

Signature \_\_\_\_\_

Date \_\_\_\_\_

Name: Tewodros Bekele

Email: [tedybekele474@gmail.com](mailto:tedybekele474@gmail.com)

Cell phone: +251942205623

## **Certification**

**Addis Ababa University**

**School of Graduate Studies**

This is to certify that the thesis prepared by TewodrosBekele entitled: **factors influencing customers loyalty on the case of mobile banking at Hibret bank KalityShegerbranch** and submitted in partial fulfillment of the requirements for the degree of Masters of Marketing Management (MAMM) compiles with the regulations of the university and meets the accepted standards concerning originality and quality.

---

AndinetWorku (PhD) Date

Advisor

## **Acknowledgment**

Ever before, I praise my Almighty God for being me with His charity to enable me to achieve this academic achievement.

My sincere gratitude goes to my Advisor (Dr. AndinetWorku) for his time, counsel, and incredible contribution to the success of this work. I would like to express my heartily thanks to the Management, Employees, and Customers of Hibret Bank for their valuable time to coordinate as well as cooperate the data collection process.

## ***Abstract***

*Now a days bank users can now conduct banking transactions using mobile banking due to the merging of banking services and mobile technologies. The main goal of this study is to determine whether aspects of mobile banking at Hibret Bank (HB) share company affect customer loyalty. In order to analyze the factor on customer loyalty of the bank in case of mobile banking, the research employed Convenience (perceived usefulness and perceived ease of use), perceived trust, perceived risk, perceived cost, and infrastructure as an independent variable. Data for the study was collected through a closed-ended questionnaire which was distributed to 400 respondents and analysis of findings is done based on 348 complete responses. The study employed mean and standard deviation from SPSS for analysis. Accordingly, the research has found that customers in the HB perceived that mobile banking service is useful and easy to use. According to the survey questionnaire, 88.8% of the respondents are Customers who are using mobile banking services. The multiple regression results showed that all the independent variables: (convenience, trust, risk, cost, and infrastructure) have a significant positive effect on customer loyalty in Hibret Bank Share Company at a 5% level of significance. More importantly, the regression result indicated that convenience ( $\beta 0.341$ ,  $p < 0.05$ ), infrastructure ( $\beta 0.322$ ,  $p < 0.05$ ), and trust ( $\beta 0.227$ ,  $p < 0.05$ ) dimensions were found to be the first, second, and third significant variables considered for the customer loyalty of Hibret bank. Whereas, among all the independent variables; risk ( $\beta 0.078$ ,  $p < 0.05$ ) is the least contributing to the customer loyalty at Hibret bank. Furthermore, it recommends that the bank needs to make an effort on each variables to gain the loyalty of customer on mobile banking. to further build up loyalty with customers, the bank need to continuously make changes on convenience (ease of use and usefulness) by creating awareness. In addition with the collaboration of other governmental and non- governmental organization upgrading infrastructure and solving the problem continuously. Further more concerning about trust, demonstrate their ability to provide secure value-adding services, their intention to be fair and honest concerning customers' requirements.*

***Keywords*** Customer loyalty, Convenience, Perceived Risk, Trust, Cost, Hibretbank (HB), mobile banking

# Table ofContents

List of Figures .....	x
List of Tables .....	xi
Acronyms .....	xii
CHAPTER ONE: INTRODUCTION .....	1
<b>1.1. Background of the Study</b> .....	1
<b>1.2. Problem Statement</b> .....	4
<b>1.3. Research question</b> .....	5
<b>1.4. Objective of the Study</b> .....	6
<b>1.3.1 General objective</b> .....	6
<b>1.3.2 Specific objectives</b> .....	6
<b>1.5. Research hypothesis</b> .....	6
<b>1.6. Significance of the study</b> .....	7
<b>1.7. Scope and limitation of the study</b> .....	7
<b>1.8. Organization of the Study</b> .....	8
CHAPTER TWO: LITRATURE REVIEW .....	8
<b>2.1. Theoretical Literature</b> .....	8
<b>2.1.1. Definition of Mobile Banking</b> .....	9
<b>2.1.2. Background of Mobile Banking Technology</b> .....	10
<b>2.1.3. The origin of Mobile Banking</b> .....	11
<b>2.1.4. Benefits of Mobile Banking</b> .....	13
<b>2.1.5. Challenges in Mobile Banking</b> .....	15
<b>2.1.6. Services Available on Mobile Banking</b> .....	16
<b>2.1.7. Technologies Employed to Provide Mobile Banking Services</b> .....	21

2.1.8. Factors affecting Mobile Banking.....	23
2.2. The Conceptual Framework .....	29
CHAPTER THREE: RESEARCH METHODOLOGY .....	30
3.1. Research Design .....	30
3.2. Research Approach.....	31
3.3. Types and Sources of Data .....	31
3.4. Data Collection Procedure and Instruments .....	31
3.5. Population of the Study .....	32
3.6. Sample Size and Sampling Technique.....	32
3.7. Data Analysis Techniques.....	33
3.8. Validity and Reliability Tests.....	34
3.8.1 Validity .....	34
3.8.2 Reliability .....	34
CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION .....	36
4.1. Response Rate.....	36
4.2. Demographic Characteristics of the Respondent's .....	36
4.3. subscribers and users of mobile banking service .....	37
4.4. Descriptive Statistics .....	38
4.4.1. Convenience .....	38
4.4.2. Trust .....	39
4.4.3. Risk .....	39
4.4.4. Cost.....	40
4.4.5. Infrastructure .....	40
4.5. Correlation Test .....	41
4.6. Test for Linear regression model assumption .....	43
4.7. Regression Analysis.....	45

<b>Model Summary</b> .....	46
<b>ANOVA</b> .....	46
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION .....	49
<b>5.1. Summary of Research Findings</b> .....	49
<b>5.2. Conclusions</b> .....	50
<b>5.3. Recommendations</b> .....	51
References .....	52
APPENDIX .....	57

## List of Figures

Figure 1: The conceptual framework .....	30
Figure 2: Normality-Histogram Graph.....	43
Figure 3: P-Plot graphs.....	45

## List of Tables

Table 1: Result of Reliability analysis .....	35
Table 2: Respondent's Profile.....	36
Table 3:subscribers and users of mobile banking service .....	37
Table 4: Convenience Dimension .....	38
Table 5: Trust Dimension.....	39
Table 6: Risk Dimension.....	39
Table 7: Cost Dimension.....	40
Table 8: Infrastructure Dimension .....	40
Table 9: Pearson Correlation Analysis.....	41
Table 10: Normality test of variables.....	44
Table 11: Multi collinearity Statistics .....	45
Table 12: Model Summary for Customer Loyalty variables.....	46
Table 13: ANOVA .....	46
Table 14: Regression Result.....	46
Table 15: Hypothesis testing and interpretation of results .....	48

## **Acronyms**

ATM- Automated Teller Machine;

ICT - Information Communication Technology;

MPIN - Mobile Banking, Personal Identification Number;

MB – Mobile Banking;

NBE-National Bank of Ethiopia;

PDA- Personal Digital Assistant;

PEOU- perceived ease of use;

PIN- Personal Identification Number;

PU- perceived usefulness;

SAAD- South Addis Ababa District;

SMS- Short message service;

SPSS- Statistical Package for Social Sciences;

TAM - Technology Acceptance Model;

TPB -Theory of Planned Behavior;

TRA -Theory of Reasoned Action;

USSD- Unstructured Supplementary Service Data;

UTAUT - the Unified Theory of Acceptance and Use of Technology; and

WAP- Wireless Application Protocol

# CHAPTER ONE: INTRODUCTION

## 1.1. Background of the Study

In the modern economy, a strong and well-constructed financial system is a cornerstone of economic expansion and growth. Developmental and expansionary operations are greatly aided by the availability of banking conveniences and the growing reach of banking services. Information technology, which is the only means of drastically reducing costs while reaching a huge number of people, is crucial in this regard for developing a complete financial system. Technology is not suited for financial intermediation since it is not affordable, accessible, secure, or private.

In the past ten years, mobile phone technology has emerged as the most promising and suitable conduit for financial inclusion. Mobile phone use for inclusive finance is particularly common in nations where the bulk of the populace lacks or has limited access to banking services (Sumanjeet 2010). Petrova (2002) defined mobile banking as the capability to carry out financial transactions through a mobile terminal or, more broadly, through a mobile device. This is a reasonable description because it covers information-based financial services as well as standard services like bank account statements and money transfers as well as electronic payment options (e.g., alerts on account limit or account balance, access to stock broking). M-banking is a well-known and effective tool for promoting growth, supporting innovation, and boosting competitiveness (Nath et al., 2001). By lowering travel time and distance to the closest retail bank offices, mobile banking can increase accessibility to essential financial services for customers. These days, there are countless opportunities for offering financial and social services via mobile network due to the significant development of the mobile sector worldwide (Kabir 2013). Mobile banking eliminates the time and distance restrictions associated with banking tasks like checking account balances and transferring money between accounts without having to go to a bank location (Mishra and Sahoo, 2013). Prior studies on online and mobile banking have mostly examined adoption, looking at various factors and how they affect users' acceptance of new self-service technologies (Pikkarainen, et al., 2004; Wessels and Drennan, 2010; Laukkanen,

2016). According to Pikkarainen et al. (2004), the primary factor influencing the uptake of internet banking was perceived utility. In other words, a consumer will accept a technology if they believe it improves their performance while carrying out banking tasks. Laukkanen (2016) discovered that the best predictor of technology adoption in online and mobile banking is the value barrier, which is closely related to perceived utility. Additionally, Wessels and Drennan (2010) restricted their investigation to on customer attitudes toward mobile banking and their aspirations to use it. Their findings corroborate the idea that compatibility and acceptability are most positively impacted by perceived utility. They also discovered that acceptability of mobile banking is negatively impacted by cost and perceived danger.

Regardless of technology or overall performance type, access to mobile information services may additionally be a awesome component. This possibility will succeed as banks profit from e-banking services in a variety of ways, which includes decreased interplay costs, availability of services around-the-clock, and elevated banking operational effectiveness. One of the most gorgeous technological memories of the remaining decade has been the expansion of mobile phones in the course of the growing world. Indeed, in the growing world, cellular phones are truly more common than financial institution debts (Adegbenjo et al., 2016). More human beings in growing countries have cell telephones than financial institution accounts. Examining such information will help banks in figuring out the splendid merchandising strategies required to attract new clients and keep present ones (Kaynak 1992). With increasing competitiveness in the banking enterprise and the commonality of services provided by banks (Kaynak, 1995), it has emerge as increasingly more important for banks to understand the elements that determine the foundation on which clients make a selection companies of M-banking services.

Ethiopia's economic sector now consists of two government owned industrial banks and twenty private commercial banks (NBE, 2021). The wide variety of business financial institution branches has now risen to 6000. However, this is insignificant given that the nation's populace has risen to greater than a hundred million. Over 75% of the Ethiopian population is unbanked, with nearly 40% of all financial institution branches placed in Addis Abeba, the capital city. Mobile services are promising, and but their growth is dependent on

the reliability and performance of cellular networks, the effectiveness and competency of the service, public have faith in providers, and the competence of regulation (Abdulmenan, 2017). Ethiopia has over 45 million mobile subscribers, however M-banking users are inadequate (NBE). Because of concerns about the use of cash during the Corona virus pandemic, the adoption of mobile banking services is gaining traction.

Mobile banking was approved in Ethiopia in 2015. (NBE). Ethiopia's mobile banking evolution is also not mature in terms of absolutely making use of all cellular offerings available. Currently, most financial institution customers use notification or alarm inquiries among all types of mobile banking services (NBE, 2015). Furthermore, there are more than 45 million mobile subscribers. However, M-banking customers are still in their infancy. This shows that, regardless of the reality that the giant majority of humans personal a telephone phone, they are no longer subscribed to cell banking offerings for a range of reasons, which the research is looking into. Furthermore, the tremendous use of cellular banking services that are presumed to be provided by way of industrial banks is no longer nicely guaranteed. This demonstrates that Ethiopia's economic zone is underdeveloped in evaluation to neighboring countries such as Kenya, the place mobile banking is used via 61% of the population (African Business Central, 2015). In contrast to the country's populace and the bank's tens of millions of complete clients, the privately owned Hibret financial institution has a fairly small quantity of cellular banking users. A deeper comprehension of the issues and factors affecting M-banking is integral to further improving mobile banking practices in growing nations (Zhao et al., 2008). Researchers and practitioners can build strategic implications for how to promote cellular banking in underdeveloped nations via growing a thorough grasp of the barriers and elements that have an effect on how well-developed countries can entirely undertake the technological know-how and reap its benefits. In spite of the value of the concern region in developing nations, few research have so a ways been carried out, noticeably in Ethiopia. An assessment of mobile banking practices and their difficulties (Berhanu, 2018). Additionally, a extraordinary learn about was carried out on the variables influencing Addis Abeba's adoption of cell banking (Tesfaye Matewos, 2018). They centred on the difficulties in enforcing mobile banking, which have too many causes and are tough to analyze. In order to address these adoption issues, the lookup intends to discover the factor—customer loyalty—that has an impact on the uptake of mobile banking.

Customer loyalty can be one of the barriers to the adoption of cell banking, so additional learn about is still wanted to shut the knowledge gap left with the aid of earlier research that hinders the loyalty of customers that use cellular banking at Hibretbank. In order to fill the hole in the research, this study evaluated mobile banking in the Hibretbank quality sheger branch and its affect on purchaser loyalty.

## **1.2. Problem Statement**

The blending of banking and telecommunications offerings has opened doorways for cell commerce, specially cell banking. Customers that use mobile banking services advantage from cost savings, time independence, convenience, and promptness. Banks have the threat to expand their market penetration through mobile offerings thanks to mobile banking (Lee et al., 2007).

Technology and innovative financial service delivery methods, like mobile banking, have significantly aided in extending affordable economic provider get admission to to a larger segment of the population (NBE Directive, 2012). The top seven African nations for mobile money/mobile charge use via countries are: Kenya at sixty one percent, Uganda at 42 percent, Tanzania at 39 percent, Senegal at 29 percent, Ghana at 18 percent, South Africa at 15 percent, and Nigeria at 15 percent, in accordance to an African Business Central (ABC) document on April 16, 2015. Kenya uses it 61%, Uganda makes use of it 42%, Tanzania uses it 39%, Senegal uses it 29%, Ghana makes use of it 18%, South Africa uses it 15%, and Nigeria uses it 15%. It suggests that even although our country, Ethiopia, solely lately started using the mobile banking service, the progress is slower than anticipated when in contrast to the noted nations.

The same is true for Hibretbank; extremely few people use the bank's mobile banking service. The research, which focuses on mobile banking specifically in Hibret bank, had a constraint in Ethiopia. Although some earlier researchers, such as (Serklum, 2020; AB Kejela 2021), have attempted to conduct research on factors influencing the adoption of mobile banking in various banks, their study was too general because it was made in the Ethiopian banking industry and was unable to demonstrate the root and specific causes that affect Hibret Bank customers' loyalty and prevent them from using mobile banking services

as desired. In addition, throughout the researcher's experience as a Customer Service Officer at Hibret bank-grade C branch, a significant number of customers who use mobile banking have always been noticed coming to the branches to use bank services. Hibret bank is investing in the mobile banking project for the effective provision of mobile banking services to its customers. Additionally, a sizable proportion of clients who use mobile banking have consistently been observed visiting the branches to use bank services throughout the researcher's time as a Customer Service Officer at Hibret bank's grade C branch. In order to effectively provide mobile banking services to its consumers, Hibret Bank is investing in the initiative.

Currently, 419,917 Hibret bank customers use mobile banking (annual report, 2021). To achieve the desired outcome of the project and thereby create a society without cash, which is the ultimate goal of the financial sectors in the current digital world, it is crucial for commercial banks that offer mobile banking services to understand the obstacles impeding the intention to use mobile banking services. Additionally, having a thorough grasp of these variables allowed Hibret Bank to create appropriate marketing plans, customized awareness-raising initiatives, and trial projects.

### **1.3. Research question**

1. How does convenience (perceived ease of use and perceived usefulness) affect customer loyalty of mobile banking?
2. What is the effect of perceived trust on customer loyalty to mobile banking services?
3. What is the relationship between perceived risk and customer mobile banking loyalty?
4. How does cost affect customer loyalty to mobile banking services?
5. What is the effect of infrastructural development on customer loyalty to mobile banking services?

## **1.4. Objective of the Study**

### **1.3.1 General objective**

The general objective of the study is to assess factors influencing customers' loyalty to mobile banking in Hibret bank. In addition to this, the study has the following specific objectives.

### **1.3.2 Specific objectives**

- To examine how convenience (perceived ease of use and perceived usefulness) affects customers' loyalty to mobile banking service in Hibret bank.
- To examine how perceived trust affects customer loyalty to mobile banking service in Hibret bank.
- To examine how perceived cost affects customer loyalty of mobile banking service in Hibret bank.
- To examine how the perceived risk affects customers' loyalty of mobile banking service in Hibret bank.
- To examine how infrastructure development affects customers' loyalty of mobile banking service in Hibret bank.

## **1.5. Research hypothesis**

The study hypotheses are as follows:

**H<sub>1</sub>:** There is a positive and significant effect of convenience on customer loyalty of mobile banking in Hibret Bank.

**H<sub>2</sub>:** There is a positive and significant effect of trust on customer loyalty of mobile banking service in Hibret Bank.

**H<sub>3</sub>:** There is a positive and significant effect of perceived risk on customer loyalty of mobile banking service Hibret Bank.

**H4:** There is a positive and significant effect of perceived cost on customer loyalty of mobile banking service Hibret Bank.

**H5:** There is a positive and significant effect of infrastructure on customer loyalty of mobile banking service in Hibret Bank.

## **1.6. Significance of the study**

Any business organization's main goal is to proceed working economically through the introduction and distribution of items and services. In the banking business today, automated technology like e-payments would be extremely necessary for each gratifying their desires and surviving. Therefore, it is necessary for industrial banks to look into the difficulties associated with e-payment practices like cellular banking. In addition to these, the learn about will help economists, planners, and policymakers apprehend the difficulties that would negatively effect the implementation of cell banking initiatives. It also identifies practicable hassle areas for future lookup for an interested researcher, and the study's findings gave bank managers beneficial facts about how to overcome limitations in the project's use of mobile banking, Lastly, it used to be hoped that the find out about will assist Hibret financial institution personnel higher draw close the difficulties related with cellular banking.

## **1.7. Scope**

Although there are five Districts in Hibret bank that are providing mobile banking services, the study was focused on South Addis Ababa District (SAAD) kalitsheger branch. Therefore, the study focused on assessing the mobile banking project practices and their challenges in the Hibret bank-grade C branch only. This is mainly because grade C branches relatively have a newly registered large number of mobile banking customers, which are stayed for a long period..

## **1.8. Limitation of the study**

The time and financial constraints forced the study to be limited to these areas as traveling across districts requires sufficient time and cost. Since, SAAD has similar working

procedures, rules, and regulations with other districts in the bank, focusing on grade C branches of the district would have no compromise on the study result. As a result, the study result would represent not only SAAD but also other districts of the bank

## **1.9. Organization of the Study**

The paper consists of five chapters. The first chapter deals with the introduction part which would consist of the background of the study, statements of the problem, objectives of the study, research question, significance of the study, and scope of the study. While the second chapter contains a review of the related literature which includes both theoretical and empirical literature. Accordingly, the research design and methodology are presented in the third chapter. In chapter four, the results and findings of the study are discussed. Finally, the last chapter deal with the conclusions and recommendations which would be forwarded based on the result obtained.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1. Theoretical Literature**

#### **2.1.1 Customer loyalty**

According to Bloemer et al. (1998), bank loyalty is the deliberate (i.e., non-random and assessing) choice to stick with one bank out of a group of banks over time. Customer loyalty is defined in the context of this study as having positive sentiments about the bank of their choice, which are represented in their recommendations, i.e., how likely a customer is to recommend their bank to a friend or coworker. Customer loyalty and its relationship to profitability and growth have been the subject of numerous studies (e.g., Hallowell, 1996; Reichheld, 1993; Reichheld and Teal, 1996; Matzler, 2006; Edvardsson et al., 2000), of which Hallowell and Matzler examine loyalty in a banking context. Despite the appearance of a solid relationship, loyalty is not always. Despite the relationship appearing to be solid, loyalty does not always result in improved firm success and may even be detrimental to product enterprises (Edvardsson et al., 2000). The impact of loyalty on company performance was only favorable for service organizations (ibid). The results suggest that

although product companies may largely rely on price to keep clients, service companies must earn their loyalty (ibid). Many banks have concentrated on developing innovative products and services to increase customer loyalty and retention (Meidan, 1996). However, because these innovations are frequently imitated It has been proposed that banks should place greater emphasis on factors that are harder to measure and less concrete than associated fees, like service quality and customer pleasure (Yavas and Shemwell, 1996; Worcester, 1997). Although a consumer may not always be loyal out of choice, a lack of alternatives and difficult switching costs may persuade a dissatisfied customer to stick with a business (Andreassen and Lindestad, 1998). According to results from an American study (Tesfom and Birch, 2011), switching barriers between banks are varied for people of different ages, with older people experiencing higher switching obstacles than younger ones. In the end, this makes older people less likely to switch banks, even if they are dissatisfied with their service. Practically speaking, the authors contend that banks must provide younger consumers with more substantial incentives if they want to keep them (Tesfom and Birch, 2011).

### **2.1.2 Definition of Mobile Banking**

Customers can access bank accounts through mobile devices to conduct and execute banking-related operations like balancing checks, checking account statuses, transferring money, and selling stocks. Mobile banking is an application of mobile commerce (Kim et al., 2009). According to (Luo et al., 2010), mobile banking is a cutting-edge way for customers to obtain financial services through a channel that involves using a mobile phone.

Opening and managing mobile/regular accounts, receiving deposits, and performing fund transfers or cash-in and cash-out services using mobile devices are all examples of conducting banking activities that fall under the umbrella of mobile banking (NBE Directive, FIS-01-2012).

In a broader sense, mobile banking enables the execution of financial services during which the customer employs mobile communication techniques in conjunction with mobile devices as part of an electronic operation (Pousttchi and Schurig 2004 as cited in Singh 2011). Mobile phones can be used for mobile banking, which offers a variety of features such mini

statements, account history checks, SMS notifications, access to card statements, balance checks, and mobile recharging (Vinayagamoorthy and Sankar 2012). Banks are always changing their technologies in an effort to reach every consumer and grow their customer base. There are many benefits to using mobile banking, including easy access for those living in rural or remote places whenever needed. Information technology and business applications have been merged in mobile banking, a growing mobile technology. Since the advent of mobile banking, customers have had access to specialized services around-the-clock without needing to visit a typical bank branch to conduct personal business.

### **2.1.1. Background of Mobile Banking Technology**

Financial Providers now have the chance to introduce new financial innovations thanks to the development of mobile technologies. Mobile banking is one of the new financial technologies that financial service providers have implemented in an effort to boost customer satisfaction and efficiency. Customers now have the option to receive banking services without physically visiting bank branches because to more recent improvements in information and communication technology (ICT). The costs of financial institutions have decreased as a result of this technical advancement, which has increased in recent years (Mari 2003; Saleem and Rashid 2011).

Customers will have access to rapid and interactive banking services whenever and wherever they want, which will result in significant value for them (Mallat et al., 2004). Additionally, mobile banking services can speed up data processing and enhance efficiency. Additionally, the use of mobile banking significantly impacts cost savings and the facilitation of change in retail banking (Laukkanen and Lauronen 2005). According to Cruz et al. (2010) and Dasgupta et al. (2011), mobile banking has a huge potential to offer trustworthy services to persons living in distant places with little access to the internet. Mobile banking "assists banks in accelerating, shortening processing times, improving the flexibility of business transactions, and reducing costs involved with having people physically handle customers," according to the Financial Times (Ayo et al., 2010).

In both developing and developed nations, the use of mobile phones has encouraged the growth of markets, social enterprise, and public services (Spence and Smith 2010).

According to Lin (2011), financial services now place a greater emphasis on mobile banking due to the quick development of mobile technology. A method of reducing the cost of sending money from one location to another is through the usage of mobile banking (Donner and Tellez 2008; Anyasi and Otubu 2009). The provision of financial services via a mobile phone in order to reach the unbanked population is known as transformational mobile banking (Porteous, 2006).

Second, additive mobile banking, which only uses the mobile device as an additional channel to offer financial services to individuals who already have accounts. Businesses and merchants now have a plethora of new alternatives to sell their products and services to customers. Banking is one of the things that customers today who are "on-the-go" value as being easily accessible. The days of clients waiting in lines to do their banking transactions in banks are long gone. They may now move money to and from their accounts with the push of a button thanks to electronic banking. Despite the fact that clients have easy access to mobile technology, relatively few people have adopted mobile banking (Deloitte 2010).

## **2.1.2. The origin of Mobile Banking**

### **2.1.2.1. The origin of Mobile Banking Worldwide**

The first basic smart phones with WAP capability, which allowed for the usage of the mobile web, were introduced in 2011, according to Ishengoma (2011), while the initial mobile banking services were provided via SMS. European banks began providing their consumers with mobile banking on this platform in 1999. Prior to 2010, SMS and the Mobile Web were frequently used for mobile banking. The M-Banking system works in such a way that it can verify if the customer has enough money in his or her wallet and approve a deposit or withdrawal transaction at the agent with the help of a precise sequence of SMS messages. Additionally, when a customer deposits money, the system credits their bank account or mobile wallet and the retailer receives cash. The customer can also withdraw cash from the merchant in the same way: after exchanging an SMS to confirm authorization, the merchant gives the customer cash and charges the customer's account.

### **2.1.2.2.The Origin of Mobile Banking in Africa**

According to Gray (2005), the African continent was able to add up to 15 million new mobile phone users to its base in 2004 alone, which is equal to the continent's entire number of telephone subscribers in 1996. This can be viewed as growth. According to Boadiet al. (2007) and UNCTAD (2007), both industrialized and developing nations have seen a surge in the number of persons who subscribe to mobile phone plans. Mobile phones are the most widely used kind of communication technology in Africa, according to ITU (2007).This indicates that mobile banking, one of the most popular ways for banked and unbanked people to trade money, is expanding in Africa. It went on to say that the fastest-growing mobile markets are in South Africa, Nigeria, and Egypt. Nigeria, with over 70 million mobile customers, is the largest subscriber in Africa, according to ICT Works (2010). Muganda et al. (2008) claim that Nigeria is the continent's leader in the use of mobile commerce.

### **2.1.2.3.Mobile Banking in Ethiopian Banking Industry**

In 2001, the major state-owned Commercial Bank of Ethiopia (CBE) introduced ATMs to provide service to the local consumers, ushering in the era of electronic banking into the Ethiopian market (Gardachew 2010). When Dashen Bank inked a contract with iVery, a South African provider of electronic payment services, to launch mobile commerce on April 21, 2009, the scope of electronic banking services was subsequently expanded to include mobile banking.According to the contract, Dashen Bank has been granted a license by iVery Payment Technologies to use its Gateway and MI Card E-payment processing system. Users of Dashen's Mod Birr can send 500 Birr to another Mod Birr user at any time. Dashen Bank would become the first private bank in Ethiopia to capture online and mobile merchant transactions as a result (Amanyehun 2011).

However, after years of mistakes and client wait-and-see behavior, mobile banking finally became widely used. Since that time, mobile banking has gradually increased in many different regions of Ethiopia. Mobile banking services are still not widely used or adopted, despite the extremely high mobile penetration rate. Mobile banking is poised to attract millions of new users from the thronging global population thanks to the introduction of new

mobile technologies, such as Blackberry, iPhone, Androids, etc (Agwu 2012). Many clients are looking for time-saving options since they are sick of the outdated banking methods. According to a survey of the literature, mobile banking has been extensively studied in both rich and developing economies, although there have only been a few studies on the developing Ethiopian economy. Therefore, it is thought that this research will close this gap by introducing a new source of research that aids in planning and decision-making.

### **2.1.3. Benefits of Mobile Banking**

One of the emerging mobile technologies employed in the business world is mobile banking. Applications for business and information technology have been merged. Since the advent of mobile banking, customers have had access to specialized services around-the-clock without needing to visit a typical bank branch to conduct personal business. SMS is utilized to facilitate mobile banking as the primary media, which is short messaging service. Time savings, flexibility of location, and convenience are the main drivers of mobile and SMS usage (Venkatesh et al, 2003). With mobile banking, banks can spend less on things like courier services, communications, paperwork, and branch setup costs as well as the resources needed to conduct transactions (Sunil and Durga 2013). Additionally, banks that offer mobile banking services may have a competitive edge over banks that do not. According to Goswami and Raghavendran (2009), banks will be able to use mobile banking services to expand cross-selling opportunities, make considerable cost savings, and improve service quality in addition to increasing fee-based income. The key advantages that mobile banking offers to customers are convenience, universal access, and mobility (Laforet and Li 2005). Customers can ask numerous questions about their accounts without having to stand in line at the bank desk. Customers can travel less and spend less money getting to the bank for their financial transactions (Sunil and Durga 2013). Since alerts are sent from the bank, customers can pay their utility bills on time and avoid paying fines.

An analysis of mobile banking and economic development should concentrate on how it can change or, at the very least, improve economic growth. The expectation is that cell phone banking may make a significant contribution to economic growth through its capacity to generate income, allowing more people to access necessary financial services in a timely

and cost-effective manner. Overall, the growth of mobile banking is anticipated to have significant macroeconomic benefits as a result of a five to twenty percent decrease in financial exclusion across various emerging nations by 2020. (Techcentral, 2012).

#### **2.1.3.1. Benefits of Mobile Banking to Banks**

Banks can use the time saved by clients switching to mobile banking to expand their businesses through more effective marketing and sales efforts. With mobile banking, banks can spend less on things like courier services, communications, paperwork, and branch setup costs as well as the resources needed to conduct transactions (Sunil and Durga 2013). Additionally, banks that offer mobile banking services may have a competitive edge over banks that do not. Additionally, it has been discovered that using mobile banking reduces the need for clients to visit bank locations for fund transfers or information. This fosters a positive relationship between banks and customers, which contributes to customers' increased loyalty to the banks. According to Goswami and Raghavendran (2009), banks will be able to use mobile banking services to expand cross-selling opportunities, make considerable cost savings, and improve service quality in addition to increasing fee-based income.

#### **2.1.3.2. Benefits of Mobile Banking for Customers**

Customers can ask numerous questions about their accounts without having to stand in line at the bank desk. Customers can travel less and spend less money getting to the bank for their financial transactions (Sunil and Durga 2013). Since alerts are sent from the bank, customers can pay their utility bills on time and avoid paying fines. Ubiquitous access, convenience and mobility are the main benefits that mobile banking confers to customer (Laforet and Li 2005). Delport (2010) notes that clients no longer need to spend precious time and resources traveling to bank locations thanks to mobile banking. However, despite the ubiquitous use of mobile phones and the many benefits that mobile banking provides, it is still not generally used (Riquelme and Rios 2010).

### **2.1.3.3. Customer loyalty**

Customer loyalty, according to Oracle, is an ongoing emotional bond between you and your customers that shows itself in their propensity to interact with you and make repeat purchases as opposed to those from your rivals. When a customer has a good experience with you, loyalty develops naturally and helps to build trust.

Loyalty is the outcome of numerous pleasant experiences that gradually foster a sense of trust through time, not of any one good or service. Additionally, it does not imply that every interaction must be flawless. A few drawbacks are OK, but too many will weaken the bond between a company and its customers. Customers won't actually lose loyalty as a result of a bad experience; it depends on how successfully the company/banks handle the issues.

Consumer loyalty is also significantly impacted by a mobile banking application's ability to quickly and adaptably address customer needs. It was shown that customers' decisions to choose and stick with the specific application were significantly influenced by the perceived simplicity of using the product in mobile banking. As a result, a key factor in determining client loyalty is how simple it is to use mobile banking applications. The stability of mobile banking services had a significant impact on customer loyalty in a number of ways, and the level of customer trust also had an impact. (Juma, 2019).

### **2.1.4. Challenges in Mobile Banking**

Banks must handle the operational, legal, infrastructural, social, structural, and economic difficulties in a way that produces a pleasant and consistent customer experience that will build and sustain trust in the system while developing, rewarding, and managing a network of retail agents.

Managing the structure refers to the method by which financial institutions create relationships with their agents and is one of the issues they face in providing mobile and agent banking. The connection may be direct, indirect, or mixed. A financial institution that has a direct contact with banking agents employs its own team to find and assess potential agents before hiring and managing them. Contracting with an outside management firm to oversee the entire procedure is an indirect relationship. There is also a hybrid model, in

which a financial institution contracts with a management business to administer the agent networks on a day-to-day basis and assumes responsibility for certain aspects of the process, such as contracting and selection (Mas et al., 2008).

Building a successful agent network is a problem that focuses on finding people who are well-trained, dependable, strategically positioned, and suitably motivated to follow rules, keep enough float on hand, and serve clients. Agents can produce transaction volume and balance liquidity by offering a variety of services (such as account opening, deposits, withdrawals, bill payments, etc.). To fulfill customer requests for cash-in/cash-out, an agent must keep sufficient cash and e-money float balances on hand. The agency can run out of e-float and be unable to accept further deposits if too much cash is taken in. The agent will accumulate e-float but run out of currency if there are too many withdrawals. Customers will become discouraged in either scenario if the agent is unable to meet their needs at the appropriate time. Additionally, a safe method of delivering cash to and from an agent is required (Flaming et al., 2011).

One of the issues affecting the mobile banking industry is the availability and caliber of infrastructure. The availability of telecommunications services could be hampered by interruptions brought on by technical or non-technical problems, as well as by the absence of any parallel systems or alternatives. Similar to this, network congestion could represent a bottleneck in the delivery of quality service to mobile banking users. One of the difficulties in implementing and maintaining the availability of mobile banking service is the patchy availability of power in the nation, especially in rural areas. As a result, service interruptions from utilities or hardware, software, or both might result in information loss. In the event of catastrophic occurrences, such as power outages, fires, etc., and natural disasters, financial institutions that lack business continuity and disaster recovery planning run the danger of having their services unavailable (flooding, earthquake etc.).

### **2.1.5. Services Available on Mobile Banking**

The services included in mobile banking, as previously mentioned, are numerous. These services can be grouped into the following categories, per (Tiwari & Stephan 2007):

### **2.1.5.1.Mobile Accounting**

Tiwari& Stephan (2007) defined mobile accounting as transaction-based banking services that revolve around a standard bank account and are conducted and/or availed by mobile devices.

However, not all mobile accounting services are based on transactions. To distinguish between services that are necessary to operate an account and services that are necessary to administer an account, mobile accounting services can be separated into two groups (Renju 2014). Additional services that educate a customer about their transactions and other account-related activity are also necessary. Because of this, Mobile Accounting is frequently provided in conjunction with services in the mobile financial information sector.

### **2.1.5.2.Account Operation**

In this study, an activity that involves financial transactions is referred to as a "account operation." These transactions could involve both internal and external accounts.

According to (Tiwari& Stephan 2007), Mobile services that are used to operate an account are:

**Money remittances:** - For one-time transactions like paying bills or transferring money, mobile devices can be used to direct the bank to send money. The ability to cancel an ordered remittance may also be part of this service.

**Issue standing orders:** - Standing orders for regularly repeating payments, like monthly rent or phone bills or standing payments, may be given to the house bank.

**Transfer funds to and from sub-accounts:** - When necessary, money can be moved from one sub-account to another, for example, from a savings account to a checking or other sort of account or vice versa (Sunil and Durga 2013).

**Subscribing insurance policies:** - Mobile devices can be used to purchase standardized, affordable insurance policies like travel insurance. This service may be especially appealing in time-sensitive circumstances. For instance, if a bank client needs to embark on an urgent,

unforeseen trip, he may still be able to sign up for a travel insurance coverage offered by his home bank.

### **2.1.5.3.Account Administration**

Account administration describes tactical circumstances, such as when a bank customer may still be able to enroll in a travel insurance policy provided by his home bank if he must leave on an urgent, unanticipated trip. This could entail tasks like managing access and requesting checkbooks. According to Tiwari & Stephan (2007) and Sunil & Durga (2013), mobile accounting services are utilized to manage the account.

**Access administration:** - Mobile devices can be used to manage account access, such as changing the unique PIN or requesting new transaction numbers.

**Change operative accounts:** - A consumer can use a different account to conduct transactions using this service and alter his default operating account. Customers with multiple sub accounts will find this option appealing. Without first moving the money to the default account, sub-account funds can now be used strategically..

**Blocking lost cards:** - Regardless of the user's present location, misplaced credit and debit cards can be quickly blocked via mobile non-voice telecommunication systems like Wireless Application Protocol and Short Message Service (WAP, SMS).

**Cheque book request:** - The consumer can ask for a check book to be shipped to his or her address listed on the bank's records rather than going to the bank in person. This helps them save some crucial time (Sunil and Durga 2013).

**Bill Payment:** - The payment is made on demand via mobile phone banking for those businesses that register with the bank for this service.

**Change of Primary Account:** For transactional purposes, the customer may switch the primary account to a different new account number (Sunil and Durga 2013).

#### **2.1.5.4.Mobile Financial Information**

Informational banking and financial services that are not transaction-based are referred to as mobile financial information (Tiwari& Stephan 2007). Account information and Market information are two areas into which this sub-application might be separated (Cruz et al. 2010).

#### **2.1.5.5.Account Information**

Even though it may not always entail a financial transaction, the term "Account Information" refers to details that are unique to a customer and his bank. These mobile services fall under this category:

**Balance inquiries:** - To examine the current financial situation of one's own bank or securities accounts, one can use a mobile device (Sunil and Durga 2013).

**List of latest transactions:** - A list of the most recent transactions made on an account can be requested using mobile devices. The standard, pre-determined number of most recent transactions used by this service are reported as and when needed. The majority of banks offer a list of transactions.

**Statement request:** - It generates a list of all transactions during a specified time period, such as a week or a month, in contrast to a request for a list of the most recent transactions. Statements can be requested manually or online as needed. Account statements can be requested using Mobile Banking and/or sent on mobile devices (Cruz et al. 2010).

**Transaction and balances:** - Every time a transaction (both a credit and a debit) on the account exceeds a specified threshold, the bank may be told to notify the consumer automatically through SMS. Additionally, the account balance state could prompt a similar threshold notice. Anytime the balance falls below a specific, specified level, the consumer may be notified by SMS. This service could be beneficial in assisting the client to stay out of awkward situations caused by his inability to keep his promises (Cruz et al. 2010)..

**Threshold alerts for stock prices:** - When the values of some specific stocks drop or increase to a specified threshold amount, the bank may be given the authority to send an

alarm through SMS to mobile devices and request further instructions (Suoranta and Matila 2004).

**Returned cheques or cheque status:** - If one of the customer's deposited checks has not been fulfilled and corrective action is necessary, the client may be notified right away.

**Credit card information:** - The consumer has the option to check the status of his credit cards at any time and from any location, as well as the available credit at that particular moment.

**Branch and ATM locations:** - The location of the closest bank-affiliated branch or ATM may be aided by mobile devices. Positioning the mobile device can reveal the customer's present location. While traveling, this service could be quite helpful (Crosman 2011).

**Helpline and emergency contact:** - Content that is needed in an emergency, such blocking a stolen credit card or checkbook, may be made available to mobile devices. The information may be delivered on a WAP page, which is similar to a web page, or it may be incorporated in the telephone menu, for instance in collaboration with a network provider.

**Information on the completion statutes of an order:** - If the consumer has a mobile device, the bank may employ "push" services to let him know whether or not his orders may be fulfilled. This guarantees that the customer can receive urgent information while traveling.

**Product information and offers:** - A consumer can receive updates from the bank regarding new goods and promotions while they are on the go. The information that a customer wants to access can be "pulled." On the other hand, the bank has the ability to "push" information or offers to customers who have indicated an interest in them and a desire to do so.

#### **2.1.5.6. Market Information**

Information with a macro scope is referred to as market information as opposed to account information. The customer account is not immediately impacted by this information. It is produced either externally, such as currency rates or interest rates set by central banks, or

internally, such as bank-specific interest rates, by the individual bank (Tiwari & Stephan 2007). The specific bank customer has no direct influence on this procedure. If a consumer so desires, the information may be later categorized to suit his specific needs and preferences and then supplied to a mobile device or PDA of his choice. This category of information typically includes news and reports on the stock market, interest rates, commodity prices (such as those for gold and oil), foreign exchange rates, and stock market headlines.

### **2.1.6. Technologies Employed to Provide Mobile Banking Services**

Customers can use mobile banking technologies for a variety of financial services, including scheduling bill payments on their mobile devices. Browser-based applications, messaging-based applications, and client-based applications are among the mobile technologies utilized in mobile banking (Kim et al. 2009; Tiwari&Buse 2007).

#### **2.1.6.1.SMS (Short Message Service)**

Text messages are used on messaging-based solutions to carry out all client and bank communications. For instance, a customer can perform transactions with a bank via text messaging by utilizing a registered cellphone number to send the bank a prepared order. The Unstructured Supplementary Service Data (USSD), which is compatible with the majority of mobile phones, is an illustration of a messaging-based application. WIZZIT in South Africa (WIZZIT 2005), MPESA in Tanzania (Camner&Sjöblom 2009), M-PESA in South Africa (Nedbank 2010b), and FNB mobile banking are examples of existing mobile banking applications based on USSD (FNB 2010).

The phrase "SMS Banking" describes the delivery of banking and financial services using SMS, or short message service. Financial firms can connect with their clients through SMS. SMS can be used on almost all mobile devices, making it ideal for sending messages from banks for various banking processes. The customer sends an SMS containing the service request to a designated number, which is used for this purpose, in order to initiate an inquiry.

The client sends the bank a personalized SMS (a command-based instructional message with an Arabic number) including the predetermined commands for each service made available.

If the request is determined to be approved, the bank's server gets the SMS, interprets the commands, and then executes the commands and instructions. A unique Mobile Banking, Personal Identification Number is used to carry out the authentication (MPIN). Additionally, only calls from a mobile phone that has been designated as the operator of that specific bank account are accepted when making requests.

One can obtain all financial and nonfinancial information through the integration built with the mobile banking server. The information will be obtained when the entire process is finished and stored in the Oracle database for future use.

### **Dialing to \*811# Inserting the command and the PIN Navigation of**

### **The financial or non-financial information Logging off**

#### **2.1.6.2. Browser-Based**

The web application uses the Wireless Access Protocol (WAP), which is a method of connecting to the internet (Kim et al. 2009). A suitable, WAP-capable mobile phone is needed for this. The mobile phone is used to access online banking platforms. To use this service, a browser-based customer must have internet access. The interface is created by the server and sent to the mobile device, allowing the content to be shown in the browser. This method, which can be quite quick depending on the server the customer is connected to, has the drawback of requiring the subscriber (customer) to remain online throughout the entire transaction process, which could result in greater costs for the customer.

#### **2.1.6.3. Client-Based (Downloadable Applications)**

In order to use the mobile device while offline and access some simple transactions before coming online, this strategy necessitates the installation of software on the consumers' devices. Before connecting to the internet, typing down the information could save money. This client-based program is very helpful since it enables users to prepare transactions offline, such as entering account information, and then transmits the data by sending out the data. Offline banking lowers the time and expense of an online connection (Pendharkar2004). The consumers should download these mobile banking apps to their

phones. Transactions can be completely encrypted in both the source and destination using the features of these programs. Mobile banking application designers can optimize the applicable interface for the financial transactions because this program has been created for specific reasons.

One benefit of these applications for financial institutions is their independence of application (Ming 2007). Customers can utilize the Mobile Banking app once they have downloaded the software to their phones. To put it another way, the application must be costly and suitable with the diverse requirements and features for a big number of mobile phones.

One of the environments, such as Microsoft Windows Mobile, should be supported by the phone. Another issue with mobile banking applications is that users must download, install, and update the software on their devices. For some users, this may be a brand-new issue.

### **2.1.7. Factors affecting Mobile Banking**

The adoption of new technological innovations has been studied by numerous scholars using a variety of theoretical frameworks. The Technology Acceptance Model (TAM) (Davis, 1989), which proposes the two sets of beliefs, namely, perceived ease of use (PEOU) and perceived usefulness (PU), to determine an individual's acceptance of a technology, is one of the frameworks that have been established based on previous investigations. According to the Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB), attitude, subjective norms, and perceived behavioral control are the main elements influencing how people utilize technology. In contrast, Rogers' (1995) Unified Theory of Acceptance and Use of Technology (UTAUT) described how innovations spread through the social system.

#### **2.1.7.1. Technology Acceptance model (TAM)**

Davis (1986) created TAM to describe computer usage behavior. An information systems theory called the technology acceptance model (TAM) analyzes how people come to accept and employ a technology. The model suggests that perceived usefulness (PU) and perceived ease of use (PEOU) are the two key factors in determining whether an information system is adopted.

**Perceived usefulness:** - refers to the extent to which a person's use of a specific system would increase or enhance his or her ability to perform at work (Davis 1986).

**Perceived ease of use:** - refers to the extent to which a person would be free of effort if they used a certain system (Davis 1986). According to Masrom and Hussein (2008), a person's decision to utilize or not use an information system depends heavily on how useful and user-friendly they believe it to be.

According to Davis (1989), additional factors that affect the utility, usability, and user acceptance of information systems (System consisting of the network of all communication channels utilized within an organization) must be addressed in future research on their use. Therefore, it's possible that these two determinants don't entirely describe what determines whether a technology application like mobile banking will be accepted. With the addition of new variables such perceived playfulness (Moon & Kim, 2001), perceived enjoyment (Koufaris, 2002), and perceived credibility, the original TAM has been expanded in earlier research (Wang et al., 2003). In order to comprehend the uptake of mobile banking in Taiwan, Luarn and Lin (2005) added four new elements to the TAM model (TAM2) that was already in place. These include perceived self-efficacy, perceived credibility, perceived expense, and perceived risk. **Perceived Credibility:** In the context of mobile banking, perceived credibility is referred to as one's assessment of the security and privacy concerns with mobile banking (Ba & Pavlou, 2002). Information and reputation as determined by others are prerequisites for perceived credibility. The preparedness to use mobile banking is correlated with perceived credibility, according to Luran and Lin (2005).

**Perceived Self-efficacy:** Evaluations of one's ability to carry out the necessary actions to handle potential scenarios are central to the concept of perceived self-efficacy (Bandura, 1982). A determination of one's proficiency with a mobile banking service is known as the self-efficacy of mobile banking (Luarn & Lin, 2005) The knowledge, skills, and abilities required to use the new information technology might be included in the self-efficacy category.

**Perceived Cost:** Perceived cost is the degree to which a person believes using mobile banking will cost money (Luran & Lin 2005). Typically, these expenses would include the

price of the mobile device, network fees, transaction fees for banks, and costs associated with sending data across the network infrastructure.

**Perceived risk:** Perceived risk is defined as apprehension about the outcome (positive or negative) of using a good or service. It is described as the combination of uncertainty plus the gravity of the situation involved and the likelihood of suffering losses as a result of the transaction acting as a deterrent to making a buy (Bauer, 1960).

## **Uses of TAM 2 MODELS**

Knowing how people use and accept information and communication technology One of the most developed areas of information systems study is ICT. Numerous theories are employed in information technology and information system research to comprehend how people accept new technologies. The Innovation Diffusion Theory, Theory of Reasoned Action, Theory of Planned Behavior, Technology Acceptance Model, and most recently, the Unified Theory of Acceptance and Use of Technology, are just a few of the models that have been produced. Each of these models has aimed to pinpoint the elements that affect consumers' decision to adopt information technology or their actual use of it. A model to determine if a new technology will be adopted is provided by the TMA and TAM2 models (Venkateshet al., 2003).

### **2.1.7.2. The Theory of reasoned action (TRA)**

Fishbein and Ajzen created the first structure for this concept (1975). According to TRA, one's attitude toward behavior and subjective norms influence behavioral intention, which in turn influences actual conduct (Masrom and Hussein, 2008).

According to Fishbein and Ajzen (1975), attitude toward behavior refers to how a person feels about engaging in a behavior. The subjective norm, on the other hand, was defined as a person's opinion of whether the behavior should be carried out. This would be motivated by a person's desire to abide by the judgments of those who are significant to them (Fishbein&Ajzen 1975).It was considered that behavioral intentions represented people's level of willingness to try and amount of effort they intended to put out in order to carry out the behavior. Generally speaking, the more strongly an action is intended to be performed,

the more likely its performance should be (Sheppard et al. 1988). Ajzen (1991) expanded the basic TRA theory and established the notion of planned conduct (TPB).

### **2.1.7.3.Theory of planned behavior (TPB)**

The Theory of Reasoned Action serves as the foundation for the Theory of Planned Behavior (TRA). To the TRA, TPB introduced a perceived behavioral control component. According to Ajzen (1991), only behaviors that are under volitional control can show behavioral intention in them (e.g., if the person can decide at will to perform or not to perform the behavior). Non-motivational factors, such as the availability of resources, would frequently impact behavior (Ajzen 1991).

The third factor added to TPB is perceived behavioral control (Ajzen 1985). It indicates that behavioral intention, which is influenced by attitude, subjective norms, perceived behavioral control, or any combination of the aforementioned components, affects a person's actual behavior. While perceived behavioral control relates to the individual's perception of the ease with which the conduct can be carried out, subjective norm refers to the perceived social pressure to engage in or refrain from the behavior. The degree to which a person views the conduct in the research favorably or unfavorably is described by their attitude (Ajzen 1985).

### **2.1.7.4.Unified Theory of Acceptance and Use of Technology (UTAUT)**

Eight models used in earlier studies to understand IS usage behavior were combined to create the Unified Theory of Acceptance and Use of Technology (UTAUT). (Venkateshet al. 2003) first studied the user acceptance literature before developing the idea. The motivational model, theory of planned behavior, and the previously stated theories, TRA and TAM, were all covered in this review (TPB). 24 The results of this analysis showed that seven constructs seemed to be important direct predictors of intention or usage (performance expectancy, effort expectancy, and social influence, facilitating conditions, attitude toward using technology, self-efficacy, and anxiety).The first four of these, according to Venkateshet al., (2003), played a substantial influence as direct predictors of user acceptance and usage behavior. After that, various components from the eight models were combined to

create the unified model UTAUT. The UTAUT model performed better than the eight separate models when using the original data from the aforementioned hypotheses. The theory was later validated empirically using information from two additional organizations (Venkatesh, et al., 2003).

## **2.2 Emperical review**

Yani and Mardatillah (2016) investigated the effect of convenience and service quality on customer loyalty of mobile banking service in Bank Perkreditan Rakyat, Indonesia. This research was conducted by using quantitative descriptive method and it took 100 samples of the population. The results indicate to convenience influence customer loyalty of mobile banking service of the Bank.

Thulkifly (2015) aimed to know the impact of security and risk on customer loyalty of mobile banking service in two selected branches of Batticaloa District. This study considered 100 banking customers from the selected two branches of Bank of Ceylon in Batticaloa District. The findings of the study indicated mobile banking service have higher strength of associations with customer loyalty. The tests of hypotheses have proved that risk has relationship with customer loyalty mobile banking service. The study concludes that security and risk have higher impact on customer loyalty mobile banking service.

Lusala (2017) analyzed the effect of trust on customer loyalty of mobile banking service of commercial banks customers in Kenya. Correlation research design was employed through cross sectional survey. The target population was customers of commercial bank customers in Nairobi. Primary data was collected through use of questionnaires. The respondents were asked to express their experiences, expectations and levels of satisfaction measured on a five-point Likert scale. The results revealed that trust significantly contributed to customer loyalty of mobile banking implying mobile banking initiatives increases levels of customer loyalty.

Mohammad et al. (2015) carried out a study to analyze customer loyalty using infrastructure element on retail bank customers in North east Nigeria and found out that technology and infrastructure was significantly related to customer loyalty.

Kaura, v., durga Prasad, cs. and sharma, s. (2015) analyzed the effect of service convenience, cost and service quality on customer loyalty. The result revealed that service quality, cost and service convenience dimensions have positive impact on customer loyalty.

### **2.3 Research gap**

With the various attractive benefits of mobile banking, banks hope that the performance of this service can improve and experience rapid development. According to Eryiğit et al. (2021); Goutam et al. (2021) Although the world of banking business has experienced rapid development, this development is also followed by various kinds of complaints and various problems with the quality of service, especially transactions through mobile banking, this arises after customers use and activate mobile banking services which have an impact on dissatisfaction customer, which is directly related to their loyalty. Tight competition through the emergence of similar services offered by other banks with better services makes customers compare each of these mobile banking services, which can definitely make customers switch to mobile banking services at banks with better information technology system performance. As a result the 5 IVs perceived to be factors are convenience, trust, risk, cost and infrastructure.

Convenience (Perceived Ease of Use and Perceived Usefulness) have been proved to be antecedent factors that influence customer loyalty of mobile banking. Particularly, Perceived Usefulness has been identified to have positive impact on the users Intention to Use in a long run (Chang et al., 2012). Furthermore, a positive relationship between Perceived Ease of Use and Perceived Usefulness has been identified (Nagy, 2018; Song et al., 2017).

Specifically, perceived ease of use positively impacts perceived usefulness and perceived usefulness significantly affect users' loyalty to use mobile banking. These findings align with the previous studies (Chang et al., 2012; Nagy, 2018; Song et al., 2017), indicating that when

users find the mobile banking service is easy to use, they feel it is more useful. At the same time, when users believe the usage of mobile banking is conducive to their service need, they are more willing to use it in practice.

Mobile banking users need to trust the service provider first as the initial trust is obvious which will be the first step to use the service or not. Then the user will think about how risky it is using the service. Further more, the user needs to know if the technology he/she is using is trustworthy or not. Finally the users began to expand their level of usage and their expectation and need rises. As a result the more they use the more they are loyal.

In general the research tried to explore different researches as source but as a gap and related to the research aim, it took the independent variables from different researches, mainly from “factors affecting the adoption of mobile banking”(Berhanu, 2018). The research used adoption as dependent variable. In order to fill the gap customer loyalty need to be achieved to maintain customer adoption of mobile banking. So when customers are loyal as a result of convenience, trust, risk, cost and infrastructure. The bank can develop a suitable customer maintaining strategy due to their loyalty. When customers are loyal they do not hesitate to try any product and technology which the bank is offering.

## **2.4 The Conceptual Framework**

The conceptual framework shows the variables used in the study that influence the practice of mobile banking services. Accordingly, the study will be made using variables: convenience (perceived ease of use and perceived usefulness) perceived trust, perceived cost, perceived risk, and infrastructure (Brown *et al.*, 2003; Walker, 2004) to look at their level of influence on the practice of mobile banking service in Hibret bank.

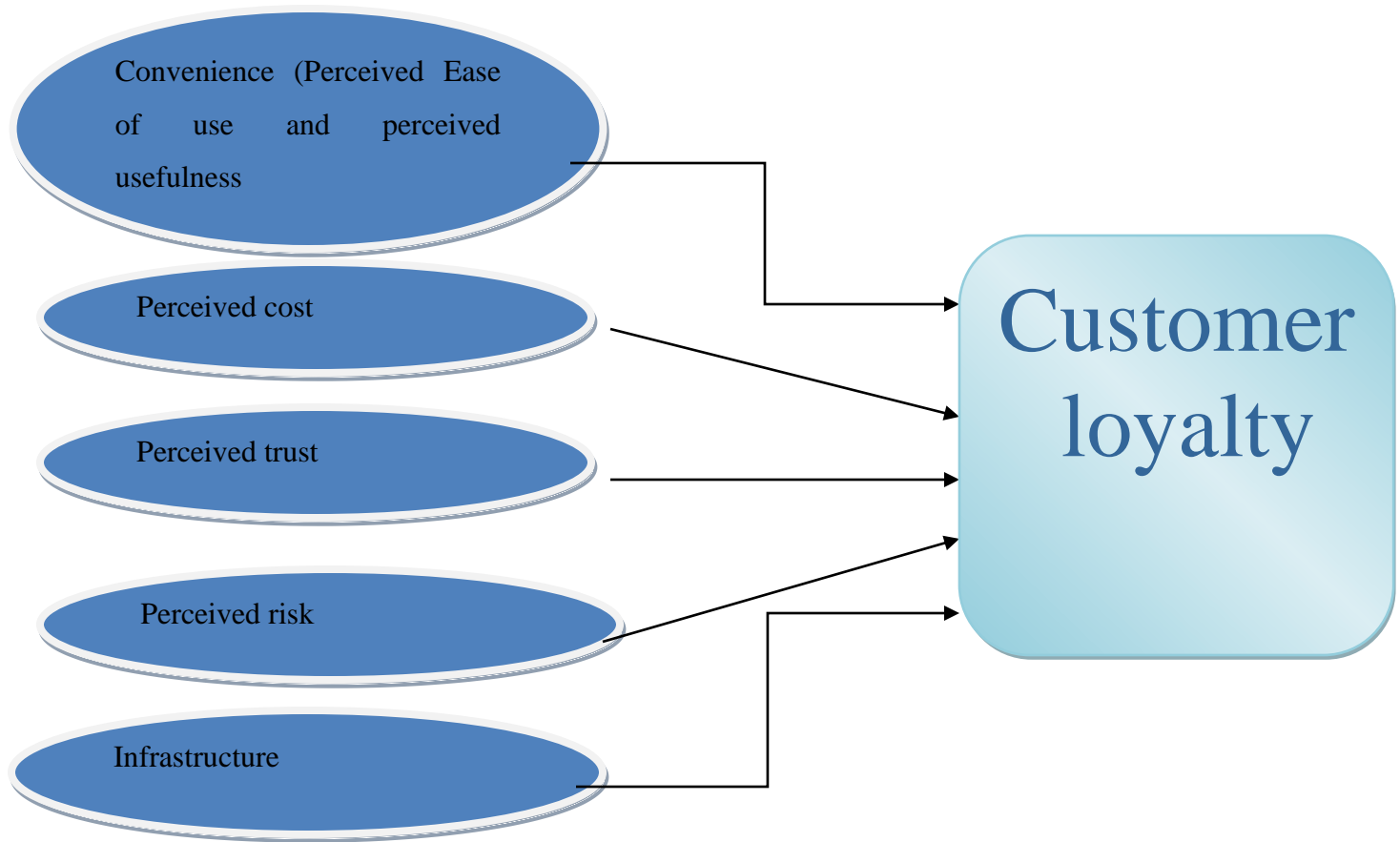


Figure 1: The conceptual framework

*Source: Self-constructed based on TAM2 model(Davis et al., 1989)*

## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1. Research Design

A research design constitutes the blueprint for the collection, measurement, and analysis of data. It is the plan and the structure of investigation so conceived as to obtain answers to

research questions. A research design is a master plan that specifies the methods and procedures for collecting and analyzing the needed information.

This research adopted a quantitative research approach. The quantitative research approach uses statistical methods in describing patterns of behavior and generalizing findings from samples to the population of interest and employs a structure of inquiry such as experiments and surveys. (Creswell, 2003).

The researcher used descriptive designs to describe factors influencing customers' loyalty to a bank; the case of mobile banking in Hibret bank. In doing this, the researcher employed descriptive and explanatory approaches to research design.

### **3.2. Research Approach**

Quantitative research approaches have been employed. The study used a quantitative research approach to gather, analyze, and measure statistical data based on measurements of quantity. It applies to phenomena that can be expressed in terms of quantity (Kothari, 2004). In a quantitative research approach, several objects are selected and studied to increase the ability to draw general conclusions.

### **3.3. Types and Sources of Data**

The study largely depended on primary data, which has been collected through a survey method by using a structured questionnaire arranged on a standardized 5-point Likert scale. In addition; secondary data that are relevant documents on mobile banking which is mentioned in the literature have been referred to as deemed necessary.

### **3.4. Data Collection Procedure and Instruments**

For the purpose of achieving the research objective structured questionnaires was designed that enable to answer the research questions. All the questionnaires were translated in to local language (Amharic) to help more understand by respondents. The first part of the questionnaire has taken the consideration of demographic factor of the respondents and

some general information about the mobile banking service. The questions were designed with multiple choice selections for convenience.

The second part of the questionnaire were required the respondent to the rate their agreement level of the bank they have chosen. The aim was to collect the opinions of the respondents in respond to the mobile banking service of the selected branch. The source of the questions adopted from research paper and cooperation of others currently working banking industry. After the designation of the questionnaires, were send to advisor for approval and finally were distributed to respondent. The respondents were customer of hibret bank. the data were collected mainly in hibret bank kality sheger branch. Evengthogh it was one branch, the respondents were from different branches.it was known that onebranch serves customers of all over the country when ever they visited.

### **3.5. Population of the Study**

According to Zikmund (2003), a population is any complete group of people, companies, hospitals, stores, college students, or the like that share some set of characteristics. For this study, the population is individuals who have an account, both users and non-users of mobile banking service, at Hibret Bank, South Addis Ababa District grade KalityShegerbranch. The population includes not only active mobile banking customers but also addresses those customers who have subscribed for the service but yet not using the service. This is because; it would help the study to get the root cause for their loyalty behind using mobile banking at Hibret Bank. Accordingly, as per the information obtained from the branch as of June 2021, there are about 13,700bank customers including those mobile banking subscribers/customers in the above branch and this is the total population of the study.

### **3.6. Sample Size and Sampling Technique**

The basic idea of sampling is related to the idea of selecting some of the elements in a population to study because the study of the whole population was less practical given the time and costs involved. From the total population size of 13,700mobile banking users and non-user customers in Hibret bank South Addis Ababa District; kalitysheger branch400

sample respondents were taken from customers at grade C branch. Based on Yemane's simplified formula to calculate sample sizes, which is the most ideal method to use when the target population is large. The study was focused on only grade C branches, because, a large number of customers including mobile banking customers have existed in those branches and they relatively have customers stayed for long. In addition, the existence of time and cost limitations force the study to focus on some specific target groups. Accordingly, the researcher used the convenience sampling technique, non-probability sampling, to select the respondents, because it is difficult to access all customers of the bank within a specific period. The given estimated population proportion of 0.05 margins of error and a 95% confidence level. Yamane (1967:886) cited in Israel (1992) which is revised in April 2009 and again reviewed in June 2012 provides a simplified formula to calculate sample sizes.

A 95% confidence level, and  $e = \pm 5\%$

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

$$1 + N(e)^2$$

**Where: -**

**n** = the sample size

**N** = the population size

**e** = the level of precision (Sampling error)

$$n = \frac{N}{1 + N(e)^2} = \frac{13,700}{1 + 13,700(0.05)^2} = 399.96$$

$$1 + N(e)^2 = 1 + 13,700(0.05)^2$$

### **3.7. Data Analysis Techniques**

The study performed data coding, entering, editing and cleaning activities by the researcher in order to check the consistency of the data. Then after statistical package for the social sciences (SPSS) version 24 applied for the purpose of processing and analysis of the results. Both descriptive and inferential statistics were used to analyze the quantitative data

gained through structured questionnaire. Descriptive statistics is used to describe the usefulness of the data set and examine relationships between variables. In order to describe the data, preliminary descriptive statistics such as frequency, percentages, and mean scores would be computed. To view the internal consistency of the scale items, Cronbach coefficients (alpha) are computed. Multiple regression analysis is performed using the five selected factor dimensions as independent variable and the customer loyalty as dependent variable.

### **3.8. Validity and Reliability Tests**

The researcher adopted structured questionnaires and document reviews and compiled secondary data from different sources.

#### **3.8.1 Validity**

The study is conducted using the instrument other researchers used in other related studies of course with some modifications to fit the purpose of the study. In addition, the questions have been pilot tested with managers and employees five each from e-payment departments that are assumed to have close information on mobile banking services and some modifications meant to be made. Jargon and confusing words, and double-meaning words were rectified. Moreover, the relevancy of the questionnaires has been confirmed.

#### **3.8.2 Reliability**

According to Ho (2006), the reliability of a measuring instrument is defined as its ability to consistently measure the phenomenon it is designed to measure. Cronbach's alpha is a coefficient of reliability used to measure the internal consistency of a scale; represented as a number between 0 and 1. Cronbach alpha is used to determine the consistency of scales used to measure study variables. The internal consistency reliability is higher if Cronbach's alpha is closer to 1. The most common technique used in the literature to assess the scale's reliability and stability is the use of Cronbach Alpha Statistics. As tabulated in table 1, all the Cronbach Alpha coefficients for the variables under the study were above 0.911 implying

that the scale used to measure the loyalty of customers of mobile banking was consistent and hence reliable.

Table 1: Result of Reliability analysis

<b>No</b>	<b>Description of factors</b>	<b>No of items</b>	<b>Cronbach's alpha</b>
<b>1</b>	CONVENIENCE (Perceived ease of use and perceived usefulness)	6	0.74
<b>2</b>	Trust	6	0.83
<b>3</b>	Risk	5	0.73
<b>4</b>	Cost	5	0.81
<b>5</b>	Infrastructure	3	0.74
<b>6</b>	Customer Loyalty	5	0.751
	Overall	30	0.911

## CHAPTER FOUR: DATA ANALYSIS AND DISCUSSION

### 4.1. Response Rate

A total of four hundred (400) questionnaires were distributed, out of which, three hundred forty-eight(348) questionnaires were successfully returned. In making conclusions, Mugenda and Mugenda (2003) indicated the representativeness of the response rate to undergo the data analysis part; a response rate of 50% is satisfactory; a 60% is good, and 70% and above is excellent. Based on the assertion of this scholar the response rate of this study is 87% which is considered an excellent response rate.

So, the analysis was made based on 348 successfully responded questionnaires and done in line with the research questions and objectives.

### 4.2. Demographic Characteristics of the Respondent's

This section showed the main demographic characteristics such as gender, age, education, years of customer and usage of product/ service of the Bank.

Table 2: Respondent's Profile

Item no	Description		Frequency	Percentage
1.	Gender	Male	180	51.7
		Female	168	48.3
2.	Age	20-30	134	38.5
		31-40	169	48.5
		41-50	34	9.8
		More than 50	11	3.2
3.	Education	Primary	48	13.8
		Secondary	83	23.9
		Technical and vocational	58	16.7
		University	159	45.7

Sources: Survey Result, 2022

From the above table 2, indicated in item number 1, 180(51.7%) of the respondents were male and the remaining 168(48.3%) of the respondents were female. Thus, the greater numbers of respondents were male. Even if it was almost close enough.

The largest share of respondents was in the age group of 31-40 years (48.5%) followed by the age group of 20-30 years (38.5%);9.8% were age group 41-50 years and over 50 years old were only 3.2% and. This implies that most of the respondents were in the age group between 31-40 years.

Pertaining to the highest level of education, the majority of the respondents were university attendees (45.7%). The remaining 23.9% of the respondents have attained secondary school, 16.7% of the respondents were technical and vocational students, the remaining 13.8% were primary school students. It showed that the respondents have in a good position to understand and answer the research questions as well as it is important to achieve the activities of the Bank effectively.

### 4.3. subscribers and users of mobile banking service

The table below shows the usage of mobile banking services among respondents and if they are currently using the service.

Table 3:subscribers and users of mobile banking service

1.	Are you subscribed to a mobile banking service?	Yes	318	91.4
		No	30	8.6
2.	Are you currently using a mobile banking service?	Yes	309	88.8
		No	39	11.2

Sources: Survey Result, 2022

Of the respondents, the majorities were mobile banking subscribers around 91.4%, and the remaining 8.6 % of the respondents did not subscribe to mobile banking services. This indicates the service is delivered wide to the customers.

Lastly, 88.8% of the respondents are currently using mobile banking services, and the rest 11.2% are not currently using mobile banking services. This finding implies that mobile banking service is a bottleneck for customer loyalty since the majority of bank customers are subscribed for the service. And in fact, this finding will lead us to raise the question of what are the challenges that these subscribers face when using the mobile banking service? This implies there is a good opportunity in strengthen the service benefits to the customer to build

their loyalty by identifying the challenges in terms of the independent variables examined in this study.

#### 4.4. Descriptive Statistics

To examine the extent to which the customers of the Bank are loyal to the bank’s mobile banking service taking the five dimensions through a questionnaire survey presented using descriptive statistics such as mean and standard deviation (SD) for variability. An analysis of the degree of agreement in Likert scale-based questionnaires setting up a cut-off point is relevant. Hence, the researcher used the following cut-off point to decide the respondent’s level of agreement or disagreement.

Mean values have been interpreted by adopting the criteria suggested by (Scot, 1999). He suggested that, for a Likert type scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), interpretation should be like; mean up to 2.8 he suggested us disagree, from 2.9 to 3.2 means neutral or neither disagree nor agree, and mean above 3.2 considered as an Agree. In the case of this study, the means scores are multiplied by the number of questions used to measure the construct/variable.

##### 4.4.1. Convenience

A five-point Likert scale is used to measure respondents’ responses concerning the perceived Usefulness of mobile banking. Where: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

Table 4: Convenience Dimension

	<b>is not complex</b>	<b>Quickly accomplish</b>	<b>Less time consuming</b>	<b>Access anytime</b>	<b>Learning is easy</b>	<b>Advantageous</b>	<b>Average</b>
<b>Mean</b>	3.98	3.86	3.93	3.97	3.80	3.79	3.88
<b>Std.</b>	0.84	0.97	0.93	0.95	0.78	0.94	

Sources: Survey Result, 2022

Concerning the convenience of mobile Banking, table 4, indicates that the combined mean of the Perceived ease of use and perceived usefulness determinant elements is 3.88 which means the respondents agree that mobile banking is easy to use. Besides, based on the empirical

evidence from the technology acceptance model (Mohammad et al. (2014), if mobile banking is perceived to be easy to use then users will have the intention to adopt and use m-banking. So that they could be loyal to the bank.

#### 4.4.2. Trust

A five-point Likert scale is used to measure respondents' response concerning the trust of mobile banking. Where: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

Table 5: Trust Dimension

Statistics	trustworthy	process payments correctly	reliable	Kept from lose	Keeping promise	good-faith	Average
<b>Mean</b>	3.87	3.84	3.89	3.95	3.88	4.08	3.91
<b>Std. deviation</b>	0.84	0.92	0.96	0.98	0.86	0.90	

Sources: Survey Result, 2022

The current users of mobile banking have a mean score of 3.91 on customer's trust, which means, the respondent 'agreed' that the bank has the trust to render the service.

#### 4.4.3. Risk

A five-point Likert scale is used to measure respondents' responses concerning the risk of mobile banking. Where: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

Table 6: Risk Dimension

Statistics	Security concern	Misuse personal info.	Loss of money	Feeling safe	Giving personal info.	Average
<b>Mean</b>	4.04	4.14	3.83	4.04	4.17	4.04
<b>Std.</b>	0.86	0.85	0.92	0.83	0.80	

<b>deviation</b>						
------------------	--	--	--	--	--	--

Sources: Survey Result, 2022

Brown *et al.*, (2003) found perceived risk to be a significant factor affecting customer loyalty. Respondents who are currently using mobile banking services have agreed with a mean score of 4.04 indicating that they have lower perception of risk – which may indicate that this is factor not a challenge in the use of mobile banking

#### 4.4.4. Cost

A five-point Likert scale is used to measure respondents' response concerning the cost of mobile banking. Where: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

Table 7: Cost Dimension

<b>Statistics</b>	<b>Compensation</b>	<b>Cheap equipment</b>	<b>Save transaction cost</b>	<b>Reduced cost of payments</b>	<b>Cost effective</b>	<b>Average</b>
<b>Mean</b>	3.75	3.98	3.81	3.78	3.88	3.83
<b>Std. deviation</b>	0.89	0.78	0.88	0.86	0.86	

Sources: Survey Result, 2022

The current users of mobile banking have a mean score of 3.83 on customer's trust, which means, the response was almost 'agreed' that the bank has a cost-effective mechanism to render the service.

#### 4.4.5. Infrastructure

A five-point Likert scale is used to measure respondents' responses concerning the infrastructure of mobile banking. Where: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

Table 8: Infrastructure Dimension

Statistics	Perform well	Interruptions doesn't discourage use	The Infrastructure current is enough	Average
<b>Mean</b>	3.98	4.00	3.43	3.80
<b>Std. deviation</b>	0.84	0.88	0.96	

Sources: Survey Result, 2022

Both Mckinsey and company (2012) and Ciuci Consulting (2014) highlights that the current reality in many developing countries mobile money service providers have not reached a scale high enough for the growth and development of mobile money technology. The poor infrastructure provision of those countries is cited as one of the major reasons. The current users of mobile banking have a mean score of 3.80 on infrastructure, which means, the response was almost 'agreed' that the bank has an uninterrupted mobile banking service to render the service.

#### 4.5. Correlation Test

Correlation determines whether and how strongly pairs of variables are related. The correlation analysis can lead to a greater understanding of the data. To know whether there is a correlation between the variables and the level of the linear relationship between the variables, Pearson's correlation coefficient was examined. This coefficient indicates the direction and the strength of a linear relationship between two variables. The Pearson's correlation coefficient ( $r$ ) can vary from -1 to +1. The larger the value implies the stronger the relationship. A coefficient of +1 indicates a perfect positive relationship and a coefficient of -1 indicates a perfect negative relationship. 0 indicates that there is no linear relationship between the variables (Field, 2009). According to Eachron (1982) the values for interpretation are (+/-0.00 to 0.2) Very weak or very low, (+/-0.20 to 0.40) Weak or low, (+/-0.40 to 0.60) Moderate, (+/-0.60 to 0.80) Strong or high, and (+/-0.80 to 1.0) Very high or very strong.

Table 9: Pearson Correlation Analysis

Correlations							
		CON	T	R	COS	INF	CL
Convenience	Pearson Correlation	1					
	Sig. (2-tailed)						
Trust	Pearson Correlation	.337**	1				
	Sig. (2-tailed)	.000					
Risk	Pearson Correlation	.329**	.163**	1			
	Sig. (2-tailed)	.000	.002				
Cost	Pearson Correlation	.712**	.103	.393**	1		
	Sig. (2-tailed)	.000	.056	.000			
Infrastructure	Pearson Correlation	.592**	.093	.499**	.688**	1	
	Sig. (2-tailed)	.000	.082	.000	.000		
Customer Loyalty	Pearson Correlation	<b>.743**</b>	<b>.401**</b>	<b>.448**</b>	<b>.671**</b>	<b>.689**</b>	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	348	348	348	348	348	348

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

Source: Survey Data (2022)

A Pearson correlation test was conducted for the independent variable Convenience and the dependent variable Customer Loyalty. The test results  $r(348)=.743, p=.000$ . Based on the rules of thumb of correlation coefficient this implies, that the two variables have a significant and positively strong correlation.

A Pearson correlation test was conducted for the independent variable Trust and the dependent variable Customer Loyalty. The test results  $r(348)=.401, p=.000$ . Based on the rules of thumb of correlation coefficient this implies, that the two variables have a significant and positively moderate correlation.

A Pearson correlation test was conducted for the independent variable Risk and the dependent variable Customer Loyalty. The test results  $r(348)=.448, p=.000$ . Based on the rules of thumb of correlation coefficient this implies, that the two variables have a significant and positively moderate correlation.

A Pearson correlation test was conducted for the independent variable Cost and the dependent variable Customer Loyalty. The test results  $r(348)=.671, p=.000$ . Based on the rules of thumb of correlation coefficient this implies, that the two variables have a significant and positively strong correlation.

A Pearson correlation test was conducted for the independent variable Infrastructure and the dependent variable Customer Loyalty. The test results  $r(348)=.689, p=.000$ . Based on the rules of thumb of correlation coefficient this implies, that the two variables have a significant and positively strong correlation.

#### 4.6. Test for Linear regression model assumption

**Normality:** This one is fairly easy to check that there is a range of values or that data is spread between multiple categories. The data almost have bell-shaped this indicated that customer loyalty and other independent variables have a good relationship.

The following Figure 2 clearly showed the histogram of the data distribution in a graph. As can be seen in the stated figure the data distribution of the study lay at a normal rate and it is acceptable to understand the data were fairly distributed.

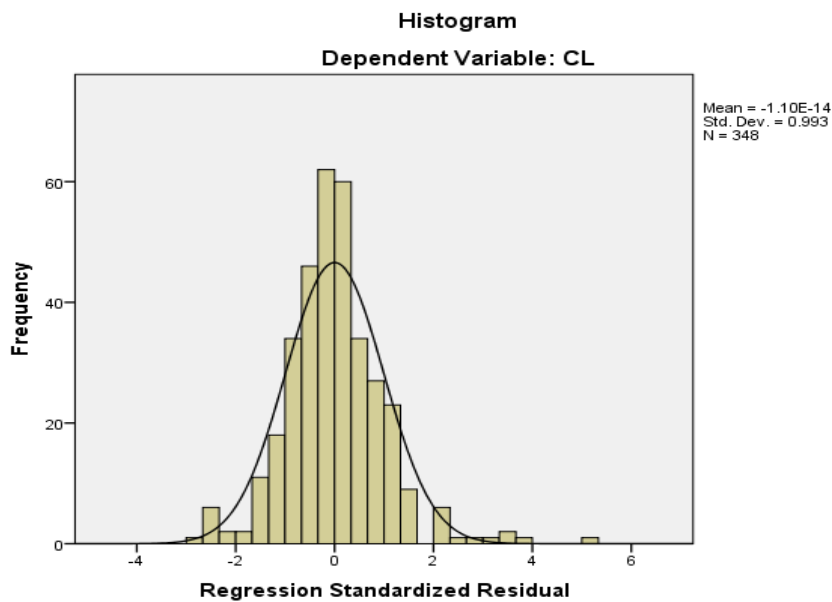


Figure 2: Normality-Histogram Graph

Source: Survey Data (2022)

Running descriptive statistics to obtain skewness and kurtosis is a standard test for normalcy. Kline (2011) stated that the absolute value of Skewness greater than 3 and the Kurtosis value greater than ten may indicate a problem and values above 20 may indicate a more serious problem. Hence, it was suggested that the absolute value of Skewness and Kurtosis should not be greater than 3 and 10. Based on this recommendation the absolute values of the Skewness and Kurtosis of all the items in this study are within the acceptable range of  $< 3$  and  $< 10$  respectively.

Table 10: Normality test of variables

Descriptive Statistics					
	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Convenience	348	-.701	.131	1.243	.261
Trust	348	-.542	.131	.928	.261
Risk	348	-.579	.131	.370	.261
Cost	348	-.234	.131	.181	.261
Infrastructure	348	-.585	.131	.820	.261
Customer Loyalty	348	-.519	.131	1.651	.261
Valid N (listwise)	348				

Source: Survey Data (2022)

**Linearity of the data:** Linear relationships, outliers/influential cases: This set of assumptions can be examined to a fairly satisfactory extent simply by plotting the relationship between each variable. As can be seen in figure 3, the relationship between dependent and independent variables are linear.

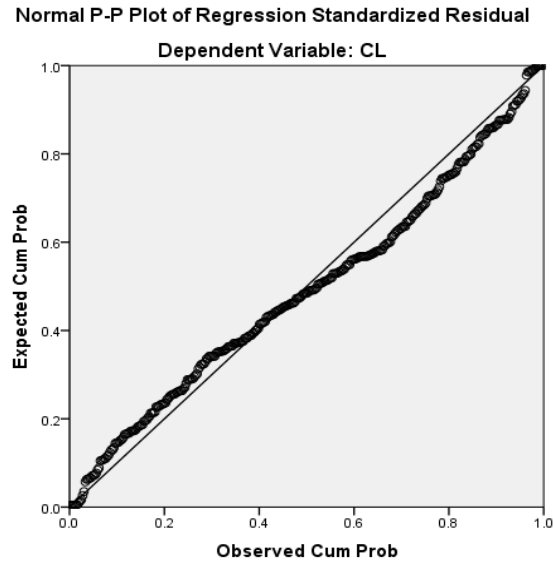


Figure 3:P-Plot graphs

Source: Survey Data (2022)

**Multicollinearity:** To check the Multicollinearity among the independent variables the researcher uses the Variance Inflation Factor (VIF). The VIF is just the reciprocal value of the tolerance. A tolerance of below 0.10 indicates that (multi) collinearity is a problem and the Multi co-linearity exists if VIF is greater than 10. (Mooi and Sarstedt, 2011).

Table 11:MulticollinearityStatistics

Model	Collinearity Statistics	
	Tolerance	VIF
Convenience	.404	2.475
Trust	.829	1.206
Risk	.731	1.367
Cost	.371	2.698
Infrastructure	.445	2.248

Source: Survey Data (2022)

#### 4.7. Regression Analysis

Regression is a technique that can be used to investigate the effect of one or more predictor variables on an outcome variable. That is, it allows us to make statements about how well one or more independent variables will predict the value of a dependent variable.

Table 12: Model Summary for Customer Loyalty variables

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.839 <sup>a</sup>	.704	.699	.34733
a. Predictors: (Constant), INF, T, R, CON, COS				
b. Dependent Variable: CL				

As indicated in table 12, the value of the coefficient of determination i.e., R-square is 0.704, which implies that 70.4% of the variance in customer loyalty can be explained by Convenience, Trust, Risk, Cost, Infrastructure the rest 29.6% can be explained by other factors.

Table 13: ANOVA

<b>ANOVA</b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97.941	5	19.588	162.374	.000 <sup>b</sup>
	Residual	41.258	342	.121		
	Total	139.199	347			
a. Dependent Variable: CL						
b. Predictors: (Constant), INF, T, R, CON, COS						

Table 13, shows that ANOVA or F-test is Significant at 0.00 which means the model is adequate as a whole by considering all variables. Therefore, it can be concluded that there is at least one independent variable that affects the dependent variable. So, that we can proceed to coefficient interpretation.

Table 14: Regression Result

<b>Coefficients</b>				
Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

		B	Std. Error	Beta		
1	(Constant)	-.328	.163		-2.016	.045
	Convenience	.359	.049	.341	7.365	.000
	Trust	.184	.026	.227	7.035	.000
	Risk	.083	.037	.078	2.270	.024
	Cost	.148	.047	.152	3.150	.002
	Infrastructure	.278	.038	.322	7.298	.000
a. Dependent Variable: CL						

Table 14 clearly shows that all the factors have a positive and significant effect on customer loyalty.

So, the equation becomes

$$CPD = b_0 + 0.341CON + 0.227T - 0.078R + 0.152COS + 0.322INF + \epsilon_t$$

Where- CON=Convenience T= Trust R=Risk COS=Cost INF=Infrastructure

*H1: There is a positive and significant effect of the convenience of mobile banking on customer loyalty in Hibret Bank.*

The result revealed that Convenience affects customer loyalty at a 5% level of significance. This shows holding other constants for one percent improvement in Convenience yields an average of 34.1 percent improvement in customer loyalty. Therefore, we will support the alternative hypothesis (H1).

*H2: There is a positive and significant effect of trust in mobile banking on customer loyalty in Hibret Bank.*

The results obtained in the SPSS test result showed that the coefficient B and p-value of Trust have a positive relation and insignificant effect on customer loyalty ( $\beta = .227, p=0.000$ ), which implies holding other constants for one percent improvement on Trust yields an average

of 22.7 percent improvement in customer loyalty. Therefore, we will support the alternative hypothesis(H2).

*H3: There is a positive and significant effect of the risk of mobile banking on customer loyalty in Hibret Bank.*

The risk was found to have a positive relation and significant effect on customer loyalty ( $\beta = -.078, p=0.024 < 0.05$ ). Holding other constants for one percent improvement on Riskyields an average of 7.8 percent improvement in customer loyalty. Therefore, we will supportthealternative hypothesis(H3).

*H4: There is a positive and significant effect of the costof mobile banking on customer loyalty in Hibret Bank.*

Similarly, Cost positively affectscustomer loyalty at a 5 % level of significance. Holding other constants for onepercent improvement in Costyields an average of 15.2 percent improvement in customer loyalty. Therefore, we will supportthealternative hypothesis(H4).

*H5: There is a positive and significant effect of infrastructure mobile banking on customer loyalty in Hibret Bank.*

The multiple regression results revealed that Infrastructureaffectscustomer loyalty at a 5 % level of significance. Holding other constants for onepercent improvement on Infrastructureyields an average of 32.2 percent improvement in customer loyalty. Therefore, we will supportthealternative hypothesis(H5).

Table 15: Hypothesis testing and interpretation of results

Hypothesis	Result		Decision
	B(beta)	Sig.	
H1: There is a positive and significant effect of the convenience of mobile banking on customer loyalty in Hibret Bank.	0.341, p<0.05	.000	Supported
H2: There is a positive and significant effect of trustinmobile banking on customer loyalty in Hibret Bank.	0.227, p<0.05	.000	Supported

H3: There is a positive and significant effect of the risk of mobile banking on customer loyalty in Hibret Bank.	0.078, p<0.05	.024	Supported
H4: There is a positive and significant effect of the cost of mobile banking on customer loyalty in Hibret Bank.	0.152, p<0.05	.002	Supported
H5: There is a positive and significant effect of infrastructure mobile banking on customer loyalty in Hibret Bank.	0.322, p<0.05	.000	Supported

## **CHAPTER FIVE: SUMMARY, CONCLUSION, AND RECOMMENDATION**

This chapter consists of three sections which include a summary of the findings, conclusion, and recommendations.

### **5.1. Summary of Research Findings**

This study's major goal was to find out how mobile banking affected Hibret bank Share Company customers' loyalty. Additionally, descriptive and explanatory research designs were used in the study. A questionnaire was used to collect the necessary information. 348 (87%) of the total respondents to the survey completed it. For the dependent variable

(customer loyalty) and five independent factors, a multiple regression model was built. The main outcomes of the study are outlined below as a consequence of the analysis and interpretation.

The research revealed that the variable of convenience, infrastructure, trust, cost and risk perceived that it is convenient or easy to use and useful, trust worthy, good level of infrastructure, low cost usage of the service and minimum or no risk might be significantly important factor on customer loyalty.

## **5.2. Conclusions**

Based on the major findings of the study, the following conclusions are drawn.

Accordingly, the mean value of the convenience, trust, risk, cost, and infrastructure are 3.88, 3.91, 4.04, 3.83, and 3.80 respectively. This indicated that these dimensions have agreed to contribute to customer loyalty in Hibret Bank S.C. Moreover, in terms of mean value score among the independent variables dimension has a higher agreement or mean value.

According to the correlation analysis's findings, customer loyalty at Hibret Bank S.C. is positively correlated with the independent variables (convenience, trust, risk, cost, and infrastructure). That indicates that as the Bank enhances the independent factors (convenience, trust, risk, cost, and infrastructure), so does the customer's loyalty to the Bank.

The multiple regression results showed that all the independent variables: (convenience, trust, risk, cost, and infrastructure) have a significant positive effect on customer loyalty in Hibret Bank Share Company at a 5% level of significance. More importantly, the regression result indicated that (convenience ( $\beta 0.341$ ,  $p < 0.05$ ), infrastructure ( $\beta 0.322$ ,  $p < 0.05$ ), and trust ( $\beta 0.227$ ,  $p < 0.05$ ) dimensions were found to be the first, second, and third significant variables considered for the customer loyalty of Hibret bank. Whereas, among all the independent variables; risk ( $\beta 0.078$ ,  $p < 0.05$ ) is the least contributing to the customer loyalty at Hibret bank.

### **5.3. Recommendations**

The bank must always work to make the mobile banking service that is utilized for Transactions simpler. The marketing campaign should emphasize how easy, practical, risk-free, fully equipped, and cost-beneficial utilizing mobile banking is.

- The study's findings imply that the bank should act quickly to streamline its mobile banking offerings. According to the survey, client loyalty is significantly impacted by convenience. As a result, the bank has to spread the word about how helpful and simple the service is. Therefore, the bank must investigate new technology with cutting-edge services. In order to encourage customers to use mobile banking, the bank must also identify companies that require services and payment options from the bank directly.
- In addition, the study showed that infrastructure has a significant impact on client loyalty. As a result, the bank must collaborate with providers of sophisticated infrastructure. The bank should work on the infrastructure in conjunction with the relevant government agencies, such as Ethio-Telecom and EELPA, in order to lessen the frequency of network outages and power outages, which have a negative impact on the use of mobile banking services and undermine consumer loyalty.
- The bank's mobile banking division needs to work more to earn consumers' trust by continually showcasing its capacity to deliver secure value-adding services, its intention to be fair and honest about customers' needs, and its good faith in terms of customer empowerment.

- The bank must make sure that the service is provided in accordance with the promises made during marketing campaigns in all of its branches. Given that client loyalty is influenced by consumer trust.
- The bank should create mobile banking awareness raising workshops specifically for the clients who do not use the service.
- To increase customer loyalty, the bank should see the fact that many of its customers use mobile devices as a great opportunity to improve service to all customers. To do this, the bank should put more effort into educating communities, especially prospective customers of Hibret bank, about the benefits of mobile banking and its convenience, functionality, and safety.

## **References**

- Abebe Z. (2016). Opportunities and challenges in the adoption of E-banking services: the case of Dashen Bank S.C.
- Alemayehu F. and Tekelemedhin M. (2009). Law of banking, Negotiable instruments and Insurance unpublished.
- Ali A. and Hayat A. (2014). Factors influencing the use of mobile banking international journal of managing information technology 6(1) p. 1-13.
- Barnes and Corbitt, C. 2001. "The adoption of internet financial services: a qualitative study" International journal of retail and distribution management Vol. 29(8). P. 390-398.
- Bhattacharjee A. (2002). Individual trust in online firm's scale development and initial test, Journal of management information system 19(1), 211-241.

- Carr Jr. V.H (1999).Technology adoption and diffusion.The learning center for interactive Technology.
- Chian-Son Yu, factors affecting individuals to adopt mobile banking empirical evidence from the UTAUT model, Chain-Son yu, 2012.
- Chitungo S.K and Munogo S. (2015). Extending the technology acceptance model to mobile Banking use in rurazembawe journal of business administration and education 3(1) 51.
- Cooper, D.R and Schindler, P.S (2006).Business research methods, 10thed. New delhi, Tata Me Gran. Hdi publisher company inc.
- Creswell, W. (2003). Research design: qualitative, quantitative and mixed approaches, 2nd ed. Sage publication California.
- Davis F. (1989). Perceived usefulness, perceived ease of use and user acceptance of acceptance of information technology MIS quarterly, 13(3): 319-340.
- Davis F.D. (1989).Perceived usefulness, perceived ensue of used and acceptance of information TechnologyMis Quarterly. 13(3) 319-339.
- Garadechew, W. 2010. Electronic banking in Ethiopia practices, opportunities and challenges. Journal of internet banking and commerce, 15(2) – 2- 9.
- George D. and Mallery D. (2003). SPSS for windows step by step a sample guide and reference 4th ed. Buston MA Ahyn and bacon.
- Gu. J.C Lee S.C and suh.YH (2009).Determinants of behavioral intention to mobile banking.Expert system with application, 36(9), 11605-11616.
- Hair J. F Anderson R.ETathamR.L and Black W.C (2005). Multivariate data analysis New Jersey prentice Hall.
- Hair J.FR. E Anderson R.LTatham and W.C. Black (2006).Multivations data analysis

International edition 6th ed N.J. prentios Hall. New Jersey.

Hanudin A. Rostinal S. Masurniwati, M. A and Ricarde B. (2012).Receptiveness of mobile Banking by Malaysian local customers in sabahianemperical investigation journal of Internet banking and commerce, 17(1).

Karlukc N. (2014). Banking services in the East African Community. Challenges to the existing legislative and regulatory frameworks.Journal of information policy Vol. 4: 270 -295.

Khalifa, M. and Shen, K. (2008).Explaining the adoption of transactional BZC mobile Commerce: journal of enterprise information management, 21(2), 110-124.

Kim, G. Shin B. and Lee H.G. 2009.Understanding dynamics between initial trust and usage Intention of mobile banking.Information system journal, 19(3) 283-31.

Kline, R. B. (2011). *Principles and Practice of Structural Equation Modelling* (5th ed., pp. 3-427). New York: The Guilford Press.

Kotharc, E.R. (2004). Research methodology: methods and techniques, 2nded. New age International limited publishers New Delhi.

La forest S. and Li X. (2005). Consumer attitudes towards online and mobile banking in China.International journal of bank marketing, 23(5), 362-380.

Luarn, P. and Lin H.H (2005). Toward understanding of the behavioral intention to use mobile Banking computers in human behavior, 21: 871-891

Mooi, E. and Sarstedt, M. (2011), "*A Concise Guide to Market Research the Process, Data,andMethods Using IBM SPSS Statistics*", Heidelberg, Germany.

Moon, J. W and Kim, Y. G (2001).Extending the TAM for World Wide Web context.Information and management 38, 217-230.

National bank of Ethiopia (2017).Annual report.

- National Bank of Ethiopia (NBE). Directives No FIS/01/2012 Regulation of Mobile and Agent Banking Service.
- National bank of Ethiopian, (2012). Regulation of mobile and agent banking services directive NoFIS/01/2012.
- NBE Annual Report 2016/2017.
- NBE National Financial Inclusion Strategy (April 2017).
- Hamburg (Germany) mobile banking as business strategy: impact of mobile technologies on customer balances and its implication for banks.
- Ratten V. (2011). Mobile banking innovation and entrepreneurial use decision. *International journal of entrepreneurship and innovation* 2(2) 27-38.
- Rodrigues G. Sarabdeen J. and Balasubramanian S. (2016). Factors that influence consumer Adoption of e-services in the UAE. A UTAUT model perspective *journal of internet Commercial* 15(1): 18-30.
- Roselyne A. (2012). Factors affecting adoption of mobile banking technology in Kenya *Asian Journal of business and management science* 2(11) p. 1-13.
- SaleemZ, and Rashid K. (2011). Relationship between customer satisfaction and mobile banking Adoption in *pavistair international journal of trade, economic and France*, 2(2) – 537-544.
- Satriye M. (1999). Adoption of internet banking by Australian consumer: An empirical Investigation: *International journal of bank marketing*, 17, 324-334.
- ShalloneK.C, Simon Munogo, extending the technology acceptance model to mobile banking Adoption in rural zimbabroe, *journal of business administration and education*, 2013: 3(1): 51-79.
- Skeran, R. (1992). *Research methods the business a skill building method*, 2nd edition, John Wiley and sons, inc. Canada.

- Tiwari R. and Buse S. (2004). The mobile commerce australuar consumer: An empirical Investigator international journal of bank marketing, 17, 324-334.
- Tornatzky, LG. and Klein K.J (1982).Innovation characteristics and innovation adoption Implementation.
- Venkatesh V. and Davis F. (2000). A theoretical extension of the technology acceptance model four longitudinal field studies management science 46(2) p. 186-204.
- Venkatesh V., thorhs, M.4 Davis G.B and Davis, F.D 2003 “user acceptance of information technology toward a United view” MIS quarterly, vol 27, pp. 425-478.
- Worku M. (2015). Factors Affecting Adoption of Mobile Banking: The case of Commercial Bank of Ethiopia, Addis Ababa City Branches.
- Yu. T. Fang K. (2009). Measuring the post-adoption customer perception of mobile banking servicescyberpsychology and behavior, 12.37-35.

## **APPENDIX**

**Addis Ababa University**

**School of Commerce**

**Masters of Marketing Management**

**Questionnaire to be filled by respondents**

### **Dear Respondents:**

First of all, I would like to express my earnest appreciation for your generous time, and honest and prompt responses.

The title of this thesis is “to assess factors influencing customers loyalty of a bank; the case of mobile banking in Hibret bank kalitysheger branch”.

Please note that your views in this questionnaire shall not be, in any way, used for any other purpose rather than the advancement of this study. You are therefore assured that your views on the content of this questionnaire shall not be used in any way that might cause damage to your reputation as an individual or otherwise, integrity, emotions, or indeed professional conduct as the information provided will be treated with a high level of confidentiality. Individual responses will not be identifiable as they will be treated in aggregate when reporting the findings.

I would like to thank you in advance, for completing this questionnaire and assisting me in my research.

### **Instructions**

Please tick (√) in the appropriate boxes as provided

**Section A: Personal Details**

1. Gender? Male  Female
2. Age range? 20 -30  31-40  41 – 50
3. Level of education completed?  
 Primary  Secondary  Technical & Vocational  University
4. Are you subscribed to a mobile banking service?  
 Yes   
 No
5. Are you currently using a mobile banking service?  
 Yes   
 No

**If No; Why?** \_\_\_\_\_

**Section B: Factors Affecting Mobile Banking Practice**

*Please circle the appropriate number to indicate the level of your agreement or disagreement with the following statements on a scale of 1 to 5, where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree*

<i>Questions</i>	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>neutral</i>	<i>agree</i>	<i>strongly agree</i>
<b>CONVENIENCE (Perceived ease of use and perceived usefulness)</b>					
Mobile banking service is not complex so it doesn't take me time to learn how to use it.					
Using mobile banking enables me to do my banking transactions quicker as it is convenient and easiest for me to use.					

Mobile banking is faster than visiting a bank or using phone banking because it is more accessible and less time-consuming than other banking options.					
By using mobile banking, I can access my fund any time I want to.					
I think that learning to use mobile banking would be easy.					
Overall, I think that using mobile banking is advantageous.					
<b>TRUST</b>					
I believe the bank is trustworthy and can provide mobile banking services effectively.					
The mobile banking service performs well and processes payments correctly.					
Mobile banking is reliable so I'm not afraid that my transaction detail would be leaked during message passing.					
If I lose a mobile phone as a mobile banking user, in the meantime I would not be afraid that I lose my money as well.					
I believe the bank keeps its promises and commitments.					
The bank makes good-faith efforts to address most customer concerns.					
<b>RISK</b>					
A security concern doesn't prevent me from checking my account using a mobile phone.					
When I'm using mobile banking services, I don't think that someone misuses my personal information					

When making a mobile banking transaction, I don't think that I will lose money.					
I feel safe using mobile banking because I think people can't access my account.					
I would feel safe while providing personal information over mobile banking.					
<b>COST</b>					
When a transaction error occurs due to system failure, I can get compensation from the bank.					
I think the equipment cost of mobile banking is cheap and I believe I could be able to get service with my current cell phone.					
Mobile banking could save me transaction costs as it enables me to get all services on hand.					
Mobile banking is important since the transaction costs of Payments are greatly reduced.					
M-banking is a cost-effective way to provide banking services to customers.					
<b>INFRASTRUCTURE</b>					
Mobile banking service performs well when there is a network problem					
The frequent power interruption doesn't discourage me to use mobile banking					
I believe the current infrastructure development of the country is enough to use mobile banking service					

<b>CUSTOMER LOYALTY</b>	1	2	3	4	5
Mobile banking has an impact on my loyalty to the bank					
The risk I take using mobile banking defines my loyalty to the bank					
The cost of mobile banking affects my loyalty to the bank					
My loyalty to the bank relies on the infrastructure of the bank's mobile banking service					
The bank's effort to gain the trust of the customer affects my loyalty					

በመላሽች የሚሞላ መጠይቅ

ውድምላሽ ሰጪዎች

በቅድሚያ ውድገዜያችሁን ሰውታችሁት ክክለኛም ላሽስ ለሰጣችሁኝ እና ለጥናቱ ስለረዳችሁኝ ከልብዎ ሆነም ስጋና ዬን አቀርባለሁ።

የምትሰጡኝ ምላሽ ለትምህርት አላማ የሚውል ምስጢር ወይም ለሌላ አላማ የሚደውል ወይም

የማንጠቀም በመሆኑ የምሰጡት ምላሽ ምንም ዓይነት ጉዳት አያስከትልም። በመሆኑም ይህም ላሽ

በአቃጠላይ እንጂ በተናጥል የሚወሰድ አይደለም።

**መመሪያዎች**

እባክዎ ከዚህ በታች ለመምረጥ በተዘጋጀው ሰው ስጥም ልክ ትያድርጉ

**ክፍል 1: የግል መረጃ**

- 1. ያታወንድ
- ሴት
- 2. እድሜ 20-30
- 30-40
- 40-50
- >50
- 3. የትምህርት መረጃ
- 1ኛ ደረጃ
- 2ኛ ደረጃ
- የቴክኒክና ሙያ
- የኒቨርሲቲ
- 4. የሞባይል ባንክ ንግተጠቃሚ ኖት
- አዎ
- አይ



ሞባይል ባንክንግ አስተማማኝ በመሆኑ የግል መረጃዎቹ ይመዘበራሉ የሚል ስጋት የለኝም።					
ሞባይሌ ቢሰረቅ እንደሞባይል ባንክንግ ተጠቃሚነቱ ገንዘቤን አጣጥለው ብዬ አላስብም።					
ባንኩ ቃሉን ይጠብቃል ብዬ አምናለው።					
ባንኩ ለደንበኞች ፍላጎት ተደራሽ ለመሆን ጥረት ያደርጋል።					
<b>ሪስክ አደጋ/ RISK</b>					
የሴኪዩሪቲ ወይም የጥንቃቄ ጉዳዮች የሞባይል ባንክንግ ሂሳቤን ቼክ ኮማድረግ አያግዱኝም።					
የሞባይል ባንክንግ አገልግሎት ስጠቀም የግል መረጃዎቼን እሳሳታለው የሚል ስጋት የለኝም።					
በሞባይል ባንክንግ የገዝብ ዝውውር በማድረግበት ጊዜ ገዝቤን አጣጥለው ብዬ አልሰጋም።					
የሞባይል ባንክንግ ስጠቀም ሌሎች ሰዎች ሂሳቤን ይህሉ የሚል አስተሳሰብ የለኝም።					
ከሞባይል ባንክንግ አጠቃቀም ጋር በተያያዘ የግል መረጃዎቼን ወደ ሞባይል በማስገባብት ጊዜ የደህንነት ስጋት የለብኝም።					
<b>ወጪ/ COST</b>					
በሲስተም መቋረጥ ምክንያት የገዝብ እንቅስቃሴ ስህተት ቢፈጠር ባንኩ ካሳ ይከፍለኛል ብዬ አስባለው።					

የሞባይል ባንክንግን መገልገያ እቃዎች ውድነት አያሳስቦኝም ምክንያቱም አሁን ባለኝ ስልክ መጠቀም ስለምችል።					
ሞባይል ባንክንግ አገልግሎትን በእጅ ላይ ስለማገኘት የተለያዩ ወጪዎችን ይቀንስልኛል።					
ሞባይል ባንክንግ በጣም አስፈላጊ ነው ምክንያቱም የአገልግሎት ወጪዎችን በጣም ስለሚቀንስ።					
<b>ኢንፍራስትራስትር/ INFRASTRUCTURE</b>					
የኔትወርክ ችግር እያለ ጥሩ የሆነ የሞባይል ባንክንግ አገልግሎት ማግኘት ይቻላል።					
ተደጋጋሚ የኤሌክትሪክ መቆራረጥ የሞባይል ባንክንግ አገልግሎት እንዳልጠቀም አያደርገኝም።					