



**THE EFFECT OF E-BANKING SERVICE QUALITY ON
CUSTOMER ENGAGEMENT
THE CASE OF ABYSINIYA BANK**

By- MAHDER TEMESGEN

Advisor- BELAYNESH TEFERA (PHD)

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DECLARATION

I hereby declare that this thesis entitled “Effect of E-banking Service Quality on Customer Engagement. A study on Bank of Abyssinia in Addis Ababa City” has been undertaken by me under and supervision of Belaynesh Tefera (PHD).

This thesis is my own work and has not been submitted to any university or other organizations for the purpose of receiving a degree or credential.

Signature _____

Date_____

Mahder Temesgen

Approved By the Board of Examiners

1. _____

Advisor

Signature

Date

2. _____

Internal Examiner

Signature

Date

3. _____

External Examiner

Signature

Date

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Abstract

The study explores the relationship between E-banking service quality and customer engagement .it examines how the four e- banking service quality dimensions (performance, security ease of use and customer support.)Influence user engagement .An explanatory research design was employed to analyze the data collected from 353 respondents through purposive sampling technique. Descriptive statistics explored demographic data, while inferential statistics including regression and correlation analysis were used to test the relationship between the dependent and independent variables. The findings reveal a positive and significant association between e banking service quality and customer engagement. Performance, ease of use and security demonstrate positive correlation with customer engagement and customer support exhibited negative coefficient, suggesting a need for further investigation in to specific aspects of customer support that impact user behavior. These results highlights the critical role of e banking service quality in fostering customer engagement .Banks should prioritize enhancing performance security and user friendliness of their platforms.

Key words: E-banking, Customer Engagement, Service Quality dimension

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List of Abbreviations

ANOVA- Analysis of Variance

ATM – Automated Teller Machine

BOA – Bank of Abyssinia

CSEB – Customer engagement of e –banking

FAQ- Frequently asked Questions

ICICI – Industrial Credit and Investment Corporation of India

ICT – Information Communication Technology

ITM – Interactive Teller Machine

OCC – Office of the Comptroller of the Currency

PCI – Perceived Characteristics of the Innovation

PDA – Personal Digital Assistant

SBI – State Bank of India

SMS – Short Message Service

SPSS- Statistical Package for Social Science

TPB – Theory of Planned Behavior

CHAPTER ONE

INTRODUCTION

This Chapter includes background of the study, , problem statement, research questions, objective of the study, scope and limitation of the study and organization of the proposal.

1.1 Background of the Study

It is known that information technology is the Main force behind the global developments that are occurring. The global banking sector is experiencing a new phenomenon of unparalleled rivalry backed by contemporary information and communication infrastructure as a result of the pervasive and steady rise of information and communication technology (Murthy,2004). Electronic banking is the transformation of banks' information and services by banks to customers through different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television (Daniel,2000).E-banking's development started with the usage of ATMs stand for Automated teller machines, and Finland is the world's first nation to pioneer e-banking.(Mishra, R. and J. Kiranmai 2009

In the developed countries the banks are working primarily via Internet as non-branch banks. Around one fifth of Finish and Swedish bank customers are banking online, while in US, according to UNCLAD, online banking is growing at an annual rate of 60 percent and the number of online accounts has approximately reached 15 million by 2006.

In Ethiopia, electronic payment systems are still in their infancy and cash is the most common form of payment. Ethiopian banking system is still underdeveloped compared to the rest of the world. The newer e-banking techniques ATMs, Debit cards, Virtual Banking, Internet banking, Mobile banking, and other didn't get the necessary attention in promoting and making it accessible to peoples in different regions of the country. Although a remarkable improvements has been noticed in recent years in the banking sector of Ethiopia in introducing banking services and increasing active e-banking users Ethiopia is still in infancy stage compared to the world (Abiy D, 2019).

According to Worku G 2016), in order for banks to be competitive, they must constantly innovate and enhance their offerings of tailored packages and services.

Various elements will impact customer satisfaction and engagement, contingent on the nature of the industry. Beyond simple client happiness, customer involvement is paramount. When it comes to the banking industry, particularly in this internet-based era of e-banking and e-banking services, it denotes a more profound, continuous relationship where clients actively engage with the bank and its offerings. According to Jean Robert Kala and Arielle Ndassi (2009), quality is crucial to building strong customer relationships, which in turn promote higher levels of consumer engagement. .Successful Customer Engagement goes beyond the first transaction, Delivering pertinent material through marketing and engagement initiatives that promote repeat business is the aim (Nick Barney, 2006). Most banks in developed and some in developing parts of the world are now offering e-banking services with various levels by understanding the benefits of adapting e banking services and critically analyzing the link between e banking and customer relation and customer engagement.(Garau, 2002).

The purpose of this study is investigating the Effect of Electronic banking service quality on customer Engagement in the banking sector of Ethiopia specifically in Bank of Abyssinia Addis Ababa Region.

1.2 Statement Of the Problem

Customer engagement is a real problem that needs a solution and still needs to be identified. There is no theoretical model that completely captures what creates and how to retain engaged customers. It is well known that customer satisfaction and service quality are key drivers of customer loyalty and retention (Cuthbert, 2010).In the contemporary marketing world, the concept of engagement has become increasingly important, due to its ability to enhance customer loyalty and affect an organization's overall performance. The significance of customer engagement has been studied extensively in service marketing literature, identifying a positive relationship with customer satisfaction, word of mouth, retention (Chandler and Lusch, 2015),

This can have numerous benefits for the bank in terms of increased profits and shareholder value. The study suggested here is specific toe-banking service quality and thus it will give banks tangible direction of how to increase value for their customers in an e-banking context.

In the past, the safety of customers' money and the interest that resulted from their savings were the main factors driving demand for banking services. But today's consumers are more concerned with how banks provide their services than they are with money security. The reason is that the present day customer requires efficient, fast and convenient services (Kwashie, 2012) .

Online banking industry is growing competitive, hence it becomes increasingly important for banks to attract and retain customers, and the quality of the e -banking services plays the major role in this process so that knowing the important relation of the e banking service quality and customer engagement will be crucial.(Sreen and Mahanidis, 2009). In recent years, tremendous increase in the development of e-banking services has been witnessed. At the same time, customers have more choices to make with increasing alternatives available. In today's competitive environment, only those banks will survive which can retain their customers, hence it is critical to understand how to retain customers by understanding what is of value to the customer in banking service. A review of the literature shows that customer retention can lead to sales growth, increased profit margin, and reduced marketing costs, all of which can lead to increased shareholder value (Ganesh, Arnold, and Reynolds, 2000).

In Ethiopia, Banks have started using primary internet transactions through mobile, internet and card banking services and they are facing challenges such as, very poor connection, and trust of the people in the Modern tools, convenience of clients to utilize and adopt online banking facility (Garedachew Worku, 2018). In the study "Evaluation of customer satisfactions on bank services in Jimma city in Commercial bank of Ethiopia(Belay and Deribie ,2012) reported that 25% of the sample respondents indicated that the benefits they received from e-banking were unchanged when compared to traditional banking, while 17% stated that they received the best benefits at the highest level from e-banking services.

According to the study, a greater proportion of respondents expressed dissatisfaction with the E-banking service provided by the Commercial Bank of Ethiopia. Therefore, the findings showed that the bank's e-banking services are inadequately qualified. This study's concentration on traditional banking services was one of its limitations.

Despite the widespread adoption of e-banking services, customer engagement remains a challenge for many financial institutions. there is positive association between service quality and customer satisfaction in various contexts, including e-banking. However, the specific dimensions of e-banking service quality that drive customer engagement need further exploration.(Zeithaml and Bitner,2000) . Limited research exists on how specific service quality dimensions, beyond the traditional ones,

translate into customer engagement within the context of a particular e-banking platform, considering the unique needs and demographics of its customer base. This research examined how these dimensions translate into customer engagement within the e-banking framework by taking the case of Bank of Abyssinia.

1.3 Research Objectives

1.3.1 General Research Objective

The general objective of this study is to analyze the effect of electronic banking on customers Engagement in the case of Abyssinia Bank.

1.3.2 Specific Research Objectives

Specifically the study aims achieving the following specific objectives.

1. To examine the effect of customer support on customer engagement
2. To examine the effect of performance on customer Engagement
3. To evaluate the effect of security on Customer engagement
4. To evaluate the effect of ease of use on Customer Engagement

1.4 Research Question

1.4.1 General Research Questions

As the study aims to is to examine the impact of adapting E-Banking in customer engagement by taking the case of Abyssinia Bank in Addis Ababa City. General Research Question will be,

1. What is the Effect of E- Banking service quality on Customer Engagement?

1.4.2 Specific Research Questions

The specific Research questions of this study are derived from the Specific objective of the study. Thus the specific research questions are-

1. What is the effect of customer support on customer engagement?
2. What is the effect of performance on customer Engagement?
3. What is the effect of security on customer engagement?
4. What is the effect of Ease of use on customer Engagement?

1.5 Significance of the Study

The findings of this research will add to the relevant body of knowledge regarding E banking service in Ethiopia. The finding of the study will have a great importance for Abyssinian bank by addressing the gap which is stated in problem statement as they will understand the relation of electronic banking and Customers. This will go a long way in optimize its E banking investments that enhance Customer Engagement. The findings will help stakeholders in the banking industry for recognizing and addressing this gap which is vital for unlocking the potential of e banking to get more engaged and brand loyal Customers.

Additionally, the research may help other researchers as a reference who is interested in carrying out a further research and for the researcher it will fulfill the requirement for Master's Degree in Digital Marketing and E commerce.

1.6 Scope of the Study

Conceptually the study examined perception of customers about e-banking service quality, how they see the service meet or surpass their expectations and how the E banking service quality dimensions are related with their engagement with the bank.

The Study used quantitative research approach for gathering and examining numerical information. By using explanatory research design to test the casual relationship of the independent and dependent variables. The research will adopt non probability technique specifically purposive sampling technique. The target scope of the research is the e banking users of Bank of Abyssinia who lives in Addis Ababa. Abyssinia bank is selected because comparing to others the bank has been introducing advanced and up-to-date e banking services. Addis Ababa city is selected for the convenience of the researcher due to budget and time constraints.

1.7 Limitation of the Study

In examining the effect of e-banking Service quality on customer engagement on Abyssinia Bank in Addis Ababa. The study did not include who do not use the current e-banking services and limited to customer of Bank of Abyssinia who resides only in Addis Ababa due to limitation of time and resources . In addition the research used only the quantitative research approach.

1.8 Definition of Terms

1.8.1 Definition of E-Banking

Electronic banking is the carriage of banks' information and services by banks to customers through different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television. (Daniel, 2000).

According to Timothy (2012) also defines that electronic banking alludes to the utilization of the Internet as a remote conveyance channel for giving administrations, for example, opening a bank account, transferring funds among diverse accounts and electronic bill presentment and payment. This can be offered in two principle ways. A bank with physical offices can build up a Website and offer these services to its clients notwithstanding its customary conveyance channels. Second, is to set up a virtual bank, where the PC server is housed in an office that serves as the lawful location of such a bank. The banks offer their clients the capacity to make deposits and withdraw funds by means of ATMs (Automated Teller Machines) or other remote conveyance channels claimed by different foundations, for which an administration expense is acquired. Electronic banking is modern delivery channel of banking services (Ahasanul, 2009).

1.8.2 E- Banking Service Quality Dimensions

Security: - is the lack of danger, risk, or uncertainty; it encompasses financial security, bodily safety, and confidentiality. It consists of employees who consistently treat customers with courtesy, make sure they feel secure throughout transactions, and have sufficient knowledge to answer questions from customers (Parasuraman, Zeithaml & Berry, 2005).

Ease of Use: - Ease of use is important when it comes to customers' concerns about the time and effort required to become comfortable with e-banking (David, 2010). It is associated with easily remembered pin codes and URLs, user-friendly software, easily navigable websites, clear and concise information, and easily understood terms and conditions. It is believed to have an effect on the uptake of e-banking. (Alagheband, 2006).

Performance: - is the way each feature and service that banks offer for online banking operates. It includes the availability of multilingual e-banking services, round-the-clock customer support, and the ability to move money across banks (Garvin, 1987).

Customer Support: - is a group of services designed to help users use a product correctly and economically. Customer support includes both pre- and post-sale assistance. Before customers form opinions, the company ought to help attract them and make them feel comfortable. (Courtney Gupta, 2024)

1.9 Organisation of the Study

This study is organized into five chapters. The first chapter consists of an introduction which consists of background of the study, statement of the problem, objectives of the study, significance of the study, scope of the study and definition of terms. The second chapter discusses Theoretical and empirical literature relevant to the study objective. While Chapter 3 will detail the research technique, research design and methods used,

The fourth chapter deals with the presentation, analysis and interpretation of the data. The fifth chapter deals with the summary of findings, conclusions and recommendations of the study. Finally, references, a set of appendices and questionnaire that used to collect primary data for this work is included.

CHAPTER TWO

LITERATURE REVIEW

This chapter presents a review of previous studies related to the present study. The chapter constitutes both theoretical and Empirical reviews. It explains examination of studies related to e-banking and customer Engagement in banks. Additionally theoretical models related with e banking adoption are included.

2.1 Theoretical Literature Review

The Theoretical foundation of this study is based on three theoretical models of internet banking adoption. The theory of planned behavior, Technology acceptance model, Perceived Characteristics of the innovation.

2.1.1 Theory of Planned Behavior

It has been effectively indicated that consumers' acceptance of IT may be predicted using theory of planned behavior (TPB) (Amjad and Wood, 2009). It connects the relationship among attitudes and a person's conduct (Ajzen,1985) put up the idea of incorporating perceived behavioral control into the theory of reasoned action in order to increase its predictive capacity (Koger and Winter, 2010). Among the most predictable theories of persuasion is this one. It has been used in research on the relationships between attitudes, beliefs, and behavioral intentions and behaviors in a variety of industries, including public relations, advertising, healthcare, and public relations.

According to the idea, a person's behavioral intentions and behaviors are shaped by their attitude toward conduct, subjective norms, and perceived behavioral control (Sniehotta, 2009). This theory aids in the comprehension of how people's conduct might convert. Because conduct can be planned and purposeful, the TPB is a theory that predicts intentional behavior. TPB is the replacement for Ajzen and Fishbein's comparable Theory of Reasoned Action (Koger and Winter, 2010). Perceived behavioral control was added to the sequence as a result of the revelation that behavior did not seem to be entirely voluntary and under control.

The theory was renamed the Theory of Planned Behavior with this addition. The overall point of view that people have on the attractiveness or undesirability of a particular behavior. Subjective norm (SN) is

a term used to describe how someone who plans to engage in a specific conduct feels pressured by their organization or society. The concept of perceived behavioral control, or PBC, refers to how easy or challenging a person believes it to be to carry out a specific activity.

It is shown that TPB can offer a helpful theoretical framework for comprehending and forecasting the adoption of new information systems (Ajzen, 2002). In a meta-analysis research, Armitage and Conner (2001) used the TBP to examine earlier investigations. According to an analysis of the available data, the influence of previous actions is lessened when behavior and intention measures are consistent, and it disappears when expectations are reasonable, intentions are clear and well-formed, and detailed plans have been made for putting intentions into action. The main findings supported the TPB's effectiveness and indicated that additional research on novel factors is necessary to improve the model's predictability.

2.1.2 The Technology Acceptance Model

Among models for adopting innovations, the Technology Acceptance Model (Bagozzi, Davis, and Warshaw, 1992) seems to be the most popular. Numerous researches have employed this approach to investigate the variables influencing an individual's use of novel technology. Through the sequential relationship between belief, attitude, intention, and behavior in TAM, we can forecast how users will use new technology. The Theory of Reasoned Action (TRA), which states that perceived utility and perceived ease of use influence people's attitudes about their intention to utilize an invention, is really adapted into TAM with reference to information systems. The Intention of Behavior Real-World Conduct Beliefs in Behavior and Assessments of Results Viewpoint regarding Subjective Norm Behavior.

Hanafizadeh et al. (2014) state that when adopting a system, they used the TAM prototype. According to this hypothesis, system acceptance and usage are mostly determined by perceived usefulness and simplicity of use (Bankole, et al., 2011). Numerous studies on the adoption of electronic banking augment or expand upon the initial TAM by incorporating extra constructs, as perceived danger, perceived cost of use, compatibility with lifestyle, perceived security (Hsu, Wang, and Lin, 2011), relative advantage and personal innovativeness (Chitungo and Munongo, 2013). Actually, according to Davis (1989), TAM allows for the addition of external variables as determinants of perceived usefulness and ease of use.

Furthermore, TAM makes the assumption that prospective customers have unrestricted freedom to act and make decisions. As a result of practical limitations that they may face, such as the rationalization of conventional banking channels, many consumers have shifted to using mobile banking over the past 10 years (Hanafizadeh et al., 2014). Furthermore, TAM is better than the other models, according to Yousafzai et al. (2010), who also emphasized the model's significance in analyzing online banking behavior. According to Jongu (2014), e-banking services provide users cost savings, comfort, and promptness. Banks are also keen to extend their market share by utilizing these services. According to Kleijnen et al. (2004), the development of mobile technology has given financial providers a chance to launch new financial innovations.

2.1.3 Perceived Characteristics of the innovation

By fusing TAM components with IDT qualities, Gary Moore and Izak Benbasat (1991) created Perceived Characteristics of the Innovation (PCI) (Moore and Benbasat, 1991). They divided observability into two dimensions: visibility and outcome demonstrability, and they substituted PEOU for complexity. novel construction image was introduced because, in accordance with Moore and Benbasat (1991), the decision to adopt an innovation occurs in a certain social environment and as a result, the adopter's image is influenced by that decision. Eight characteristics made up the final conceptual framework (PCI), which represented the psychological (voluntariness and trialability), social (outcome demonstrability, visibility, and image), and usability (relative benefit, PEOU, and compatibility) of technology adoption. Gounaris and Kostitos (2008) point out that PCI hasn't gotten much attention in IB literature, despite its comprehensiveness and improved capacity to explain complex innovation adoption processes. They discovered that PCI outperformed TAM and IDT in terms of results, and that social and psychological aspects were important in the adoption of IB.

2.1.4 Summary of The Models

Similarities:

- All the three model seek to explain why people Adopt new technologies or behaviors.
- Both TPB and TAM emphasize how perceived control or simplicity of use can have an impact on adoption.

- TAM and PCI both center on the features of the innovation itself (complexity, relative benefit vs. utility).

Differences:

- Scope:** TAM focuses exclusively on technology adoption, whereas TPB is a universal model for any behavior. PCI emphasizes the features of the innovation.

- Focus:** TPB emphasizes intentions, TAM user perception, and PCI the innovation's properties.

- Predictive Power:** Although TPB is more general, it may need to be customized for certain situations. Although TAM is ideally suited for technology, social variables might not be captured. PCI provides information on how to design innovations for broader acceptance.

Strength and Weakness

Theory of Planned Behavior (TPB):

Strengths:

- Comprehensive: Describes how attitudes, peer pressure, and perceived control affect behavior.
- Adaptable: Relevant to a broad spectrum of actions outside of the use of technology.
- High predictive power: TPB is capable of making precise behavioral predictions when customized for particular situations.

Weaknesses:

- Complexity: Can be cumbersome to apply due to multiple factors.
- Measurement challenges: Accurately measuring subjective constructs like attitude can be difficult.
- Limited role for external factors: Doesn't fully account for external influences beyond the individual's control.

Technology Acceptance Model (TAM):

Strengths:

- Simple and easy to use: Two core constructs make it a user-friendly model.
- Well-validated: Extensive research supports its effectiveness in predicting technology adoption.
- Actionable insights: Helps identify factors (usefulness, ease of use) to improve technology design and user acceptance.

Weaknesses:

- Limited scope: Focuses solely on technology, neglecting broader social and psychological influences.
- Ignores external factors: Doesn't consider external conditions affecting technology adoption (e.g., cost, accessibility).
- Limited cultural sensitivity: May not be universally applicable across all cultures.

Perceived Characteristics of Innovation (PCI):**Strengths:**

- Innovation-eccentric: Focuses on the innovation's features, offering valuable insights for design and marketing.
- User-centered perspective: Considers how users perceive innovation's characteristics (relative advantage, complexity).
- Broad applicability: Useful for evaluating various innovations beyond technology.

Weaknesses:

- Limited role for user context: Doesn't account for individual motivations or social influences on adoption.
- Assumes rational decision-making: May not capture emotional or impulsive factors affecting adoption.
- Difficulty in measuring constructs: Accurately gauging user perceptions of innovation characteristics can be challenging.

Connecting the Models

All three models – Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), and Perceived Characteristics of Innovation (PCI) - can be connected to understand e-banking service quality and customer engagement. Here's how:

TPB:

- Customer Engagement: Consider** "using e-banking services" as the target behavior. TPB can help understand what influences a customer's intention to engage with e-banking. Factors like:
- Attitude:** is the customer positive about the ease and security of e-banking offered by the bank?
- Subjective Norm:** Do friends and family who use e-banking recommend it?

-Perceived Behavioral Control: Does the customer believe they have the technical skills and confidence to use e-banking effectively?

TAM:

-E-Banking Service Quality: TAM focuses on perceived usefulness and ease of use. These can be directly linked to e-banking service quality:

-Perceived Usefulness: Does the e-banking platform offer features and functionalities that meet the customer's needs (e.g., bill pay, mobile deposits)?

-Perceived Ease of Use: Is the e-banking platform user-friendly and intuitive, with clear navigation and functionalities?

PCI:

•**Customer Adoption of E-Banking:** PCI sheds light on how the inherent characteristics of e-banking services influence customer adoption and engagement:

•**Relative Advantage:** Does e-banking offer clear benefits over traditional branch banking (e.g., 24/7 access, convenience)?

•**Compatibility** Does e-banking fit well with the customer's lifestyle and preferred way of managing finances?

•**Complexity:** How easy is it for the customer to learn and use the e-banking platform?

By combining insights from all three models, you can gain a richer understanding of customer engagement with e-banking services:

-TPB- helps identify what drives a customer's intention to use e-banking based on their attitudes, social pressure, and perceived control.

-TAM-highlights how the perceived quality of e-banking services (usefulness and ease of use) impacts customer adoption and engagement.

-PCI- looks at the innovation itself (e-banking features) and how their design characteristics influence user perception and ultimately, engagement.

Overall: Understanding these connections allows banks to:

-Improve e-banking service quality based on user needs and perceptions (TAM).

-Design user-friendly and accessible e-banking platforms to enhance adoption (PCI).

-Develop marketing campaigns that address customer concerns and highlight the benefits of e-banking (TPB).

By considering all these factors, banks can create a positive e-banking experience that fosters customer adoption and engagement.

The link between the conceptual frame work and the theories

The three theories can be effectively related to e-banking service quality dimensions, specifically customer support, security, ease of use, and performance. Here's how:

Theory of Planned Behaviour (TPB):

- **Attitude:** Customers with a positive attitude towards e-banking security, ease of use, and performance will likely perceive it as a valuable service and have a stronger intention to use it. Customer support quality can influence attitude by demonstrating the bank's commitment to resolving issues and ensuring a smooth experience.
- **Subjective Norm:** If the social norm surrounding e-banking is positive, with friends, family, or colleagues using it successfully, it can influence a customer's intention to adopt it. High-quality customer support can contribute to a positive social norm by demonstrating the bank's reliability and trustworthiness.
- **Perceived Behavioral Control:** Customers who perceive e-banking as easy to use (due to good design and functionality) and who feel confident in receiving adequate support when needed (through responsive customer service) will have a higher perceived behavioral control over using e-banking. This can lead to a stronger intention to utilize the service.

Technology Acceptance Model (TAM)

- **Perceived Ease of Use:** An e-banking platform that is easy to navigate, understand, and perform transactions on will be perceived as more usable according to TAM. This can lead to increased adoption and continued use. Customer support can play a role by offering clear tutorials, FAQs, and readily available assistance, further enhancing perceived ease of use.
- **Perceived Usefulness:** Customers who perceive e-banking as offering valuable features and functionalities that meet their needs will find it more useful. Security, ease of use, and

performance all contribute to perceived usefulness. Customer support can also add to usefulness by providing guidance on how to utilize specific features effectively.

Perceived Characteristics of Innovation:

This theory focuses on how individuals perceive new technologies. It can be applied to e-banking by considering the following:

- **Relative Advantage:** E-banking offers advantages like convenience, accessibility, and potentially lower transaction fees compared to traditional banking. Customer support can further enhance this advantage by ensuring a smooth and efficient experience.
- **Compatibility:** E-banking needs to be compatible with existing user habits and skills. A user-friendly interface and readily available customer support can increase compatibility.
- **Complexity:** A complex e-banking platform can deter users. Here, ease of use plays a crucial role. Customer support can help users navigate any complexities they encounter.
- **Trial ability:** The ability to try e-banking features with minimal risk (e.g., through demo accounts) can encourage adoption. Customer support can play a role by offering guidance during a trial period.
- **Observability:** Seeing positive experiences of others using e-banking can influence user perception. Customer support can contribute to positive observability by actively resolving issues and showcasing the platform's benefits.

By understanding how these theories connect with e-banking service quality dimensions, banks can focus on:

- Developing user-friendly interfaces and functionalities.
- Providing comprehensive customer support across various channels.
- Ensuring robust security measures.
- Demonstrating the value and convenience of e-banking services.

These efforts can ultimately lead to increased customer adoption, satisfaction, and engagement towards the bank's e-banking platform.

2.2 Empirical Literature Review

The Empirical Literature review of this study will describe a studies related to E banking service quality dimensions and customer Engagement which are conducted in different parts of the world and in Ethiopia.

Several studies have empirically established the positive influence of customer support on e-banking engagement. Research by Alimuddin Rizal Rivai, Wahyudi ,2020) demonstrates how effective resolution of issues through support channels raises client happiness and, in turn, e-banking service engagement. The main goal of the study was to determine how customer happiness and customer engagement are affected by customer service and product knowledge. The Bank BNI Regional Semarang e-banking clients of the object user are chosen for this investigation. Purposive sampling was used in this study to select samples from a total of 100 respondents. Based on the study's findings, it can be said that increasing customer happiness is necessary to increase consumer engagement. While offering greater customer value can help to achieve this kind of happiness, the support system is user-friendly and up to date, and it offers clients comprehensive and ongoing access to information products.

A study by Kamdjoug et al. (2020) emphasizes the role of trust in e-banking. When customer support fosters trust through effective communication and security measures, it encourages active engagement with the platform.

In Jordanian Commercial Banks the study of (Aladdin & Hasan, 2011) on e-banking functionality and outcomes of customer satisfaction seeks to examine the impact of e-banking service quality on customer satisfaction outcomes as well as the adoption of e-banking functionality. To find 179 customers who fit the specified range of demographics (such as gender, age, and computer use), prior internet experience levels, and product-related knowledge, a purposive sample technique was used. According to the research, Jordanian Commercial Bank customers were happier when they used e-banking due to its accessibility, convenience, security, privacy, content, design, speed, fees, and charges. In Singapore a study by Gerrard et al,2010 identify an important factor for Internet Banking adoption. The findings of the study show that, All respondents who did not use internet banking services had a negative perception of the security in Internet Banking. The respondents perceived that there were many security risks when using the internet. They felt the privacy was a concern, feeling all their financial information could be in jeopardy. Risk was one of the two most frequently mentioned factors in their study; concern about risk was mentioned by all respondents. An empirical investigation

conducted by Sathye (2000) on the adoption of internet banking by Australian customers identified, security concern among banks and customers are keeping both away from internet banking . The study of kerem(2003) on adaption of electronic banking underlying consumer behavior and critical success factors conducted in Estonia, was intended to study the further understanding of how consumers perceive electronic banking in the days of interactive channels in Estonia, as Estonia is internationally renewed for being a pioneer in the acceptance of new technology. The adaption of internet banking better prices, recommendation, better services, marketing effort, better access and higher privacy.

A research done in Portugal by Anabela Maria Bello,2023, under the title of “The Role of Customer Engagement with E Banking” intends to determine the factors that influence consumers' happiness with online banking and their level of interaction with the bank as well as their level of loyalty to the online banking service. In the context of electronic banking, the study model examines website interactivity as a precursor to client engagement and satisfaction. Ultimately, it is shown that one characteristic that has a significant influence on satisfaction is interactivity when the direct effects are analyzed. Because interactivity has a significant impact on engagement, website interactivity is also a crucial factor in connection to customer engagement. When it comes to loyalty, e-satisfaction is the component with the biggest impact, followed by engagement and interactivity. However, all three variables have a considerable impact on loyalty.

As pointed out by Harimurti and Suryani (2019), Customer engagement happens between two parties that will interact with marketing: businesses and consumers. There is interaction between consumers and businesses since the transaction process involves dynamic connections and emotional attachments. As a result, creating a strong customer notion is crucial to increasing brand loyalty. Interaction with businesses promotes consumer loyalty and helps with improved business decisions. But we also need to examine the indirect impacts, as taking into account both direct and indirect effects together will provide a more thorough evaluation of the connections between the variables being studied. Because of its indirect impacts, interaction has the largest overall effect on loyalty when we consider both direct and indirect effects.

A study Conducted in India by Yashasvi Rajnikant Rajpara, aims at evaluating service quality of internet banking services in Anand city from customer's perspective. . In the, 5 quality dimensions i.e. Responsiveness, Reliability, Efficiency, Privacy of information and Easiness to use are considered. Customers from two leading Banks, one from Public sector(State Bank of India) and one from Private

sector (ICICI Bank) were considered for the purpose of study. Response has been taken from 300 customers (150 from each bank). Based on the findings the researcher concluded that, The internet banking has been sizzling in India. The growth in recent year attracts many banks to internet services, the competition resulted into benefit to the customers. Within Anand city, due to AMUL, GIDC, and educational institutes, majority of customers using internet banking are from service class. ICICI is the pioneer bank in India into internet banking so in majority of quality dimension it scores more than SBI, however looking at the score of privacy of information it seems that, people in India still trust Public Sector Bank. The difference in service quality arises mainly because of skilled human resource. ICICI succeed to attract young & efficient staff for the internet operations, while on the other hand SBI still suffers mentality of old employees. However in last few years, SBI came out as a leading Public Sector Bank, providing internet services.

Studies by Wu et al, 2018) contend that an intuitive user interface increases users' trust in their ability to utilize the platform, increasing the chance that they will explore its features and interact with e-banking services. While it discusses the relationship between engagement and ease of use, the evaluation focuses on the general effects of ease of use on the e-banking user experience. According to the results, consumer engagement is positively impacted by ease of use.

In Ethiopian there are also some studies conducted, Specifically (Gardachew, 2010) conducted a research on the opportunities and challenges of e-banking in Ethiopia. The study's primary objectives were to assess Ethiopia's current state of electronic banking and look into the prospects and major obstacles associated with setting up an e-banking system. After conducting a survey on how banks currently operate, the author identified a few obstacles to using e-banking systems, including the absence of a financial network that connects banks, political unrest in nearby nations, a high rate of illiteracy, and a lack of appropriate legal and regulatory frameworks for e-commerce and e-payments.

(Tamru ,2017),studied the impact of E-banking service quality on customer satisfaction on Commercial bank of Ethiopia in Jimma City, which analyzes the relation of E banking and Customer satisfaction. In the study the researcher concluded that Customer satisfaction is the major factor contributing to the success of service sector. In this research the 57 satisfaction of customers with the different quality dimensions pertaining to the theoretical model was evaluated. Accordingly, the major findings, In general, adult people, employed, more educated and male are major e-banking users. From Service quality dimension, such as customer support, Easy use, Performance and service content has positive impact on customer satisfaction or these variables significance contribution in customer

satisfaction. As a whole service quality dimension together has impact on the customer satisfaction of e-banking in commercial bank of Ethiopia. But some independent variables, customer support, ease use, services content and performance has positive correlation and positive regression coefficient with customer satisfaction of electronic banking and while, the other independent variables such as Reliability, transactional efficiency and service security, are negative correlation which means has less contribution in impact of customer satisfaction.

The study of (Bultum, 2014) seeks to determine the variables that influence the e-banking industry's acceptance in Ethiopia. Data from four Ethiopian banks three private (Dashen, Zemen, and Wegagen banks) and one state-owned (Commercial Bank of Ethiopia) were used to perform the study. The study issue that arose from the researcher's experience with Ethiopia's E-banking system and the literature review was addressed using a mixed research approach. Data from the survey are statistically analyzed in this paper. a study framework created using Tornatzky and Fleischer's technology-organization environment model (TOE). Infrastructure and a lack of rivalry between domestic and international banks The result of the study indicated that, the major barriers Ethiopian banking industry faces in the adoption of electronic banking are: security risk, lack of trust, lack of legal and regulatory frame work, lack of ICT infrastructure and absence of competition between local and foreign banks. The study suggests a series of measures which could be taken by the banking industries and by government to address varies challenges identified.

Furthermore (Assefa, 2013) conducted a study on the impact of e-banking on customer satisfaction in two privet banks in Gondar city. The researcher employed descriptive and inferential statics in analyzing this study and it was limited to customers of two private banks only. According to the study's findings, the majority of e-banking users are young, educated, employed, and students. Business people, on the other hand, do not actively utilize e-banking services. Only current and savings account holders can currently use e-banking; it has decreased the number of times bank halls are used for banking services, shortened wait times for customers who are unaware of the fees associated with using it; it has increased customer satisfaction after users take control of their account movements; and there is a great potential to grow e-banking services in the city.

2.7 Conceptual Framework

The basic objective of this study is to investigate the effect of E-Banking service quality on customer Engagement. The research model for this research is given in Figure 1.

The independent variables are an explanation of e-banking service quality Dimensions.

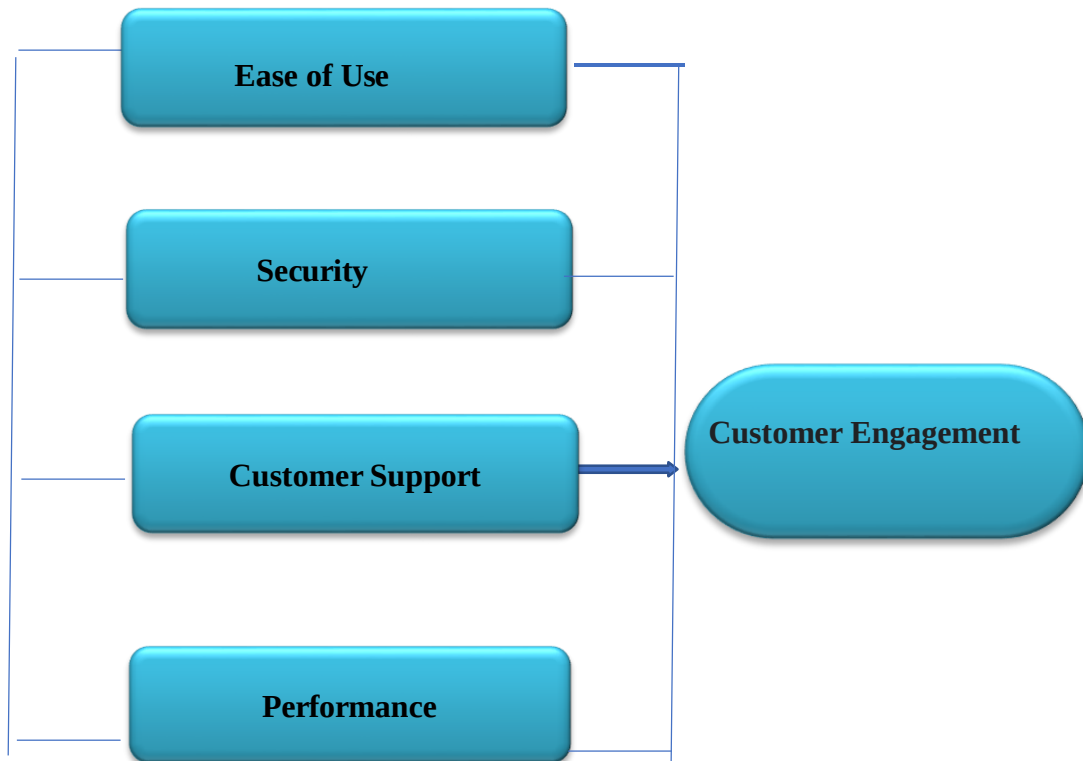


Figure 1 Source;(Yang et al., 2004)

2.8 Research Hypothesis

Based on literature, the alternatives hypotheses will be

H1: Customer support has a positive effect on Customer Engagement

H2: Performance has a positive effect on Customer Engagement

H3: Security has a positive effect on Customer Engagement

H4: Ease of use has a positive effect on customer Engagement

CHAPTER THREE

RESEARCH METHODOLOGY

In this Chapter, The research approach used for the study is briefly covered in this section. In addition, it provides details about the research design, study population, study area, and data collection and analytic techniques used.

3.1 Research Approach

In this research quantitative research method is used.

3.1.1 Quantitative Approach

It is the process of obtaining and analyzing numerical data. It can be used to identify patterns and averages, create hypotheses, investigate causality, and extrapolate results to bigger groups (Pritha Bhandari, 2020). The objective of this approach is to measure information and extrapolate findings from a target population sample (Macdonald et al., 2008, p. 9). It uses standardized procedures for gathering data and outputs data as numerical data. Objective analysis is also observed in quantitative research. Because quantitative research is a formal, objective, systemic procedure that uses numerical data to gain knowledge, it was chosen for this study (Creswell, J.W. 2003).

In this study quantitative data is used as a measurement for answering objectives of the study by testing the casual relationship of e banking adoption and customer engagement in the case of Abyssinia Bank.

3.2 Research Design

The research design is the phase of study planning that is often used to rationally visualize the study's potential. It can also be viewed as a manual for collecting, calculating, and interpreting data. A research design aimed toward explanation was used in this study. The goal of explanatory research is to determine the causes of events. It can help in understanding a particular subject better, figuring out the process or reason of particular phenomena, and making future predictions. A "cause and effect" approach can also be used to describe explanatory research, which looks for patterns and trends in the data that already exists

Since the objective of this research is to study The Effect of E banking Service quality on customer engagement in case of Abyssinia Bank, it uses explanatory research design to determine Impacts between the dependent and independent variables. The researcher also used descriptive studies to describe the characteristics of the sample by using mean, percentages and frequency

3.3 Sampling Design

3.3.1 Population of the Study

The total group of units for which study data are intended to be utilized to draw conclusions is known as the target population in research (Cox, 2013).The Abyssinia Bank e-banking users who reside in Addis Ababa City and have been actively utilizing the service made up the study's target group. The reason. Addis Ababa was chosen for this research project due to logistical considerations, particularly budget and time constraints..

3.3.2 Sampling Technique and Sample Size

This study will use non probability techniques specifically, purposive sampling methods is used to consciously select customers who meet the criteria of having used e-banking services actively, Purposive sampling technique is used to Select only those individual who are relevant to research purpose.

The sampling size was determined by using a formula developed by Taro Yamane, (1967) with a probability of 95 % free error.

According to annual report Bank of Abyssinia, Addis Ababa offices, the total population of customers 1.2 million as of December 31, 2022 in branches which found in Addis Ababa and from those its reported that 65% of the customers uses the E banking services which is 780000 Customers.

So To calculate sample size, simplified formula provided by Taro Yamane (1967) will be used $N/1+N(e)^2$

Where n is the required sample size, N is the population size and e is the level of precision.

Therefore the sample size will be

$$n= 399.79$$

3.3.3 Variables and Measures

E-banking quality is often a composite score that combines these individual dimensions. However, the relative importance of each dimension may vary depending on the specific customer and their banking needs. To examine the effect of e banking service quality among the seven e- banking service quality dimensions four e banking service quality dimensions the study used , Customer support, performance, security and ease of use are used. Reliability, Transaction Efficiency and service content were excluded.

How quality is measured in each dimension:

Customer Support: Measured by responsiveness (how quickly inquiries are addressed), resolution rate (percentage of issues resolved), and overall customer satisfaction with support interactions. This can be assessed through surveys, call center metrics, and social media sentiment analysis.

Performance: Measured by system uptime (availability of the platform), transaction processing speed, and overall speed of navigation within the e-banking system. Banks track these metrics internally and may report uptime statistics publicly.

Ease of Use: Measured by user interface (UI) design clarity, intuitiveness of features, and the overall learning curve for new users. User testing, surveys, and heat map analysis of user behavior on the platform can provide insights into ease of use.

Security: Measured by the strength of encryption protocols, authentication methods, and the banks track record of preventing cyber-attacks. While specific security details are often not publicly disclosed, banks may achieve certifications or report on successful security measures implemented.

Justifications for excluding the variables -

Transaction efficiency -While transaction efficiency is not explicitly included the chosen dimensions, it is likely to be positively influenced by performance and ease of use. A well-functioning and user- friendly platform will naturally lead to faster and more efficient transactions.

Reliability -is often considered an umbrella term encompassing aspects of security and Performance. By focusing specifically on security and performance, it will able to be delving deeper in to these crucial aspects.

3.4 Data sources and data collection tools

Primary data gathering techniques was used to obtain the necessary data for the investigation. The information was gathered from active E-banking users of the bank by the use of a questionnaire with closed-ended questions intended to gather information. and a structured interview will be used for the branch Managers.

3.5 Data collection Procédures

For data collection purposes, an online questionnaire was employed and shared across various social media platforms frequented by Bank of Abyssinia customers. Additionally, the researcher visited selected branches of the bank and presented the opportunity to complete the questionnaire directly to respondents, allowing them to choose their preferred method of completion (social media or email). Furthermore, bank staff assisted in reaching out to their customers to encourage participation in the questionnaire. This questionnaire was developed based on a previously validated questionnaire used for other related research titled "The Effect of E-Banking Service Quality on Customer Satisfaction." The current questionnaire incorporates modifications to reflect the specific research focus .

3.6 Data Analysis Methods

The process of editing and reducing accumulated data to a manageable size, developing summaries, looking for patterns, and applying statistical techniques is defined as data analysis (Cooper and Schindler 2014). According to Cooper and Schindler, managers require information rather than raw numbers. Therefore, it is the researcher's responsibility to analyze the data they have gathered in order to produce the necessary knowledge .In this study, data preparation will be done on the completed questionnaires by inputting, editing, and cleaning the data before processing the responses. The Statistical Package for Social Science was the instrument used for data analysis (SPSS version 29). These data analysis methods used to determine the mean, frequency, and percentage of respondents for each variable. Regression analysis was performed, and the results of the regression analysis was used to assess each hypothesis.

3.7 Validity and Reliability of the Data Collection

3.7.1 Validity

The extent to which the results truly measure what they are supposed to measure is known as validity. Accordingly, validity is essentially the success rate at which the study gauges what the research aims to investigate (Fiona Middleton, 2019). To assess this study's validity, the investigator went to great lengths to avoid bias. The information was obtained from valid sources, respondents will get clear instructions on how to answer the survey, the survey questions were standardized and the initial base of the questionnaires will be previous validated questionnaires which had been used on previous related topics and will be modified by the researcher up on the studies specific objective. Therefore, the questionnaire is adequately valid in accordance with the research objective as viewed by experts.

3.7.2 Reliability

Reliability is the extent to which a phenomenon's measurement produces dependable and consistent results. Reliability testing is important since it deals with the consistency of the equipment utilized. The scale's elements are considered related and to have consistent internal reliability if they measure the same configuration. The internal consistency statistic that is most frequently employed is Cronbach's alpha factor. The Cronbach's Alpha reliability test estimate indicates how highly the items in the questionnaire are interrelated in order to determine reliability of the instrument (Hayes, 1998). There is no absolute standard for internal consistency, but most experts agree with a minimum internal consistency factor of 0.70 (Taherdoost, 2016).

This research used Cronbach's alpha method for reliability test. A reliable measurement is not always valid: the results might be reproducible, but they're not necessarily correct (3, 2019 Fiona Middleton).

3.8 Ethical Considerations

Certain ethical guidelines were followed in the conduct of the study. Prior to administering the questionnaires, each study participant was briefed on the goal and purpose of the investigation and get the assurance of confidence and secrecy following an explanation of the study's purpose. Also the researcher assured that the names of respondents will not be revealed in the study. Furthermore, no improper, discriminatory, or insulting language was used when creating the surveys.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

This chapter presents the data that was gathered from the sampled bank branch customers of Bank of Abyssinia and uses various statistical tools based on the data analysis method. The study's Findings ought to be covered in the following a portion of this chapter. The Sample size was 399 respondents from those 353(90%) of data was collected and analyzed Using SPSS version 29.

Reliability testing, descriptive findings and specialist information analysis (Regression analysis) based on the data gathered make up the three components of this chapter. Therefore, frequency and percentage were used in descriptive analysis to assess the general analysis, multiple regression models were used in SPSS version 29 to analyze the specialized questions, and the t-test was used to test the hypothesis.

4.1 Descriptive Findings

4.1.1 Demographic Profile

Table 4.1 Demographic characteristics table

No	Demographic		Frequency	Percentage
1	Gender	Male-	160	49.9
		Female-	193	55.1
		Total	353	100
2	Age	18-27	104	29.6
		28-37	168	47.9
		38-47	67	19.1
		48-60	11	3.1
		Above 60	3	0.3
		Total	353	100
3	Educational Status	Primary	13	3.7
		High School	21	6
		Bachelor's degree	205	58.6
		Master's degree	96	27.4
		PHD	13	3.7
		Above PHD	2	0.6
		Total	353	100
4	Occupation	Student	22	5.6
		Unemployed	14	4.1
		Employed	172	39.2
		Self Employed	136	49.6
		Pensioner	4	1.2
		Other	4	0.3
		Total	353	100

As the above table shows there is almost equal distribution of e-banking service usage among genders. With 49.9% representing males and 55.1% females, this suggests a close parity in e-banking adoption for both demographics. Looking at age groups, the study found the highest participation (47.9%, or 168 respondents) among those aged 28-37. The following age groups were 18-27 years old and 38-47 years old. Interestingly, the data suggests a potential correlation between age and e-banking usage, with the lowest participation observed among those above 60 (0.3% of respondents). Furthermore, The most represented educational levels were those with a Bachelor degree which was 205 respondents or 58.6%

of the respondents .and 96 (27.4%)are those with Master`s degree .The least represented educational level were those PHD and above PHD who were 13 in number or 3.7 % and above PHD 2 in number or 0.6% of the respondents respectively .As far as occupation is concerned, the respondents are employed (39.2%), Self Employed (49.6%) and students (5.6%) and there were least respondents from Unemployed and pensioner with 4.1 and 0.2 respectively .

4.1.2 Mean, and Standard Deviation

The mean and standard deviations of the respondents' scores were computed as descriptive statistics. By contrasting these mean scores and variations among respondents, analysis has been carried out. Descriptive statistics are used in order to compare various elements that, when utilizing the means and standard deviations data, influence the commercial bank of Ethiopia's customers' pleasure. A rating was conducted based on each variable to determine the respondents' satisfaction level with the e-banking services provided by their respective banks.

Table 4.2 Mean and Standard Deviation analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Customer Support	353	4	55	9.88	4.274
Performance	353	4	42	10.50	4.236
Security	353	4	16	10.60	2.919
Ease of use	353	4	16	9.48	2.977
Customer Engagement	353	8	22	11.44	2.146
Valid N	353				

Source, SPSS Survey 2024

The above table shows the responses which were based on a Likert scale of 1-5 where 1=strongly disagree 2=disagree 3=neutral 4=agree 5=strongly disagree. The central tendency measures were calculated using data obtained from the e-banking Bank of Abyssinia. The following are the considerations of each variable:

Customer Support -The score of 9.88 indicates a positive experience with customer support. This means that, on average, customers are very satisfied with the support they receive. The variation mean scores of 4.274 ratings are far from the average, and there is a large variation in how customers perceive the customer support. So, while the average customer rates the customer support very highly, there is also a chance that some customers had negative experiences.

Performance – has mean score of 10.5 and standard deviation of 4.236. The mean score of 3.61 indicates the most of e-banking service users are agreed to the performance efficiency of Bank of Abyssinia.

Security – has mean score of 10.6 indicates most of respondents are happy by the security features provided by Abyssinia Bank and standard deviation score were 2.977 infer that e-banking services users are consistency on the services security.

Ease of use - has mean score of 9.48 and standard deviation 2.977, indicates that customers generally find the e-banking platform easy to use. This is a very positive sign, as ease of use is a major the standard deviation is relatively low, suggesting that most customers had a similar experience with the platform's ease of use.

The study's empirical data also indicates that e-banking variables significantly affect consumer Engagement. The electronic banking literature, which argues persuasively that e-banking parameters affect consumer Engagement, has benefited greatly from this empirical research (Hua, 2009; Wise, Victoria & Ali, & Muhammad, 2009).

4.2 Cronbach's Alpha Test of Reliability

Reliability refers to the consistency and dependability of a measuring instrument using it repeatedly should give us the same or similar results every time (Anderson, Gaile-Sarkane, 2008).

Table 4.3 Cronbach Alpha Score

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.874	0.891	24

Nunnally and Bernstein (1994) assert that a research instrument's internal consistency reliability increases with Cronbach's alpha proximity to 1. The range of a Cronbach's Alpha score is 0 to 1. A Cronbach's Alpha score of more than 0.70 indicates that the scaled item has a high level of internal dependability. Furthermore, as the number of items in the scale increases, the Cronbach's Alpha increases as well, resulting in a fall in the Cronbach's Alpha score (Garson, 2002). The cumulative Cronbach's alpha ratings were over 0.70 or close to 1, indicating high reliability, as seen in table 4.2 above.

4.3 Chi Square Test

The Chi-Square test is used to examine the relationship between customer Engagement with e-banking and demographic traits. Due to the categorical nature of the variable being studied, the test statistics were selected. The SPSS statistical package's output was displayed.

Table 4.4 Chi-Square test for association between demographic characteristic and Customer Engagement of E-banking

Variable	Chi Square	Df	Asymp.sig
Gender	74.9	7	0.001
Age	136.16	21	0.000
Education	726.378	42	0.002
Occupation	495.54	35	0.000

The Above table shows that the association between customer Engagement in e-banking and the demographic variables like educational level, age, occupational, are statistically significant. P-value below a chosen significance level (usually 0.05) indicates that the observed results are unlikely to be due to chance. This statistic indicates the strength of the observed association between demographic variables and customer engagement. Higher Chi-square values generally suggest stronger associations. For Example as the results provided (asymptotic significance score of 0.001, degree of freedom of 7 and Chi-square value of 74.9) suggest a statistically significant association between the demographic characteristic "gender" and customer engagement.

4.4 Correlation and Regression analysis

4.4.1 Correlation analysis

A statistical technique called correlation analysis is used to determine whether or not two variables or datasets have a link. Pearson's correlation coefficient is measure of the strength of a linear association between two variables.

Table 4.5 Correlation analysis of the dependent and independent variable

Correlations						
		Customer Support	Performance	Security	Ease of Use	Customer Engagement
Customer Support	Pearson Correlation	1	.751**	.648**	.660**	.402**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001
	N	353	353	353	353	353
Performance	Pearson Correlation	.751**	1	.741**	.603**	.490**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001
	N	353	353	353	353	353
Security	Pearson Correlation	.648**	.741**	1	.798**	.642**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001
	N	353	353	353	353	353
Ease of Use	Pearson Correlation	.660**	.603**	.798**	1	.544**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001
	N	353	353	353	353	353
Customer Engagement	Pearson Correlation	.402**	.490**	.642**	.544**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	
	N	353	353	353	353	353
**. Correlation is significant at the 0.01 level (2-tailed).						

Since all of the variables measure the same item, correlations between them are predicted. Therefore, prior to conducting factor analysis, any variable that has no correlation ($r=0$) with any other variable—or very few should be eliminated.

As the above table shows, Customer support and performance and Ease of use scored 0.4 and 0.49, 0.544 correlation with customer engagement respectively, which means there is moderate positive association between the two variables. Security Scored 0.644 correlations which necessarily mean there is positive association between the two variables. Overall the correlation analysis signifies that there's a positive trend between the dependent and independent variables. As the value of one variable increases, the other variable tends to increase as well.

4.4.2 Regression Analysis

Regression analysis for e-banking service quality dimensions and customer engagement has been done in this part to determine the association between explanatory factors and e-banking customer Engagement.

Table 4.6 Anova Analysis

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	678.453	4	169.613	62.636	<.001 ^b
	Residual	942.363	348	2.708		
	Total	1620.816	352			
a. Dependent Variable: Customer Engagement						
b. Predictors: (Constant), Customer Support ,Performance, Security, ease of use						

As reported from the above table. The model is well fitted since the p-value is <0.001, which is significant, and the F-value (62.636), which is used to gauge the model's overall test of significance,

4.4.3 Multiple Regression Analysis

To test the hypothesis, multiple regression analysis was utilized. The methods are helpful for examining the connection between one dependent variable and multiple independent factors (Hair et al., 1998).

Table 4.7 Regression Coefficient Analysis of the Model

Coefficients ²								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95% Confidence Interval	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6.386	0.334		19.097	<.001		
	Customer Support	-0.046	0.034	-0.091	-1.347	0.179	0.366	2.729
	Performance	0.041	0.037	0.081	1.113	0.267	0.315	3.178
	Security	0.402	0.060	0.547	6.755	<.001	0.255	3.922
	Ease Of Use	0.085	0.052	0.118	1.631	0.104	0.318	3.146
a. Dependent Variable: Customer Engagement								

The coefficient of the link between the dependent and independent variables is displayed in table 4.8 above. Customer support, performance security, and ease of use have substantial correlations with customer Engagement, as seen by their significance values, which are less than 5% of the significant level. The tolerance level also indicates a moderate level of multicollinearity between the independent variable and dependent variable. (Hair et al., 2006) .Given the VIF and tolerance levels found in the analysis, there is no problem with multicollinearity. Generally, based on the aforementioned criteria, all scales used in this study proved to be valid and reliable. Since all of the VIF's values are less than 10, there is no multicollinearity issue in this instance.

$$\text{CSEB} = 6.386 - 0.046 X_1 + 0.041 X_2 + 0.402 X_3 + 0.085 X_4$$

X₁= one unit change in Customer Support will change customer engagement by -0.046unit in average

X₂= one unit change in Performance will change customer engagement by 0.041 unit in average

X₃= one unit change in Security will change customer engagement by 0.0402unit in average

X4=one unit change in Ease Use will change customer engagement by 0.085 unit in average

The explanatory variable are negative relationship with customer Engagement Customer Support reliability, transaction low coefficient of -.0.046 indicates negative impact on customer Engagement of e-banking of Bank of Abyssinia.

Performance, Security, and ease of use has a positive coefficient of 0.041, 0.042,0.085 respectively. This means leads to better Customer Engagement on e-banking.

4.4.4 Hypothesis Test

H1: E-banking Customer Support has positive impact on customer Engagement

As shows in the above table 4.7 Customer Support has negative correlation with customer Engagement of e-banking -0.046 at significance level of 0.001 this implies that Customer support has negatively impact customer Engagement. Therefore hypothesis rejected.

The possible reason for this could be –

Context Specific Factors

Alternative communication preferences: Traditionally Ethiopians might prefer in- person interaction for complex issues. Even with good phone or online support, they may not actively engage with it.

Language barriers: If Abyssinian Bank e-banking customer support is limited to Amharic or a few languages

Cultural factors in Ethiopia: Customer engagement with banks might be influenced by cultural aspects not captured in the quantitative approach. consider including qualitative research (interviews, focus groups) to understand these aspects.

Abyssinian Bank Specific Factors:

Limited support channels: Even if the support staff is excellent, the options for reaching them (phone, email, chat) might be limited, discouraging customer engagement.

Long wait times or slow response: High call volumes or slow response times on emails or chat could frustrate customers and make them disengage, even if the support itself is good.

Limited functionalities of support: Perhaps the customer support can't address all the issues users face with the e-banking platform, leading to disengagement despite good service for basic inquiries. It might exclude customers who prefer English or other regional languages.

Measurement Issues- While the quantitative data provides a starting point, a qualitative research methodology is essential to comprehensively assess the quality of customer support offered by Abyssinian Bank. By delving deeper into customer experiences.

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H2: E-banking Performance has positive impact on customer Engagement

As result in table 4.7 shows that Performance has positive correlation with customer Engagement a 0.041 regression significance level value 0.267. This implies that the variables positive correlation with customer engagement of e-banking. Therefore, hypotheses are accepted.

H3: E banking Security has positive impact on Customer Engagement

As result in table 4.7 shows that Performance has positive correlation with customer Engagement a 0.042 regression significance level value 0.000 This implies that the variables has positive correlation with customer Engagement of e-banking. Therefore, hypotheses are accepted.

H4: E-banking Ease of Use has Positive Impact on Customer Engagement

As result in table 4.7 shows that Performance has positive correlation with customer Engagement a 0.085 regression significance level value 0.05 This implies that the variables positive correlation with customer satisfaction of e-banking. Therefore, hypotheses are accepted.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary of the findings

To start from the descriptive findings under the demographic variables Gender has Almost equal number of males (55.1%) and females (44.9%) usage e-banking. The age distribution, 28-37 (47.9%) has the highest percentage of e-banking users, followed by the 18-27 (29.6%) and 38-47 (19.1%) age groups. Less than 5% of users are above 60 years old. Assessing the Education status of, The majority of e-banking users (58.6%) have a Bachelor's degree. Those with a Master's degree (27.4%) also represent a significant portion of users. Less than 10% of users have a high school diploma or below. Occupation, Employed (49.6%) and self-employed (39.2%) individuals are the most likely to use e-banking. Students (5.8%) and unemployed individuals (4.0%) have a lower usage rate. Overall, e-banking seems to be most popular among middle-aged adults with a college degree who is employed.

The analyses of independent variables using requirement model, all variables plays crucial role in impact of e-banking services on customer Engagement. These Customer Support, Performance, Security, Ease of Use, 0.402, 0.49, 0.642, 0.544 respectively correlation with customer Engagement. n and customer support (0.194), easy use (0.179), performance (0.205) and service content has 0.010 with customer satisfaction. The positive Correlation indicates high contribution of the predictors in customer engagement or high impact on customer Engagement. When also checking the regression analyses of independent variables on customer Engagement Customer Support -0.046, Performance 0.041, Security 0.042, ease of use 0.085. The negative coefficient of independent variables implies the variables negatively affect customer of Bank of Abyssinia and also the positive coefficient implies the amount by which independent variables affect the customer Engagement.

5.2 Conclusion

The success of the service sector is mostly attributed to customer satisfaction ad Engagement. E-banking has grown to be a popular service that both current and new users desire. Customer Engagement is essential to all service sectors, and banks are no exception. Offering High Quality services is one approach for banks to increase customer Engagement and win over clients' loyalty.

This study Evaluated Customers Engagement with the four E banking service quality dimensions related to the theoretical model. Consequently, the following is a presentation of the main findings:

Descriptive analysis reveals that e-banking adoption is most prevalent among middle-aged adults with a college degree who are employed. This suggests a target market for Bank of Abyssinia's e-banking initiatives. Furthermore, the analysis indicates a positive and significant relationship between service quality dimensions and customer engagement in e-banking. Performance, security, and ease of use all demonstrate positive correlations and regression coefficients with customer engagement. This highlights the importance of focusing on these aspects to enhance user satisfaction and loyalty.

Interestingly, customer support exhibits a negative regression coefficient, suggesting a lesser impact on customer engagement. This may warrant further investigation into the specific aspects of customer support that influences user behavior.

The study also finds statistically significant associations between customer engagement and various demographic variables, including age, gender, education level, and occupation. In other words, customer engagement in e-banking appears to be demonstrably dependent on these factors. It is important to note that e-banking service quality can be hindered by several external factors. These include poorly developed telecommunication infrastructure, unreliable power supply, and limited customer knowledge. Addressing these challenges will be crucial for improving overall service quality.

In conclusion, the research suggests that by prioritizing the enhancement of e-banking service quality, Bank of Abyssinia can achieve a corresponding increase in customer satisfaction and engagement. This can be achieved by focusing on core service dimensions like performance, security, and ease of use, while also addressing external limitations and optimizing customer support strategies.

5.3 Recommendations

The analysis of this work includes implications for Bank of Abyssinia as far as the engagement of their customers with different aspects of the e-banking services is concerned. Therefore, based on the study results, The researcher like to forward the following recommendations for Bank of Abyssinia.

Bank of Abyssinia should work on increasing the number of users from all aspects that are from gender, age, educational level, and occupation. Bank of Abyssinia should give more attention on all service quality dimensions to improve customer Engagement because;

Bank of Abyssinia should hard work on the e-banking service quality variables ease use, performance and Security content which have positive impact on customer Engagement. The finding of a negative regression coefficient between customer support and customer engagement in e-banking at Bank of Abyssinia highlights an area for improvement. Here are some recommendations to address this:

-Improved knowledge base and FAQ: Develop a comprehensive and well-organized knowledge base with clear instructions and troubleshooting guides.

- Multi-channel support: Offer customer support through various channels like phone, email, live chat, and social media to cater to different user preferences.
- Empower support staff: Train customer support staff to effectively address inquiries, solve problems efficiently, and provide a positive and empathetic experience.
- First Contact Resolution (FCR): Emphasize resolving customer issues during the first point of contact to minimize frustration.

-Regularly collect customer feedback on their experience with customer support, including satisfaction surveys and post-interaction ratings and Analyze feedback and use it to continuously improve customer support processes and procedures.

-Address external factors affecting customer support like Telecommunication infrastructure and Power supply reliability:

At last, this study sheds light on the significant influence of e-banking service quality dimensions on customer engagement in the context of Bank of Abyssinia. However, it is important to acknowledge that the chosen variables likely represent just a portion of the factors at play. Future research efforts can be enriched by incorporating additional variables not explored in this study.

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Appendix

Questionnaire for Customers

Dear Respondents,

In partial completion of the requirements for the Master's Digital marketing and E commerce, this questionnaire is specifically developed to conduct research on the effect of e-banking services quality on customer Engagement in the case of Bank of Abyssinia in Addis Ababa City. I would greatly appreciate it if you could respond to the following inquiries as openly as possible. Rest assured that the answers you provide are solely intended for academic purposes.

Thank You in Advance for your time and Cooperation!

Reminder

- You are not required to write your name.
- Put an "X" mark or right mark (✓) in the appropriate box according to your choice.
- Your response is confidential and it is required for the purpose of academic research.

Part I. Background of the information

1. **Gender:** Male ☐ Female ☐
2. **Age:** 18-24 ☐ 25-35 ☐ 36-50 ☐ 51-60 ☐ above 60 ☐
3. **Educational status:** Primary ☐ High school ☐ TVET ☐ Bachelor degree ☐ Master's Degree ☐
PHD ☐ above PHD ☐
5. **Occupation:** Unemployed ☐ Student ☐ Employed ☐ Self Employed ☐ Pensioner ☐

Service Quality Dimensions		Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
Customer Support						
	It is easy to contact customer support when you need help with the services					
	I Receive a quick response from staff after Contacting them					
	Staff can describe step to use and condition to use clearly					
	E-banking provide knowledgeable staff to solve problem					
Performance						
	-I am satisfied with the speed and responsiveness of the E banking platform					
	-The E banking Platforms works 24/7					
	-The E banking platforms provides the services with a variety of languages					
Security						
	I feel Confident that my banking information is secure					
	I am satisfied with the security features offered by the bank					
	I feel that the bank does a good job communicating with me about security matters					
	I Feel safe when using e-banking					
Ease of Use						
	It is easy find information in the e-banking platforms					
	The E-banking platforms languages are clear and easy to understand					
	E- banking system provides clear instruction					

Customer Engagement

	-I am satisfied with the e-banking services provided by the bank					
	I make Transactions Frequently through E -Banking					
	How has using your bank's online banking service affected your overall interaction and engagement with the bank?					
	My interaction and engagement with the bank is different before and after starting using the e banking services					
	I recommend family, friends, other persons to use the E banking Services of the bank					