



ADDIS ABABA UNIVERSITY

SCHOOL OF BUSINESS AND ECONOMICS

**E-BANKING SERVICE QUALITY, CUSTOMER SATISFACTION AND
CUSTOMER LOYALTY: (MEDIATE AND MODERATED MODEL)**

**THE CASE OF SELECTED PRIVATE COMMERCIAL BANKS IN ADDIS ABABA,
ETHIOPIA**

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS
ADMINISTRATION**

BY

ZIYAD YASSIN AHMED

ADVISOR

ABERA LEGESSE (PHD)

October, 2024

Addis Ababa, Ethiopia

DECLARATION

I, the undersigned, declare that this thesis project entitled "E-BANKING SERVICE QUALITY, CUSTOMER SATISFACTION AND CUSTOMER LOYALTY: (MEDIATE AND MODERATED MODEL) : The Case of Selected Private Commercial Banks in Addis Ababa, Ethiopia" is my original work and has been done under the guidance and advice of Abera Legesse (PhD), College of Business & Economics). All the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Name: Ziyad Yassin Ahmed

Signature: _____

Date: _____

19 Nov. 2024.

Statement of Certification

This is to certify that the thesis work entitled "E-BANKING SERVICE QUALITY, CUSTOMER SATISFACTION AND CUSTOMER LOYALTY: (MEDIATE AND MODERATED MODEL) The Case of Selected Private Commercial Banks in Addis Ababa, Ethiopia" under taken by Ziyad Yassin for the partial fulfillment of degree of Masters of Business Administration at Addis Ababa University, to the best of my knowledge, is an original work and not submitted for any degree at this university or in any other university.

Aberra Legesse (PhD)


Signature

22 Nov. 2024
Date

(Thesis Advisor)

This is to certify that this thesis prepared by Ziyad Yassin, entitled "E-BANKING SERVICE QUALITY, CUSTOMER SATISFACTION AND CUSTOMER LOYALTY: (MEDIATE AND MODERATED MODEL) The Case of Selected Private Commercial Banks in Addis Ababa, Ethiopia", is submitted in partial fulfillment for the requirement for the degree of Master of Business Administration complies with the regulation of the university and meets the accepted standards with respect to originality and quality.

Approved by the examining committee:

Tenkir Seifu

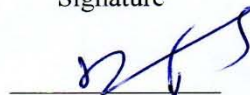

Signature

NOV 19, 2024

External Examiner

Date

Dejene T.


Signature

22/11/2024

Internal Examiner

Signature

Date

Abeera L.


Signature

22 Nov. 2024

Advisor

Signature

Date

Chair of Department of Graduate Program Coordinator

ACKNOWLEDGEMENT

First, I would like to express my gratitude to the Almighty for the support He has provided throughout my endeavors, including this thesis project. Next, I want to thank my advisor, Abera Legesse (Phd), for his guidance during the entire process of completing this thesis. I am also grateful to my family for their unwavering support in all my life's pursuits. Additionally, I would like to acknowledge my good friend, Laek, for his assistance in overcoming challenges I encountered while using the data analysis software. Finally, I extend my thanks to the management staff of Bank of Abyssinia, United Bank, Cooperative Bank of Oromia, and Zemen Bank, as well as everyone who took the time to help distribute my questionnaires to their customers. Thank you all!

Contents

ACKNOWLEDGEMENT	2
List of Tables	7
List of Figures	8
Acronyms:.....	8
Abstract.....	9
CHAPTER 1: INTRODUCTION	10
1.1 Background of the Study	10
1.2 Statement of the Problem.....	11
1.3 Research Questions.....	13
1.4 Objective of the study	14
1.4.1 General Objective	14
1.4.2 Specific Objectives	14
1.5 Significance of the Study	14
1.6 Scope of the Study	14
1.7 Organization of the Study	15
CHAPTER 2: LITERATURE REVIEW.....	16
2.1 Theoretical Review	16
2.1.1 Electronic Banking (e-banking)	16
2.1.2. Service Quality	17
2.1.3 E-Service Quality Dimensions	18
2.1.4 Customer Satisfaction and customer Loyalty.....	22

2.1.5 Demographic Factors	24
2.2 Empirical Review	24
2.3 Research Gap.....	30
2.4 Conceptual Framework.....	30
CHAPTER 3: RESEARCH METHODOLOGY	34
3.1 Research Design	34
3.2 Research Approach.....	34
3.3 Target population and Sampling Methods.....	35
3.3.1 Target Population.....	35
3.3.3 Sampling Method.....	35
3.5 Data Collection Procedures.....	36
3.6 Method of Data Analysis	36
3.7 Reliability and Validity Test.....	37
3.7.1 Validity Analysis	37
3.7.2 Reliability Analysis	37
3.8. Ethical Considerations	37
CHAPTER FOUR	38
4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION.....	38
4.1 Introduction	38
4.2 Response Rate	38
4.3 Data Handling	39
4.3.1 Missing Data Handling	39

4.3.2 Normality Test.....	39
4.4 Data Analysis and Interpretation.....	40
4.4.1 Demographic Profile of Respondents.....	40
4.4.3 Descriptive and Reliability Analysis of Variables	42
4.4.4 Correlation Analysis	43
4.4.5 Regression analysis through Baron and Kenny technique.....	44
4.4.6 Personal Factor Moderation Analysis Using Andrew F. Hayes Process Model.....	47
4.4.6.1 Relationship between E-Service Quality and Customer Satisfaction, with Gender as a moderator	48
4.5 Discussion	54
CHAPTER FIVE.....	55
5. Conclusions, Recommendations and Future Study.....	55
5.1 Conclusion	55
5.2 Recommendation.....	56
5.3 Future Study.....	57
Reference	57
APPENDIX I: QUESTIONNAIRE	64

List of Tables

Table 3.1 Sample Size.....	36
Table 4.1 Normality Test.....	40
Table 4.2 Demographic Characteristics of Respondents.....	40
Table 4.3 Descriptive statistics for the Variables	42
Table 4.4: Reliability Analysis and Descriptive.....	43
Table 4.5 Pearson Correlation Analysis	44
Table 4.6 Mediation Analysis by Baron & kenny.....	46
Table 4.7 Analysis on Gender Moderation effect in the relationship between E-Service Quality and Customer satisfaction.....	49
Table 4.8 Analysis on Gender Moderation effect in the relationship between E-Customer satisfaction &E-Loyalty	49
Table 4.9 Analysis on Age Moderation effect in the relationship between E-Satisfaction & E-loyalty	50
Table 4.10 Analysis on Age Moderation effect in the relationship between E-Service Quality and E-Satisfaction	51
Table 4.11 Analysis on Education Moderation effect in the relationship between E-Service Quality and E-Satisfaction	52
Table 4.12 Analysis on Education Moderation effect in the relationship between E-Satisfaction and E-Loyalty	53
Table 4.13 Hypothesis Summary	55

List of Figures

Figure 2.1: conceptual framework of study variables..... 31

Acronyms:

ATM:	Automatic Teller Machine
DV:	Dependent Variable
E-Banking Service:	Electronic Banking Service
E- SQ:	Electronic Service Quality
E- Satisfaction:	Electronic Satisfaction
E-Loyalty:	Electronic Service Loyalty
IT:	Information Technology
IV:	Independent Variable

Abstract

This study examines how e-banking service quality influences customer loyalty, specifically highlighting the moderating effects of demographic factors such as age, gender, and education level. Additionally, it investigates the mediating role of e-satisfaction in the relationship between e-service quality and e-loyalty among selected private commercial banking customers in Addis Ababa. Data were collected from 308 online banking users in the city through a survey-based method. The research utilized mediation and moderation techniques from Baron and Kenny (1986) and Preacher and Hayes (2008), respectively.

The research adopts a quantitative, cross-sectional design to assess these relationships, gathering data through a structured survey administered to 308 e-banking users in Addis Ababa using convenience sampling. The survey instrument, based on established e-service quality frameworks, captures key dimensions of service quality, including efficiency, fulfilment, system availability, and privacy/security, as well as measures of customer satisfaction and loyalty.

Data analysis involved descriptive statistics, correlation, and regression analysis to determine the direct impact of e-service quality on satisfaction and loyalty. Additionally, mediation analysis was used to explore the role of customer satisfaction as a bridge between service quality and loyalty. The study also examines the moderating effects of demographic factors, such as age, gender, and education, on these relationships to provide a nuanced view of customer expectations.

Findings indicate that e-service quality positively impacts satisfaction, particularly through efficiency and fulfilment, which are essential for meeting customer expectations in digital banking. Customer satisfaction was also found to mediate the relationship between service quality and loyalty, suggesting that high-quality service alone may not directly lead to loyalty without a satisfying customer experience. The study's results emphasize the importance of targeted service enhancements, suggesting that banks could improve customer loyalty by tailoring e-banking services to address specific demographic needs and preferences.

Key words: e-Banking Service, e-Service Quality, e-Customer Satisfaction, e-Loyalty

CHAPTER 1: INTRODUCTION

1.1 Background of the Study

Technology in the financial services sector has been developing at a faster rate recently, and it is quickly becoming the rule rather than the exception (Khera et al., 2022). Over the two decades, the adoption of technological innovation has significantly changed how businesses operate by removing barriers related to industry, geography, and regulations (Ayinaddis et al., 2023). As the winds of change began to blow, most banks adopted the use of electronic banking for transactions (Chauhan et al., 2022; Singh, 2023). By generating value for banks and customers alike, this technological advancement has also leveled the playing field in the banking sector by allowing clients to conduct financial transactions online rather than in person (Sewaka et al., 2021a). According to Singh (2023), Electronic banking, or "e-Banking, is the process of offering customers electronic banking services at their home or place of business.

In E-banking concept, attracting and keeping customers is a difficult and challenging problem for Commercial banks at present as a new one over the conventional or traditional/ branch banking concept. Therefore, banks and financial institutions strive to recognize factors which can attract customers and make them loyalty. Service quality is one of the critical success factors that influence the competitiveness of an organization. A bank can differentiate itself from competitors by providing high-quality service. Service quality is one of the most attractive areas for researchers over the last decade in the retail banking sector (Raza et al., 2020a). Therefore, banks have to provide service carefully & improve the service level continuously and updated to changing environmental conditions for maintaining competitiveness in the banking industry. There is no guarantee that what is excellent service today is also applicable for tomorrow. To survive in the competitive banking industry, banks have to develop new strategies which will satisfy and retain their customer base as satisfaction is considered as the essence of success.

In the banking industry, where there is fierce rivalry for devoted clients, all banks strive to be the "model bank" for their clients in order to foster profitable and enduring relationships. By offering the perfect range of items and the optimum caliber of customer care through the ideal mix of channels, they are attempting to satisfy consumer needs. Loyalty programs are widely used by banks to achieve this goal. The majority of these programs, however, only function as single streams and don't account for the various channels, products, and services that clients use to interact with the bank. According to (N & S, 2018) the key to success is to establish genuine connections and offer "hook" items for every stage of the client lifecycle.

Combining the appropriate range of products with the appropriate degree of service is necessary for a bank that wants to concentrate on customer profitability. But that is insufficient. The appropriate channels are one more crucial component. In the quickly evolving business world of today, the competition to provide consumers with high-quality banking services—whether they be branch or online—is getting more and more intense. As a result, banks must create a suitable marketing plan to sell their services to clients. Today's sophisticated and demanding clients make it even more difficult to provide quality internet service.

The growing usage of e-banking services has caused consumers to change in how they behave, thus banks must raise and enhance the caliber of their online services in order to satisfy customers. The banking sector is very competitive and dynamic, and client demand is rising. As a result, even minor variations in online services can have a significant impact on industry transfers. (Khan et al., 2023). However, the primary issue is that some clients are not happy with the caliber of e-banking services (A Ali -PhD Student et al., 2016).

The homogeneity trend in financial production and services, along with cheap switching costs, makes it simple for a consumer to migrate between e-banking platforms. Bank managers face greater challenges in developing strategies for promoting and maintaining e-banking due to the fact that banks invest billions in internet infrastructure. Customer satisfaction and retention are also becoming increasingly important factors in the success of e-banking. Additionally, banks must take into account a user's demographics in order to provide the appropriate variety of service goods for Internet banking service uptake. The identification of demographic features is crucial in comprehending the purchasing patterns of various consumer categories. This allows banks to tailor their services to the unique needs, preferences, and interests of their customer base. Thus, providing high-quality e-services necessitates comprehending the dimensions of e-service quality and working to raise the standard of the offerings in order to guarantee customer satisfaction and, consequently, foster loyalty in the banking industry's sustainable market.

The research focus will be on examining and discussing the interaction between the key dimensions of e-service quality, e-customers' satisfaction, and e-loyalty in the context of moderating effects of demographic factors regarding the usage of e-banking in Addis Ababa, Ethiopia, despite the significance and steady growth of e-banking services in Ethiopia. This is noteworthy because there haven't been many examinations in this area previously. In order to identify the characteristics of e-banking service quality and consumer perceptions regarding its impact on customers' happiness and loyalty toward e-banking.

1.2 Statement of the Problem

In recent years, the rapid growth of e-banking services has significantly changed the banking industry, offering customers unparalleled convenience and access. However, as competition in the financial sector

increases, it has become essential for financial institutions to understand the relationship between e-banking service quality, customer satisfaction, and loyalty.

Bank managers now encounter greater challenges in crafting strategies to promote and sustain e-banking services, especially as banks invest billions in internet infrastructure. Customer satisfaction and retention are emerging as vital factors for success in e-banking (N & S, 2018). Additionally, banks must consider user demographics to offer a suitable range of services that encourage internet banking adoption. Identifying demographic characteristics is key to understanding the purchasing behaviors of different consumer groups, enabling banks to customize their services to meet the specific needs, preferences, and interests of their clients.

Factors such as occupation have been shown to influence internet banking adoption, with demographic variables closely linked to this trend. Higher education levels, in particular, have been identified as a significant factor affecting the use of internet banking services, especially among more educated individuals. Despite existing research on e-banking service quality (EBSQ) dimensions, there remains a noticeable gap in understanding how these dimensions affect customer loyalty towards e-banking services. The Study would address the following research gaps:

1. Addressing the Mediating Role of Customer Satisfaction

While existing studies often examine the direct impact of e-banking service quality on customer loyalty, fewer have investigated customer satisfaction as a mediator in this relationship. This study contributes to the literature by empirically testing how customer satisfaction acts as a bridge between service quality and customer loyalty in the e-banking context. By using customer satisfaction as a mediating variable, this research adds depth to our understanding of customer loyalty drivers. It highlights that high-quality service alone does not guarantee loyalty; a satisfying customer experience is critical in translating service quality into long-term loyalty. This layered analysis encourages banks to consider satisfaction as a strategic focal point, rather than relying solely on service quality improvements.

2. Demonstrating the Nuanced Effects of E-Service Quality Dimensions

This study doesn't merely focus on overall service quality but examines individual dimensions like efficiency, system availability, fulfilment, and privacy/security to understand their specific contributions to satisfaction and loyalty. Findings indicate that efficiency and fulfilment have the strongest impact on satisfaction, which in turn positively influences loyalty. By isolating these dimensions, the study provides actionable insights into which areas banks should prioritize to enhance satisfaction. For example, improving efficiency and reliability in digital transactions can directly boost satisfaction, which mediates and strengthens customer loyalty. This nuanced view

fills a gap by identifying key aspects of service quality that act as primary drivers for satisfaction in digital banking.

3. Highlighting the Importance of Satisfaction as a Loyalty Catalyst

The study reveals that satisfaction not only improves loyalty but serves as a catalyst for loyalty when high-quality service is present. This mediating role suggests that banks must focus on creating experiences that meet or exceed customer expectations for loyalty to take root. Customer satisfaction mediates the relationship between service quality and loyalty by enhancing emotional connections with the brand. When customers are satisfied, they're more likely to trust and advocate for the bank, creating an attachment that goes beyond functional service quality. This insight challenges banks to view satisfaction as a long-term loyalty builder, one that leverages positive experiences to drive both repeat usage and customer referrals.

4. Incorporating Demographic Moderators for a Comprehensive Model

Many studies examining customer satisfaction as a mediator overlook the moderating effects of demographics, yet this study introduces variables such as age, gender, and education level to assess how satisfaction and loyalty relationships differ across groups. This fills an additional research gap by showing that satisfaction's impact on loyalty isn't uniform across all customer types. Adding demographic moderators helps banks refine loyalty strategies according to customer segments. For instance, younger, tech-savvy customers may prioritize speed and efficiency, whereas older customers value security and reliability. Banks can use these findings to customize satisfaction-driven loyalty strategies, aligning them with the unique preferences of each demographic. This targeted approach underscores satisfaction as a flexible tool in loyalty-building, one that resonates differently with varied customer bases.

Thus, this study aims to address this gap by examining a selection of private banks in Ethiopia and their branches in Addis Ababa, focusing on the impacts of e-banking service quality on customer satisfaction and loyalty. By exploring these aspects, the study seeks to provide insights that can help banks enhance their e-banking services, improve customer experiences, and cultivate long-term loyalty.

1.3 Research Questions

This study was conducted to answer following research questions;

- What is the impact of e-banking service qualities on customers' satisfaction and Loyalty
- Does Customer satisfaction mediate the relation between ebanking Service Quality and Customer Loyalty?

- Does Demographic factors such as (Gender, age, and educational status) moderates ebanking Service Quality, Customer Satisfaction and Loyalty?

1.4 Objective of the study

1.4.1 General Objective

To assess the impact of e-banking service qualities on customers' satisfaction and customer loyalty, in Ethiopian banking industry at Private commercial Banks in Ethiopia; selected branches in Addis Ababa.

1.4.2 Specific Objectives

In particular, this study would have been conducted based on following specific objectives: -

- To identify the impacts of ebanking service qualities on e-customer satisfaction
- To identify the impacts of ebanking service qualities on e-customer Loyalty
- To identify the impacts of e-Customer Satisfaction on e-customer Loyalty
- To determine the mediating impact of Customer Satisfaction between the association of ebanking service qualities and e-loyalty
- To determine the moderating impact of Demographic factors (Gender, age, and educational status) between ebanking service qualities and e-loyalty
- To determine the moderating impact of Demographic factors (Gender, age, and educational status) between Customer Satisfaction and Loyalty

1.5 Significance of the Study

This study would have different managerial and theoretical contributions. This study would be highly important for management of commercial banks in Ethiopia as it provides information about impacts of ebanking service quality on customer satisfaction and customer loyalty, as well. This study would be source of information to the banks to attract new customers and retain existing customers, especially, banks with small number of customers would be highly benefited. In addition, this study would be source of literature for further studies in the area of featured bank technologies which have impacts on customer satisfaction and loyalty.

1.6 Scope of the Study

This study would have conducted to assess ebanking service quality impacts on customer satisfaction at Private commercial Banks in Ethiopia at selected branches in Addis Ababa. For management of the research activity, this study had different scopes; time scope, geographic scope, methodological scope and conceptual scope. Due to lack of historic data, this study would have been follow cross-section design and use only current information by customers. Due to availability of large number of customers of banks in Addis Ababa, this study was geographically scoped to Addis Ababa. Methodologically, the study has used

only primary data that was collected by using questionnaire. Further, the study has used selected Private commercial banks in Ethiopia that include Bank of Abyssinia; United Bank, Cooperative Bank of Oromia; and Zemen Bank.

1.7 Organization of the Study

The study would have been organized under five chapters. The first chapter deals with the introductory part which bears background, statement of the problem, research hypothesis, objectives, significance, and scope/limitations of the study; the second chapter deals with review of both theoretical and empirical literatures related to the study and conceptual framework of the study. The third chapter deals with methodology of the study which is about design of the research, source of data and methods of data analysis. The fourth chapter presents the results and discussions which summarize the results/findings of the study, and interpret and/or discuss the findings. The final chapter is about summary of conclusions and recommendations.

CHAPTER 2: LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Electronic Banking (e-banking)

Customers can obtain bank services through safe intermediaries without having to physically visit the bank thanks to electronic banking (Sewaka et al., 2021b). Electronic banking is the best possible integration of all bank operations through the use of contemporary IT, enabling clients to receive all necessary services (Raza et al., 2020b). The purpose of internet banking is to assist banks in providing more convenient, quick, and affordable services and products. Customers can use their personal computers to peruse the main bank's offerings seven days a week (Khan et al., 2023). It allows customers to carry out banking transactions over the Internet anywhere and anytime (Raza et al., 2020b). Online banking use is expanding and has become a major competitive tool for banks in luring and keeping consumers as a result of banks beginning to provide high-quality online experiences for its patrons (Keynote, 2008). The industry's channel usage has altered dramatically as a result of online banking, particularly among younger consumers (Ayinaddis et al., 2023a). Customers may now access their accounts, pay their bills, manage their finances, and take advantage of a variety of services via e-banking. In fact, minimizing and even eliminating any references to the locations of bank branches for the purpose of providing banking services is the ultimate goal of arranging the electronic banking system. Through the Internet Banking website, a quick and convenient way to perform a variety of banking transactions was provided, allowing bank customers to manage their financial affairs with the least amount of inconvenience possible from the comfort of their home, office, or any other location that is accessible (Nayanajith & Weerasiri, n.d.). Online banking was seen as an indication of a revolution in banking distribution, according to (Chikazhe et al., 2021). Banks made significant investments in the growth of the Internet channel. According to (Ayinaddis et al., 2023a). Internet banking has grown rapidly in many nations and has unavoidably changed traditional banking practices.

Consequently, online banking emerged as a crucial means of providing services to banks, simplifying transactions and other banking tasks for clients. It is also considered the most significant approach to save expenses while preserving or improving client services. The goals of the banking institutions' use of online banking are to increase customer retention, decrease operating expenses, and provide better banking services to their clientele. The cheapest means of delivering banking products is through

the internet since it allows banks to cut both the number of branches and employees. Internet banking, according to Qureshi et al., is an innovative procedure that allows users to manage their own financial transactions without going through bank tellers. According to reports, Internet-based consumer banking may be more profitable, devoted, and loyal than traditional banking, which is consistent with recent data (Nahusenay & Lecturer, 2016). As a result, Gartner came to the conclusion that banks now view the Internet as a channel that is just as significant as their traditional channels, which include contact centers, branches, automated teller machines (ATMs), and telephone banking. The e-SERVQUAL model will be utilized in this study to track changes in customer satisfaction. The e-SERVQUAL model, which contrasts customers' expectations prior to getting a service with their perception of actual service delivery, is frequently used in the banking industry to assess service quality (Raza et al., 2020b)(Carrasco et al. 2012; Zhou et al. 2021; Dincer et al. 2019). According to e-SERVQUAL, a client's overall evaluation of an organization based on the caliber of services rendered is referred to as service quality.

2.1.2. Service Quality

It's critical to distinguish between e-services and traditional, physical service. In this case, the traditional services feature the following: customer-provider interaction is deemed crucial; service offering consists of core, facilitating, supporting, and complementary services; quality is defined as the customer's perception of the quality of the service; in contrast, the e-service features include the possibility of highly personalized online communication based on multiple information sources; customers are specific and dynamic service offering adjustment; service delivery is not limited by distance or opening hours; customers of e-banking are restricted by reviewing and hearing; and the third dimension of virtual operation can be said to involve neither product nor service. Thus, it has been believed that e-service quality has the power to improve operational effectiveness and profitability in addition to providing strategic advantages (Raza et al., 2020b). The focus is on the quality of the website due to the advancements in technology, the sophistication of client needs, and the increasing competition in the market. Users engage with the organization through the website as a gateway for the first time (Sewaka et al., 2021b). There are a lot of research on the subject of traditional banking service quality, but there aren't many that look into the quality of service provided by e-banking websites. In the current global context, banks have come to understand that providing high-quality services is essential to surviving the intense competition. The financial industry is starting to pay closer attention to performance reviews that assess how well products and services meet the needs and expectations of its clients. Because they are the primary sources of competitive advantage, banks must understand the factors that affect customers' adoption of IB in order to improve the quality of their banking services (A Ali -PhD Student et al., 2016).

Parasuraman et al. (2005) developed the E-S-QUAL model to assess consumer perceptions of service quality in both service and retail sectors. This model addresses two main aspects: the service outcome,

which is the customer's assessment of the results obtained from the service, and the service delivery process, which examines how the overall impact of the service is communicated to the user. Parasuraman et al., 2005). This study employs a revised e-service quality model proposed by Herington and Weaven (2009) and Parasuraman et al. (1985). It identifies four critical determinants for evaluating Internet service quality in the banking sector: personal needs, site organization, user-friendliness, and efficiency. Additionally, it includes two variables from the SERVQUAL framework: responsiveness and reliability.

2.1.3 E-Service Quality Dimensions

Critical electronic services dimension that affecting the Success of e-banking:

- **Content**

One of the key elements influencing internet banking is the content of websites (Raza et al., 2020b). In fact, it highlights how desirable website content is from the perspective of users. Content influences the actions of consumers. For this reason, information content is often used in research as a proxy for website quality (Raza et al., 2020b; Sewaka et al., 2021b). Websites must to offer lucrative details about the kinds of services they offer in order to help visitors build better perceptions (La & Kandampully, 2002; Cho & Park, 2001). According to (Nayanajith & Weerasiri, n.d.), users also require additional information about banks, expert suggestions, financial reports, pertinent connections, and contact details like address and phone number(s). In general, value, trust, and accurate information are necessary for content profitability (N & S, 2018). Web content can also be linked to a site's navigability, a catalogue that is well-structured, well-organized, and easy to follow, as well as clear and straightforward terms and conditions and content. (Sewaka et al., 2021b) state that comprehending a website's structure, content clarity, simplicity of searching and speedy information access, as well as user control over actions, are all important components of easy website usage. According to (Sewaka et al., 2021b) , website content has a significant role in determining the adoption of online banking. They also demonstrated how user happiness is influenced by many website aspects, including speed, navigation, interactivity, security, and content and design. According to (Nahusenay & Lecturer, 2016; Nayanajith & Weerasiri, n.d.), factors like customers' zone of tolerance, their level of role understanding, and their emotional response may have an impact on how well they perceive and expect from the service. These factors also have the biggest influence on the quality of the overall customer experience. According to Yang & Fang, utility and convenience of use are crucial considerations when assessing the caliber of an online service. According to (Raza et al., 2020b), the website's level of depth should cater to the needs of its users. Customers are likely to be skeptical of outdated or missing information because they could misunderstand it, and having too much information on the website can make it less clear (Chikazhe et al., 2021). Achieving the correct balance is crucial for fulfilling client expectations and building the institution's confidence.

- **Website Design**

The visual appeal of web sites is related to website design (Raza et al., 2020b). They state that graphics, the caliber of photos and videos, symbols, colors, and animations are crucial to the website's performance and attractiveness. These can create a positive first impression for the visitor on the website and may have a big influence on online satisfaction, according to (Nahusenay & Lecturer, 2016; Nayanajith & Weerasiri, n.d.; N & S, 2018), and others claim that a user's trust is greatly influenced by the quality of the design. According to (N & S, 2018) , consumers in e-commerce typically believe that a business that has made an investment in the design of their website has a higher chance of effectively processing electronic transactions. Moreover, Rajaobecins (2011) conducted an empirical study and discovered that consumers' online trust in financial institutions is positively influenced by the design of websites. Website design, in particular, refers to all customer-interactive elements of the website, including user navigation, providing sufficient information and customer order processes, information content, information nature, and graphic style, among other elements that contribute to this indication and positively impact e-satisfaction (Khan et al., 2023). According to Young & Hyunjoo(2012), there are beneficial direct benefits of website design quality on pleasure arousal, perceived information quality, and contentment. The way a website is designed has a significant impact on users' performance and is crucial in terms of human-computer interactions (Khan et al., 2023) . Meanwhile, according to Ranganathan & Ganapathy, website design is essential for drawing in, keeping, and enhancing visitors' interest in a business). An appealing and entertaining appearance is the goal of website design (Mohd Khalaf Ahmed et al., 2011). More research on the quality of online services has focused particularly on website design, and according to (Chikazhe et al., 2021), all writers, websites should be created to improve customers' perceptions of the website and its services.

- **E-trust**

Since there is always a danger when doing business online, the most crucial factor is the lack of trust between the company and the client because there is no real market place and trust is always seen as the most important item in any relationship. Therefore, a firm must properly develop client trust if it is to succeed in offering e-services. According to Yap et al. (2010), a deeper comprehension of the elements that can increase consumers' trust in online banking can help overcome the lack of trust. Kim (2005) proposed that two indicators—fulfillment or reliability and security/privacy—have an impact on e-trust itself. Furthermore, the level of client security in online transactions is characterized as e-trust by (Sewaka et al., 2021b) define e-trust as a customer's faith in an organization's ability to provide them with a credible assurance that the company won't take advantage of their precarious position.

- **Reliability/Fulfilment**

According to (N & S, 2018), fulfillment is the act of delivering accurate information for internal online services in a manner that meets consumers' expectations and obtaining the proper service within a given time frame. (Khan et al., 2023) found that fulfillment and reliability—that is, getting the appropriate service at the appropriate time—are significant factors that can lead to e-trust.

- **Privacy/Security**

Privacy and security pertain to the protection of websites during user interactions, credit and payment processing, and data encryption. Ensuring security and privacy is essential to fostering e-trust since it helps allay clients' worries about unauthorized use of their personal data. According to (Ayinaddis et al., 2023a; Khan et al., 2023), security is crucial when it comes to online banking. As a result, multiple protocols are in place to ensure the security of encrypted data packets over the internet. Additionally, it is stated that customers are unaware of encryption, even though some banks only accept specific versions of well-known internet browsers because of security restrictions. When (N & S, 2018) examined consumer needs for electronics worldwide, they discovered that consumers pay a lot of attention to the security of their purchases and the privacy of their personal data. The problem lies in the fact that consumers are concerned about security, privacy, and faithfulness when doing business online, particularly with regard to their sensitive personal data.

Maintaining a durable online relationship and encouraging and motivating clients to use a website are two benefits of website security (Raza et al., 2020b). According to (Nayanajith & Weerasiri, n.d.; N & S, 2018), two important factors that determine online trust are website security and privacy respect. Consumers' online trust in financial organizations is based on their perceptions of security and privacy. The cognitive, emotive, and conative aspects of loyalty are positively correlated with online trust, as demonstrated by (Ayinaddis et al., 2023b). Furthermore, these three dimensions of a customer's loyalty to their financial institution are significantly impacted by online trust, according to Rajaobelina (2011). According to studies by (Raza et al., 2020b; Sewaka et al., 2021b), users' willingness to transact money and sensitive personal information online is significantly influenced by their level of trust. In this sense, trust is essential to fostering loyalty, which in turn helps to preserve and grow market share.

- **E-Convenience**

(N & S, 2018) state that one of the key factors luring customers to the delivery of electronic banking is the availability of customer support. Convenience is now thought to be one of the key determinants of how well e-base banks provide customer service. Studies have demonstrated that the utilization of electronic banking is significantly influenced by the favorable correlation between service delivery and convenience. Thus, it is established that convenience plays a major role in the provision of customer service. These results also align with those of previous studies. According to research by (N & S, 2018;and Sewaka et al., 2021b), electronic banking offers a

greater level of convenience by allowing users to access bank services whenever and wherever they are in the world. Accordingly, the same study also showed that the factor that had the biggest impact on the overall adoption of the three service delivery activities that were examined was perceived convenience. In this case, convenience is measured by factors including ease of use, awareness, internet access from anywhere at any time, lack of lines, time savings over traditional banking, ease of login, ability to verify transaction data, and efficiency. Convenience has been found to be a significant quality characteristic in the perceived utility of Internet banking by (Nayanajith & Weerasiri, n.d.; Raza et al., 2020b). This finding has a beneficial impact on consumers' desire to utilize Internet-based e-banking.

- **E-Cost Effectiveness**

One of the main elements influencing how quickly consumers adopt new ideas is cost. According to Aliyu & Tasmin (2012), new technologies need to be economically priced in comparison to alternatives in order for customers to adopt them. If not, the customer's perspective may not support the new technology's acceptance. Offering premium services at reduced prices could give the e-banking concept a competitive edge. (Nayanajith & Weerasiri, n.d.) both claim that e-banking has successfully lowered operating and administrative costs. As per the recommendations made by (A Ali -PhD Student et al., 2016), cost savings enable e-based banks to offer greater rates on interest-bearing accounts & reduced or no service costs when compared to traditional banks. Thus, providing consumers with high-quality services at reduced costs and levies will likely be the competitive advantage that drives the sustainability and expansion of electronic banking in the future. According to studies conducted in 2011 (Ahmad, 2011; Suganthi, 2010; Bankole et al., 2011), electronic banking has successfully decreased operating and administrative costs and fees. At the same time, research has demonstrated that these cost and fee savings have enabled e-based banks to offer lower or no service costs and fees (N & S, 2018)

- **E-support/Response**

Response time, which is characterized as the ability or willingness to assist clients and offer timely service, is one of the key factors that will encourage the majority of consumers to use an e-banking product or package. Glaveli Petridou of Liassides & Spathis claims that a bank's ability to respond quickly is a necessary component of its ability to draw in new clients and enjoy sustained success. Researchers' empirical findings in the e-Banking customer loyalty studies varied; Glaveli et al. found a favorable correlation between responsiveness and client loyalty. Similar research by Jun, Cai, Diaz, and Ruiz also supported these findings. In their research, Khenget found that while there was a slight but favorable correlation between responsiveness and customer happiness. According to Garvin (Sewaka et al., 2021b), responsiveness is generally defined as the capacity to fix a

product or alter a service when issues arise because the customer lacks the necessary skills for processing and fixing them. In traditional service, responsiveness was defined as the service's capacity to promptly deliver information to customers and answer their questions without making mistakes in a matter of minutes (Raza et al., 2020b). In electronic service, responsiveness is defined as the ability to quickly respond to inquiries and obtain assistance when needed.

In terms of electronic service quality, responsiveness measures the degree of help the customer receives both during the search and when using the electronic service, as well as the amount of guidance and instructions provided for using the electronic service and assistance when problems arise (Griffiths and Brophy, 2005). Reactiveness is a reflection of the company's desire to assist the customer and can be measured by the timely service availability, meeting all of the customer's requirements, and achieving a quick response to service requests (Chikazhe et al., 2021).

2.1.4 Customer Satisfaction and customer Loyalty

According to Kotler and Keller (2012), customer satisfaction is the degree to which a person is satisfied or dissatisfied with the differences between the results of using or consuming a product and their expectations. According to Forsythe (2016), cyclic surveys are another tool that may be used to gauge customer satisfaction in addition to the several methods that are already employed to assess it. Analyzing the customer attrition rate is another technique for determining the level of customer satisfaction (Stamenkov & Dika, 2015). Additionally, the business may use mystery shoppers—hired individuals who pose as possible customers. According to Mishra et al. (2017), mystery shoppers can give businesses the kind of data they require. This data may pertain to the advantages and shopping experiences of customers, as well as the drawbacks of purchasing goods from the company or its rivals (AlSudairi, 2016; Sleimi & Davut, 2015). They therefore provide further insight about the caliber of a company's products. Customer satisfaction with online banking services is influenced by a number of characteristics, including responsiveness, security, accessibility, and goodwill (Oh & Kim, 2017).

Furthermore, a key component of corporate success has always been and still is customer pleasure (Sleimi, 2020). According to Mishra, Sinha, and Koul (2017), a customer's level of satisfaction is determined by how they feel after comparing their expectations and perceptions of a product or service. Customer satisfaction can be used to investigate consumers' expectations of how businesses provide goods and services in addition to marketing methods (Al-Hawary, Al-Smeran, & others, 2017).

The banking industry's regulations and methods of operation have undergone a significant transformation due to the emergence of e-channels [Gunasekaran A, Love PED (1999)]. According to Aladwani, the industry moved quickly to implement and provide new banking services via e-channels for clients, and as a result, e-banking services quickly took off [Aladawani AM (2001)]. Many financial organizations are making an effort to prioritize customer-oriented services these days. For this reason, introducing new

banking services is essential to building and maintaining stronger client relationships. As a result, establishing competitive supremacy is largely dependent on how satisfied clients are with banking services. Because higher customer satisfaction is linked to higher revenues, higher cross-sell ratios, higher customer retention, and a larger market share, it is acknowledged that banks with higher customer satisfaction will have a noticeable marketing advantage [Gonzalez ME, Quesada G, Picado F, Eckelman CA (2004)]. According to Fuentes-Blasco et al. (2008), there are three distinct ways that e-service differs from traditional service: it doesn't involve human interaction; it doesn't have a traditional tangible dimension; and it allows customers to self-serve (Fuentes-Blasco et al., 2010). For these reasons, specific modifications of SERVQUAL are necessary for application in a variety of settings, including the e-banking sector. Therefore, a consumer's total assessment and judgment of the quality of services provided via the Internet is described as e-service quality (Liao et al., 2011). Furthermore, Rolland and Freeman (2010) proposed that conceptions of e-service quality should be globalized and that all facets of the transaction, such as service delivery, customer service, and support, should be taken into account.

Muniesa et al. (2020), Orel et al. (2014), and Riyadi (2021) emphasize that consumers are essential for driving profits. Companies aim to maximize profits while ensuring their sustainability, increasing market share through quality, overcoming competition, and fulfilling social responsibilities. Consumer loyalty develops over time through a learning process rooted in personal experiences from repeat purchases. This indicates that loyalty has emerged. Riyadi (2021) describes loyalty as the likelihood of customers repurchasing from the same supplier in the future and their willingness to buy the company's products or services at various price points. Many researchers have used recommendations of services to other customers as an indicator of loyalty.

The importance of the relationship between patronage and a person's relative attitude is influenced by their level of customer loyalty (Stamenkov & Dika, 2015). Though customer satisfaction plays a crucial role in business management, it does not warrant effective while client pleasure is important for business management, it is not enough to guarantee successful business operations. Nonetheless, it improves a company's financial standing (Mishra et al., 2017). It has been seen that increases in loyalty yield greater financial benefits (Palmer et al., 2013). But luring in new clients is more expensive than keeping existing ones (Kotler & Keller, 2012). Loyal consumers have the ability to entice other customers to purchase from the business and frequently give their decisions carefully thought before choosing to do business with another company. Making wise judgments and sourcing are two ways to cultivate customer loyalty rather than just acquiring it (Dixit & Datta, 2010).

According to Dufwenberg (2015), building positive relationships with customers is crucial to increasing their loyalty. According to (Sewaka et al., 2021b) there are two key factors that influence the relationship between consumer pleasure and loyalty. The first is when, once satisfaction has decreased to a certain

degree, loyalty starts to erode. The second occurs when a sharp rise in loyalty leads to a rise in satisfaction, according (Sewaka et al., 2021b). The most crucial ones are improved company success and client loyalty. As such, it needs to be included into the long-term goals of the company. Contentment is a mindset. Customer happiness affects both loyalty and corporate performance (Stamenkov & Dika, 2015). A key factor in determining a company's performance is loyalty (Hussien & El Aziz, 2013; M. T. Sleimi, Karam, & Qubbaj, 2018). Most of the time, contentment is an attitude and loyalty is a behavior. Some theories claim that the ability to distinguish between initial expectations and perceived service performance is aided by customer satisfaction (Fraering & S. Minor, 2013). Customer loyalty and happiness, which can be considered to be the primary focus of most businesses, are major factors in the company's success and earnings (Yaseen & El Qirem, 2018). Dauda & Lee (2016), however, emphasized that consumers go through a number of procedures prior to making a purchase. The stages are awareness, disintegration, commitment, expansion, and exploration. client happiness is a key factor in determining client loyalty, according to Luz, de Paula, and de Oliveira (2018). Finally, a notable rise in customer satisfaction will result in a massive surge in customer loyalty (van Esterik-Plasmeijer & van Raaij, 2017).

2.1.5 Demographic Factors

Demographics encompass a range of consumer characteristics including gender, age, education, income, marital status, and literacy, among others (Bhatt & Bhatt, 2016). Scholars like Chauhan et al. (2016) have highlighted the significance of demographics in marketing research, emphasizing its influence on customer decision-making (Kamboj & Singh, 2018; Olasina, 2015). In the banking sector, factors such as gender, age, income, and education play a crucial role in the buying decision-making process of customers (Chawla & Joshi, 2017). Social-cultural aspects like demographic factors, as affirmed by Shaikh and Karjaluo (2015), have an impact on customer satisfaction and loyalty in the banking industry. Both psychographic and demographic variables, including age, gender, personal income, and education, play a role in shaping consumers' decisions within the banking realm (Olasina, 2015; Shaikh & Karjaluo, 2015). Furthermore, Lee et al. (2015) note that demographic factors such as employment status, income level, gender, age, marital status, and location of residence significantly influence the behavior of bank customers.

2.2 Empirical Review

Several research have substantiated the theoretical links between components of service quality and consumers' loyalty (Caruana, A., & Malta, M. 2002; Collier, J.E. & Bienstock, 2006). Shung and Lio (2010) demonstrate that customer loyalty is positively and significantly impacted by characteristics of the quality of electronic services. According to Santouridis, I., and Trivellas, P. (2010), factors related to the quality of services, such as payment methods, pricing structures, and customer services, have a favorable and substantial impact on customer loyalty. They demonstrated the mediating role that customer happiness plays in this. Client happiness has a direct and indirect impact on client loyalty, as

demonstrated by (Raza et al., 2020b) research. According to Ganguli and Roy (2010), certain features of technology-based financial services have a favorable and direct impact on client loyalty. Thus, the characteristics of e-service quality as predictors of e-satisfaction Superior e-service quality has been shown to increase customer satisfaction, client acquisition, and customer retention, according to the majority of research (Chikazhe et al., 2021; Khan et al., 2023) .

By gathering information from 200 students in Zagreb, Croatia, Ozretic-Dosen and Zizak (2015) conducted a critical analysis of the SERVQUAL model's application to the quality of banking services. According to the report, management must enhance banking services in three key areas: responsiveness, assurance, and dependability.

An exploratory study was carried out on the e-service quality of Irish banking by (Nayanajith & Weerasiri, n.d.). Semi-structured interviews were conducted with digital banking users who were chosen through the use of a purposive sample technique in order to meet the study's purpose. As to the study's findings, trust, accessibility, web usability, and flexibility are the most crucial characteristics for digital banking services.

Research was conducted in Sirilanka by (Shamil et al., 2023) to determine the causes of customers' reluctance to use internet banking. Thirty respondents were interviewed in-depth by them. The research findings demonstrated that the primary causes of resistance to online banking In their 2022 study, (Mwiya et al., 2022) focused on users' perceptions of online and mobile banking in Zambia, as well as the state of the market. Through questionnaires, information was gathered from 300 respondents. According to the study's findings, men are more frequently targeted as clients in Zambia than women are. Customers' lack of awareness and understanding, IT knowledge, and perception of danger were deemed to be the main obstacles to internet banking.

An exploratory study was conducted in Turkey by (Zavareh et al., 2012) to investigate the elements influencing businesses' and customers' adoption of digital banking. Information was gathered from 114 participants. The data was analyzed using two-factor and cluster analysis, and the findings indicate that online banking lowers operating expenses and increases consumer happiness.

Through an empirical study, (Amin, 2016) evaluated the quality of e-banking web portals by building a model based on the characteristics of added value, responsiveness, security and trust, cross-buying service quality, added value, and basic service quality. All of the aspects were categorized by the researchers into three groups through this study: core services, supplemental services, and problem-solving services. The study's findings indicated a clear preference for the use of web portals as an essential component of e-banking management systems. A study on customer satisfaction and the caliber of Indian banking services was conducted by Rijwani et al. (2017). The researchers looked at

service quality using the five SERVQUAL dimensions. To determine the impact of service quality on customer satisfaction, they used factor analysis, reliability analysis, regression analysis, and correlation analysis to examine the data. There were 384 responders in the study's sample. The study's findings showed a clear connection between customer satisfaction and service excellence. Additionally, it was shown that certainty had a greater influence on consumer satisfaction than dependability did.

In the Sri Lankan district of Batticaloa, Tharanikaran et al. (2017) examined the degree of client happiness and the caliber of electronic banking services. A questionnaire was used to gather data for the study from 231 respondents. The researchers used unidimensionality, reliability, and validity tests to evaluate the constructs, and a one-sample t-test was used to test the hypothesis. The study's findings showed that the Batticaloa district has a high level of customer satisfaction and service quality.

Toor et al. (2016) looked into how e-banking affected client satisfaction. Information was gathered from 264 respondents who use e-banking in various Pakistani cities. The SERVQUAL model was utilized, together with correlation and multiple regression analysis, to ascertain the degree of significance for each variable related to consumer satisfaction in online banking. The study's findings indicated a favorable correlation between customer satisfaction and aspects of service quality.

The quality of the service is even more important to improve customer response towards the online store, particularly in the context of online transactions, where there is less person-to-person connection that might affect the client's pleasure and trust level. According to earlier research (A Ali -PhD Student et al., 2016; Li et al., 2021; Zavareh et al., 2012), the quality of an e-service has an effect on e-satisfaction (e-satisfaction).

Web site and service quality of interest banks would impact trust and satisfaction, which in turn would impact client loyalty, according to (Chikazhe et al., 2021). Thus, e-loyalty can aid in customer retention and lower acquisition costs, which will aid banks in becoming more profitable and gaining a stronger position in the banking sector. De Oliveria (2000) established accessibility, user-friendliness, privacy and security, graphical interface, accountability, and sufficient responsiveness as useful criteria in e-loyalty after finding a relationship between e-loyalty and service quality in his study.

Thus, customer pleasure, which was the precursor to e-loyalty in earlier research, has long been recognized as a key factor in determining loyalty (Shamil et al., 2023) Many people hold the belief that happy consumers are more likely to exhibit loyalty behavior, such as making repeat purchases and being eager to recommend businesses to others (A Ali -PhD Student et al., 2016; Amin, 2016). Therefore, the significance of e-satisfaction and e-loyalty, as well as the intimate connections between them, have been crucial issues in the research on online transactions (Park & Kim, 2003; Reichheld & Scheffer, 2000; Yang & Peterson, 2004). It has been found in earlier research that e-satisfaction affects

e-loyalty. According to Anderson & Srinivasan (2003), customer happiness has a significant influence on e-loyalty, and customers who are satisfied are more likely to develop a closer bond with the online merchant. Ariff et al. (2014) discovered that the internet banking service's assurance-fulfillment, efficiency-system availability, privacy, responsiveness, and website aesthetics and guide comprise e-SQ. This suggests that modifying the E-SERVQUAL is necessary when assessing e-SQ for the service. E-satisfaction was positively impacted by website design and guidance, efficiency-system availability, and contact-responsiveness of the online banking e-SQ. E-satisfaction and e-loyalty had a positive significant relationship. The association between the aesthetics of a website, the e-SQ guide, and consumer e-Loyalty was found to be somewhat mediated by e-satisfaction. The outcome demonstrated how crucial it is for Internet bankers to find websites that are visually appealing and that offer help and information. This study showed that, in addition to the technical and functional aspects of banks' websites that contribute to e-SQ, such as efficiency, fulfillment, and system availability, the aesthetic value and appropriate design of the websites are also essential for ensuring the quality of e-SQ, which in turn contributes to e-Loyalty and e-Satisfaction.

Mofokeng TE (2021) defines e-commerce satisfaction as a consumer's emotional response to the overall transaction experience. Several researchers have linked satisfaction to service quality. For instance, Amin M (2016) investigated the impact of online service quality on the satisfaction of Malaysian banking customers and found a strong positive correlation. Similarly, Supriyanto A (2021) identified a significant relationship between e-service quality and the satisfaction of banking customers, using comparable dimensions of online service quality. Mofokeng, utilizing structural equation modeling, revealed that factors such as security, information quality, product delivery, and product variety greatly affect online buyer satisfaction. Additionally, they noted that information quality and customer satisfaction are crucial for fostering customer loyalty in online stores. Anderson and Srinivasan (2003) and Hsu and Nguyen (2016) also indicated a positive relationship between online service quality and the satisfaction of online banking users.

Amin M (2016) examined the impact of e-service quality on e-loyalty among Malaysian bank customers, using factors such as personal needs, website organization, service friendliness, and website efficiency as indicators of e-service quality. The study revealed that online service quality positively influences customer loyalty, with all four dimensions being critical for fostering loyalty, as demonstrated through structural equation modelling (SEM). Rita P (2019) identified that the dimensions of online service quality, including website design, security, privacy, and fulfilment, are vital for Indonesian online customers. Additionally, customer behaviour showed a significant correlation with overall e-service quality among these users. Hsu and Nguyen (2016) investigated online service quality dimensions for Vietnamese customers and found that service reliability, efficiency, website design, and fulfillment significantly impact online customer satisfaction, which in turn strongly affects loyalty. Similarly, Kaur

and Kiran (2019) highlighted the importance of website interface, accessibility, convenience, and security as key predictors of online loyalty for Indian banking customers. Amin M (2016) investigated the impact of e-satisfaction on e-loyalty among Malaysian banking customers and found a significant positive relationship between the two. Gera R (2011) also identified a direct link between e-satisfaction and positive word of mouth, which in turn influences e-loyalty. According to Amin, satisfied customers are more likely to engage in repeat transactions with online banks due to their high loyalty levels. Mofokeng TE (2021) noted that both customer satisfaction and information quality play crucial roles in determining loyalty to online stores.

Supriyanto A (2021) found that higher quality online services lead to satisfied customers, which in turn enhances customer loyalty in online banking. Indrasari A (2022) examined the factors influencing user satisfaction and loyalty in online banking during the Covid-19 pandemic, identifying service quality, reliability, application, and website design as key determinants. They also noted that while security and privacy significantly impact online user loyalty, they do not directly affect online satisfaction. According to expectancy theory, as discussed by Rahman MK (2014), consumer motivation is influenced by the perceived value of expected outcomes. This theory suggests that improving customer satisfaction and loyalty may help bank manager's foster loyalty by enhancing customer satisfaction in online banking. If online banking customers believe that perceived values (expectancy) lead to e-satisfaction (instrumentality), then e-satisfaction will subsequently lead to customer e-loyalty (valence).

Customer satisfaction significantly and positively affects customer loyalty (Chikazhe et al., 2020; Dimiyati, 2018). Research indicates that women exhibit greater loyalty than men when trust levels in the banking environment are high (Ndubisi, 2006). Additionally, women have been found to be more loyal than men across various sectors in Greece, including finance, retail, entertainment, and transportation (Dimitriades, 2006). There are notable differences in buying behaviors between genders; women are generally more engaged in purchasing activities, leading to stronger brand connections and greater loyalty compared to men. Furthermore, studies suggest that the link between customer satisfaction and loyalty is more pronounced in women than in men (Gonçalves & Sampaio, 2012). Therefore, it is reasonable to anticipate that the relationship between customer satisfaction and loyalty will be stronger in females than in males.

Moreover, customer loyalty is positively influenced by customer satisfaction (Chiguvi & Guruwo, 2017). Existing literature highlights differences in consumer behavior between older and younger demographics. Younger consumers tend to be more adventurous and consider a broader range of brands when making purchases. In contrast, older consumers often prefer established brands, as their ability to process purchasing information declines with age. This results in older consumers demonstrating stronger brand

loyalty compared to younger ones. Similarly, the relationship between customer satisfaction and loyalty appears to be stronger among older consumers than younger ones (Gonçalves & Sampaio, 2012).

Prior studies confirm the positive correlation between customer satisfaction and loyalty (Asongu et al., 2020; Kamboj & Singh, 2018). The influence of income on purchasing decisions is also significant; higher-income consumers face fewer barriers to trying new brands, resulting in lower loyalty compared to their lower-income counterparts. The effect of customer satisfaction on loyalty is often stronger for higher-income consumers than for lower-income consumers (Gonçalves & Sampaio, 2012).

(N & S, 2018) discovered that younger people are more likely to use online banking in the context of the age demographic profile, which has also related age and technology adoption. According to Ageing (2002), problems like reduced mobility and visibility may deter older consumers from using electronic banking. According to Kerem (2002), young adults make up the majority of Internet users, and they would be highly drawn to use cutting-edge financial services. The mid-aged customer base is more likely to use Internet banking than younger or older consumers, according to research by Akinci et al. (2004) and Laforet and Li (2005). This group will also have a significant impact on the following adoption of more new technology. Al-Jamal & Abu-Shanab (2015) state that users should have a general understanding of web browser functionality. According to Lassar et al. (2005), having prior Internet experience is crucial to comprehending how one's perception of their capacity to plan and carry out Internet banking influences how they use the technology. According to O'Cass and Fenech (2003), having enough online experience fosters confidence in users' capacity to use the network for business.

(Chikazhe et al., 2021; Sewaka et al., 2021b) assert that a customer's familiarity with and experience with the Internet has a significant role in influencing their adoption of Internet banking. Internet banking experience is a significant component that influences consumers' intents to utilize the service, according to Lichtenstein and Williamson (2006), and consumers' findings A person's intention to use technology is significantly predicted by their age. According to Li and Lai (2011), age has little bearing on whether or not someone accepts and uses online banking. Gender considerations led (Amin, 2016; Li et al., 2021) to conclude that men are more likely than women to accept technology applications. Parasuraman and Igarria (1990) state that gender is not taken into account. According to Hung (2006), men are more likely to be impacted by the benefits of online banking and to be the majority when it comes to using it. However, Okeke and Okpala (2014) found that men are more likely than women to use online banking services and products. Hennigs, Wiedmann, Seegebarth, Pankalla, and Kassubek (2010) state that women are more accustomed to internet banking in terms of ease and According to Njuguna, Ritho, Olweny, and Wanderi (2012), gender did not appear to be a

factor in the adoption of online banking, indicating that both genders had similar perceptions of the features of online banking.

Redlinghuis, Rensleigh (2010) stated that education should be a motivating factor for both financial institutions and those who utilize online banking services and products in relation to the education profile. According to Saeidipour (2013), customers' inability to accept and use internet banking can be attributed to their lack of information regarding the services' availability and advantages. Porter and Donthu (2006) assert that education has a part in how customers feel about using internet banking and how the Internet is used. Higher educated people may be more computer literate and have strong information processing abilities, which makes using the Internet easier, according to Nasri (2011). More educated consumers use e-banking more frequently than less educated consumers, according to Izogo et al. (2012). Higher educated customers are less likely to accept internet banking as a cautious behavior when it comes to online banking, according to Couto (2013). Given the information and experience associated with using e-banking, Lee et al. (2005) proposed that since Internet banking services are provided via the Internet, users' attitudes toward utilizing the system should be computer-literate. According to Hoppe, Newman, and Muger (2001) and Jiang, Hsu, Klein, and Lin (2000), Internet users are more likely to adopt new technologies if they have more experience.

2.3 Research Gap

The research gap is a vital aspect of any study, as it helps readers understand the overall thesis and the reasoning behind the researcher's analysis. Although there is an expanding body of literature on e-banking service quality, empirical studies specifically connecting service quality to customer satisfaction and loyalty across various banking contexts are still lacking. Additionally, most existing research does not adequately address how demographic factors—such as age, gender, income, personal and work experience, and knowledge—affect customer perceptions of e-banking service quality and its influence on satisfaction and loyalty.

Moreover, there's a need to integrate other variables like e-trust, website design, web content, and user experience to gain a more holistic view of how e-banking service quality impacts customer satisfaction and loyalty.

This study aims to address these gaps by investigating how customer satisfaction and demographic factors act as mediators and moderators in the relationship between dimensions of e-banking service quality and customer loyalty. Therefore, this research will concentrate on these areas.

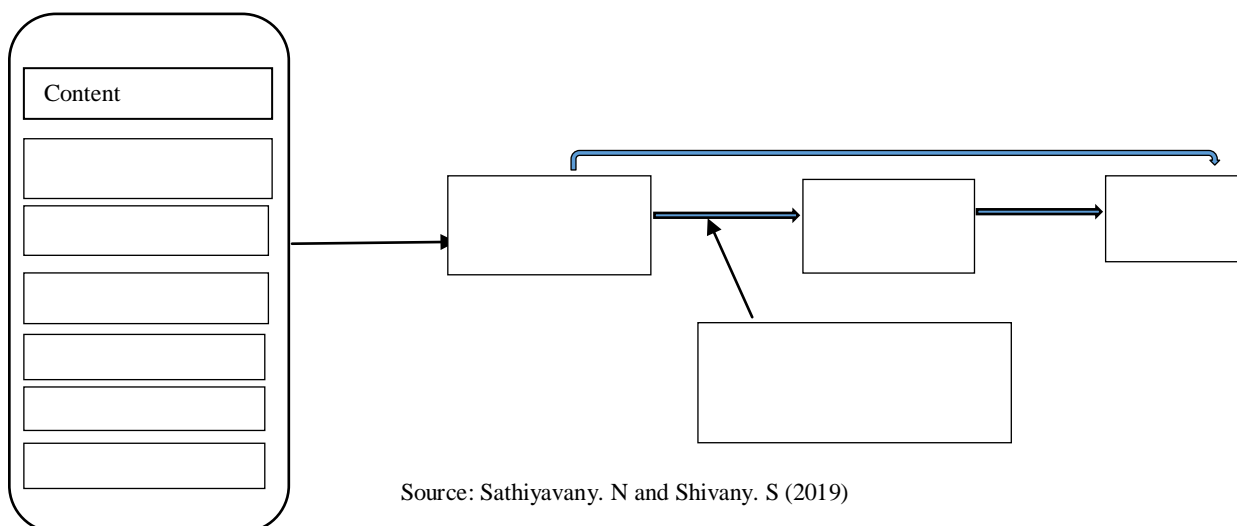
2.4 Conceptual Framework

Based on the literature reviewed, ebanking service quality impact on customer satisfaction is conceptualized as follows and presented in figure 2.1 below. The independent variables taken into

account in the explanation of e-service quality are the six identified characteristics. The e-service quality dimension are e-convenience, e-trust, website, content, e-cost effectiveness and e-response/support. The models help companies comprehend the relationships between e-service quality, customer satisfaction, and customer loyalty, while also considering the mediating and moderating roles of customer satisfaction and demographic factors.

Figure 2.1: conceptual framework of study variables

EBSQ Dimensions



Source: Sathiyavany. N and Shivany. S (2019)

Hypotheses:

Mofokeng TE (2021) defines e-commerce satisfaction as a consumer's emotional response to the overall transaction experience. Several researchers have linked satisfaction to service quality. For instance, Amin M (2016) investigated the impact of online service quality on the satisfaction of Malaysian banking customers and found a strong positive correlation. Similarly, Supriyanto A (2021) identified a significant relationship between e-service quality and the satisfaction of banking customers, using comparable dimensions of online service quality. Mofokeng, utilizing structural equation modeling, revealed that factors such as security, information quality, product delivery, and product variety greatly affect online buyer satisfaction. Additionally, they noted that information quality and customer satisfaction are crucial for fostering customer loyalty in online stores. Anderson and Srinivasan (2003) and Hsu and Nguyen (2016) also indicated a positive relationship between online service quality and the satisfaction of online banking users. Based on these findings, I propose the following hypothesis.

H1: E-banking-service quality has a significant positive impact on e-satisfaction.

Amin M (2016) examined the impact of e-service quality on e-loyalty among Malaysian bank customers, using factors such as personal needs, website organization, service friendliness, and website efficiency as indicators of e-service quality. The study revealed that online service quality positively influences customer

loyalty, with all four dimensions being critical for fostering loyalty, as demonstrated through structural equation modelling (SEM). Rita P (2019) identified that the dimensions of online service quality, including website design, security, privacy, and fulfilment, are vital for Indonesian online customers. Additionally, customer behaviour showed a significant correlation with overall e-service quality among these users. Hsu and Nguyen (2016) investigated online service quality dimensions for Vietnamese customers and found that service reliability, efficiency, website design, and fulfilment significantly impact online customer satisfaction, which in turn strongly affects loyalty. Similarly, Kaur and Kiran (2019) highlighted the importance of website interface, accessibility, convenience, and security as key predictors of online loyalty for Indian banking customers. Based on this body of literature, I propose the following research hypothesis:

H2: E-service quality positively and significantly influences e-loyalty of customers.

Amin M (2016) investigated the impact of e-satisfaction on e-loyalty among Malaysian banking customers and found a significant positive relationship between the two. Gera R (2011) also identified a direct link between e-satisfaction and positive word of mouth, which in turn influences e-loyalty. According to Amin, satisfied customers are more likely to engage in repeat transactions with online banks due to their high loyalty levels. Mofokeng TE (2021) noted that both customer satisfaction and information quality play crucial roles in determining loyalty to online stores. Given these findings, the researcher proposes the following hypothesis:

H3: E-satisfaction has positive influence on e-loyalty of customers.

Supriyanto A (2021) found that higher quality online services lead to satisfied customers, which in turn enhances customer loyalty in online banking. Indrasari A (2022) examined the factors influencing user satisfaction and loyalty in online banking during the Covid-19 pandemic, identifying service quality, reliability, application, and website design as key determinants. They also noted that while security and privacy significantly impact online user loyalty, they do not directly affect online satisfaction. According to expectancy theory, as discussed by Rahman MK (2014), consumer motivation is influenced by the perceived value of expected outcomes. This theory suggests that improving customer satisfaction and loyalty may help bank manager's foster loyalty by enhancing customer satisfaction in online banking. If online banking customers believe that perceived values (expectancy) lead to e-satisfaction (instrumentality), then e-satisfaction will subsequently lead to customer e-loyalty (valence). Based on this reasoning, I propose the following mediation hypothesis:

H4: E-Satisfaction mediates the relationship between e-service quality and e-loyalty of customers

Customer satisfaction significantly and positively affects customer loyalty (Chikazhe et al., 2020; Dimiyati, 2018). Research indicates that women exhibit greater loyalty than men when trust levels in the banking environment are high (Ndubisi, 2006). Additionally, women have been found to be more loyal than men

across various sectors in Greece, including finance, retail, entertainment, and transportation (Dimitriades, 2006). There are notable differences in buying behaviors between genders; women are generally more engaged in purchasing activities, leading to stronger brand connections and greater loyalty compared to men. Furthermore, studies suggest that the link between customer satisfaction and loyalty is more pronounced in women than in men (Gonçalves & Sampaio, 2012). Therefore, it is reasonable to anticipate that the relationship between customer satisfaction and loyalty will be stronger in females than in males.

Moreover, customer loyalty is positively influenced by customer satisfaction (Chiguvi & Guruwo, 2017). Existing literature highlights differences in consumer behavior between older and younger demographics. Younger consumers tend to be more adventurous and consider a broader range of brands when making purchases. In contrast, older consumers often prefer established brands, as their ability to process purchasing information declines with age. This results in older consumers demonstrating stronger brand loyalty compared to younger ones. Similarly, the relationship between customer satisfaction and loyalty appears to be stronger among older consumers than younger ones (Gonçalves & Sampaio, 2012).

Several studies have demonstrated that age is a key moderator in the relationship between service quality and customer satisfaction/loyalty. For instance, Korgaonkar & Wolin (2022) found that younger customers (Millennials and Gen Z) are generally more satisfied with technological innovations and prioritize speed and convenience in their online banking experiences. In contrast, older customers (Baby Boomers and Gen X) are more concerned with security, ease of use, and trust in the platform.

Regarding Gender Studies have shown that gender plays a significant role in how individuals perceive service quality and its impact on satisfaction and loyalty. Sweeney & McKechnie (2021) argue that women tend to place greater importance on customer support, security, and the emotional aspect of service quality, while men often prioritize functionality, speed, and efficiency in e-banking services.

Zhang et al. (2023) and Yang & Lee (2021) both highlight that education level is a strong moderator in the relationship between e-service quality and customer satisfaction. Educated customers, particularly those with higher education, tend to have higher digital literacy and are more likely to adopt advanced features in e-banking, such as personalized financial management tools, online trading platforms, or virtual financial advisors.

Other studies confirm the positive correlation between customer satisfaction and loyalty (Asongu et al., 2020; Kamboj & Singh, 2018). The influence of income on purchasing decisions is also significant; higher-income consumers face fewer barriers to trying new brands, resulting in lower loyalty compared to their lower-income counterparts. The effect of customer satisfaction on loyalty is often stronger for higher-income consumers than for lower-income consumers (Gonçalves & Sampaio, 2012). Based on this analysis, it is plausible to propose that:

H5: Demographic factors (Gender, Age, and Education) moderates the association among E-banking service quality, Customer Satisfaction and Customer Loyalty.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Research Design

The research design for this study was cross-sectional survey method. In cross-sectional surveys, independent and dependent variables will be measure at the same point in time using a single questionnaire. Along with the cross-sectional nature of this study, the study will employ descriptive research design and explanatory research design.

3.2 Research Approach

According to Creswell (2007) the three methods that are commonly implemented in research are quantitative, qualitative and mixed, where one of them is not better than the others, all of this depends on how the researcher want to do a study. Based on the objective of the study, this study will follow a quantitative research approach that uses statistical tools and numbers. Quantitative research is the systematic and scientific investigation of quantitative properties and phenomena and their relationship

(Kothari, 2005). The quantitative data was generated by using structured questionnaire. Therefore, in terms of approach, this study would have employed quantitative method while conducting the study.

3.3 Target population and Sampling Methods

3.3.1 Target Population

Hair et al., (2010) states target population as a specified group of people or object for which questions can be asked or observed to collect required data structures and information. Based on their Customer Size and market power, the commercial private banks are divided in to four groups; three banks in each group. The first group include Awash Bank (est. 1994), Abyssinia Bank (est. 1996) and Dashen Bank (est. 1996). The second group of the targeted banks include Wegagen Bank (est. 1997), United Bank (est. 1998) and Nib International Bank (est. 1999). The third and fourth groups of banks include banks that are established from 2005 to 2009. Cooperative Bank of Oromia (est. 2005), Lion International Bank (est. 2006) and Oromia Bank (est. 2008) are included at the third group; and the fourth group of the banks include banks established in 2009 such Brehan Bank, Bunna International Bank and Zemen Bank. At the second stage, from each group, one bank is randomly selected.

Based on simple random selection, from the first group; Bank of Abyssinia; from second group; United Bank, from third group; Cooperative Bank of Oromia; and from the fourth group Zemen Bank were selected. At the third stage, this study selects branches to undertake the study. To control the location effect, this study uses branches of the selected banks at the closest locations. Based information from the selected banks, all banks selected at the second stage have branches at Megenagna (in Addis Ababa) specifically 'Megenagna Branch'.

The target population of this study is customers of the selected private banks. This study assumes that, comparatively, branches are convenient place to contact customers and get better responses. Then, it is important to determine number of respondents to include in the study. Since similar services are provided by the banks throughout a year/month/day, this study targets daily average users of service of a bank at the selected banks. But the number of customers that use service of a bank varies from bank to bank. Based on February, 2022, users of the banking service at the selected branches, the daily average of Bank of Abyssinia is 457 customers, United Bank is 386 customers, Cooperative Bank of Oromia is 314 customers, and Zemen Bank is 177 customers. Therefore, the target population of the study is 1,334 customers at selected banks.

3.3.3 Sampling Method

Alreck & Settle (2005) noted that the choice of sample size is made after considering statistical precision, practical issues and availability of resources. There is no a single and precise way to determine size of sample; hence there are a number of inadequacies for deciding on sample size. However, to determine the

sample size, the study uses Yamane’s (1967) formula that provides a simplified method to calculate the sample size. This formula is based on a 95% desired confidence level and 5% desired level of precision.

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

Where; n = Sample size, N = population size, e = level of precision. Based on computation by using this formula, the sample size is determined to 308 respondents. Then, the number of respondents in each bank at the selected branches is computed proportionally. Table 3.2 below shows sampled respondents of the study at each bank. The Population size (N) was obtained from each bank daily average users.

Table 3.1 Sample Size

Bank	Population	Proportion	Samples
Bank of Abyssinia	457	34.3	106
Cooperative Bank of Oromia	314	23.5	72
United Bank	386	28.9	89
Zemen Bank	177	13.3	41
Total	1,334		308

Source: own computation (2024) based on Yamane (1967) formula

3.5 Data Collection Procedures

The data was collected from the respondents by using questionnaire. The questionnaire would have been prepared using 5-point Likert-Scale approach (i.e., from “Strongly Disagree to Strongly Agree”) which would measure our independent variable e-service quality, and dependent variable e-loyalty. A pilot survey would be conducted in order to ascertain if the questionnaire adequately addressed the critical aspects of the research objective. Accordingly, respondents would have been asked to indicate their level of agreement on 5-point Likert scale with the following ratings; Strongly Disagree (1), Disagree (2), neutral (3), Agree (4) and Strongly Agree (5) for ordinal scale measurement and to generate data suitable for quantitative analysis.

3.6 Method of Data Analysis

This study would have used quantitative data analysis methods. Descriptive and inferential statistics would be employed for the data analysis process. The descriptive statistics include frequencies, percentages, means and standard deviation. In addition, the inferential statistics such as chi-square tests, ANOVA was used to examine bank selection variation based on the selected variables. The results of analyses were presented by using tables. The data would have been analyzed by using Statistical Package for Social Science (SPSS) version 27.

3.7 Reliability and Validity Test

3.7.1 Validity Analysis

Bryman & Bell (2007) defined validity as how much any measuring instrument measures what it is intended to measure. They also suggest that the important issue of measurement validity relates to whether measures of concepts really measure the concept or not. There are several ways of establishing validity such as content validity; convergent validity concurrent; predictive validity; construct validity; and convergent validity. This study would have addressed content validity through the review of literature.

3.7.2 Reliability Analysis

The reliability of an instrument reflects its stability and consistency within a given context. It is the consistency of measurement over time, whether it provides the same results on repeated trails. It is defined as a characteristic of an instrument that reflects the degree to which the instrument provokes consistent responses. Cronbach's alpha is an index of reliability associated with the variation accounted for the true score of the underlying construct and it can only be measured for variables which have more than one measurement question. 0.5 is a sufficient value, while 0.7 is a more reasonable value. This study would have used Cronbach's alpha statistics to compute reliability analysis.

3.8. Ethical Considerations

When distributing the questionnaire, respondents would have been informed about the study's purpose and benefits, as well as their right to accept or decline participation. They would have been assured that their responses would remain confidential and their identities would not be revealed. Each participant would have the right to privacy and respectful treatment, with no personal harm inflicted during the research. The researcher would maintain strict confidentiality regarding all information collected.

CHAPTER FOUR

4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter discusses the findings and the process used to obtain them. It begins with background information about the respondents, presented in both table and narrative format. Next, the analysis methods are outlined, including descriptive analysis using SPSS for frequency tabulations and ANOVA for mean comparisons. The results are then interpreted and compared with existing literature to verify consistency. A total of 308 questionnaires were distributed during the research, with 306 completed and returned accurately.

4.2 Response Rate

This study has distributed questionnaires to 308 respondents who are customers of selected private commercial banks. Among the questionnaires distributed, 306 questionnaires were returned adequately filled. Hence, the response rate of the questionnaires was 99%, where 99.3 % of the questionnaires were returned and the study has proceeded data analysis. The data analysis was started by following data handling procedures, such as, missing data handling and outlier identification.

4.3 Data Handling

4.3.1 Missing Data Handling

In the data collected, there were 18 observations with missing data. Hence, first, the study has followed missing data handling procedure before conducting statistical analysis. Hair et.al. (2010) stated that missing data is information required from the target respondent but not available in the questionnaire. According to Hair et.al. (2010) analyzing a missing dataset could be catastrophic, especially when the pattern of the missing data is non-random. Hence, it is important to effectively neutralize the adverse effects of missing data by detecting and ruling solutions for missing data problems.

The missing data can be either ignorable or non-ignorable (Hair et.al. 2010); the ignorable missing data are occurred because of the research design; the non-ignorable missing data occurred for unknown reasons such as accidental skipping, non-volunteer to answer a specific question, and do not know the answer of specific cases at all (Cooper and Schindler, 2014).

There are two main methods suggested to handle missing data namely: list wise /pair wise/ deletion and model-based approach and imputation/substitution/ methods. However, different authors did not support deletion because if one respondent missed one case/question/ then the whole survey would be dropped from the analysis (Cooper and Schindler, 2014; Collier, 2020). Nevertheless, Hair, Black, Babin and Anderson (2009) also asserts that if random missing data of less than 10% of the number of cases, then any approaches of missing data remedies are appropriate. Accordingly, it suggested that cases with missing data can be eliminated from the dataset and further analysis can be conducted. Therefore, this study has dropped 2 cases from the dataset and proceeded to next step of data handling, i.e., outlier identification and removal of the outlier cases.

4.3.2 Normality Test

It is imperative to verify the normality of data before employing inferential statistical techniques for data analysis (Butt, 2009; Mukerji, 2008). It is discovered that analyzing non-normally distributed data sets with higher kurtosis and skewness can produce inaccurate findings (Butt, 2009). According to Field (2009), regardless of the population distribution, a sample size of 30 or more would generally result in a normal sampling distribution. Additionally, Meyer et al. (2005) asserted that the larger the sample size used in the investigation, the more reliable and precise the population parameter estimates for statistical inferences would be. This study's sample size (n=306) was sufficient to meet the normalcy criteria. Thus, before the analysis, this study evaluated each variable's distribution.

According to Mukerji (2008) normality of data can be checked by looking at some descriptive values such as skewness and kurtosis. For normally distributed data, it is suggested that the skewness values fall within the range of -2 to +2 and the kurtosis values fall within the range of -7 to +7 (Mukerji, 2008). Based on

these standards, this study has checked normality assumption and the details were presented in Table 4.1 below.

Table 4.1 Normality Test

Variable	min	max	skew	S.E	kurtosis	S.E
Conv	1	5	-1.878	.139	3.100	.178
Relb	1	5	-1.744	.139	2.716	.178
RespSup	1	5	-1.695	.139	1.233	.178
Trust	1	5	-.297	.139	-.004	.178
WebCon	1	5	-1.476	.139	0.944	.178
Costef	1	5	-1.424	.139	0.729	.178
ESatsfn	1	5	-1.280	.139	0.326	.178
ELoyal	1	5	-1.223	.139	0.688	.178
ESQual	1	5	-1.621	.139	2.363	.178

Source: Author’s Computations, 2024

Based on the standards adopted (Butt, 2009; Mukerji, 2008), this study computed that there is no evidence of excessive skewness and kurtosis; where the largest skewness and kurtosis values were 1.878 and 3.1 respectively. This suggests that the normality assumption is not violated for the data used in the study.

4.4 Data Analysis and Interpretation

The SPSS-27 software was utilized for data analysis following a specific process. To prevent incomplete or unsuitable responses, all questionnaires were thoroughly reviewed. Descriptive analysis was conducted to assess the characteristics of the data. Correlation analysis was then employed to explore the relationships between different variables. Lastly, regression analysis was performed to examine the cause-and-effect relationships among the variables.

4.4.1 Demographic Profile of Respondents

The following table summarizes the demographic profile of the respondents in terms of sex, age, year of ebanking usage, ebanking transaction frequency, Monthly income and educational qualification.

Table 4.2 Demographic Characteristics of Respondents

#	Variables	Items	N	%
1	Sex	Male	186	60.8
		Female	120	39.2
		Total	306	100%
2	Age	18-24	41	13.4
		25-35	70	22.9
		36-44	132	43.1

		45-55	38	12.4
		55 and above	25	8.2
		Total	306	100%
3	Educational Qualification	under grade12	20	6.5
		High school completed	32	10.5
		Diploma	41	13.4
		Degree	147	48.0
		Masters	50	16.3
		Doctorate degree	16	5.2
		Total	306	100.0
4	E-banking Experience year	Less than one year	32	10.5
		between 1-3	121	39.5
		between 4-6	100	32.7
		more than 6 years	53	17.3
		Total	306	100.0
5	Ebanking transaction frequency	daily	20	6.5
		weekly	154	50.3
		monthly	94	30.7
		occasionally	32	10.5
		never	6	2.0
		Total	306	100.0
6	Occupation	Student	14	4.6
		civil servant	119	38.9
		private employee	110	35.9
		Entrepreneur	42	13.7
		Retire	13	4.2
		other	8	2.6
		Total	306	100.0
7	Income per month	500-3000	49	16.0
		3000-6000	41	13.4
		6000-9000	149	48.7
		above 10000	67	21.9
		Total	306	100.0

Source: Author's Computations, 2024

Table 4.2 provides insights into the demographic and professional characteristics of customers from selected private commercial banks. In terms of gender, most respondents were male, making up 60.8%,

while females accounted for 39.2%. The largest age group was 36-44 years, representing 43.1% of the sample, followed by the 25-35 age group at 22.9%. The youngest group, aged 18-24, had the least representation at 13.4%. Respondents aged 45-55 comprised 12.4%, and those aged 55 and older accounted for 8.2%.

Regarding Educational qualification, the majority of respondents held a First Degree, accounting for 48.0% of the total, indicating nearly half of the participants completed undergraduate studies. The next largest group was those with a Master's Degree at 16.3%, showing a considerable number of respondents with advanced education. Diploma holders made up 13.4%, while High School Completers represented 10.5%. The under grade 12 category was the least represented at 6.5%, indicating low participation from those with lower educational attainment. Only 5.2% of respondents held a Doctorate Degree, indicating very few participants achieved the highest level of education. In the category of e-banking experience, the largest group of respondents had 1-3 years of experience, constituting 39.5% of the total. The second largest group had 4-6 years of experience, comprising 32.7%. Those with more than 6 years of experience made up 17.3%, while respondents with less than one year of experience accounted for 10.5%. In the distribution among ebanking transaction frequency, the majority of respondents conducted e-banking transactions weekly, accounting for 50.3% of the total. The second largest group performed transactions monthly, accounting for 30.7%. The occasional users represented 10.5%, and daily usage was relatively low. The never category was the smallest at 2.0%, indicating very few respondents did not engage with e-banking at all.

In terms of monthly income, the largest segment of respondents was in the 6000-9000 range, making up 48.7% of the total. The second largest group consisted of individuals earning above 10000, which accounted for 21.9%. Those earning between 500-3000 represented 16.0%, while respondents in the 3000-6000 range constituted 13.4%.

4.4.3 Descriptive and Reliability Analysis of Variables

Table 4.3 Descriptive statistics for the Variables

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
EServiceQuality	306	102.00	251.00	222.0719	26.65520
Custemersatafaction	306	12	30	26.57	4.317
Customerloyalty	306	12	30	26.47	4.134
Valid N (listwise)	306				

Table 4.3 presents descriptive statistics for three variables: E-Service Quality, Customer Satisfaction, and Customer Loyalty, based on a sample size of 306 respondents. The mean value of E-Service Quality is 222.07, indicating a generally high perception among respondents. The range of scores suggests variability in how participants evaluate E-Service Quality, with a standard deviation of 26.66 indicating moderate dispersion around the mean. Customer Satisfaction has a mean score of 26.57, indicating high levels of customer satisfaction. The range from 12 to 30 shows a limited spread in scores, suggesting most respondents have similar views on their satisfaction levels. The standard deviation of 4.31 indicates that while there is some variation in satisfaction levels, it is relatively low compared to the range. Customer Loyalty has a mean score of 26.47, similar to Customer Satisfaction, indicating a high level of customer loyalty among respondents. The range from 12 to 30 is the same as for Customer Satisfaction, suggesting that loyalty perceptions are closely aligned with satisfaction levels. The standard deviation of 4.13 indicates low variability in loyalty scores, indicating that most respondents feel similarly about their loyalty to the service.

Descriptive (minimum, maximum, mean, standard deviation) and reliability analysis are given in Table 4.4. All three variables exhibit high mean scores, indicating positive perceptions among respondents. The standard deviations are relatively low, suggesting that responses are consistent. The Cronbach's Alpha values for each variable are well above the commonly accepted threshold of 0.70, demonstrating strong internal reliability. Overall, the data suggests that e-service quality, e-satisfaction, and e-loyalty are well-constructed measures with high reliability.

Table 4.4: Reliability Analysis and Descriptive

Variable	Min	Max	Mean	std	Cronbach's Alpha
E-Service Quality	1	5.00	3.86	0.7956	0.957
E-Satisfaction	3	5.00	4.43	0.7596	0.975
E-loyalty	4.00	5.00	4.41	0.7368	0.970

4.4.4 Correlation Analysis

Table 4.5 presents the results of the Pearson correlation coefficients among the study variables. The table indicates that all three variables demonstrate strong positive correlations with each other. The relationship between e-service quality and e-loyalty is significantly positive at the 1% significance level ($r = 0.783^{**}$, $p \leq 0.01$), supporting our second hypothesis (H2). Additionally, there is a significant positive relationship between e-service quality and e-satisfaction ($r = 0.786^{**}$, $p \leq 0.01$) also at the 1% significance level, which supports our first hypothesis (H1). Furthermore, the mediating variable, e-satisfaction, shows a significant and positive relationship with the dependent variable, e-loyalty, at a 1% significance level ($r = 0.926^{**}$, $p \leq 0.01$). This finding supports our third hypothesis (H3).

The significance levels for all correlations are below 0.01, indicating that the relationships are statistically significant. Overall, the analysis suggests that improving E-Service Quality could positively influence both Customer Satisfaction and Customer Loyalty, indicating the importance of service quality in enhancing customer experiences.

Table 4.5 Pearson Correlation Analysis

Variables	E-Service Quality	E-customer loyalty	E-Customer Satisfaction
E-Service Quality	1	.783**	.786**
E-customer loyalty	.783**	1	.926**
E-Customer Satisfaction	.786**	.926**	1
**. Correlation is significant at the 0.01 level (2-tailed).			

4.4.5 Regression analysis through Baron and Kenny technique

The Baron and Kenny mediation model, introduced by Baron and Kenny in 1986, is a widely used method for testing mediation hypotheses in social psychology and other fields. This model outlines a systematic approach to determine whether a mediator variable explains the relationship between an independent variable (IV) and a dependent variable (DV).

The researchers employed the mediation framework proposed by Baron and Kenny (1986) to assess the mediating role of e-satisfaction in the relationship between e-service quality and e-loyalty. Baron and Kenny outlined four criteria (four models) to evaluate the mediating effect of a variable between an independent variable (IV) and a dependent variable (DV).

Condition 1: The independent variable should significantly influence the mediator. The researchers tested this condition, and the results are detailed in Model 1 of Table 4.5. This condition is met, as e-service quality (IV) significantly and positively affects e-satisfaction (mediator) ($\beta = 0.786$, $SE = 0.006$, $t\text{-value} = 22.147$, $p < 0.001$). A one-unit increase in e-service quality results in a 0.786-unit increase in e-satisfaction. The standard error (SE) is low (0.006), indicating that the sample is representative of the population and sufficiently large. The regression model demonstrates a good fit and is significant at the 1% level, with $F = 490$.

The correlation coefficient ($R = 0.786$) shows a strong positive relationship between e-service quality and customer satisfaction, indicating that as e-service quality increases, customer satisfaction tends to increase as well. The R Square value (0.617) shows that 61.7% of the variance in customer satisfaction can be explained by e-service quality, indicating its significant role in determining satisfaction. The adjusted R

Square (0.616) is close to the R Square value, indicating the model's robustness even after accounting for predictors. The standard error of the estimate (2.675) indicates a better fit, while the F statistic (490.492) is high, indicating the model's statistical significance. The p-value (<.001) confirms the model's significance, indicating that e-service quality reliably predicts customer satisfaction.

According to condition 1 of the mediation model proposed by Baron and Kenny (1986), the analysis of the model summary and coefficients indicates that e-service quality is a major predictor of customer satisfaction, explaining more than 61% of the variance in satisfaction scores. The statistical significance of the model underscores the critical role of e-service quality in increasing customer satisfaction. Therefore, businesses should focus on enhancing e-service quality to effectively raise customer satisfaction levels.

Condition 2: The independent variable should positively influence the dependent variable.

Model 2 in Table 4.5 shows that e-service quality (IV) has a positive and significant effect on e-loyalty among banking customers ($\beta = 0.783$, $SE = 0.006$, $t\text{-value} = 22.147$, $p < 0.001$), fulfilling Baron and Kenny's second condition. A one-unit increase in e-service quality enhances e-loyalty by 0.783 units, which is significant at the 1% level ($p < 0.001$). Again, the small SE (0.006) indicates a large and sufficient sample size. The regression model is a good fit and significant at the 1% level, with $F = 480$.

The analysis of the model summary and coefficients shows that e-service quality is a strong predictor of customer loyalty, explaining over 61% of the variance in loyalty scores. The model is statistically significant, with a strong correlation and effect size. The findings support the conclusion that improving e-service quality can substantially enhance customer loyalty, underscoring its importance in strategic planning for businesses aiming to increase customer retention and satisfaction

Condition 3: The mediator must significantly affect the dependent variable.

Model 3 in Table 4.5 shows that e-satisfaction significantly and positively influences e-loyalty (DV) ($\beta = 0.926$, $SE = 0.021$, $t\text{-value} = 42.8$, $p < 0.001$), confirming the third condition of Baron and Kenny's mediation analysis. A one-unit increase in e-satisfaction leads to a 0.926-unit increase in e-loyalty, which is significant at the 1% level ($p < 0.001$). The regression model is also significant with $F = 570$ at the 1% level and has a sufficiently large sample size (lower $SE = 0.021$).

The model demonstrates a strong positive relationship between customer satisfaction and customer loyalty, with a correlation coefficient of 0.926 indicating a strong correlation. The R Square value of 0.858 reveals that customer satisfaction accounts for approximately 85.8% of the variance in customer loyalty, indicating its importance as a key determinant. The adjusted R Square value is nearly equal to the R Square value, indicating the model's robustness even after adjusting for predictors. The standard error of the estimate (1.562) indicates the model's fit to the data. The F statistic is high, indicating the model's statistical significance. The p-value (<.001) confirms the model's significance, confirming that customer satisfaction reliably predicts customer loyalty.

Condition Four: The impact of the independent variable on the dependent variable should diminish after introducing the mediator into the regression model.

Model 4 in Table 4.6 indicates that the impact of e-service quality (independent variable) on e-loyalty (dependent variable) becomes insignificant at the 5% level, with a p-value of 0.425 after adding e-satisfaction (mediator) into the model ($\beta = 0.144$, $SE = 0.005$, $t\text{-value} = 4.228$). The relationship is significant with the inclusion of e-satisfaction, suggesting full mediation by e-satisfaction. Additionally, regression model 4 shows a good fit and is significant at the 1% level, with an F value of 876. Notably, the regression coefficient and t-value for e-service quality (IV) decreased from 0.783 to 0.144 and from 22.147 to 4.228 after incorporating e-satisfaction (mediator), with a p-value of less than 0.05 confirming full mediation by e-satisfaction which fulfil condition four of the mediation model of Baron, R. M., & Kenny, D. A. (1986).

The model demonstrates a strong positive relationship between E-Service Quality and Customer Satisfaction and Customer Loyalty, indicating that improvements in either factor are associated with higher levels of customer loyalty. The R Square value (0.866) explains approximately 86.6% of the variance in customer loyalty, indicating the model effectively captures the relationship between these factors. The adjusted R Square value (0.866) is close to the R Square value, indicating robustness and no over fitting. The standard error of the estimate (1.520) indicates a good fit, and the F statistic (876) is high, indicating the model's statistical significance.

Table 4.6 Mediation Analysis by Baron & kenny

Variable	Coefficient (β)	SE	t-value	p-value
Model 1: Regression Result Between E-Service Quality (IV) and E-Satisfaction (Mediator)				
E-SQ	.786	.006	22.147	.000*
R2=0.617, F=490				
Model 2: Regression Result Between E-Service Quality (IV) and E-Loyalty				
E-SQ	0.783	0.006	22.147	.000*
R2=0.613, F=480				
Model 3: Regression Result Between E-Satisfaction (Mediator) and E-Loyalty				
E.Sat	.926	.021	42.8	0.000*
R2=0.858, F=570				
Model 4: Regression Result Between E-Service Quality (IV) and E-Loyalty (DV) in the presence of E-Satisfaction(Mediator)				
E-SQ	.144	.005	4.228	.425
E-Sat	.813	.033	23.888	.000*
R2=0.866, F=876				

*Indicates significance at 1% level. This table indicates the various steps of Baron and Kenny mediation analysis in four different models. Regression model 1 indicates the impact of e-service quality on e-satisfaction. Regression model 2 indicates the influence of e-service quality on e-loyalty. Regression model 3 indicates the effect of e-satisfaction on e-loyalty, and model 4 shows the influence of e-service quality on e-loyalty in the presence of e-satisfaction (mediator)

4.4.6 Personal Factor Moderation Analysis Using Andrew F. Hayes Process Model

Moderation analysis is a statistical method that examines the relationship between an independent variable (IV) and a dependent variable (DV) at different levels of a moderator (the third variable). Andrew F. Hayes developed the PROCESS macro to facilitate this analysis in statistical software like SPSS. Moderation analysis using Hayes' PROCESS model is a powerful method to explore complex relationships between variables. It helps in understanding how the influence of an independent variable on a dependent variable is contingent upon the level of a moderator.

According to Hayes' PROCESS model for moderation, there are Steps for Conducting the Analysis. These are the following:-

1: Variable Identification

- Independent Variable (IV): The variable which is expected to influence the dependent variable.
- Dependent Variable (DV): The outcome variable to be predicted
- Moderator: The hypothesized variable that would affect the strength or direction of the relationship between the IV and DV.

2: PROCESS Macro installation:

Downloading and installing the PROCESS macro from Andrew Hayes' website,

3: Setting Up the Analysis in SPSS

- Access the PROCESS macro through the menu: Analyze > Regression > PROCESS v4.1

4: Input Model Parameters:

- Select our IV, DV, and moderator in the dialog box.

5: Choose the appropriate model number for moderation (Model 1 was the researcher choice)

6: Running the Analysis:

The output would provide key information, including:

- Interaction effects
- Confidence intervals for the effects

7: Result Interpretation:

Interaction Term: Check if the interaction between the IV and the moderator is statistically significant. A significant interaction suggests that the moderator influences the relationship between the IV and DV.

In the framework of Hayes' PROCESS model, the researcher would generally follow the outlined steps and analysed the results for interaction effects. These effects reveal how the moderator affects the relationship between the independent variable (IV) and the dependent variable (DV), leading to the subsequent analysis and interpretation:

4.4.6.1 Relationship between E-Service Quality and Customer Satisfaction, with Gender as a moderator

Table 4.7 shows the analysis of the relationship between E-Service Quality and Customer Satisfaction, with Gender as a moderator. The sample size is 306. The model shows a strong positive relationship between E-Service Quality and customer satisfaction, with approximately 61.98% of the variance in customer satisfaction explained by the model. The mean squared error (MSE) is 7.1570, indicating the model's accuracy. The F statistic ($F = 164.1119$) is high, indicating statistical significance. The p-value (< 0.0001) indicates that the model is statistically significant overall, confirming that at least one predictor variable contributes to the prediction of customer satisfaction.

The coefficients for E-Service Quality (X) show a positive relationship, with each unit increase in E-Service Quality increasing customer satisfaction by approximately 0.1253 units. However, the effect of being male on customer satisfaction is not statistically significant, suggesting minimal interaction effects. The interaction term between E-Service Quality and Gender shows that the effect of E-Service Quality slightly varies by gender but is not statistically significant.

Tests of interaction show a small change in R^2 for the interaction term, and the associated F statistic ($F = 0.0487$) with a p-value ($p = 0.8255$) indicates that the interaction between E-Service Quality and Gender does not significantly improve the model.

4.4.6.2 Relationship between E-Customer Satisfaction and E-Loyalty, with Gender as a moderator

The results show a strong positive relationship between E-Service Quality and customer satisfaction, with approximately 61.87% of the variance explained by the model. The mean squared error (MSE) is 6.5816, reflecting the model's accuracy. The F statistic ($F = 163.3145$) is high, indicating the overall model is statistically significant. The p-value (< 0.0001) confirms that the model is statistically significant, indicating that at least one predictor variable contributes meaningfully to customer satisfaction prediction.

The coefficients for E-Service Quality (X) and Gender (W) indicate that for each unit increase in E-Service Quality, customer satisfaction increases by approximately 0.1192 units. However, the interaction term (Int_1) shows that the effect of E-Service Quality on customer satisfaction slightly varies by gender, but this effect is not statistically significant. The interaction tests show that the interaction between E-Service Quality and Gender does not significantly enhance the model.

The analysis indicates a significant positive relationship between E-Service Quality and Customer Satisfaction, with a considerable portion of the variance accounted for by the model. While the interaction between E-Service Quality and Gender suggests slight variations in effects based on gender, these variations are not statistically significant. Overall, E-Service Quality remains a crucial predictor of

customer satisfaction across both genders, highlighting the importance of enhancing service quality to improve customer outcomes.

Table 4.7 Analysis on Gender Moderation effect in the relationship between E-Service Quality and Customer satisfaction

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.7873	.6198	7.1570	164.1119	3.0000	302.0000	.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	26.5605	.1573	168.8171	.0000	26.2509	26.8701
EService	.1253	.0059	21.1899	.0000	.1137	.1370
Gender	-.4510	.3241	-1.3915	.1651	-1.0889	.1868
Int_1	-.0027	.0122	-.2207	.8255	-.0268	.0214

Product terms key:						
Int_1	:	EService x	Gender			

Test(s) of highest order unconditional interaction(s):						
	R2-chng	F	df1	df2	p	
X*W	.0001	.0487	1.0000	302.0000	.8255	

Table 4.8 Analysis on Gender Moderation effect in the relationship between E-Customer satisfaction & E-Loyalty

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.7865	.6187	6.5816	163.3145	3.0000	302.0000	.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	26.4136	.1509	175.0678	.0000	26.1167	26.7105
EService	.1192	.0057	21.0223	.0000	.1081	.1304
Gender	-.4744	.3108	-1.5260	.1280	-1.0860	.1373
Int_1	-.0199	.0117	-1.7009	.0900	-.0430	.0031

Product terms key:						
Int_1	:	EService x	Gender			

Test(s) of highest order unconditional interaction(s):						
	R2-chng	F	df1	df2	p	
X*W	.0037	2.8930	1.0000	302.0000	.0900	

Focal predict: EService (X)						
Mod var: Gender (W)						

4.4.6.3 Relationship between E-Satisfaction and E-Loyalty with Age as a moderator

Table 4.9 results show a strong linear relationship between these predictors, explaining approximately 86.06% of the variability in customer loyalty. The model's mean squared error (MSE) is 2.4067, indicating better predictive accuracy. The F-statistic is 421.2440, confirming that at least one predictor is significantly related to customer loyalty. The p-value is 0.0000, affirming the overall significance of the model. The coefficients for customer satisfaction and age are 26.4737 and 0.9470, respectively. The interaction term (Int_1) is positive, suggesting that the interaction between customer satisfaction and age slightly enhances customer loyalty. The interaction term explains an additional 1.22% of the variance in customer loyalty, indicating a small but meaningful effect. The interaction term's F-statistic is 4.3306, with a p-value of 0.0303, indicating that the interaction between customer satisfaction and age is statistically significant. The analysis indicates that both customer satisfaction and age are significant predictors of customer loyalty, with customer satisfaction having a strong positive effect. The interaction between customer satisfaction and age shows a positive enhancement in loyalty, suggesting that older customers may respond more favourably to increases in satisfaction.

Overall, the model exhibits strong predictive power and significance, emphasizing the importance of enhancing customer satisfaction to foster loyalty. Financial institutions should consider these factors when developing strategies aimed at improving customer retention and loyalty, particularly by tailoring their services to address the needs of different age groups.

Table 4.9 Analysis on Age Moderation effect in the relationship between E-Satisfaction & E-loyalty

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.9277	.8606	2.4067	421.2440	3.0000	302.0000	.0000
Model							
	coeff	se	t	p	LLCI	ULCI	
constant	26.4737	.0887	298.5126	.0000	26.2992	26.6483	
customer	.8880	.0207	42.9089	.0000	.8472	.9287	
Age	.947	.0820	2.3756	.0181	.0334	.3560	
Int_1	.0410	.0192	.4749	.0303	-.0267	.0487	
Product terms key:							
Int_1	:	customer	x	Age			
Test(s) of highest order unconditional interaction(s):							
	R2-chng	F	df1	df2	p		
X*W	.0122	4.3306	1.0000	302.0000	.0303		

4.4.6.5 Relationship between E-Service Quality and E-Satisfaction with Age as a moderator

The study focuses on the relationship between E-Service Quality and customer satisfaction, with a sample size of 306. Table 4.10 shows a strong correlation between these predictors, explaining approximately 61.75% of the variance in customer satisfaction. The mean squared error is 7.2003, and the overall model is statistically significant, indicating that at least one predictor is significantly related to customer satisfaction. The coefficients indicate that a one-unit increase in E-Service Quality is associated with an increase in customer satisfaction. The interaction term suggests a slight positive impact on customer satisfaction, with a p-value of 0.0205 indicating significance. The interaction analysis shows that the interaction between E-Service Quality and Age explains minimal additional variance in customer satisfaction. The interaction effect is statistically significant, although the change in R² is negligible.

The analysis indicates that E-Service Quality has a significant positive impact on customer satisfaction, and Age also shows a small but significant effect. The interaction term suggests that the effect of E-Service Quality on customer satisfaction may differ slightly based on age. Overall, the study confirms the significance of the model and its potential impact on customer satisfaction.

These findings highlight the importance of improving E-Service Quality to enhance customer satisfaction while recognizing that age should be considered in service design and delivery strategies.

Table 4.10 Analysis on Age Moderation effect in the relationship between E-Service Quality and E-Satisfaction

Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.7858	.6175	7.2003	162.5187	3.0000	302.0000	.0000
Model							
	coeff	se	t	p	LLCI	ULCI	
constant	26.5686	.1534	173.2024	.0000	26.2668	26.8705	
EService	.1270	.0058	21.7356	.0000	.1155	.1384	
Age	.0171	.1437	.1190	.0205	-.2657	.2999	
Int_1	.0019	.0060	-.3276	.0205	-.0137	.0098	
Product terms key:							
Int_1	:	EService x	Age				
Test(s) of highest order unconditional interaction(s):							
	R2-chng	F	df1	df2	p		
X*W	.0001	.1073	1.0000	302.0000	.0205		

4.4.6.6 Relationship between E-SQ and E-Satisfaction with Educational level as a moderator

Table 4. 11 shows the coefficients for E-Service Quality (X) and Education (W) indicate a strong positive effect, with each unit increase in E-Service Quality resulting in an increase in customer satisfaction. However, higher education levels are associated with a decrease in customer satisfaction, suggesting a

potential negative relationship. The interaction term (Int_1) shows that the effect of E-Service Quality on customer satisfaction varies with education level, suggesting that education modifies the relationship between E-Service Quality and customer satisfaction. The interaction tests show a significant change in R² for the interaction term, and the associated F statistic (F = 9.9663) confirms that the interaction between E-Service Quality and Education significantly enhances the model.

Overall, the analysis reveals a strong positive relationship between E-Service Quality and Customer Satisfaction, with the model explaining a significant portion of the variance in satisfaction (63.35%). While E-Service Quality has a significant positive effect on customer satisfaction, the relationship with Education is marginally significant and suggests a potential negative impact. Importantly, the interaction between E-Service Quality and Education is significant, indicating that education level influences how E-Service Quality affects customer satisfaction. Organizations should focus on enhancing E-Service Quality while considering the educational background of their customers, as it may affect satisfaction outcomes.

Table 4.11 Analysis on Education Moderation effect in the relationship between E-Service Quality and E-Satisfaction

Model : 1							
Y : custemer							
X : EService							
W : Education							
Sample							
Size: 306							
Model Summary							
	R	R-sq	MSE	F	df1	df2	p
	.7959	.6335	6.8999	173.9771	3.0000	302.0000	.0000
Model							
	coeff	se	t	p	LLCI	ULCI	
constant	26.5978	.1504	176.7923	.0000	26.3018	26.8939	
EService	.1271	.0057	22.4678	.0000	.1159	.1382	
Educatio	-.2323	.1254	-1.8523	.0650	-.4791	.0145	
Int_1	.0148	.0047	3.1569	.0018	.0056	.0240	
Product terms key:							
Int_1	:	EService x	Education				
Test(s) of highest order unconditional interaction(s):							
	R2-chng	F	df1	df2	p		

X*W	.0121	9.9663	1.0000	302.0000	.0018
-----	-------	--------	--------	----------	-------

4.4.6.7 Relationship between E-Satisfaction and E-Loyalty with Educational level as a moderator

This study explores the connection between Customer Satisfaction (X) and Customer Loyalty (Y), with Education (W) serving as a moderating factor. Analysing a sample of 306 individuals, the findings reveal a strong positive relationship between these variables. As shown on table 4.11, the correlation coefficient ($R = 0.9284$) indicates a significant positive impact, with the model explaining about 86.18% of the variance in customer loyalty. The high mean squared error (MSE) suggests the model's accuracy, while the F statistic ($F = 627.9792$) indicates statistical significance. The p-value (< 0.0001) confirms the model's significance, suggesting that at least one predictor significantly contributes to customer loyalty.

The coefficients for Customer Satisfaction ($B = 0.8967$) and Education (W) point to a strong positive effect, showing that higher education levels correlate with increased customer loyalty. The interaction term ($B = -0.0432$) implies that the impact of customer satisfaction on loyalty varies with education level, indicating that education influences this relationship. Interaction tests reveal a modest change in R^2 for the interaction term, with the F statistic ($F = 5.5639$) confirming that the interaction between Customer Satisfaction and Education significantly strengthens the model.

Overall, the analysis highlights a very strong positive relationship between Customer Satisfaction and Customer Loyalty, explaining a substantial portion of the variance in loyalty (86.18%). Both Customer Satisfaction and Education significantly affect customer loyalty, with customer satisfaction having a particularly pronounced effect. The notable interaction between Customer Satisfaction and Education suggests that education level influences how customer satisfaction drives loyalty. Organizations should prioritize improving customer satisfaction due to its strong impact on loyalty, while also considering customers' educational backgrounds to develop tailored strategies that enhance loyalty outcomes.

Table 4.12 Analysis on Education Moderation effect in the relationship between E-Satisfaction and E-Loyalty

Model Summary						
R	R-sq	MSE	F	df1	df2	p
.9284	.8618	2.3845	627.9792	3.0000	302.0000	.0000
Model						
	coefficient	se	t	p	LLCI	ULCI
constant	26.4489	.0889	297.4960	.0000	26.2740	26.6239
customer	.8967	.0207	43.2163	.0000	.8559	.9376
Education	.1471	.0742	1.9827	.0483	.0011	.2931
Int_1	-.0432	.0183	-2.3588	.0190	-.0792	-.0072
Product terms key:						
Int_1 : customer x Education W						
Test(s) of highest order unconditional interaction(s):						
	R2-chng	F	df1	df2	p	

X*W	.0025	5.5639	1.0000	302.0000	.0190
-----	-------	--------	--------	----------	-------

4.5 Discussion

Table 4.13 provides an overview of the five hypotheses outlined in the literature review. The study confirms that the findings support all four hypotheses, with the exception of H5.

The results indicate that e-service quality has a positive impact on e-satisfaction, thereby supporting H1. This aligns with Mofokeng TE's study (2021), which found that high-quality online services lead to greater satisfaction among online banking customers. Enhancing online service quality can improve customer satisfaction, value, trust, and commitment, which are vital for a firm's long-term success. Additionally, the quality of e-banking services has a significant positive influence on the e-loyalty of online banking customers, supporting H2. This suggests that superior services, such as internet and mobile banking, encourage customers to remain loyal and continue using the same bank.

The data also supports H3, demonstrating that the e-satisfaction of online customers significantly and positively affects their e-loyalty. Higher levels of satisfaction contribute to increased loyalty and commitment to their bank, a finding echoed by Mofokeng TE (2021). Conversely, dissatisfied customers are likely to switch banks if service performance fails to meet their expectations. The results further indicate that e-satisfaction serves as an indirect mediator in the relationship between e-service quality and e-loyalty, supporting the researcher's mediational hypothesis (H4). This aligns with Oliver RL's (1980) Expectancy-Disconfirmation Paradigm, which assesses customer satisfaction based on perceived service quality.

Concerning Hypothesis 5 (H5), the analysis of three demographic variables—Gender, Age, and Educational Qualification—reveals that Gender do not significantly affect or interact with E-Service Quality, E-Satisfaction, and E-Loyalty. Therefore, this variables do not moderate the relationships between E-Service Quality and E-Satisfaction, or between E-Satisfaction and E-Loyalty. In contrast, both Customer Satisfaction and Education have a significant impact on customer loyalty, with customer satisfaction having a particularly strong influence. Additionally, the interaction between E-Service Quality and Customer Satisfaction with Education indicates that education level affects how customer satisfaction promotes loyalty, thereby moderating that relationship. Furthermore, the analysis indicates that E-Service Quality has a significant positive impact on customer satisfaction, and Age also shows a small but significant effect. The interaction term suggests that the effect of E-Service Quality on customer satisfaction may differ based on age

If banks prioritize customers' individual needs, security, and website efficiency, and create a user-friendly website, customers are likely to perceive the service quality as premium. This perception leads to increased satisfaction when service performance meets or exceeds expectations, fostering trust and loyalty to the bank. Consequently, the researcher concludes that improved online service quality enhances customer

satisfaction, which in turn increases service usage frequency, the likelihood of recommending the bank, and repeat purchases—key indicators of e-loyalty.

Table 4.13 Hypothesis Summary

Hypothesis	Description	Result
Hypothesis 1	E-banking-service quality has a significant positive impact on e-satisfaction	Accepted
Hypothesis 2	E-service quality positively and significantly influences e-loyalty of customers	Accepted
Hypothesis 3	E-satisfaction has positive influence on e-loyalty of customers	Accepted
Hypothesis 4	E-Satisfaction mediates the relationship between e-service quality and e-loyalty of customers	Accepted
Hypothesis 5	Education, moderates the association among E-banking service quality, Customer Satisfaction and Customer Loyalty	Accepted
	Age, moderates the association among E-banking service quality, Customer Satisfaction and Customer Loyalty	Accepted
	Gender, moderates the association among E-banking service quality, Customer Satisfaction and Customer Loyalty	Rejected

CHAPTER FIVE

5. Conclusions, Recommendations and Future Study

5.1 Conclusion

The research aimed to investigate how the quality of e-Banking services affects customer loyalty, considering e-satisfaction as a mediating factor and demographic variables (such as gender, age, and educational qualifications) as moderating factors. The study was conducted among customers of selected private commercial banks in Addis Ababa.

Customers are crucial stakeholders for banks. A quantitative research approach with a descriptive design was used to analyse the influence of e-Banking service quality on customer satisfaction and loyalty. Data were collected through a closed-ended structured questionnaire from 306 participants selected via convenience sampling. The analysis involved frequencies, percentage distributions, group modes, standard deviations, Chi-square correlations, and multinomial logistic regression. The descriptive results indicated that customers were generally satisfied with the e-Banking service quality provided by the banks in the area.

Statistical analysis demonstrated a significant correlation between the dimensions of e-Banking service quality and customer satisfaction, as evidenced by Chi-square statistics. The study aimed to achieve three goals: first, to evaluate the influence of online service quality on the loyalty of online banking customers; second, to investigate whether customer satisfaction mediates this relationship; and third, to assess if factors such as gender, age, and educational qualifications moderate the relationships among e-Service Quality, e-satisfaction, and e-loyalty. The results showed a significant positive impact of e-service quality on the e-loyalty of online banking customers. Furthermore, improved online services were found to enhance customer satisfaction, which in turn boosts loyalty and commitment. The research identified a complete mediating effect of e-satisfaction on the relationship between online service quality and loyalty, employing methods developed by Preacher and Hayes (2008) and Baron and Kenny (1986). While e-Service Quality positively affected customer satisfaction, its relationship with education was only marginally significant, suggesting a potential negative impact. Additionally, e-Service Quality significantly influenced customer satisfaction, and age also played a significant role. The effects of e-Service Quality on customer satisfaction varied by age, indicating that age moderates the relationship between e-Service Quality and e-loyalty. Importantly, the interaction between e-Service Quality and education was significant, highlighting that educational level affects how e-Service Quality influences customer satisfaction and loyalty, as well.

Banks are encouraged to enhance e-Service Quality while considering customers' educational backgrounds, as this may influence satisfaction outcomes. Both customer satisfaction and education significantly affect customer loyalty, with satisfaction having a particularly strong impact. The interaction between customer satisfaction and education suggests that education level influences how satisfaction drives loyalty. Therefore, Banks should prioritize improving customer satisfaction, given its strong influence on loyalty, while also tailoring strategies to account for customers' educational backgrounds.

As fraud incidents have risen with advancing technology, banks must prioritize security and privacy, which are vital aspects of service quality. The researchers employed methodologies to guide future studies, utilizing mediation and moderation models from Baron and Kenny (1986) and Preacher and Hayes (2008). The study's findings contribute scientific value, particularly applicable to the banking sector and the broader service industry. It enriches the literature in three significant ways: by employing techniques for mediation and moderation analysis, enhancing the scientific rigor of the findings.

5.2 Recommendation

Based on the above findings, I would recommend the following. First, banks should focus on enhancing the quality of their online services to boost customer satisfaction and loyalty. Second, bank websites need to be well-organized and user-friendly, which will contribute to customer e-loyalty. Third, management must prioritize the security of both the bank's website and, crucially, the mobile application that most

customers use for online banking. Fourth, Banks are encouraged to enhance e-Service Quality while considering customers' educational backgrounds, as this may influence satisfaction outcomes. Both customer satisfaction and education significantly affect customer loyalty, with satisfaction having a particularly strong impact. The interaction between customer satisfaction and education suggests that education level influences how satisfaction drives loyalty. Therefore, Banks should prioritize improving customer satisfaction, given its strong influence on loyalty, while also tailoring strategies to account for customers' educational backgrounds and age.

5.3 Future Study

Future studies could investigate how factors like e-commerce experience moderate the connection between e-service quality and e-loyalty in online banking. This research is limited to conventional banking, so future work might expand to include Islamic banking, enabling a comparison of online service quality and customer loyalty across both systems, as well as examining the indirect effects of online satisfaction on these relationships. Additionally, exploring cross-cultural differences in e-banking service quality and its impact on customer loyalty is suggested.

Reference

A Ali -PhD Student, B. J., Perlis, M., & Ahmad Wan Omar, W. (2016). Relationship between E-Banking Service Quality and Customer Satisfaction in Commercial Banks in Jordan. In American Based Research Journal (Vol. 5). <http://www.abrj.org>

A stakeholder analysis. TQM Journal, 25(5), 557–576. <https://doi.org/10.1108/TQM-11-2012-0086>

Abenet Yohanne (2010): Key Factors that Determine Adoption of Internet Banking in Ethiopia

- Amin, M. (2016). Internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty. *International Journal of Bank Marketing*, 34(3), 280–306. <https://doi.org/10.1108/IJBM-10-2014-0139/FULL/HTML>
- Ayinaddis, S. G., Taye, B. A., & Yirsaw, B. G. (2023a). Examining the effect of electronic banking service quality on customer satisfaction and loyalty: an implication for technological innovation. *Journal of Innovation and Entrepreneurship*, 12(1). <https://doi.org/10.1186/s13731-023-00287-y>
- Ayinaddis, S. G., Taye, B. A., & Yirsaw, B. G. (2023b). Examining the effect of electronic banking service quality on customer satisfaction and loyalty: an implication for technological innovation. *Journal of Innovation and Entrepreneurship*, 12(1). <https://doi.org/10.1186/s13731-023-00287-y>
- Bambore PL (2013) Customer satisfaction and electronic banking service on some selected banks of Ethiopia. *International Journal of Research in Computer Application & Mana* 3: 133. Barriers and driver.
- Baron RM, Kenny DA (1986) The moderator–mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *J Personal Soc Psychol* 51(6):1173
- Bauer, Hans H., Maik Hammerschmidt, and Tomas Falk. 2005. Measuring the Quality of E-banking Portals. *International Journal of BankMarketing* 23: 153–75.
- Biritu (2012) A quarterly magazine of the National Bank of Ethiopia. 113: 10-20.
- Carrasco et al. 2012; A Model for the Integration of E-Financial Services Questionnaires with SERVQUAL Scales under Fuzzy Linguistic Modeling. *Expert Systems with Applications* 39: 11535–47.
- Chiguvi, D., & Guruwo, P. T. (2017). Impact of customer satisfaction on customer loyalty in the banking sector. *International Journal of Scientific Engineering and Research (IJSER)*, 5(2), 55–63
- Chikazhe, L., Makanyeza, C., & Chigunhah, B. (2021). Understanding mediators and moderators of the effect of customer satisfaction on loyalty. *Cogent Business and Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1922127>
- Chikazhe, Lovemore; Makanyeza, Charles; Chigunhah, Blessing (2021); Understanding mediators and moderators of the effect of customer satisfaction on loyalty, *Cogent Business & Management*, ISSN

- 2331-1975, Taylor & Francis, Abingdon, Vol. 8, Iss. 1, pp. 1-19, <https://doi.org/10.1080/23311975.2021.1922127>
- Chong, Alain Yee-Loong, Keng-Boon Ooi, Binshan Lin, and Boon-In Tan. 2010. Online Banking Adoption: An Empirical Analysis. *International Journal of Bank Marketing* 28: 267–87.
- Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). Wiley.
- Collis, J., & Hussey, R. (2013). *Business research: A practical guide for undergraduate and postgraduate students*. Palgrave macmillan.
- Coyne and DeLongis (1986)
- Daniel E (1999) Provision of electronic banking in the UK and the Republic of Ireland. *International Journal of Bank marketing* 17: 72-83.
- Firdous, S., & Farooqi, R. (2017). Impact of internet banking service quality on customer satisfaction. *The Journal of Internet Banking and Commerce*, 22(1), 1–17.
- Fraering, M., & S. Minor, M. (2013). Beyond loyalty: customer satisfaction, loyalty, and fortitude. *Journal of Services Marketing*, 27(4), 334–344.
- Gera R (2011) Modelling E-Service Quality and Its Consequences in India: An SEM Approach. *J Res Interact Mark* 5:203–225. <https://doi.org/10.1108/17505931111187811>
- Gonçalves, H. M., & Sampaio, P. (2012). The customer satisfaction-customer loyalty relationship. *Management Decision*, 50(9), 1509–1526. <https://doi.org/10.1108/00251741211266660>
- Hair, Joseph F, Ringle, C. M., & Sarstedt, M. (2013). Editorial-partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1–2), 1–12.
- Haq IU, Awan TM (2020) Impact of e-banking service quality on e-loyalty in pandemic times through interplay of e-satisfaction. *Vilakshan XIMB J Manag* 17(1/2):39–55
- Hsu Y, Nguyen TM (2016) Service quality, customer satisfaction, and customer loyalty of Internet Banking in Vietnam. *Int Rev Manag Bus Res* 5(4):1485
- <https://api.semanticscholar.org/CorpusID:168632037> Asongu, S., Nnanna, J., & Acha-Anyi, P. (2020). Inclusive education for inclusive economic participation: The financial access channel. *Gender in Management*, 65 (5), 481–503. <https://doi.org/10.1108/GM-08-2019-014>

- Hussien, M. I., & El Aziz, R. A. (2013). Investigating e-banking service quality in one of Egypt's banks:
- Indrasari A, Nadjmie N, Endri E (2022) Determinants of satisfaction and loyalty of e-banking users during the COVID-19 pandemic. *Int J DataNetw Sci* 6(2):497–50
- ISSN (P): 2319-2267; ISSN (E): 2319-2275 Vol. 8, Issue 1, Dec- Jan 2019; 1-18© IASET)
- Kaur N, Kiran R (2015) E-banking service quality and customer loyalty: changing dynamics of public, private and foreign bank consumers in India. *Glob Bus Manag Res* 7(1):74
- Khan, F. N., Arshad, M. U., & Munir, M. (2023). Impact of e-service quality on e-loyalty of online banking customers in Pakistan during the Covid-19 pandemic: mediating role of e-satisfaction. *Future Business Journal*, 9(1). <https://doi.org/10.1186/s43093-023-00201-8>
- Khan, H. F. (2017). E-banking: Benefits and issues. *American Research Journal of Business and Management*, 3(1), 1–7.
- Khera, P., Ng, S., Ogawa, S., & Sahay, R. (2022). Measuring digital financial inclusion in emerging market and developing economies: A new index. *Asian Economic Policy Review*, 17(2), 213–230. <https://doi.org/10.1111/aepr.12377>Zafar et al., 2011 Chauhan et al., 2022;
- Kotler P (2000) *Marketing management (6th edn.)*, Longitudinal Assessment of customer, Prentice-Hall LaBarbera, New Jersey.
- Kotler, P., & Keller, K. (2012). *Dirección de marketing (Decimocuarta ed.)*. Naucalpan de Juárez: Pearson Education.
- Lau, Mei Mei, Ronnie Cheung, Aris Y. C. Lam, and Yuen Ting Chu. 2013. Measuring Service Quality in the Banking Industry: A Hong Kong Based Study. *Contemporary Management Research* 9: 263–282.
- Lee, J. (Jiyeon), Patterson, P. G., & Ngo, L. V. (2017). In pursuit of service productivity and customer satisfaction: the role of resources. *European Journal of Marketing*, 51(11–12), 1836–1855. <https://doi.org/10.1108/EJM-07-2016-0385>
- Li, F., Lu, H., Hou, M., Cui, K., & Darbandi, M. (2021). Customer satisfaction with bank services: The role of cloud services, security, e-learning and service quality. *Technology in Society*, 64. <https://doi.org/10.1016/j.techsoc.2020.101487>

- Mofokeng TE (2021) The impact of online shopping attributes on customer satisfaction and loyalty: moderating effects of e-commerce experience. *Cogent Bus Manag* 8(1):1968206
- Muniesa, R. L., & Giménez, C. G. (2020). The Importance of the Loyalty of Fashion Brands through Digital Marketing. *Journal of Spatial and Organizational Dynamics*, 8(3), 230-243
- Mwiya, B., Katai, M., Bwalya, J., Kayekesi, M., Kaonga, S., Kasanda, E., Munyonzwe, C., Kaulungombe, B., Sakala, E., Muyenga, A., & Mwenya, D. (2022). Examining the effects of electronic service quality on online banking customer satisfaction: Evidence from Zambia. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2143017>
- N, S., & S, S. (2018). E-Banking Service Qualities, E-Customer Satisfaction, and e-Loyalty: A conceptual Model. *International Journal of Social Sciences and Humanities Invention*, 5(6), 4808–4819. <https://doi.org/10.18535/ijsshi/v5i6.08>
- Nahusenay, S., & Lecturer, E. (2016). E-Banking Service Quality and Its Impact on Customer Satisfaction in State Owned Banks in East Gojjam Zone Ethiopia. In *Journal of Economics and Sustainable Development* www.iiste.org ISSN (Vol. 7, Issue 21). Online. http://en.wikipedia.org/wiki/Automated_teller_machine
- Nasri (2011).. Naser Asgari, Mohamad Hassan Ahmadi, Mehdi Shamlou, Atefe Rashid Farokhi & Milad Farzin(2014), Studying the Impact of E-Service Quality on E-Loyalty of Customers in the Area of E-Banking Services, *Journal of Management and Sustainability*; Vol. 4, No. 2; 2014ISSN 1925-4725 E-ISSN 1925-4733Published by Canadian Center of Science and Education, URL: <http://dx.doi.org/10.5539/jms.v4n2p126>.
- Nayanajith, G., & Weerasiri, R. A. S. (n.d.). A Review on E-Banking Adoption in the Context of E-Service Quality. In *Sri Lanka Journal of Marketing* (Vol. 5, Issue 2).
- Orel, F. D., & Kara, A. (2014). Supermarket self-checkout service quality, customer satisfaction, and loyalty: Empirical evidence from an emerging market. *Journal of Retailing and Consumer services*, 21(2), 118-129.
- Ozretic-Dosen, Durdana, and Ines Zizak. 2015. Measuring the Quality of Banking Services Targeting Student Population. *EuroMed Journal of Business* 10: 98–117
- Palmer, S. L., Armstrong, C., Onar-Thomas, A., Wu, S., Wallace, D., Bonner (2013).
- Philipos.L(2013): Effects of ebanking on customer satisfaction on a few chosen Ethiopian banks

- Rahman MK (2014) Empirical evaluation of customer loyalty in Malaysian retail outlets. *J Mark Manag* 2(2):129–143
- Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020a). Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model. *TQM Journal*, 32(6), 1443–1466. <https://doi.org/10.1108/TQM-02-2020-0019>
- Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020b). Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model. *TQM Journal*, 32(6), 1443–1466. <https://doi.org/10.1108/TQM-02-2020-0019>
- Rijwani, Parag, Ritesh Patel, and Nikunj Patel. 2017. Service Quality and Customer Satisfaction: Study of Indian Banks Using SERVQUAL. *International Journal of Economic Research* 14: 199–211
- Rita P, Oliveira T, Farisa A (2019) The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*5(10):e02690
- Riyadi, S. (2021). Effect of E-Marketing and E-CRM on E-Loyalty: An Empirical Study on Indonesian Manufactures. *Turkish Journal of Physiotherapy and Rehabilitation*, 32(3), 5290-5297
- Sadaf Firdous, Rahela Farooqi(2017), Impact of internet banking service quality on customer satisfaction, *Journal of Internet Banking and Commerce*, April 2017, vol. 22, no. 1, (<http://www.icommercentral.com>)
- Sathyavany & Shivany (2019) INTERFACES AMONG E-BANKING SERVICE QUALITIES, E-CUSTOMER SATISFACTION, AND E-LOYALTY (*International Journal of General Management (IJBGM)*)
- Sewaka, S., Anggraini, K., Mas'adi, M., Nurhadi, A., & Arianto, N. (2021a). The Effect of Customer Satisfaction and Service Quality of Banking Products on Loyalty of Bank Customer in Tangerang. *International Journal of Artificial Intelligence Research*, 6(1). <https://doi.org/10.29099/ijair.v6i1.295>
- Sewaka, S., Anggraini, K., Mas'adi, M., Nurhadi, A., & Arianto, N. (2021b). The Effect of Customer Satisfaction and Service Quality of Banking Products on Loyalty of Bank Customer in Tangerang. *International Journal of Artificial Intelligence Research*, 6(1). <https://doi.org/10.29099/ijair.v6i1.295>
- Seyed Fathollah Amiri Aghdaie1, Razieh Karimi1 & Ali Abasaltian(2015), The Evaluation of Effect Electronic Banking in Customer Satisfaction and Loyalty, *International Journal of Marketing*

- Shamil, M. M., Herath, H. M. T. S., & Sumatiratne, W. M. O. (2023). The Influence of e-Banking Service Quality on e-Customer Satisfaction and Loyalty: A Sri Lankan Study. SSRN Electronic Journal. <https://doi.org/10.2139/SSRN.4475451>
- Singh, N. (2023). Impact of e-banking: Prior and after effects on banking activities. Journal of Pharmaceutical Negative Results. <https://doi.org/10.47750/pnr.2023.14.S02.39>
- Stamenkov, G., & Dika, Z. (2015). A sustainable e-service quality model. Journal of Service Theory and Practice, 25(4),414–442.
- Supriyanto, A., Wiyono, B. B., & Burhanuddin, B. (2021). Effects of service quality and customer satisfaction on loyalty of bank customers. Cogent Business & Management, 8(1), 1937847
- Tharanikaran, V., Sritharan, S., & Thusyanthy, V. (2017). Service quality and customer satisfaction in the electronic banking. International Journal of Business and Management, 12(4), 67–83. Yoo & Donthu, 2001
- Tharanikaran, Vadivelu, Sutha Sritharan, and Vadivelu Thusyanthy. 2017. Service Quality and Customer Satisfaction in the Electronic Banking. International Journal of Business and Management 12: 67.
- Vun ACY, Amran H, Jaratin L, Charlie AL (2019) Service quality and customer loyalty: the mediating role of customer satisfaction among professionals. Int J Online Market 3(2):1–19
- Worku , Tilahun and Tafa (2016),The Impact of Electronic Banking on Customers ' Satisfaction inEthiopian Banking Industry (The Case of Customers of Dashen andWogagen Banks in Gondar City), Journal of Business & Financial Affairs,ISSN: 2167-0234, Worku et al., J Bus Fin Aff 2016, 5:2,DOI:10.4172/2167-0234.1000174
- Zavareh, F. B., Ariff, M. S. M., Jusoh, A., Zakuan, N., Bahari, A. Z., & Ashourian, M. (2012). E-Service Quality Dimensions and Their Effects on E-Customer Satisfaction in Internet Banking Services. Procedia - Social and Behavioral Sciences, 40, 441–445. <https://doi.org/10.1016/j.sbspro.2012.03.213>

APPENDIX I: QUESTIONNAIRE

SCHOOL OF GRADUATE STUDIES

MASTER OF BUSINESS ADMINISTRATION PROGRAM

Questionnaires to Be Filled By Customers of Selected Private Commercial Banks in Addis Ababa

Dear Customers,

This questionnaire is designed to collect primary data about the Commercial Banks E-banking service quality, customers Satisfaction and Loyalty. The research is undertaken as academic requirement of master's degree in Business Administration. I want to assure you that this research is only for academic purpose which is authorized by Addis Ababa University. Your inputs are important for the study and will be treated with anonymity and confidentially.

Thank you.

Ziyad Yassin

Email: ziziman.2009@gmail.com

I. Demographic Information

Please Circle Your Answer

1. Gender A. Male B. Female

2. Age A. 18-24 C. 25 -35 D.36-44 E. 45-55 D. 55 & Above.....

3. Educational

A. Under grade 12 B. High School Completed B. Diploma C. First Degree D. Masters Degree E. Doctorate Degree

4. Ebanking Experience A. Less than a year B between 1-3 years C. between 4-6 years D. More than 6 years

5. Frequency of Ebanking banking transaction A. Daily B. weekly C. monthly D. occasionally E. Never

6. Occupation

A. Student B. Civil Servant C. Private Employee D. Business Entrepreneur E. Retiree F. Other

7. Monthly income

A. 500 to 3000 ETB B. 3000 to 6000 ETB C. 6000 to 10000 ETB D. 10000 & Above ETB

II. Bank Account and Related Information

8. What is your primary criteria to select e-banking service?

- A. Convenience B. Service Quality C. 24/7 availability
D. Lower fees compared to traditional banking E. Others (please Specify)

III. E-Banking Service Quality Dimensions and related Questions

Please indicate the level of your agreement with each of the following statements by selecting and putting a tick mark (√) in the box of your choice.

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

		1	2	3	4	5
NO	Dimensions					
1	Convenience					
	Your Bank's customer service representatives are responsive when you have inquiries or issues related to e-banking.					
	Your Bank's customer service representatives have the knowledge of ebanking and show professionalism.					
	Your bank provide service with modern e-banking facility					
	Your Bank e-banking platforms are user friendly and easily navigable					
	speed & efficiency of e-banking platform for conducting transactions and accessing information is fast					
	Your bank physical facilities are visually appealing					
	When you have a problem, the customer care of your bank shows a sincere interest in solving.					
	I do able to customize or personalize the service settings from my end					
	Your bank has sufficient number of branches and ATM					
	There is good customer relationship between the bank and its customer.					
	I recommend my bank's e-banking service to others based on my experience with convenience					
2	Reliability					
	your bank E-banking service is error free with zero downtime					
	You often have experienced service disruptions or downtime when accessing e-banking services.					

	I find the availability of e-banking services of my bank is reliable					
	The transaction processing, like fund transfers, bill payments...etc., through e-banking services of your bank is reliable					
	There is frequent errors or discrepancies in my e-banking transactions					
	I satisfied with the speed and responsiveness of e-banking services					
	The accuracy of account information displayed on e-banking platforms is reliable.					
	There is delay in online transaction of your bank					
3	Responsiveness and Support					
	Your bank employee always willing to help customers					
	Your bank employee helps in using all the latest features of e-banking services					
	Your bank employees are never too busy to respond customer's request					
	You feel that your e-banking service provides timely notifications & updates regarding your account activities					
	Your customer support team through the e-banking service is available and accessible					
	There are delays in receiving transaction confirmation or alerts through e-banking platform					
	You are satisfied with the response time for technical issues or errors encountered while using e-banking service					
	It is easy to reach out to your customer support team through the e-banking service when you have a query or concern					
	Your e-banking service in resolving your issues is effective					
	I recommend my bank's e-banking service to other based on the responsiveness of the platform					
4	Trust					
	The website /app interface inspires confidence in the security of my transactions.					
	I believe that my personal & financial information is protected by the e-banking service of my bank.					
	My Bank e-banking service maintains a high level of privacy for my					

	personal information.					
	The e-banking service of my bank has effective security measures in place to prevent unauthorized access to my account.					
	I am confident in the e-banking service of my bank's ability to respond promptly to any security concerns or issues I may encounter.					
	I have a clear understanding of the e-banking service of my bank's security practices and policies.					
	I do frequently change my e-banking account password					
	My bank employees are consistently courteous					
	I recommend the e-banking service of my Bank's to others based on my level of trust in the service					
5	Website and Content					
	The overall design and layout of the e-banking webpages of your bank is awesome.					
	Your bank e-banking webpages load and respond quickly					
	The navigation menus and links on the e-banking webpages are user friendly & intuitive					
	Your bank e-banking webpages adapt to different screen sizes and devices (e.g., desktop, mobile, tablet) very well					
	You feel secured when accessing and using the e-banking webpages					
	The availability and accessibility of the e-banking webpages (uptime, no system errors, etc.) of your bank are good					
	I do not feel log-in, lagging and connectivity issue while using E-banking service of my bank?					
	I recommend the e-banking services to others based on the quality of webpages.					
	The clarity and accuracy of information provided on the e-banking service website of your bank is excellent.					
	I find the information I need on the e-banking website easily.					
	The information provided on the e-banking website of my bank is up-to-date.					
	Often, you encountered inconsistencies or errors in the information presented on the e-banking website of your bank.					

	I recommend the e-banking services to others based on the quality of webpages.					
	I recommend the e-banking services to others based on the quality of web content and its clarity					
6	Cost effectiveness					
	I experienced cost savings by using e-banking services like reduced fees, transportation costs, etc.					
	I find e-banking services to be more cost-effective than visiting physical bank branches.					
	There are costs associated with e-banking that I find inconvenient or unnecessary (e.g. transaction fees, maintenance fees, etc)					
	I am satisfied with the overall cost-effectiveness of e-banking services.					
	I recommend e-banking services to others based on their cost-effectiveness.					
7	Customer Satisfaction					
	E-banking services provided by the bank meets my needs					
	Your Bank's customer service representatives are responsive when you have inquiries or issues related to e-banking					
	Speed & efficiency of e-banking platform for conducting transaction is fast					
	I am satisfied with the security features of the ebanking -services					
	I am satisfied with the security features of the ebanking -services					
	I am satisfied with my e-banking experience					
8	Customer Loyalty					
	I use the bank e-banking services frequently					
	I am satisfied and continue using my current e-banking service					
	It is always my first choice using my bank e-banking services when conducting financial transaction					
	The bank is honest and transparent in its dealing and communication					
	I recommend my bank to my friends and family members					
	I am satisfied and loyal with my Bank					

Additional Comment, if any:-

Thank you for taking time to complete this survey! Your feedback is greatly appreciated.