The Effect of Digital Banking service quality on Customers' Satisfaction: The Mediating Role of Brand Image in the Case of Commercial Bank of Ethiopia

By: Yohannes Tesfaye

Advisor: Andinet Worku (Ph.D.)

Addis Ababa University
School of Commerce
Department of Marketing Management

A thesis Submitted for the partial fulfillment of the requirement for the Master of art Degree in Marketing Management

Sep 2022
Addis Ababa, Ethiopia

Certification

This is to certify that the thesis entitles "**The Effect of Digital Banking service quality on Customers' Satisfaction: The Mediating Role of Brand Image in the Case of Commercial Bank of Ethiopia**", submitted to Addis Ababa University, School of Commerce, Department of Marketing Management for the award of the Degree of Master of Marketing management carried out by Ms.Yohannes Tesfaye, under our guidance and supervision. Therefore, we hereby declare that no part of this thesis has been submitted to any other university or institution for the award of any degree or diploma.

Main Adviser's Name	Date	Signature
Co-Advisor's Name	**Date**	**Signature**

DECLARATION

I hereby declare that this thesis entitled "**The Effect of Digital Banking service quality on Customers' Satisfaction: The Mediating Role of Brand Image in the Case of Commercial Bank of Ethiopia**", has been carried out by me under the guidance and supervision of Andinet Worku (Ph.D.). The thesis is original and has not been submitted for the award of any degree or diploma to any university or institution.

Researchers Name	Date	Signature

APPROVAL

This is to certify that this thesis has been submitted in partial fulfillment of the requirements for the award of the master's in marketing management with my approval as Advisor and Examiner.

Approved by Examining Board

Advisor	Signature	Date
Internal Examiner	Signature	Date
External Examiner	Signature	Date

Acknowledgments

I thank the Almighty God for being my guide throughout my studies and for having brought me this far.

I am very glad to express my sincere gratitude and appreciation to my advisor Andinet Worku (Ph.D.) all this would not have been achieved without the motivation, important and constructive comments, criticisms, and professional advice and doing all these on time from the beginning of the proposal writing to the completion of this thesis and stimulation from him.

Finally want to thank all the customers of CBE for their cooperation in providing the required data for the study.

List of figures

Figure 2. 1: Dimensions of Brand Image 27
Figure 2. 2:Conceptual Framework 35
Figure 4. 1: Initial path model........ 47
Figure 4. 2:Depicts the result after the dropouts. 48
Figure 4. 3:The Bootstrapping Diagram. 57

List of tables

Table 2. 1 Previous conceptualization of Digital banking service 17
Table 2. 2 Dimensions of electronic service quality 22
Table 2. 3 Brand image concept........ 25
Table 2. 4 Empirical Review of Brand Image and Customer Satisfaction 32
Table 3. 1: Scale Selection........ 40

Table 4. 1Response Rate........ 44
Table 4. 2: Demographic Characteristics........ 45
Table 4 3: Reliability and Internal Validity 50
Table 4 4:Discriminant Validity 52
Table 4. 5 Collinearity statistics (VIF)........ 53
Table 4. 6: Path Coefficients along with their bootstrap values and ‘T’ Values........ 54
Table 4. 7:Specific Indirect Effect 58
Table 4. 8:Predictive relevance 59

Abbreviations and Acronyms

ADCs……………Alternative device Channels

ATM……………. Automatic teller machine

BI……………….Brand Image

CBE……………..Commercial Bank of Ethiopia

CS……………….Customer Satisfaction

DB………………Digital banking

E-banking………… Electronic banking

EFT ……………….Electronic fund transfer

E-payment………… Electronic payment

ICT………………. Information communication technology

PLS……………...Partial Least Square

POS……………… Point of sale

PSS ……………….Premium Switch Solution

SEM……………..Structural Equation Modeling

SPSS…………......Statistical Package for Social Science

Contents

Certification I
DECLARATION II
APPROVAL III
Acknowledgments IV
List of figures V
List of tables VI
Abbreviations and Acronyms VII
Abstract XI
CHAPTER ONE: INTRODUCTION 1
1.1. Background of the study 1
1.2. Statement of the Problem 3
1.3. Research question 7
1.4. Study Objectives 7
1.4.1. General objective 7
1.4.2. Specific Objective 8
1.5. Study Significance 8
1.5.1. Theoretical Significance:- 8
1.5.2. Practical significance: - 8
1.6. Scope of the Study 9
1.7. Limitations of the Study 9
1.8. Definition of Terms 10
1.8.1. Conceptual definition 10
1.9. Organization of the Paper 11
CHAPTER TWO: REVIEW OF RELATED LITERATURE 12
2.1. Theoretical Review 12
2.1.1. Queuing Theory 12
2.1.2. Theory of Reasoned Action 13
2.1.3. Contrast Theory 14
2.2. Conceptual Review 14
2.2.1 Customer Satisfaction 14
2.2.2 Digital banking service 16
2.2.2.1 Digital banking service Channels 19
2.2.2.2 Digital banking service quality dimension on Customer satisfaction 21

2.2.3 Brand Image ... 24
2.2.3.1. Brand Image Dimension ... 27
2.3. Empirical Review ... 29
2.3.1. The effect of Digital banking service quality On Customer Satisfaction ... 29
2.3.2. The effect of brand image on Customer Satisfaction ... 31
2.3.3. The effect of Digital banking service quality on Brand image ... 32
2.4. Summary and Literature Gap ... 34
2.5. Conceptual Framework and hypothesis development ... 35
2.6. Hypotheses ... 36
Chapter Three: Research Methodology ... 37
3.1. Research Design ... 37
3.2. Research Approach ... 37
3.3. Population and Sampling ... 38
3.3.1. The population of the study ... 38
3.3.2. Sampling ... 38
3.3.3. Sample Size ... 38
3.4. Source of Data ... 39
3.5. Methods of Data Collection ... 41
3.6. Method of Data Analysis ... 42
3.7. Validity and Reliability ... 42
3.8.1 Validity ... 42
3.8.2 Reliability ... 43
3.8. Ethical Considerations ... 43
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, AND DISCUSSION ... 44
4.1. Respondents Response Rate ... 44
4.2. Demographic information ... 45
4.3. Structural Equation Modeling (SEM) ... 46
4.3.1. Measurement Model ... 47
4.3.1.1. Confirmatory factor analysis ... 49
4.3.1.2. Reliability and Validity Reliability ... 49
4.3.1.3. Convergent validity ... 51
4.3.1.4. Discriminant validity ... 51
4.3.1.5. Test for absence of series multicollinearity assumption ... 52
4.4. Structural Model Analysis ... 53
4.4.1. Hypothesis Test ... 54

4.4.1.1. Brand image and Customer satisfaction 55
4.4.1.2. Ease of use and Customer Satisfaction 55
4.4.1.3. Ease of use and Brand Image 55
4.4.1.4. Responsiveness and Brand image 55
4.4.1.5. Responsiveness and customer satisfaction 55
4.4.1.6. Reliability and Brand image 56
4.4.1.7. Reliability and Customer Satisfaction 56
4.4.2. Mediation Effect Test 58
4.4.3. Predictive Relevance 59
4.4.4. Discussion of the findings 60
4.4.4.1. Digital banking service quality and Brand image 61
4.4.4.2. Brand image and customer satisfaction 63
CHAPTER FIVE: SUMMARY OF MAJOR FINDINGS, CONCLUSION, AND RECOMMENDATIONS 64
5.1. Summary of Major Findings 64
5.2. Conclusion 66
5.3. Recommendation 67
5.4. Suggestions for Further Research 68
Reference 69
Appendix 1 86
Questionnaires for customers 86

Abstract

The study aimed to examine the effect of Digital banking service quality on customers' satisfaction: the mediating role of brand image in the case of Commercial Bank of Ethiopia. The study employed an explanatory research design and a quantitative research approach. A survey was conducted on 250 customers of Commercial Bank of Ethiopia who are using Digital banking service quality using a convenience sampling method. A Structural equation model (SEM) is employed to estimate the theoretical model and hypotheses are empirically tested by the use of Partial Least Squares (PLS) through Smart PLS software. The findings of the study showed that ease of use and efficiency, responsiveness, security and privacy, and web design had a positive and statistically significant effect on brand image and customer satisfaction. Website design has a strong effect on brand image. Reliability has no statistical significance in determining brand image and responsiveness has no statistical significance in customer satisfaction. The study also discovered that brand image plays a role in mediating the relationship between website design and customer satisfaction. Additionally, brand image has a mediation role in the relationship between security and privacy and customer satisfaction. Finally, the study recommends that the CBE should incorporate personalized Digital banking service features, increase the quality of Digital banking service channels, and establish a complaint tracking system to identify service recovery and measure customer satisfaction at each transaction and update the drawbacks as possible.

Key Words: Digital banking, service quality, Brand image, Customer satisfaction, CBE

CHAPTER ONE: INTRODUCTION

This chapter begins by presenting the brief background of the study which is followed by the statement of the problem. Under the statement of the problem, the study states the reasons to carry out this study. Following the statement of the problem, the research questions, and the general and specific objectives of the study are presented. Finally, the significance of the study, the scope of the study including the organization of the paper are presented.

1.1. Background of the study

Customers of banks have started using services that make it simpler for them to conduct their transactions in the modern period, where nearly all bank companies have started to migrate into the digital era. (Revin & Prasetia, 2020). The significant advancements in IT and their convergence with new electronic services, such as crowd investing platforms or online banking marketplaces, are the main forces driving this process. Examples of these technologies include smartphones and tablet PCs. These advancements not only enable new business processes but also completely new business models and even signal a total transformation of the banking value chain, similar to how value chains in other industries, such as the media or tourism industries, have undergone similar radical shifts (Ito, 2017).

In today's financial industry, competition has become very high, and to gain market share, providing excellent service and satisfying customers is a critical role. So banks deliver their core services through digital platforms that make customers more comfortable and satisfied than through physical service. According to previous studies, Digital banking service is not the only factor that affects customer satisfaction, but rather the customer's perception of the brand, and this assumption is supported by Grace, Kavengi, and Onyancha (2013), who found that brand image is significantly related to customer satisfaction and loyalty intention, so the hypothesis is fully supported. Likewise, in the branding literature, there is a general assumption that a favorable brand image has a positive impact on customer satisfaction. It is (Andreassen, 1997) proposed that image affects customer satisfaction through a filtering effect. Furthermore, Adisu (2018) proposed that brand image correlates with customer satisfaction and that brand image has been identified as an important antecedent of customer satisfaction. Hence, a positive bank brand image will tend to generate high customer satisfaction in the bank.

It is crucial to pay attention to the quality of Digital banking service customer care to increase customers' interest in utilizing online banking facilities. Good customer service can increase people's intentions to use Digital banking service services. The study conducted by Bultum (2014) found that e-banking systems, such as ATMs, mobile banking, internet banking, and others, were not well adopted by the Ethiopian banking industry.

The attributes affecting the Digital banking service experience are as follows: service quality, functional quality, perceived value, service customization, service speed, employee-customer engagement, brand trust, Digital banking service innovation, perceived usability, and perceived risk. They affect customer experience, satisfaction, loyalty, and financial performance. Cajetan, Ikechukwu and Mbama(2018).

The research conducted by (Ansebo, 2022) on the commercial bank of Ethiopia under the title "The impact of electronic banking on customer satisfaction: A case study of commercial bank of Ethiopia's Hossana town branches concluded that electronic banking in Ethiopia has a significant impact on service delivery. This leads to improved customer satisfaction.

According to Selshi (2019), customers of commercial banks in Ethiopia prefer banking halls (branches) for a variety of reasons, including accessibility, security, convenience, and fear of losing a relationship, implying that most customers prefer using passbooks over Digital banking services.

And this might be due to the efficiency of the Digital banking service services for the customers of commercial banks in Ethiopia. The study conducted by Tale, (2021) found some of the CBE branch customers are poorly satisfied in terms of the responsiveness and tangibility dimensions.

Not only that, it has been determined that transaction efficiency has the greatest influence on customer satisfaction, while service reliability has the second-highest influence. (Neeraj B, Abebe S,Waktole F., 2020). Additionally, the study conducted by Tadesse & Fayera Bakala

(2021) stated that many of the ATM customers of commercial banks in Ethiopia were very dissatisfied with the ATM service. This was affected or minimized by a lack of tangible goods.

Customer satisfaction may have an impact on brand image, and when a customer is satisfied, their brand image is treated differently. Customers who are satisfied with their brand image were found to have greater loyalty than customers whose evaluations were done directly without considering their brand image Nichay, Upamannyu, and S.S. Bhakar (2014). First, it was necessary to quickly evaluate past studies to outline this investigation. Theoretical reasoning was also presented to establish consistency among the latent variables of the study model. In the third step, the research model will be demonstrated, and research hypotheses will be developed using the pertinent theoretical knowledge and literature. Fourth, SPSS 25 and clever PLS 4 were used to examine the data that had been obtained. Finally, recommendations for further research, managerial ramifications, and conclusions are presented.

1.2. Statement of the Problem

The banking industry has taken the lead position in the e-business world for years (Chavana and Jayshree, 2013). The emergence of new opportunities and the scaling of borders by the e-banking revolution has significantly altered the banking industry. Banking, to put it simply, refers to the distribution of banking goods or services via electronic means. Electronic banking has been considered, sometimes in the form of automatic teller machines (ATMs) and telephone transactions. Recently, it has been transformed by the internet. The new delivery channel facilitates banking transactions for both banks and customers. The internet offers faster access to bank services for customers that is more suitable and available around the clock irrespective of the customer’s location (Chavana and Jayshree, 2013) The rise of Digital banking service has changed the way people do their banking and provided new strategic directions for those who want to invest in banking information and communication technology. (Sabi, Humphrey, and Muki, 2014). And the existence of the technology is to serve customers and be profitable through cost reduction and expanding market share by designing a relevant strategy.

The obvious reason for every business's existence is the client; hence, satisfying customers is a key goal of any business plan and mission. This idea must be understood for an organization to succeed and develop. It is sufficient to say that organizational profitability is influenced by consumer satisfaction. An emotional condition is customer contentment. (Oliver and Richard L., 1997). noted that satisfaction is a general psychological state which is about the expectation of emotions and experience from shopping behavior. Y and Yi (1990) discovered that customer satisfaction is influenced by two factors, which are experience and expectations of service performance. Operationally, satisfaction is similar to an attitude, as it can be assessed as the sum of satisfaction with the various attributes of the product or service. According to Hansemark, & Albinson, (2004), "satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers expect and what they receive, regarding the fulfillment of some needs or desires". The expectation is a pre-purchase idea that diverts toward ideas that a good or service with particular characteristics will result in particular outcomes. In cases where performance exceeds expectations, the buyer will be delighted. Expectations are usually not fulfilled when they reflect unanticipated service attributes or are unrealistically high. (Kotler and Keller, 2012). I believe that in today's world, smart companies aim to delight customers by promising only what they can deliver, and then delivering more than what they promise. Customers usually share their experiences, either good or bad, with a product and/or company with those within their social circles. (Biljana and Jusuf, 2011) suggest that satisfied customers are likely to tell six people, while dissatisfied customers will relate their negative experiences to at least ten people. (Bridgett, Joseph, Ameenah, Williams, and Roger, 2012) It is assumed that when customers are unsatisfied, they could complain, indulge in negative word of mouth, or, in extreme cases, choose not to defect, especially when they feel the substitute firm/product won't offer something better.

Brand image is essential to marketing because it allows clients to determine the quality of products and further influences their purchasing behavior. (Ronnie, Anne, and Karinna N., 2006)defined brand image as the material property associated with the brand, such as the product name and the packaging, which could make profits or sense for customers and help or increase the brand's visibility. (Ronnie, Anne, and Karinna, 2006) proposed reducing conceptual model verification with the effects of brand image and brand attitude. Three routes in the model were proposed to connect to the brand directly through the brand image and the brand attitude, and indirectly from the brand attitude through the brand image. (Dawn and George, 1990) defined brand image as the brand concept that customers held; and (Robert and Patrick, 2009) stated that most brand images were subjectively perceived images that were interpreted by customers' rationality or sensitivity. In addition, the brand image did not exist in the technology, the function, and the product but was affected by relevant marketing programs, campaign context, and the characters of the accepters. Wu and Fu (2009)Supposedly, while referring to a brand image, the perception presented by the fact would be more important than the fact itself.

The perception of banking services by local customers has significantly changed in recent years. Many of the banks' competitive initiatives are geared around assisting customers with their purchasing decisions. Services to meet their needs for financing and saving are also taken into consideration. Customers' banking service purchases get more sophisticated as they gather and analyze more reference data. In other words, customers become pickier about their purchases.

They are easily dissatisfied and ready to voice their complaints whenever the bank causes service failures, e.g., long service delivery processes, failure to provide proper product information, unprofessional staff, and so on. Consequently, if the bank brings about satisfactory recovery outcomes for the failures, customers may revisit the bank for another purchase and have good words about the bank with others. Otherwise, customers may detect other banks' signals and negatively comment on them. As pointed out above, the student researcher learned from a preliminary investigation that was conducted that major service failures of the bank emanate from redundant network off, failure of ATM withdrawal, failure of mobile banking, long service delivery time, weak customer handling system, and ineffective customer complaint handling system.

Customer satisfaction increases as a result of the brands' excellent reputations. If a customer is satisfied with a brand after learning about it and using it, the brand's reputation is enhanced. A positive brand image improves customer satisfaction. Customer satisfaction helps to construct the image of the brand.

Silshi and Abels (2019), conducted a study on the impact of electronic banking on customers' satisfaction: the case of the commercial bank of Ethiopia, (Neeraj, Abebe & Waktole, 2020) studies the impact of e-banking services on customer satisfaction: the case of the commercial bank of Ethiopia in Nekemte. The study aims at identifying the electronic banking service dimensions that have an impact on customer satisfaction in the Commercial Bank of Ethiopia.

G/Hiwot(2018) conducted a study on the role of e-banking service quality on customer satisfaction in the case of a commercial bank in Ethiopia and was to examine the role of e-banking service quality on customers' satisfaction in the commercial bank of Ethiopia.

Teketel and Dipak (2022) examined the impact of electronic banking on customer satisfaction in the case of Ethiopia's Hossana town branches, and the study aimed to measure the service quality in electronic banking to improve customer satisfaction and to examine the different dimensions of service quality to relate them with the expectations of customers.

Additionally (Adisu, 2018), he has conducted a study on the effect of e-banking on customer satisfaction The study examines the effect of the electronic banking system on customer satisfaction in some selected banks

Mekdes, (2019) study looks at the effect of e-banking attributes on customer satisfaction. Some scholars attempt to demonstrate the connection between brand image and customer satisfaction in their research paper findings.

Sara, (2021) has researched the effect of brand image benefit on customer satisfaction: the case of Ethio-telecom. The research examines brand image benefits on customer satisfaction. studied the effect of brand image on building customer satisfaction and loyalty in the case of Hilton Hotel Addis Ababa, Ethiopia to examine the effect of brand image on building customer satisfaction and loyalty.

These problems motivate the researchers to examine the effect of Digital banking service quality on customer satisfaction and brand image. Several studies have been done about Digital banking service quality, customer satisfaction, and brand image.

While earlier studies looked into each perspective separately, none of these studies, as per the knowledge of the researcher, put both explanations to the test at the same time. So, due to these factors, customer satisfaction is not a direct result of Digital banking service. However, we need to study the indirect relationship between Digital banking service, customer satisfaction, and brand image.

Future research on customer satisfaction with banking services is necessary on both a national and international level, given the significance of e-banking services in the overall assessment of satisfaction with banking services and the impact of customer satisfaction in the increasingly competitive banking sector. (Andreea & Cristina , 2018).

Therefore, this study tried to fill the gap by empirically examining the effect of Digital banking service quality on customer satisfaction and brand image in the Commercial Bank of Ethiopia. In particular, how the dimensions of Digital banking service quality (Reliability, Ease of Use Efficiency, Website Design, Privacy, and Responsiveness) affect customers' satisfaction and how brand image outcomes affect customers' satisfaction will be examined.

1.3. Research question

The study tried to answer the following research questions:

1. How does digital banking service quality influence customer satisfaction?
2. How does digital banking service quality influence product image?
3. To what extent brand image affects customer satisfaction?
4. Does product image mediate the influence of digital banking services quality on customer satisfaction?

1.4. Study Objectives

1.4.1. General objective

The purpose of this research was to identify the effect of Digital banking service quality on Customer Satisfaction with a mediation effect on product image the case of the commercial bank of Ethiopia

1.4.2. Specific Objective

The Specific objectives of this thesis can be summarized as follows:

1. To examine the effect of Digital banking service quality on customer satisfaction.
2. To examine the effect of Digital banking service quality on brand image.
3. To examine the effect of brand image on customer satisfaction.
4. To investigate the impact of Digital banking service quality on customer satisfaction through brand image.

1.5. Study Significance

1.5.1. Theoretical Significance:-

This study is expected to contribute to the existing growing body of Digital banking service literature by examining the relative impact of Digital banking service quality on customer satisfaction as well as the relationships between customer satisfaction and Brand image and by empirically investigating the case of Commercial Bank of Ethiopia. In addition, the outcome findings and recommendations of this research could help the customer service department's manager by applying the findings of this research in their strategic customer relationship management practices to evaluate customer satisfaction and improve service failure management and service recovery.

1.5.2. Practical significance: -

It might also help to enhance Digital banking service quality and, secondly, give ideas about brand image intentions. The study results might also assist government and regulatory bodies to enact regulations and procedures to identify the message to build a brand image that would determine the level of customer satisfaction in the financial industry. In general, this study is expected to provide input for the implementation of appropriate Digital banking service quality that will improve customer satisfaction.

1.6. Scope of the Study

Conceptual Scope: The study is mainly concerned with examining the effect of Digital banking service on customer satisfaction and the Brand image of customers in the Commercial Bank of Ethiopia. This study concentrated on (**Reliability, and Ease of Use and Efficiency, Website Design, Privacy, Responsiveness.**)to investigate whether they result in a strong or weak relationship between customer satisfaction and the Brand image of customers in commercial bank of Ethiopia from the customers' point of view only.

Methodological Scope: Given these objectives, the study used a quantitative research approach and explanatory research design to explain the relationship between the dependent and independent variabl.es

Geographical Scope: The study was conducted only on selected branches of the commercial bank of Ethiopia located in Addis Ababa.

Time Scope: In terms of time scope, this study was a cross-sectional study, and data were collected at a point in time. Thus, the study's time delimitation is the 2022 fiscal year.

1.7. Limitations of the Study

The major limitation of this study was disregarding the opinions and perceptions of employees concerning Digital banking service even though their outlooks in the area of banking customer service matter throughout the investigation of Digital banking service. The study also used a convenience sampling technique due to the nature of the target population The study targeted only customers of the Commercial Bank of Ethiopia in Addis Ababa. In addition, this study was limited to investigating the effect of Digital banking service quality on customer satisfaction in the banking service sector only and specifically in the Commercial Bank of Ethiopia.

1.8. Definition of Terms

1.8.1. Conceptual definition

Digital banking service: Digital banking service is financial services delivered through mobile phones, personal computers, the internet, or cards linked to a reliable Digital banking service system. This includes services like money deposits, withdrawals, and transfers. (Peterson K.Ozili, 2018) Digital banking service means digitizing all of the banking operations and substituting the bank's physical presence with an everlasting online presence, eliminating a consumer's need to visit a branch. (Tavaga, 2021)

E-banking: Electronic banking is defined as any use of information and communication technology and electronic means by a bank to conduct transactions and interactions with stakeholders (Abid and Noreen, 2006)

Perceived Ease of use: Perceived EU has been defined as "the degree to which a person believes that using a particular system would be free of effort" (Venkatesh, V & Davis, F.D., 2000)

Perceived Usefulness: Perceived usefulness is a customer's perception of the ability to improve work efficiency, for example by saving time, when accessing services in multiple ways (Davis, F. D., 1993).

Trust: Trust is defined as the willingness of a party to be vulnerable to the actions of another party, based on the expectation that the trustee will perform a particular action important to the trustor, without being able to control and monitor the other party (Mayer, Davis, & Schoorman, 1995)

Customer satisfaction: Customer satisfaction means meeting the requirements of the customer as per their expectations. If the value of the services delivered is less than or not equal to the expectations of the customers, this leads to dissatisfaction among the consumers (Toor, 2016.)

Brand Image: Brand image is the current view of the customers about a brand. Brand image is a mental image that reflects the way a brand is perceived, including all the identifying elements, the product or company personality, and the emotions and associations evoked in the consumer's mind (Porter, 1985)

Commercial Bank is a bank that works with businesses handling banking needs for large and small businesses including lending money for real and capital purchases, foreign exchange, etc.

Speed of Transactions: A measure of the quickness of a transaction using a Digital banking service, to deliver the desired result promptly.

Accessibility: The extent to which a consumer or user can obtain a good or service at the time it is needed and at the convenient location and contact the organization which is in charge of that particular good or service.

Adaptability: The ability of bank customers to alter their responses to the changed circumstances or environment brought about by Digital banking services. Adaptability shows the ability to learn from experience.

Affordability: A price or cost that is believed by bank customers to be within their financial means

Digital wallet: Digital wallet is essential for digital commerce and ecosystems built on value-added services. In addition, it optimizes transaction costs for customers and funding costs for banking operations;

1.9. Organization of the Paper

This study is structured into five chapters. The current chapter discusses the background of the study, the statement of the problem, the objectives of the study, the scope of the study, the significance of the study, and the limitations of the study. Chapter two undertakes a review of the literature on theoretical and empirical works of literature on service recovery and related studies. Chapter three deliberates the methodology that was used for the study. Chapter four presents data discussion and analysis. Chapter five provides conclusions and recommendations.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

This chapter aims to present works of literature relevant to this study and to provide a conceptual framework, models, and theories that are relevant in the field of customer satisfaction that has been discussed to facilitate analysis and understanding of the research questions. The chapter begins with a Theoretical Review of previous studies which finally leads to the conceptual framework.

2.1. Theoretical Review

2.1.1. Queuing Theory

Queuing theory is traceable to the Danish Mathematician, Statistician, and Engineer, Agner Krarup Erlang who created models for the description of the Copenhagen Telephone Exchange. According to (Erlang and Agner, 2022), queuing theory is the mathematical study of waiting for lines or queues. As a branch of operational research, the results from queuing theory are usually used when making business decisions on resources required to provide a service. A queuing model enables length and waiting lines prediction. Naturally, banks with a large number of customers usually experience lines of waiting customers which is long. The essence of this scenario is the low efficiency of a queuing system.

And also the goal of queuing theory is to evaluate and, ideally, improve the flow of consumers through a queue system. It does this by using mathematical models and performance measures. The service sectors have employed queuing theory extensively and it has numerous uses. In the past, a queuing theory has been used to evaluate factors including employee schedules, work environments, productivity, and performance as well as consumer wait times and environments. Queuing theory can be used in banks to evaluate a wide range of variables, including registration fill-time, customer waiting time, customer counseling time, and staffing levels for receptionists and technicians. The study conducted by (Olaofe, Moses, Ajibola, Olurotimi, Otunaya, Gbemisola Olabisi, Ekundayo, Olugbemileke, Akanni, Adeniyi, Lawal, and Odunayo, 2020) stated that Low public awareness on electronic banking, fewer service points, few usages of ICT for banking transactions and inadequate desk officers to attend to the customers were observed while applying queuing theory on effective service at First bank branch.

The banking sector, like other service-oriented businesses, faces increased competition. Businesses can get a competitive edge in the market by offering quick service, it has been proven. Additionally, the literature reveals several studies documenting consumers' displeasure with lengthy wait times, indicating that this is a widespread issue in bank operations and a frequent source of worry and dissatisfaction among customers and, in many cases, bank staff. Increased competition and the importance that customers place on their time are two factors that are contributing to the growing emphasis on delivery speed.

The study conducted by (Sunday, Afolalu, Kunle, Babaremu, Samson, Abiodun A. Abioye, Ademola Abdulkareem, and Samue, 2019)shows that a few studies have been carried out within the scope of the banking sector concerning the application and impact of queuing theory on telecommunication and computer systems.

2.1.2. Theory of Reasoned Action

To comprehend the connections between attitudes, intentions, and behaviors better, the Theory of Reasoned Action (TRA) was created (Fishbein, 1967). One of the most significant ideas used to describe human behavior is this one (Poon,2008). Individuals' views regarding conduct and subjective norms help to explain behavioral intention to utilize technology. Delivering good service quality has been linked to success in these sectors as a result of increased competition and deregulation, which has caused many service and retail organizations to look for profitable methods to differentiate themselves (Cheah& Phau, 2011) Therefore, due to greater revenues, increased cross-sell ratios, higher customer retention, changing consumer behavior, and increased market share (Kaynak& Harcar 2015)service quality has been a prominent research topic in the last ten years. The importance of customer service in the banking industry forced businesses to compete in a setting that was driven by the market. The service industry as a whole is quite diverse, and what is diverse for one service sector may not be true for another. Due to this differentiation, services in this industry are not standardized and are also intangible, making them impossible to compare or physically observe. Customer satisfaction and service quality concepts are tied to one another.

2.1.3. Contrast Theory

(Hovland, 1957)Were the first to introduce contrast theory (1987). Contrast theory is described by (Dawes, 1972)as the propensity to emphasize the differences between one's attitudes and the attitudes expressed by opinion statements. Contrast theory offers a different perspective on the customer post-usage evaluation process than assimilation theory did because post-usage evaluations result in predictions that are in direct opposition to those made about how expectations will affect satisfaction. Compared to the previous system, when cash could only be withdrawn from the counter, the advent of automated teller machines has made it easier for consumers to access funds in their accounts at any time.

A bank that wants to boost client satisfaction must either make significant investments in the ATM networks or join the current regional or global networks, like Visa or Master card. Contrast theory contends that a surprise effect occurs, causing the gap to be enlarged or exaggerated, whereas assimilation theory maintains that customers would attempt to reduce the difference between anticipation and performance. The contrast theory claims that any deviation from expectations is amplified in the direction of the deviation. The goods or services would be rejected as wholly unsatisfactory if the company increases expectations in its advertising and then a customer's experience is only marginally less than that promised. According to this view, commercial banks must continually introduce fresh products that raise client happiness while also remaining competitive.

2.2. Conceptual Review

2.2.1 Customer Satisfaction

Customer delight is customer satisfaction’s measurement towards a product, an organization, services, or sales items with the inclusion of customer services (Janahi, 2017) According to (Hassan, 2019), that customer satisfaction is also received on having offers or services per the expectations. Customer satisfaction is an important factor in an organization for retaining customers.

Customer satisfaction has become a key intermediary objective in service operations due to the benefits it brings to organizations (Ranaweera C. and Prabhu J., 2003). The importance of customer satisfaction is derived from the generally accepted philosophy that for a business to be successful and profitable, it must satisfy customers (Shin, 2001)Previous research has demonstrated that satisfaction is strongly associated with re-purchase intentions (Cronin, and Taylor,1992) Customer satisfaction also serves as an exit barrier, helping a firm to retain its customers (Fornell, 1992) . Several studies have concluded that it costs more to gain a new customer than it does to retain an existing one (Blodgett, Akefield, and Barnes,1995). In addition, customer satisfaction also leads to favorable word-of-mouth publicity that provides valuable indirect advertising for an organization (Halstead and Fornell, 1992)

When a dissatisfied customer chooses not to complain to avoid confrontation or to save the employee from being punished, the service provider misses the opportunity to rectify or correct the service failure situation and return the customer to a satisfying state (Tronvoll, 2007) .

Additionally, Customer satisfaction is experienced or achieved through the medium of an electronic or online setting, which is regarded as e-customer satisfaction (Zeithaml,2002).
Increased standards of product quality and a focus on customer satisfaction go hand in hand (Khatoon, Zhengliang, & Hussain, 2020). More significantly, e-reliability banking and viability make it more of an influence on the growth of the banking sector. (Santos, 2003).
In all businesses, but especially in the service industry, a company's ability to sustain client happiness is critical. For customers to be satisfied, buyers must buy and use the goods or services. (Husnain & Akhtar, 2016) .

The prosperity of a bank is directly related to the attitudes and preferences of its customers. Elevated electronic banking, corporate performance, and customer objectives are all linked to customer satisfaction. An organization’s ability to grow and succeed depends on the satisfaction of its customers (Husnain & Akhtar, 2016). Customer pleasure is closely related to service quality. Online banks typically are more interested in customer opinions on online banking services because it is simple to evaluate the benefits of comparable services. Customer satisfaction, which is strongly influenced by the client's understanding of the overall service quality, underpins the absolute achievements of the quality regime. (Ventre & Kolbe, 2020).

2.2.2 Digital banking service

Analyzing contemporary literature closely gives intriguing information regarding Digital banking services. First, there haven't been many attempts to define Digital banking service in many ways, both locally and globally. To give just a few examples, Digital banking service has been defined as any system that uses electronic signals to replace people or paper (Mitchell, 1988); the delivery of banking services through channels other than conventional physical branches (Liao, 1999), and a banking method that does not use physical branches and instead bases transactions on the Internet (Ahmadalinejad, 2015). A more expansive perspective, however, asserts that Digital banking service encompasses a wide range of services, from standard ATM services and direct deposit to automatic bill payment, electronic financial transfers, and computer or PC banking (Kolodinsky, 2004) These definitions, meanwhile, don't seem to capture the fundamental nature, extent, and core of Digital banking service and they seem debatable. As a result, the financial industry will be better able to evaluate the strategic value of Digital banking services with a clear grasp of the applications, products, and services of Digital banking. For the customer, this understanding will influence the acceptance, uptake, and usage of Digital banking service goods and services across various consumer segments, including the banked, under-banked, and unbanked.

The first challenge was to propose a thorough definition that encompassed current developments in the field of Digital banking service given the multiplicity of definitions, dimensions, and diverse and heterogeneous Digital banking service channels. For instance, previous definitions did not specifically define which electronic devices constituted "Digital banking service " equipment. However, using a PC or laptop to access banking services only should not be regarded as a Digital banking service (Shaikh, 2015)

The definition of Digital banking service that the authors suggest is as follows: Digital banking service is any day, anytime, and anywhere banking system consisting of a variety of alternative delivery channels, products, and services developed and deployed by a banking company or microfinance institute so that consumers can access banking information to conduct financial and non-financial transactions using an electronic device – commonly, but not exclusively, an ATM, the Internet, cell phone, smartphone, tablet, etc

Table 2. 1Previous conceptualization of Digital banking service

S #	Citation	How has digital or electronic banking been considered?	How has digital or electronic banking been defined or explained?
1.	Kirakosyan & Dănăiață (2014)	E-banking; Virtual banking; PC banking; Online banking	Electronic banking allows customers to access their bank information, make deposits, conduct financial transactions, pay bills, check balances on their accounts, transfer funds, and purchase financial instruments remotely by using a personal computer and accessing banking facilities from the comfort of their home or office.
2.	Liébana-Cabanillas et al. (2013)	A primary distribution channel	Although this article does not explicitly define electronic banking, it explained that electronic banking is a crucial service by which to gain customer satisfaction and loyalty and establish closer customer relationships, thereby meeting user expectations.
3.	Fonseca (2014)	Online banking	Digital banking is defined as conducting transactions and accessing bank account information via personal computers (PCs).
4.	Karjaluoto et al. (2002).	Internet banking	Electronic banking is the provision of information or services by a bank to its customers via a computer, television, or mobile phone.
5.	Wu et al. (2006)	Online banking	Electronic banking is a type of online transaction via the internet. It constructs an alternative channel by which customers can easily make a transaction anywhere and anytime and reduces the need for financial intermediaries.
6.	Floh & Treiblmaier (2006)	Internet banking	Electronic banking is the provision of information or services by a bank to its customers over the internet.
7.	Liébana-Cabanillas et al. (2015)	Alternative delivery or distribution channel	Electronic banking is the primary alternative channel to traditional bank branches (face-to-face banking) and offers customers a number of advantages such as convenience, global access, availability, cost and time savings, transparency of information, ability to choose and compare, and customization.

Source: (Aijaz and Shaikh, 2016)

There are several things in this definition that need to be made clear. The flexibility of the services offered to bank account holders in the comfort of their home, office, or recreational spaces is represented by Digital banking service, for instance, which enables them to use any electronic device to access their banking information and complete various electronic transactions.

The second part of this definition refers to "banking information," as ADCs have also been used in research as information delivery channels (Martin, 2014). The information revolution, according to (Karjaluoto, 2002) has helped every sector of the economy and will profoundly alter how banks and other financial institutions function. According to these presumptions, the

foundation of Digital banking service is giving customers access to banking information whenever and wherever they want it.
The many sorts of transactions are described in the third part of this description. One can easily divide these transactions into financial and non-financial transactions given the varied character of the various distribution channels, Digital banking service products, and services. Financial transactions in this context refer to actions involving money, including fund transfers, cash withdrawals, utility bill payments, and charitable contributions. In contrast, non-financial transactions include looking for ATM locations, requesting checkbooks, checking account balances, and receiving mini-statements.

The ADCs are covered in the definition's fourth component. ADCs are separated into two main kinds by the banking sector: physical and virtual offerings. ATMs and POS terminals are examples of physical ADCs. The majority of physical channels support both conventional and cutting-edge financial and non-financial transactions made with credit and debit cards and other types of payment cards. Mobile phones and the Internet are examples of virtual ADCs. Virtual channels enable customers to access their financial information remotely, quickly, and easily without going to a bank branch or ATM by removing time and location constraints. The banking portfolio has been further diversified by a few non-traditional services created and provided by non-financial organizations. Similarly, m-banking, branchless banking, and social network banking services, which were recently added to the Digital banking service portfolio, have revolutionized the banking services landscape, increased the scope of banking, and allowed consumers to access banking and payment services on their portable devices.

The establishments that provide digital financial services are the final component of the definition's fifth category. Banking institutions have historically controlled the industry and were subject to strict regulatory requirements. Microfinance organizations have, nevertheless, played a vital role and created several Digital banking service products during the past ten years. As a result, neither commercial nor retail banks are the only institutions that provide Digital banking services.

Confusion pervades the Digital banking service landscape as a result of the sheer size, variety, heterogeneity, and flexibility of Digital banking services and the related literature. When "m-banking" is distinguished from "Internet banking" and "branchless banking," the confusion is even more perplexing. Given the differences in the environments, technology, and devices, the authors make the case that Internet (or online) banking and mobile banking are two distinct Digital banking service channels.

According to (Hanafizadeh, Behboudi, Koshksaray & Tabar, 2014) the distinction also pertains to the service's location-free accessibility and the size of the device's display. For instance, m-banking enables usage of the service whenever and wherever required, saving time when using the service. The keyboard and display size of mobile devices appear to be the main deterrents to using mobile banking services, in contrast to the case when using a PC or laptop for online/Internet/net banking (Laukkanen, 2007)Branchless banking is largely designed for the under banked, unbanked, or de-banked portion of society, in contrast to mobile banking, which frequently uses cutting-edge technology, innovations, and sophisticated services.

2.2.2.1 Digital banking service Channels

ATM - Automatic Teller Machine - known to us as ATM, is a telecommunication computerized device that offers customers financial institutions access to financial transactions in public spaces without the need for contact with the employees of that institution. In modern ATMs, the customer is identified after the introduction of the card (monetary), which contains a unique number. The authorization will be granted after that press customer's identification number (PIN) (Ilir and Doci, 2009)Terminals - Every computer connected to the serial connection, mainly support UNIX Operating System or Windows, with limited functions and uses no use programs only bank dedicated software. Currently, CBE has a mobile money market size of about 6.7 million users and there are 3,091 ATMs all over the country. (CBE, 2021/22)

POS - Point of sales - represents a place of payment in a shop, which is called a POS terminal device that enables transaction or payment by card under the person's supervision seller. This enables the terminal at the same time invoice printing (Ilir and Doci, 2009). New ICT systems of banks must meet three main requirements: - The last schedule of services - infrastructure needs to support 24-hour operation, 365 days a year. Currently, CBE has the POS - Point of sales of about 4,350 million users (CBE, 2021/22)

Internet Banking or Online Banking – - Internet banking allows customers of a financial institution to conduct financial transactions on a secure website operated by the institution, which can be a retail or virtual bank, credit union, or society. It may include any transactions related to online usage. Banks increasingly operate websites through which customers are able not only to inquire about account balances, interest, and exchange rates but also to conduct a range of transactions. Unfortunately, data on Internet banking are scarce, and differences in definitions make cross-country comparisons difficult (AT and Timothy, 2012)

Interaction with technology and consumer value dynamics in the banking industry, We all have heard of online banking, but not all of us have used it ourselves. People continue to pay phone bills, electricity, and water, at the respective counters and continue to withdraw or deposit money in person at bank counters. It happens to see on the Internet, different interests that banks offer on deposits, commissions that they hold for the account, or conditions to be met to get a loan. However, when it comes to deciding to act, feel better and more confident when we are within the walls of a bank, in front of a natural person, which in turn illustrates our services and advises us that in his opinion, is more appropriate for us. The challenge of this industry is the design of this new channel for the provision of banking services in a simple and reliable to be used by customers. After all, banks have generations who strive to earn the trust of clients and cannot risk everything with a confusing site, tedious, and, above all, not sure. Currently, the Internet Banking market size is about 31,000 users. (CBE, 2021/22)

Digital Wallets -These are electronic devices that allow for making financial transactions. An individual’s account can be linked to the digital wallet. Digital wallet systems enable the wide spread use of digital wallet transactions among various retail vendors in the form of mobile payment systems and digital wallet applications. CBE birr mobile payment system is a good example in Ethiopia and the Master Card Pay pass in the US and worldwide.

Mobile Banking - (Kennedy and Jacky, 2013) define Mobile banking (m-banking) as, the provision and availing of banking and financial services through the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, administer accounts and access customized information.

Mobile networks in Ethiopia offer money services in the name of CBE Mobile banking by CBE, Tele birr by Ethio telecom, Amole by Dashen Bank, Awash mobile wallet by Awash Bank, and Gize Pay by Abyssinia Bank. Currently, the mobile money market size is about 5.2 million users. (CBE, 2021/22)

Telephone Banking- According to (Hosseini & Mohammadi, 2012), telephone banking is a service that allows bank account holders to perform various banking transactions such as checking the balance in hand or fund transfers over the telephone. A major difference between ATM banking and telephone banking is that the latter does not allow deposits and withdrawals. Similarly, telephone 'voice-to-voice' conversations between banking customers and bank staff are considered to be face-to-face branch banking rather than telephone banking (Hoehle, Scornavacca, & Huff, 2012). A decade ago, one Australian bank, Suncorp-Metway, launched a telephone call center. The cell center offers fast approval of low-cost term loans, overdrafts, business checks, and cash management account services to small business customers (Wright & Ralston, 2002).

2.2.2.2 Digital banking service quality dimension on Customer satisfaction

There are numerous aspects of measuring the quality of an electronic service that is utilized in numerous research examples, including responsiveness, dependability, credibility, safety, usability, effectiveness, privacy, security, navigation, and website design. A list of studies and the metrics for measuring the quality of electronic services employed by researchers are shown in Table 2 1.

Table 2. 2Dimensions of electronic service quality

Researcher Dimensions	Dimensions
Meuter et al., 2000	(Efficiency), (Flexibility), (Convenience), (Security), (Impersonalization)
Cox and Dale, 2002	(Customer Confidence), (Ease of Use), (Relationship Services), (Online Resources)
Lee and Lin, 2005	(Website Design), (Reliability), (Responsiveness), (Trust), (Personalization)
Zeithaml et al., 2002	(Information Availability), (Content), (Privacy), (Security), (Website Graphic Style), (Usability), (Fulfillment)
Yang et al., 2004	(Reliability), (Access), (Ease of Use), (Attentiveness), (Security), (Credibility)
Madu and Madu, 2002	(Serviceability), (Security), (System Integrity), (Trust), (Responsiveness), (Service), (Differentiation), (Customization), (Web Store Policies), (Reputation), (Assurance)
Long and McMellon, 2004	(Tangibility), (Reliability), (Responsiveness), (Assurance), (Empathy), (Communication)
Parasuraman et al., 2005	(Efficiency), (Reliability), (Performance), (Privacy), (Trust), (Personalization)
Nubur, 2010	(Reliability), (Responsiveness), (Security), (Empathy), (Tangibility)
Swaid and Wigand, 2009	(Information Quality), (Ease of Use), (Reliability), (Responsiveness), (security), (Personalization)
Iliachenko, 2006	(Reliability), (Credibility), (Responsiveness), (Efficiency), (Tangibility), (Communication)

Source: (AL-SMERAN, 2017)

Based on previous studies, the following dimensions were used in this study: Reliability, and Ease of Use, and Efficiency, Website Design, Privacy, Responsiveness.

Reliability: Reliability is the first determinant of customer satisfaction, and the second determinant of customer loyalty to the website (Zeithaml, Parasuraman, and Malhotra, 2002) Reliability is defined as a service-based capability to provide customers with confidence and high resolution (Sung, 2009).To achieve reliability, companies must provide service as promised by the company and reliably (Al-Dmour and Hani, 2005). It includes the correct technical recruitment of the website and precision in obligations and promises of service (delivery of customer orders, delivery time, advertising, and product information) (Parasuraman, Zethamel, and Molhotra, 2005), plus the correct completion of the request, and direct delivery of applications, and the accuracy of the advertising (Yang,2004).

Reliability is measured by providing a website permanently and the right action (Gerrard, 2003). Reliability refers to the company's ability to deliver the quality of information that matches the criteria of timeliness, accuracy, understandability, and relevance, in addition to its ability to fulfill pledges to the customer thereby achieving a high level of satisfaction (Swaid, 2007).

Ease of use: Ease of website use is the most important element that makes customers repeat using the website (Madu and Madu, 2002). Ease of use may be defined as ' anticipating expected customer that he does not need to use the system a great effort ' (Zeithaml, Parasuraman, and Malhotra, 2002).

Website design: Website design is an influencing dimension on buyers' customer perceptions (Zeithaml, Parasuraman, and Malhotra, 2002), and the website design is defined as providing customers with information in a fun way and having a distinctive and attractive website design (Bresselles et al., 2008).

Numerous studies have shown that Web design includes Website Appearance, and Visual design (Shang, 2004), and according to (Bauer, 2006) website design is designed with aesthetic attributes and content, and features. To assess the standards of aesthetic appearances on a website, one must question types, sizes, and, texts (Madu and Madu, 2002), as well as for image clarity, and quality, and use appropriate visuals from the website.

Privacy: Privacy is one of the essential attributes of the dimensions of electronic service quality appears confidence to the user to make online transactions (Zeithaml, Parasuraman, and Malhotra, 2002; Iliachenko, 2006) defines privacy as ' protect customers from fraud and protect their personal information '. And increase privacy by securing the website for customers of intervention and protecting their personal information (Zeithaml, Parasuraman, and Malhotra, A., 2000a.). This dimension can be measured by assessing the degree of protection and maintaining customer information from hacks plus how customers feel safe with their special information while dealing with the website (Sheng, 2010) The importance of privacy comes from the ability of internet services to deliver reliable and dependable to build confidence among customers (Madu, and Madu, 2002).

Responsiveness: (Garvin, 1988)defines responsiveness in general as the ability to repair the product or modify service when problems occur because the consumer does not have sufficient expertise for processing and repair. Responsiveness in traditional service centered around the ability of the service to answer customers' questions, respond to them without errors in minutes plus immediate delivery to the customer (Zeithaml, Parasuramann, and Malhotra, 2002), and electronic service responsiveness known as rapid response and get help in case of a problem or a question. In electronic service quality, responsiveness measures – the level of assistance received by the customer during the search, and when needed while using electronic service, in addition to measuring the extent of guidance and instructions for using electronic service and assistance when problems arise in the service (Griffiths, 2005), in addition to the company's ability to provide a solution to the problems electronically (Iliachenko, 2006) responsiveness reflects the desire to help the customer, and it can be measured by the service availability on time, and to meet all requirements of the customer, and to achieve a response quick service request (Yasseri, 2005).

2.2.3 Brand Image

.

Brand image is a customer's mental picture of an offer and includes a symbolic meaning associated with a specific attribute of a product or service (Salinas, 2009) According to (Woisetschläger, 2012) brand image is a consumer perception formed in the customer's memory and is reflected in brand associations. The image formed in the customer's mind depends on his knowledge and perception of the brand (Alimen, 2010) According to (Lee, 2011), the brand image includes knowledge, customer opinions were given, and physical and non-physical characteristics of a brand's product. Brand image motivates consumers to buy a product or brand because of its functional attributes and benefits and the symbolic meaning associated with it (Hyun Baek, 2011; Padgett, 1997). A good brand image is a positive manifestation for companies whose products can be accepted by consumers because they have characteristics and advantages compared to similar products from other companies (Romdonny and Rosmadi, 2019).

Perceived quality and esteem dimensions make up brand image. In other words, brand image is the perception of a company that a customer has of it, and that represents their entire opinion. A company's capacity to maintain its market position depends critically on its ability to build and maintain a strong brand image. A bank's brand image is not absolute; rather, it is compared to the brand images of rival banks. Customers frequently establish an opinion of a bank based on their personal banking experiences. The brand image of banks also has a strategic purpose. A bank can leverage its brand image to boost its competitive position through strategic marketing initiatives. Thus, a favorable bank brand image helps strengthen the intentions customers have for selecting a bank.

Brand image is the current view of the customers about a brand. The impressions consumers have of a company extend well beyond the product or service the firm provides. (Keller, 2003) defines brand image as perceptions about a brand as reflected by the brand associations held in consumer memory. It is a set of beliefs held about a specific brand. In short, it is nothing but the consumers' perception of the product. It is how a specific brand is positioned in the market. Brand image conveys emotional value and not just a mental image

Banks, which act as financial intermediaries, have unique traits from other commercial or trade businesses. The credibility and trust of the bank's clients determine its performance. Its brand is distinct from that of other businesses offering services or goods that are not provided by banks. Instead of focusing on the evaluation of one or more specific products and services, its brand image focuses on the overall appraisal of customers to the bank. Many aspects of the bank's structure, operations, reputation, people, brand promotion, and development contribute to the overall brand image.

Table 2. 3 Brand image concept

Brand image concept	Authors
Zhang (2015)	Brand image is the key driver of brand equity, which refers to a consumer's general perception and feeling about a brand and has an influence on consumer behavior.
Newman (1957)	Brand image is everything people associate with a brand.
Martineau (1959)	Brand image is in the consumer's mind of functional and psychological attributes.
Bivainienė, Šliburytė (2008)	The brand image is related to benefit to the consumer, distinguishing emotions, idiosyncrasies, and associations, The brand image is oriented to

	issue how certain groups understand the commodity, brand, policy, company or event country.
Lee ,L., J., James, J. D., Kim, Y. K. (2014)	The brand image forms the basis for making better strategic marketing decisions about targeting specific market segments and positioning a product. The phrase, brand image, however, has been defined and applied in various ways by different researchers. The variations in definition can be confusing for brand image measurement and subsequent assessment of brand equity and brand positioning.
Aaker (1991)	The brand image creates value in a variety of ways, helping consumers to process information, differentiating the brand, generating reasons to buy, giving positive feelings, and providing a basis for extensions.
Rio,A., B., Vazquez, R. , Iglesias, R. (2001)	Brand image can be defined as perceptions about a brand as reflected by the cluster of associations that consumers connect to the brand name in memory.
Bastos, W., Levy, S., J. (2012)	Branding as the naming of a product is essentially a simple one, the applications of this idea and the thinking about it have evolved in dramatic ways. To appreciate that evolution requires awareness of the difference between a sign and a symbol.
Grubor, A. , Milovanov, O. (2017)	The brand is a unique blend of functional and emotional characteristics perceived by consumers as an additional value, unique experience, and fulfilled promise]. It has a symbolic value different from everything available in reality, and the ability

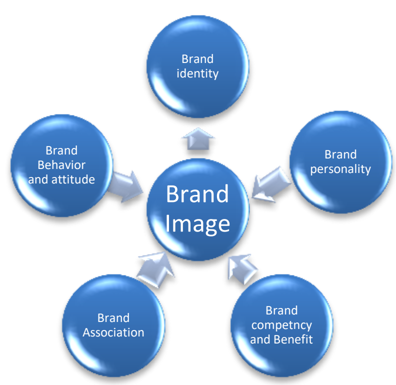
	to represent interests that go beyond the brand itself. For the company, it is the core strategic resource and most powerful invaluable asset. customer. Relevance is determined by what customers want as they choose their realtor. It may be aggressive marketing, it may be a solid reputation, or it may be a certain type of expertise. Market research and understanding your strengths and the needs of the segment you find most attractive will help you to determine what type of brand image and specific associations you want to create.
Westre, M. (2016)	Branding is now more than a list of attributes from an organization; it is a promise to the customer. Brand marketing is generally used to promise a unique benefit to customers.

Source : (kolegija, 2018)

2.2.3.1. Brand Image Dimension

Summarizing the findings from several studies in the literature and pertinent earlier research, the following picture illustrates the key factors that affect and shape a brand's image:

Figure 2. 1: Dimensions of Brand Image



Source: As cited By (Bambang Sukma Wijaya, 2013)

Brand Identity: Brand identity is the first dimension. A brand's physical or tangible attributes, such as its logo, colors, sounds, smells, packaging, location, corporate identities, tagline, and others, help consumers recognize and distinguish it from competing brands and products.

Brand Personality: The second dimension is brand personality. Brand personality is the distinctive character of a brand that makes up certain personalities as a human being, so that consumer audiences can easily distinguish with other brands in the same category, such as assertive character, stiff, dignified, noble, friendly, warm, compassionate, sociable, dynamic, creative, independent, and so on. As explained earlier, (Aaker, 1997) mentioned several dimensions of brand personality as competence, sincerity, excitement, sophistication, and ruggedness, while (Plummer, 1985)illustrated the brand personality with tones of character such as 'youthful', 'colorful', and 'gentle'.

Brand Association: The third dimension is brand associations. Brand association is specific things that deserve or are always associated with a brand, can arise from a unique offering of a product, recurring and consistent activities for example in terms of sponsorship or social responsibility activities, and issues that are very strong related to a brand, or, person, owner, and the certain symbols and meanings that are very strong attached to a brand, such as "remember Body Shop remember to recycle", Benetton = colorful people, Coca Cola = Cheerfulness, art+technology = Apple, Family's fast food restaurant = McD, Nike = Tiger Woods, Obama = First Black US President, or Healthcare policy (Obamacare), Bush = Iraq War, Bond = Sexy Women, etc.

Brand Behavior and Attitude: The fourth dimension is brand behavior and attitude. Brand behavior and attitude are the behavior and attitude of a brand when communicating and interacting with consumers to offer benefits-benefits and values that it has. In other words, brand attitude and behavior are attitudes, manners, and behaviors that a brand and all its attributes indicate when communicating and interacting with consumers which in turn influences consumers' perceptions and judgments toward the brand (Wijaya B. S., 2012). Often a brand in ways that are not appropriate and rather violates ethics in communication or delivers poor service that affects public perceptions of the attitudes and behavior of the brand, or conversely, attitudes and behaviors sympathetic, honest, consistent between promise and reality, good service, and concern for the environment and the wider community will potentially be shaping good perceptions of the attitudes and behavior of the brand. So brand attitude and behavior include communication attitudes and behaviors, activities and attributes attached to the brand when dealing with consumer audiences (Keller, 2003), as well as employee and/ or brand owners' behaviors (BREXENDORF, 2007).

Brand Competence and Benefit: The fifth dimension is brand competence and benefit. Brand competence and benefit are the values, advantages, and distinctive competencies offered by a brand in solving consumer problems, which enable consumers to get benefits because their needs, desires, dreams, and obsessions are manifested by what it has to offer. Values and benefits here can be functional (Keller, 2003), emotional, symbolic, or social (Wijaya, 2012), such as the product brand of a clothes detergent with benefits and competences are being able to clean clothes to be cleaner (functional benefit/ value), make the wearer is more confident and feel comfortable (emotional benefit/ value), be a symbol of a clean lifestyle of modern society (symbolic benefit/ value), and inspire the greater community to care about a healthy lifestyle and environmental preservation (social benefit/ value). Benefits, advantages, and distinctive competencies of a brand will affect the brand image of the product, individual or institution, and company

2.3. Empirical Review

2.3.1. The effect of Digital banking service quality On Customer Satisfaction

Customer satisfaction is more important in the case of electronic service because it's hard to maintain customers in the virtual world and get their loyalty (Zavareh, 2012). Electronic satisfaction can be defined as ' the outcome of previous experience with the services provided by the website and allows this experience to assess the effectiveness of the distribution channel of the Web and determine how he satisfied about the website ' (AlHawari, 2012) T. The importance of customer satisfaction for e-service as a mission to achieve financial performance as it is possible customer loss if he could not access the website or if the website is unsatisfactory (Heskett, 1994).In banks-where traditional electronic service — lack of direct interaction in Internet banks requires the need to test the role of technology in building electronic customer service (Schaupp, 2005)Accordingly, the Bank must obtain information on how to satisfy the e-service customers and Internet banks. Accordingly, the Bank must obtain information on how to satisfy the Digital banking service customer.

(Parasuraman, 1985)noted that receiving high-quality service will lead to a rise in customer satisfaction, (Palmer, 2005) says that ' the distinction between quality and customer satisfaction is important for all managers and researchers alike where the service provider needs to know whether their goal should draw consumers satisfied with their performance or to deliver the highest level of quality service. Arguably, service quality and customer satisfaction have been instrumental in the success and continuation of work (Daniel, 2010; Tarawneh, 2011) referred to the effect of electronic service quality collectively and individually on customer satisfaction.

(Zavareh, 2012)Referred that electronic service quality dimensions need to reinterpret especially when used in online banking service quality, in addition to a positive relationship between electronic service quality and customer satisfaction in online banking. (Sheng, 2010) found that efficiency; achieve privacy requirement have a positive impact on customer loyalty. (Carlson, 2010)Study results indicated that electronic service quality positively impacts consumer satisfaction and attitudes towards websites and behavior about a particular service provided by a website with central content in the field of sports and professional services. (Lee, Gow, Lin, and Hsiu, 2005) referred that the dimensions of electronic service quality affect overall service quality and customer satisfaction, and customer satisfaction is significantly associated with purchase intention, and the customization dimension is not linked to overall service quality and customer satisfaction.

E-banking (Sardana and Singhania, 2018)plays a more critical role in the development of the banking industry by boosting customer satisfaction levels through reliability and tenability (Al-Zadjali, 2015) Customer satisfaction is associated with high-tech electronic banking, business performance, and customer intentions. When the customer is satisfied, business performance is enhanced, and hence the business can be flourished. Satisfaction has a strong connection to the quality of service. Online banks must seem to be more concerned about the customer perception of online banking services because the advantages of competitive services can easily be measured (Santos, 2003).

2.3.2. The effect of brand image on Customer Satisfaction

There is a consensus in branding literature that a positive brand image influences consumer satisfaction, In evaluating the service, brand image was thought to be crucial. There is plenty of data to suggest that image has an impact on customers' evaluative judgments, including their opinions of quality. Graeff (1996) mentioned that, when the customer's self-image was more similar to the brand image, customer satisfaction would be affected. (Romaniuk & Sharp, 2003) found a positive relationship between brand image and customer satisfaction. Many scholars, such as (XD, Su, 2005; SW, Lin, 2005; YR, 2006; YY, Shi, 2006; Ren, Yang Yu, 2006 and ZJ, Zhang, 2007), also confirmed the positive relations between brand image and customer satisfaction. (Ren, and Yang, 2006) proposed that customer satisfaction referred to the pleasant attitude when a customer accepts a certain deal or service; and, customer satisfaction and brand value appeared notably positive relation. (QY, Gu, 2005)suggested that customer satisfaction and brand characteristics presented a significantly positive relation that customer satisfaction was the provided service higher than the expectation of the customer so that the customer was satisfied (Sang, 2009). Whereas, if the provided service was lower than the service expectation of the customer, he/she would then feel very dissatisfied. The schema memory of a brand included the interpretation

Likewise, (DaSilva, 2006)suggested that brand image correlates with customer satisfaction. Brand image has been recognized as an important antecedent of customer satisfaction. Hence, a positive bank brand image will tend to generate high customer satisfaction in the bank. (Aaker, 1991and Morgan, 2000)pointed out that, with the construction of a good brand image, customers were likely to increase their satisfaction with usage, and would like to recommend it to others. (Gensch, 1978)Considered brand image as having more influence on the purchase intention and the satisfaction of customers while the product attribute was not easily defined

Additionally According to (Grace, Kavengi, and Onyancha, 2013)brand image to the users of banking services is a strength of mind for brand loyalty as well as customer satisfaction. The study (Nischay & Bhakar, 2014) concludes that such a manner that a strong relationship was found between customer satisfaction and brand image. According to (Hendra & Budi, 2014), the study found that brand image positively affects customer satisfaction. Customer satisfaction was also found to mediate the effect of brand image on brand loyalty. According to (Sadia, XuZhengliang & Hamid, 2020) E-banking series quality is the prime indicator of customer satisfaction that motivates the customer to stay with the banks and hold long-term and healthy relationships.

Table 2. 4Empirical Review of Brand Image and Customer Satisfaction

Author and year	Title	Country	Findings
Chen,C. F. (2015)	The effect of higher education brand images on satisfaction and lifetime value from students' Viewpoint.	Taiwan	Brand image affected Customer satisfaction.
Chien-Hsiung (2011)	A study on the relations between the brand image and customer satisfaction in catering businesses	Taiwan	Brand image presented positive relations to customer satisfaction
Juhana, Manik, Febrinella, &Sidharta (2015)	A study of brand image towards customer's satisfaction in the Malaysian hotel industry.	Malaysia	Brand image could influence customer satisfaction. Brand image will attract more potential customers and able to retain the existing customers.
Malik, Ghafloor& Iqbal (2012)	Impact of bran image, service quality and price on customer satisfaction in Pakistan telecommunication sector	Pakistan	Brand image is correlated to customer satisfaction. Improvement in brand image has resulted in increased customer satisfaction.
Nazir, Ali & Jamil (2016)	The impact of brand image on the customer retention: A mediating role of customer satisfaction in Pakistan.	Pakistan	Customer satisfaction is linked with brand image and positively related with each other.
Neupane (2015)	The effects of brand image on customer satisfaction and loyalty intention in retail supermarket chain UK.	London	There is positive relationship among brand image, customer satisfaction and customer loyalty. Brand image has significant effects on customer satisfaction.
Saeed, Lodhi, Mehmood, Ishfaque, Dustgeer, Sami, Mahmood, Ahmed (2013)	Effect of brand image on brand loyalty and role of customer satisfaction in it	Pakistan	There is positive and significant relation exists between brand image and customer satisfaction.
Yulianti& Tung (2013)	The relationship among brand Experience, brand image and customer satisfaction of face book users in Indonesia	Indonesia	Brand image had positive influence to customer satisfaction

Source: (Nesro, 2020)

The researcher suggests that brand image has an impact on consumer happiness based on the aforementioned premises and the table, which summarizes research data from several researchers on various topics and countries.

2.3.3. The effect of Digital banking service quality on Brand image

In the concept of service marketing, the impact of service satisfaction and customer loyalty can lead to word-of-mouth communication, which has a significant effect on increasing new customers (Gronroos,1996). The communication cycle consists of four parts: expectation/purchase, interaction, experience, and word of mouth, which are to manage communication in marketing and shape the company's image.

According to (Aaker, 1997) explain that brand is as important as the product itself, it differentiates the product from other products, a brand is an emblem and motivates the customer to buy the products, and a symbol may be called differently like a logo according to the easiness or trademark moreover the key role of a brand is to distinguish a product with other on behalf of quality or service, it creates trust between customer and manufacturer and give competitive advantages.

The Study conducted by (Kapferer, 2004) defines a brand as an identity of a product, there are many angles to seeing a brand for the customer including overall experience from their buying process. (Deruyter, Wetzels & Bloemer, 1998) narrate that for a successful brand image companies must observe the needs of the customer deeply and it must be relevant to what the customer want.

(Aaker et al, 1997) explain in detail about brand image, the research emphasizes the identity of your product if the product has unique qualities it will attract the customer and will create a good brand image, hence to maintain the brand identity it is important to maintain consistency about quality and services, research also explains that to attain customer attention via services and quality is the best tool to build a strong image in customer minds.

(Aaker et al, 1997)also narrate that if companies want a good brand image they must be excellent in providing services, and organizing, and must be anxious about product delivery, moreover if companies want an excellent brand image they must build brand identity.

(Ward, 1999)also enlighten that brand image is differentiated your product by making a promise with the customer to make product reliable, durable, and quality effective, moreover research shows that those companies who are committed with services and are providing distinctive product feature get a higher brand image like multinational companies mostly follow their rules and become famous in a couple of years, on the contrary, those companies who ignore product delivery and customer satisfaction have a lower brand image.

Companies can maintain their competitive advantage in the market if they understand the aspects of service quality expected by customers, thereby ultimately getting a good brand image compared to their competitors (Setyadi, 2017)Empirical findings show that the quality of a brand perceived by customers will provide value and lead customers to buy the brand (Aaker D. A., 2012)Some researchers also found a positive and significant relationship between service quality variables and brand image (Wu, 2011)positive company image will be formed when customers are satisfied with the quality of services provided (Yang, 2017) More specifically, (Alkhawaldeh, 2020) found a positive effect of service quality on university brand image. Service quality is an essential factor that affects the overall brand image of the university (Panda, 2019) Based on previous empirical findings, the hypothesis proposed in this study is:

2.4. Summary and Literature Gap

The literature reviewed above noted that Customer satisfaction could be affected by two major poplars of Digital banking service quality and brand image. The term Customer satisfaction refers to meeting the requirements of the customer as per their expectations. If the value of the services delivered is less than or not equal to the expectations of the customers, this leads to dissatisfaction among the consumers (Toor, 2016.) , and the term e-banking, and Digital banking service are not the same the former. While Digital banking service goes beyond these, e-banking essentially restricts you from the services offered by your banks, such as NEFT transfers, automatic payment reminders, and the like. Online banking concentrates on digitizing the "core" elements of banking, while Digital banking service includes digitizing all of the activities and programs that financial institutions and their clients engage in. (Kaul, 2019)

The empirical studies identify that there is a significant relationship between Digital banking service quality and brand image with customer satisfaction. Several studies exist about customer satisfaction in the banking industry. Most Customer satisfaction is more important in the case of electronic service because it's hard to maintain customers in the virtual world and get their loyalty (Zavareh, 2012; AlHawari, 2012; Heskett, 1994; Schaupp, 2005) and the previous studies indicate that positive and significant relationship between service quality variables and brand image (Panda, 2019; AlHawari, 2012; Wu, 2011; JL, Aaker, 1997; JN, Kapferer, 2004 and Setyadi, 2017). In branding literature, it is generally agreed that consumer pleasure is influenced by a brand's image this argument had proofed by (Sadia, Xuzhengliang, Hamid, 2020; Hendra and Budi,2014; DaSilva, 2006; Ren, YangYu, 2006); YR, 2006; Su, 2005), (Romaniuk & Sharp, 2003).

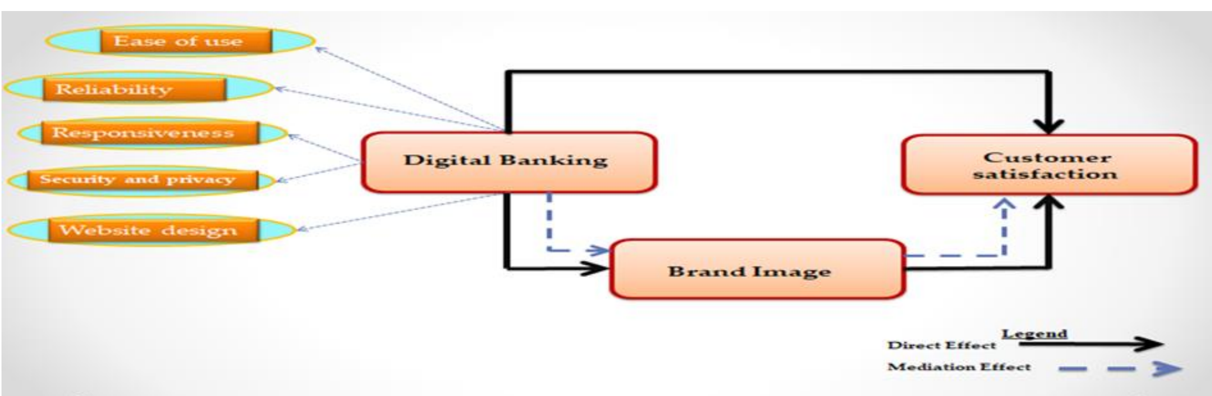
In Ethiopia and Around the Globe, several research studies have been done about Customer Satisfaction though the research doesn't mention the indirect effect of factors that affect customer satisfaction and among the researchers conducted by (Silshi and ABEL, 2019; Tale, 2021; Neeraj, Abebe, Waktole, 2020; Tadesse & Fayera, 2021), (Teketel and Dipak, 2022; Adisu, 2018; Mekdes, 2019; Sara, 2021; Belay, 2020; G/Hiwot, 2018; Andreea & Cristina, 2018) stated that brand image and Digital banking service quality affect customer satisfaction so the above mention findings didn't mention or test the indirect effect of the relationship.

So, this study will therefore be motivated to fill the theoretical gap on the effect of Digital banking service quality services on customer satisfaction through the mediation effect of brand image.

2.5. Conceptual Framework and hypothesis development

Based on the empirical review, in this research, it is proposed that the five dimensions of Digital banking service quality affect brand image and customer satisfaction. It is proposed that the Digital banking service quality dimensions have a positive effect on brand image and customer satisfaction.

Figure 2. 2: Conceptual Framework



Source: (Jamil, Rima, Ibrahim, 2018), and modified by the researcher

2.6. Hypotheses

The formulation of hypotheses in this research is in line with the literature review, and theoretical justification, as stated earlier, and concerning the research model, as illustrated in Fig.2.2 Thus, the following hypotheses are developed.

H1: There is a positive relationship between Digital banking service quality and Customer Satisfaction

H2: There is a positive relationship between Brand Image and Customer Satisfaction

H3: There is a positive relationship between Digital banking service quality affect brand images

H4: Brand Image positively mediates the positive relationship between Digital banking service quality and Customer Satisfaction

Chapter Three: Research Methodology

This chapter encompasses a description of the design of the study, the population of the study, sampling and sampling technique, data collection technique, research procedures, analysis of data, and presentation of results. The methodology part of any research study illustrates the steps that have been followed in conducting the study and the steps involved are described in detail.

3.1. **Research Design**

A research design is an overall plan for relating the conceptual research problem to relevant and practicable empirical research. In other words, the research design provides a plan or framework for data collection and its analysis. There are three approaches to business research, namely exploratory, descriptive, and explanatory (Zikmund, Babin, Carr, &Griffin, 2010). Exploratory research focuses on the discovery of ideas and insights by looking for new knowledge through exploration. Descriptive research attempts to describe situations or phenomena. While explanatory research attempts to explain the cause and effect relationship between variables.

In this study, the dependent variable was customer satisfaction; the independent variable was Digital banking service quality, and the mediation Variable was a Brand image. The appropriate research approach for this study is the explanatory approach as the main objective of the paper is to explain the effect of Digital marketing on Customer satisfaction

3.2. Research Approach

According to (Creswell, 2009)quantitative approaches employ closed-ended instrument-based questions, performance data, attitude data, observational data, and census data statistical analysis. Therefore, the study used the quantitative approach to examine the effect of Digital banking service quality on Customer satisfaction and a mediation effect on a Brand image.

.

3.3. Population and Sampling

3.3.1. The population of the study

The target population of this study was customers of Commercial Bank of Ethiopia. Customers of Commercial Bank of Ethiopia comprise organizations and Customers using Digital banking service products.

3.3.2. Sampling

A convenience sampling method had been applied for this research. Because of the nature of the research i.e. as it studies customer satisfaction in line with Digital banking service quality the mediation effect of brand image. Yet, there is no defined list of customers that have faced service Digital banking service quality failure for satisfaction. This made it impossible to use random sampling.

The questionnaire were distributed to customers found in Addis Ababa at the time of data collection. Convenience sampling is found to be appropriate as it was very difficult and impractical to contact randomly selected customers due to time and cost constraints.

3.3.3. Sample Size

While determining a sample size several factors need to be considered like the type of sample required, time constraint, budget, required estimation precision, and variability of elements in the population.

Based on (Saunders, Lewis, and Thornhill, 2007)researchers normally work on a 95% level of certainty. For a population that is large to yield a representative sample for valid proportions: where N is the sample size is the abscissa of the normal curve that cuts off an area "α" at the tails are (1- α) equals the desired confidence level i.e. 95%. "E" denotes the desired level of precision, "p" is the estimated probability of attribute that is present in the population. "q" is 1-p. The value for Z is found in the statistical tables which contain the area under the normal curve.

The resulting sample in this study was determined as follows:

$$N = Z^2 pq/E^2$$

$$= \frac{1.96^2 * 0.5*0.50}{0.05^2}$$

=384.16

3.4. Source of Data

The sources of data that this research will employ are both primary and secondary data. Primary data are originated by the researcher for the specific purpose of addressing the problem at hand (Malhotra, 2005). There are several ways to collect primary data through questionnaires, interviews, focus group discussions, etc. as deemed necessary per the research design undertaken. For this particular research primary, data will be obtained by structured questionnaires from respondents.

Secondary data are data that are collected for some purpose other than the problem at hand (Malhotra. Y, 2005)Secondary data are usually collected from journals, existing reports, and statistics by government agencies and any other authorities or entities. The secondary data for this study will be collected from journals, company reports, and any other existing reports such as government agencies and authorities.

Table 3. 1: Scale Selection

Variable	Question	Source
Ease of use and Efficiency	You can easily find documentation on how to use Digital banking service quality.	(Jamil Hammoud, Rima M. Bizri, Ibrahim El Baba, 2018)
	The application process is very clear, quick, and easy to understand.	
	You can use Digital banking services easily.	
	I find the E-Banking system to be flexible to interact with.	
	Learning to operate the E-Banking system is easy for me.	
	E-Banking services are provided in various languages.	
Reliability	I have high confidence in the E-Banking services in the bank	
	E-Banking service is reliable	
	E-Banking services perform the service right the first time.	
	I have always found E-Banking service channels in working order	
	I prefer using E-Banking services instead of visiting the branch form doing my transactions	
Security and Privacy	E-Banking services do not allow others to access my accounts	
	E-Banking service provides high protection for my banking transactions	
	E-Banking service is secured and safe from any fraud or hacking	
	The security devices of the E-Banking services protect the data that are sent by me.	
	E-Banking services offer secure personal privacy	
	I feel secure while making transactions through the Internet.	
	My E-Banking site does not share my personal information with other sites.	
Responsive ness	E-Banking services are available 24/7.	
	E-Banking services respond immediately to clients' requests	
	Help is immediately available if there is any problem	
	E-Banking services provide answers to your questions	
	Bank deals gently with customer complaints about electronic service	
Website	The bank website Works properly using different screen settings	(Al-Gahtani, 2010)
	The bank website has a Clear design	
	The bank website has an Effective internal search tool	
	The bank website Tailoring content to the needs of specific users	
	The bank website has a Short download speed	
	The bank website provides Feedback between user and website (email, chat, online community, suggested forms)	
Customer Satisfaction	I am satisfied with the transaction processing via E-Banking services.	(Jamil Hammoud, Rima M. Bizri, Ibrahim El Baba, 2018)
	I think I made the correct decision to use the E-Banking services.	
	My satisfaction with the E-Banking services is high	
	I am satisfied with the bank's e-services quality.	
	Overall, E-Banking services are better than my expectations	
	The users are satisfied with the accuracy of data in Digital banking services quality.	
	Digital banking service provides up-to-date information.	
Brand Image	CBE Brand provides a solution to my expectations good impression dependable for use makes me beautiful	(Nischay K. Upamannyu, S.S Bhakar, 2014)
	You as a customer feel delighted and feel the good frequency of use Fashion	
	CBE brand looking cheap desirable lifestyle gives me pleasure	
	Perceived by others performs it promises to feel accepted in my social group	

3.5. Methods of Data Collection

Data were collected using close-ended self-administered questionnaires from commercial banks of Ethiopia branches while customers are sitting to receive services. A screening question was provided to determine whether the individual was familiar with the Digital banking service. In addition, respondents will be asked for their willingness to participate in the survey.

To collect primary data from the respondent the instrument that will be applied is a structured questionnaire with predetermined questions.

The questions were close-ended that give respondents to rate their satisfaction level with the level of Satisfaction by using the Likert scale. A five-point Likert scale were applied with options ranging from strongly agree to strongly disagree with a neutral option neither agree/disagree included. The questionnaire was constructed based on the empirical literature review to measure customers' satisfaction with Digital banking service quality and evaluate their brand image perception of Digital banking service quality.

In order to ensure content validity, measurement items will be mainly adopted from prior studies. Modifications were made to the scale to fit the purpose of the study. Items of the questionnaire that were used as indicated below

Model Specification

The following model is formulated for this research to test the research Hypothesis.

CS= f (BE, DBSQ)

$CS = \beta_o + \beta_1 BE + \beta_2 DBSQ + \varepsilon$

(Where CS (Customer Satisfaction) is the dependent variable; BE(Brand Image), Represents Mediating variable, and DBSQ(Independent Variable).

(Cs – Customer Satisfaction, BE – Brand Image, DBSQ – Digital banking service quality); and ε denotes the error terms. Moreover, βo = intercept/constant, β = slope

3.6. Method of Data Analysis

To analyze the collected data both descriptive and inferential statistical methods will be employed. By employing frequency answers of the respondents will be reported. To assure the reliability of measures Cronbach’s alpha test will be performed. Lastly, structural equation modeling (SEM) was applied to confirm the validity of the proposed model.

SEM was found to be appropriate for this study as it provides the appropriate and most efficient estimation technique for a series of separate multiple regression equations estimated simultaneously (Hair et al, 2010). In addition, SEM was more beneficial than other multivariate methods of data analysis as it takes a confirmatory rather than exploratory approach to data analysis. Hypothesis testing was also handy while using SEM. Measurement error is neglected in regression analysis but SEM provides explicit estimates of measurement error (Byrne, 2010) . The most important feature of SEM, which also make it applicable for this study was the most widely and easily applied method for estimating point and/or interval indirect effects (Hair et. al., 2010; Byrne, 2010). The data analysis was made by a statistical package for social sciences (SPSS) version 25 and Smart PLS Version 4.

3.7. Validity and Reliability

The validity and reliability of the research measuring instruments determine, first and foremost, the extent to which one may learn from the study's phenomena. Second, the likelihood of obtaining statistical significance in data analysis, and third, the extent to which meaningful conclusions may be drawn from the obtained data.

3.8.1 Validity

According to Yin (2008), research validity may be accomplished in two steps: internal and external validity. Internal validity refers to the correctness or quality of the study activity, whereas external validity refers to the degree to which conclusions or conclusions may be generalized. Given that the questionnaires was delivered in person, the data collecting technique will reliably measure what it is meant to assess, and the research is certain that the findings are what they claim to be about. Because the theoretical framework developed is extensive in scope, it would allow us to internally validate the survey, and the responses of respondents would allow us to examine the degree of external validity. The theoretical framework included specific theories that will allow us to validate the survey, which was validated with other comparable research within the subject of our study; so, we can conclude that the survey generated is validated to some extent because it was produced from numerous research works.

3.8.2 Reliability

(Williamson, 2002)defines reliability as the extent to which research may be repeated with the same findings. The survey's dependability may be defined as obtaining quality replies to the questions and being able to get the respondents to comprehend the questionnaire. To do this, sample questions was utilized in conjunction with a scaling mechanism. The survey will be carefully designed to guarantee that respondents can react in the best possible way and that there is a high response rate. As a result, to assure the reliability of the measuring instrument, the researcher will first standardize it before distributing it to all respondents. Cronbach's alpha was also utilized to examine the internal consistency of each construct. As a result, the data gathering approach were produce consistent results, and there was openness in how the raw data will be interpreted.

3.8. Ethical Considerations

According to (Sekaran, 2006) the researcher strictly adhered to the following ethical conduct: Respondents participated in the study freely, and data were gathered with their permission. Respondents were properly informed about the objective of the study. Respondent information was also managed with absolute secrecy, and the researcher promised that participants would stay anonymous throughout the study. The real data that were obtained from respondents were not misrepresented or distorted in any way.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, AND DISCUSSION

This chapter is concerned with the display of the data obtained from the sample respondents via a survey questionnaire. Descriptive statistics are used to present fundamental data features. Cronbach's alpha and confirmatory factor analysis are also used to assess the data's reliability and validity. By analyzing the data with SPSS (25) and Smart PLS 4 software, structural equation modeling (SEM) is used to develop an appropriate model with the data and test the hypothesis.

4.1. Respondents Response Rate

Table 4. 1Response Rate

Questionnaires distributed	Questionnaire Returned	Percentage
384	250	65 %

Source: Survey data (2022)

As stated in Chapter 3, the number of samples for whom a questionnaire was issued was 384, and the total number of questionnaires gathered was 384, resulting in a response rate of 65.0 %. All 250 replies from the 384 returned surveys were deemed to be valid and were used in the data analysis. According to (Mugenda and Mugenda,2003), a response rate of 60% is considered fine, and a response rate of 70% or higher is considered outstanding. This response rate was deemed fine for concluding the report. According to the assertion, the response rate was deemed fine.

4.2.Demographic information

The study aimed to gather demographic knowledge about the respondents. Respondents were asked to show their age group, gender, level of education, job, and the length of Digital banking service usage duration with their bank and frequency of Digital banking service.

Table 4. 2: Demographic Characteristics

No	Item	Variables	Respondent	
			Frequency	Percentage
1	Age	18-22	23	9.2
		22-30	104	41.6
		30-50	91	36.4
		Over 50	32	12.8
		Total	250	100.0
2	Gender	Male	101	40.4
		Female	149	59.6
		Total	250	100
3	Qualification	High School	7	2.8
		College/University	174	69.6
		Postgraduate	69	27.6
		Other	0	0
		Total	250	100.0
4	Job Of Respondents	Worker	61	24.4
		Entrepreneur	128	51.2
		House wife	48	19.2
		Student	13	5.2
		Total	250	100
5	Length of Digital banking service	Under 6 month	35	14
		From 6 months to under 1 year	103	41.2
		From 1 year to 3 year	64	25.6
		Over 3 year	48	19.2
		Total	250	100
6	Frequency of Digital banking service	Never	12	4.8
		Once per month	29	11.6
		Twice per month	84	33.6
		3+ Times per month	125	50
		Total	250	100

Source: Survey data (2022)

The majority of the respondent from the data collected were female (59.6%) with (40.4%) being male. This shows that there is a fair representation of respondents by sex.

It is evident from the table above that majority of participants held first College/University awards (69.6%), followed by Postgraduate (27.6%) respondents with another category of education. Respondents with High School completion were (2.8%). The level of educational qualification was significant in this study because it aids to determine if the respondents had the necessary knowledge to enable them to understand the notion of the research study.

Concerning respondents job, 61 (24.4 %) were workers/officers, 128 (51.2%) were businessmen, 48 (19.2 %) of the respondents were housewife, 13 5.2 (5.2 %) were students.

Concerning the Length of Digital banking service Usage, respondents have had with the bank, the majority of the respondents 35 (14%) indicated that they have had From 6 months to under 1 year of Digital banking service Usage, while 48 (19.2 %) of the have had Over 3 year of Digital banking service Usage and From 1 year to 3 the Length of Digital banking service Usage respondent 64 (25.6 %) have had usage ad additionally few of the respondent were Under 6 month 35 (14%). This shows that respondents have good exposure to the service rendered by the bank. As a result, the sample is a good representative to evaluate the right satisfaction of customers.

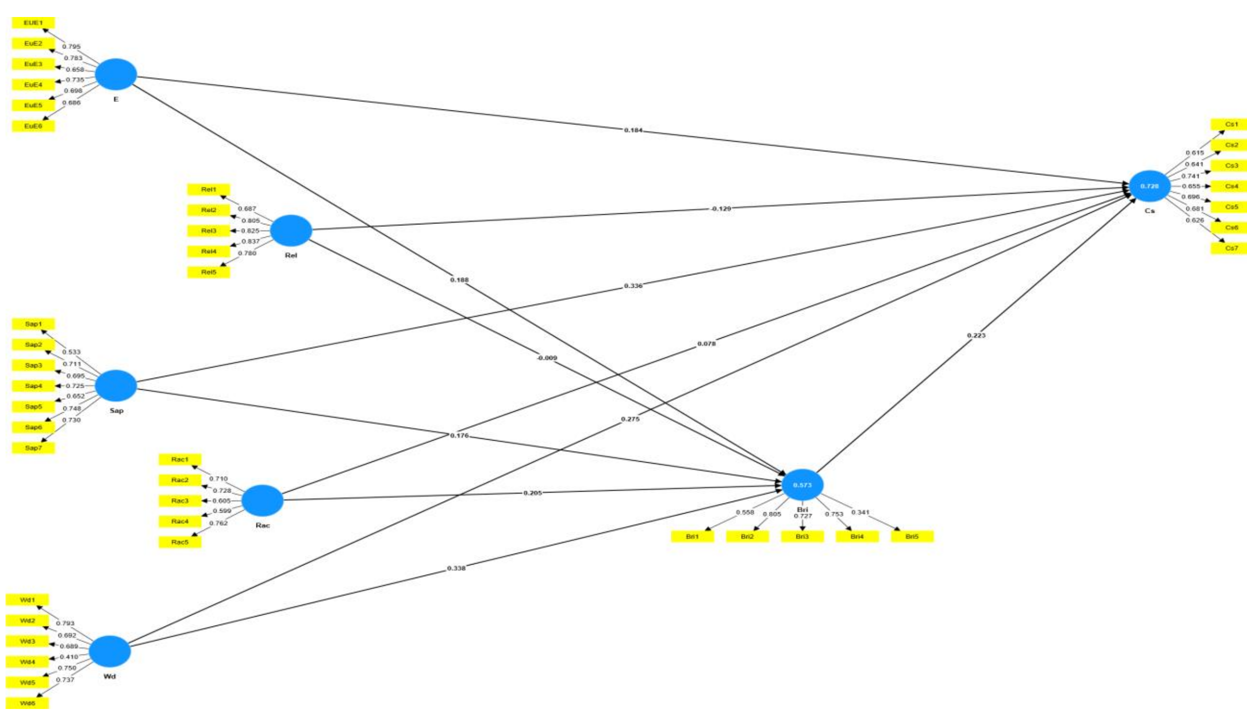
4.3.Structural Equation Modeling (SEM)

The basic goal of SEM is to determine how well a proposed model fits or appropriately represents the sample data. The SEM model is made up of two models: the measurement model and the structural model. The measurement model establishes the relationship between the observable and unobserved variables, i.e. it establishes linkages between the scores on the measuring instrument (the observed indicator variables) and the underlying construct they are intended to measure (Byrne, 2010) . The measuring model represents the CFA model, which is explained more below. The structural model, on the other hand, describes relationships among unobserved variables, i.e. it explains how certain latent variables directly or indirectly affect (cause) changes in the values of other latent variables in the model (Byrne, 2010)

4.3.1. Measurement Model

The study made advantage of Smart PLS 4.0. to test the model. (Tenenhaus, 2005) Proposed three metrics to define the overall quality of the model. The measurement model is used on the first level, the structural model is used on the second level, and the structural regression equation is utilized on the third level independently in the structural model. The convergent and discriminant validity of construction measures is used to track scale reliability and assess the different sub-factors assessed in the measurement module. The measurement model was validated by assessing the individual sub-factors and scale reliability, which was monitored by the convergent and discriminate validity of the constructs' measurements. The most common connections were Reliability, Ease of Use and Efficiency, Website Design, Privacy, Responsiveness, customer satisfaction, and Brand image. Validity tests were performed to evaluate discriminating validity, convergent validity, and measurement model dependability, Henderson, (2012) The Smart PLS method proved practical, and the resulting associations, coefficients, and loading values are given in the Initial path model Figure 4.1

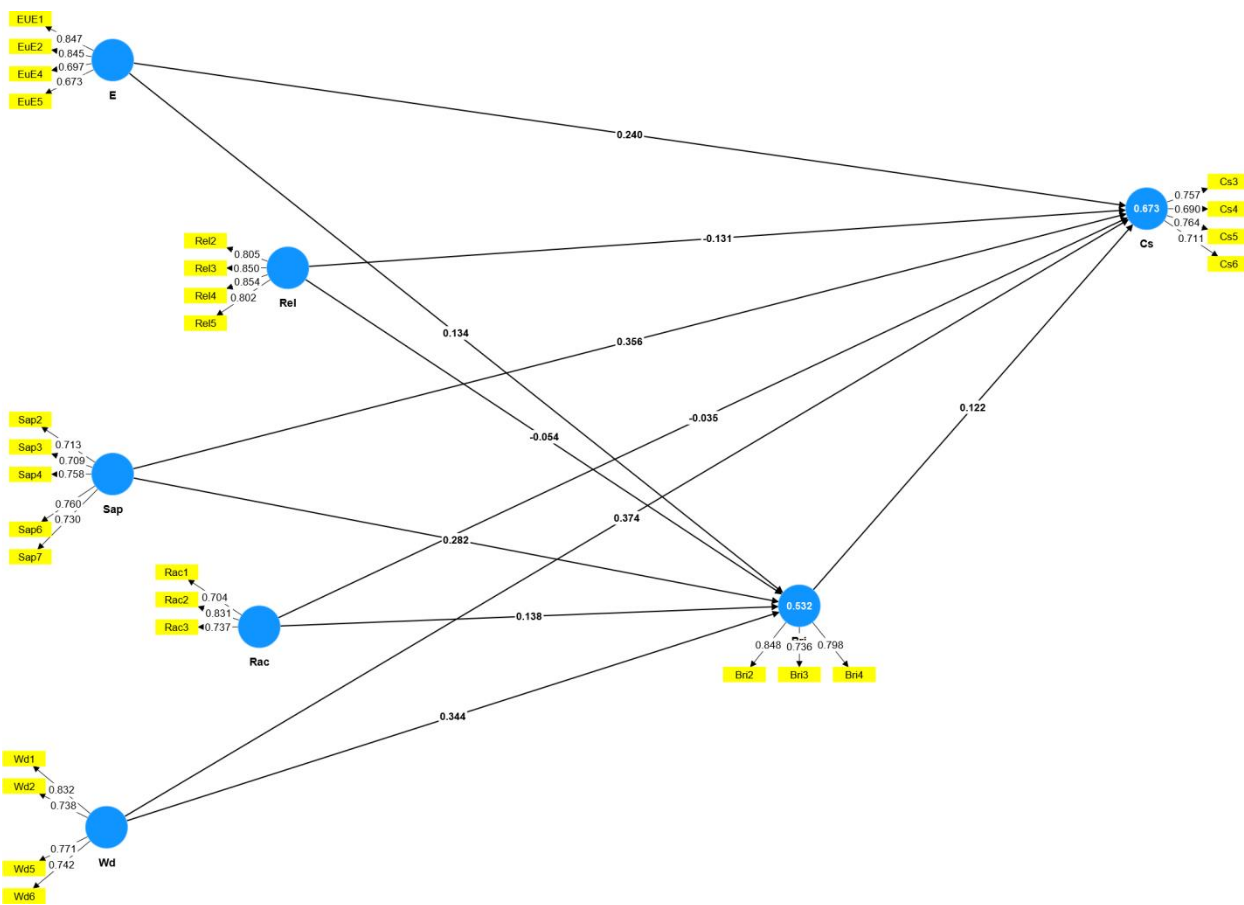
Figure 4. 1: Initial path model



Source: Survey data (2022)

In the first level, Smart PLS analyzes and evaluates the measurement module's reliability and validity. The same factor loadings were analyzed with Smart PLS software to assess the dependability of distinct sub-factors. The minimal factor loading for sub-factors was set to 0.45, as recommended by (Comrey, 1973). The sub-factors loading measures of greater than 0.50, as indicated by (Hulland, 1999), were acceptable in this investigation. The dimension sub-factors that funded the latent constructs the least were subsequently removed from the dimension model to enhance model fit. For further study, the resultant final route model

Figure 4. 2:Depicts the result after the dropouts.



Source: Survey data (2022)

4.3.1.1.Confirmatory factor analysis

According to (Hair et al, 1992)confirmatory factor analysis is a method of determining how effectively measured variables represent a subset of the constructs that they are designed to assess The CFA provides several statistics that demonstrate how well the theoretical definition of the factors corresponds to the actual data utilized. This study's confirmatory factor analysis begins by examining the fit of the measurement model, which examines how well the indicator variables fit to measure the latent variable. This is known as construct validity, and it examines the amount to which a collection of measured items truly represent the underlying component model that those questions are meant to measure (Hair et al, 1992). Construct validity is divided into discriminating and convergent validity.

4.3.1.2. Reliability and Validity Reliability

- **Reliability**

The degree to which data collecting techniques or analysis procedures produce consistent results is referred to as reliability (Saunders, Lewis & Thornhill, 2008). Reliable observations produce the same results on different occasions and by different observers. For validity to be established, the interpretation of the raw data must also be clear. A scale's dependability is frequently determined by test-retest reliability or internal consistency (Zikmund, 2010). The first indication, the test-retest, is evaluated by delivering the same scale of measurement to the same respondents again and determining the correlation between the two scores obtained (Zikmund, 2010) . The second indication, internal consistency, measures the degree to which the scale's items all measure the same underlying property (Zikmund et al, 2010). The coefficient alpha is the most widely used indicator for calculating internal consistency.

Table 4 3: Reliability and Internal Validity

Independent Variable	Questions	Std. Factor load	Cronbach's α	CR	AVE
Bri2	CBE Brand provides a solution to my expectations.	**0.848**	**0.708**	**0.710**	**0.838**
Bri3	I feel delighted and feel the good frequency of use.	**0.736**			
Bri4	CBE brand looking for a cheap, desirable lifestyle gives me pleasure.	**0.798**			
Cs3	My satisfaction with Digital banking service quality is high.	**0.757**	**0.710**	**0.715**	**0.821**
Cs4	I am satisfied with the bank's e-services quality.	**0.69**			
Cs5	Overall, Digital banking service quality is better than I expected.	**0.764**			
Cs6	I am satisfied with the accuracy of data in Digital banking services quality.	**0.711**			
EUE1	You can easily find documentation on how to use Digital banking service quality.	**0.847**	**0.775**	**0.815**	**0.852**
EuE2	The application process is very clear, quick, and easy to understand.	**0.845**			
EuE4	I find the e-banking system to be flexible to interact with.	**0.697**			
EuE5	Learning to operate the E-Banking system is easy for me.	**0.673**			
Rac1	Digital banking service quality is available 24/7.	**0.704**	**0.631**	**0.645**	**0.802**
Rac2	Digital banking services respond immediately to clients' requests.	**0.831**			
Rac3	If there is any problem, help is immediately available.	**0.737**			
Rel2	The Digital banking service is reliable.	**0.805**			
Rel3	Digital banking services perform the service right the first time.	**0.85**			
Rel4	I have always found Digital banking service channels in working order.	**0.854**	**0.851**	**0.896**	**0.897**
Rel5	I prefer using a Digital banking service instead of visiting the branch to do my transactions.	**0.802**			
Sap2	Digital banking service provides high protection for my banking transactions.	**0.713**	**0.786**	**0.788**	**0.854**
Sap3	Digital banking services are safe from fraud and hacking.	**0.709**			
Sap4	The security devices of the Digital banking services protect the data that is sent by me.	**0.758**			
Sap6	I feel secure while making transactions over the Internet.	**0.76**			
Sap7	My Digital banking site does not share my personal information with other sites.	**0.73**			
Wd1	The bank website works properly using different screen settings.	**0.832**	**0.772**	**0.774**	**0.854**
Wd2	The bank website has a Clear design.	**0.738**			
Wd5	The bank website has a short download speed.	**0.771**			
Wd6	The bank website provides feedback between users and the website (email, chat, online community, and suggested forms).	**0.742**			

Source: Survey data (2022)

- **Validity**

(Kumar, 2005)Defines validity as an instrument's capacity to measure what it is intended to measure. He also claims that validity relates to how well an empirical measure represents the true meaning of the topic under discussion. External and internal validity tests are the two types of validity tests that are commonly addressed in the research literature. The external validity of research findings refers to the data's capacity to be generalized across people, locations, and times, whereas internal validity verifies a research instrument's ability to measure what it is

Intended to assess (Cooper, 2008) There are four major ways to assess internal Validity. The methods are known as face validity, content validity, criteria validity, and construct validity (Zikmund, 2010). To ensure content validity, measurement items were mainly adopted from prior studies.

The data gathered in this study was analyzed using Partial Least Squares Regression (PLS). The study used Smart PLS 4.0 to process the collected data. The validity of the data is assessed using

Composite reliability and construct validity A construct refers to a concept or characteristic that can't be directly observed, but can be measured by observing other indicators that are associated with it, and the findings are shown in Table 4.3. All independent variables have composite reliability of CR.>0.6 or higher and an Std. Factor load of more than the >0.4 or higher. This demonstrated the data's high validity and dependability.

4.3.1.3. Convergent validity

Convergent validity measures how closely items in a particular construct converge or share a high proportion of variation in common (Hair et al, 2010). The convergent validity was calculated Using AVE. According to (Hair, 1992), all AVE should be greater than 0.5, and all in this study are greater than 0.7. As a result, all variables exceed the minimal criterion, indicating extremely strong convergent validity as shown in table 4.4.

4.3.1.4. Discriminant validity

The idea of discriminant validity states that indicators for distinct constructs should not be so closely linked that one concludes they measure the same thing. The comparison of the AVE estimates for each component with the squared inter-factor correlation estimates associated with that factor provides evidence of discriminant validity in this study. The AVE scores must be more than 0.5, and the Composite Reliability (CR) must be greater than 0.7 (Hair J. B., 2010)The AVE square root and correlations of the dependent variables are examined to determine discriminant validity. If the AVE square root of a dependent variable is greater than its correlation with other dependent variables, it possesses discriminant validity as shown in table 4.4.

Table 4 4:Discriminant Validity

Variables	Bri	Cs	Eou	Rac	Rel	Sap	Wd
Brand Image	**0.796**						
Customer Satisfaction	0.645	**0.731**					
Ease of use	0.442	0.529	**0.778**				
Responsiveness	0.575	0.561	0.389	**0.759**			
Reliability	0.348	0.38	0.717	0.306	**0.828**		
Security and Privacy	0.659	0.730	0.477	0.703	0.411	**0.734**	
Website	0.66	0.73	0.459	0.592	0.429	0.695	**0.771**

Source: Survey data (2022)

Note: Diagonals (in bold) represent the average variance extracted while the other entries represent the squared correlations matrix.

4.3.1.5. Test for absence of series multicollinearity assumption

According to Churchill and Iacobucci (2005), when there is multicollinearity, the amount of information about the effect of explanatory variables on dependent variables decreases. As a result, many of the explanatory variables could be judged as not related to the dependent variables when in fact they are. This assumption does allow the independent variables to be correlated; they just cannot be perfectly correlated.

In PLS-SEM to analyze the inner VIF report to assess the collinearity among the constructs in a model, and values should be below 3.3,Kock (2015) suggests that the occurrence of a VIF greater than 3.3 is proposed as an indication of pathological collinearity, and also as an indication of common method bias (CMB)".And in our case VIF result indicates on table 4.5 shows that VIF is below 3.3, so we can conclude in this study that there is no problem of multicollinearity

Table 4. 5 Collinearity statistics (VIF)

Variable	VIF
Brand image	2.138
Ease of use	2.269
Responsiveness	2.072
Reliability	2.120
Security	2.693
Website design	2.124

Source : Own Survey (2022)

4.4. Structural Model Analysis

Following the fitting of measurement models, the structural model for the hypothesized research model is developed by incorporating each latent variable. The structural model specifies how specific latent variables directly or indirectly influence (cause) changes in the values of certain other latent variables in the model (Byrne et al, 2010).

The structural model, as validated by the investigation, was seen using Smart PLS software. The structural model includes path coefficient assessment, which indicates the strength of the relationships between the R-square value, independent variable, and dependent variable. A bootstrapping re-sampling approach (Efron, and Tibshirani, 1993) of 250 samples was utilized to establish the consequence level of the routes defined inside the structural model. As a statistical conclusion measure, a 5% significance threshold ($p<0.05$) is utilized. The resulting t-value indicates the level of significance considering the extent of the similar factor estimations between the constructs. Table 4.5 summarizes the structural model's findings.

4.4.1. Hypothesis Test

The table below is based on the Smart-PLS output of structural model estimations in fig 4.2.

Table 4. 6: Path Coefficients along with their bootstrap values and 'T' Values.

Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Result
Bri -> Cs	0.122	0.123	0.056	2.201	0.014	Supported
Eou-> Cs	0.240	0.241	0.059	4.045	0.000	Supported
Eou -> Bri	0.134	0.128	0.077	1.730	0.042	Supported
Rac -> Bri	0.138	0.141	0.065	2.131	0.017	Supported
Rac -> Cs	-0.035	-0.033	0.054	0.636	0.262	Not Supported
Rel -> Bri	-0.054	-0.049	0.067	0.802	0.211	Not Supported
Rel -> Cs	0.131	-0.129	0.060	2.191	0.014	Supported
Sap -> Bri	0.282	0.281	0.073	3.842	0.000	Supported
Sap -> Cs	0.356	0.357	0.075	4.714	0.000	Supported
Wd -> Bri	0.344	0.345	0.068	5.067	0.000	Supported
Wd -> Cs	0.374	0.370	0.064	5.820	0.000	Supported

Source: Survey data (2022)

As recommended by the study's conceptual framework, this study evaluated three exogenous (Ease of use and Efficiency, Responsiveness, Reliability, Security and Privacy, and Website and Web Based Mobile Phone Applications) and two endogenous (Customer Satisfaction and Brand image) variables. This resulted in the formulation of four hypotheses. The hypothesis of this study is represented by one-headed arrows between latent variables on the final structural model.

The hypotheses are tested using the + 1.96 t-value rule with a significance level or P value of 0.05. All unstandardized regression estimates should be in the anticipated direction and statistically distinct from zero (that is, the critical ratio should be greater than 1.96 at a significance level of $\alpha = 0.05$) (Byrne et al, 2010; Hair et al, 2010).

4.4.1.1. Brand image and Customer satisfaction

The relationship between Brand image and Customer satisfaction was supported and significant with the original sample $\beta = 0.122$, statistics $(t) = 2.201$, and significant value $(p) < 0.05$ indicating that Brand image influences Customer satisfaction directly and positively. The finding indicates that a unit increase in Brand image leads to 0.122 increases in customers' Customer satisfaction.

4.4.1.2. Ease of use and Customer Satisfaction

The interaction between ease of use and customer satisfaction was supported and significant with the original sample $(\beta) = 0.240$, statistics $(t) = 4.045$, and significant value $(p) < 0.01$ indicating that customer satisfaction are influenced directly and positively by the ease of use. This implies that a unit increase in ease of use leads to a 0.240 increase in customer satisfaction.

4.4.1.3. Ease of use and Brand Image

The relationship between ease of use and brand image was supported and significant with the original sample $\beta = 0.134$, statistics $(t) = 1.730$, and significant value $(p) < 0.05$ indicating that ease of use influences brand image directly and positively. The finding indicates that a unit increase in ease of use leads to 0.134 increases in brand image.

4.4.1.4. Responsiveness and Brand image

The relationship between Responsiveness and Brand image was supported and significant with the original sample $(\beta) = 0.138$, statistics $(t) = 2.131$, and significant value $(p) < 0.01$ indicating that Brand images are influenced directly and positively by Responsiveness. This finding indicates that a unit increase in interactional justice leads to a 0.138 increase in customer satisfaction.

4.4.1.5. Responsiveness and customer satisfaction

The link between Responsiveness and customer satisfaction was not supported and insignificant with $\beta = -0.035$ and $t = 0.636$ indicating that Responsiveness has not much significance with customer satisfaction. It means that Responsiveness does not have a strong impact on customer satisfaction. It is also indicated that the relationship between Responsiveness and customer satisfaction was not supported and insignificant with β = -0.035 and t = 0.636 indicating that Responsiveness has not much significance with customer satisfaction. It means that Responsiveness does not have a strong impact on customer satisfaction.

4.4.1.6. Reliability and Brand image

The relationship between Reliability and Brand image was not supported and insignificant with β = -0.054 and t = 0.802 indicating that Reliability has not of much significance to the Brand image. It means that Reliability does not have a strong impact on the Brand image. It is also indicated that the relationship between Reliability and the Brand image was not supported and insignificant with β = - 0.054 and t = 0.802 indicating that Reliability has not much significance with customer satisfaction. It means that Reliability does not have a strong impact on the Brand image.

4.4.1.7. Reliability and Customer Satisfaction

The relationship between Reliability and Customer Satisfaction was supported and significant with the original sample β = -0.131, statistics (t) = 2.191, and significant value (p) < 0.05 indicating that the Reliability of Customer satisfaction is directly and positively. The finding indicates that a unit increase in Reliability leads to -0.131increases in customers' Customer satisfaction.

4.4.1.8. Security and Privacy with Brand image

The interaction between Security and Privacy with Brand image was supported and significant with the original sample (β) = 0.282, statistics (t) = 3.842, and significant value (p)< 0.01 indicating that Brand image is influenced directly and positively by Security and Privacy. This implies that a unit increase in Security and Privacy leads to 0.282 increases in the Brand image.

4.4.1.9. Security and Privacy with Customer Satisfaction

The relationship between Security and Privacy With Customer satisfaction was supported and significant with the original sample β = 0.356, statistics (t) = 4.714, and significant value (p) < 0.05 indicating that Security and Privacy influence Customer satisfaction directly and positively. The finding indicates that a unit increase in Security and Privacy leads to 0.356increases in customers' Customer satisfaction.

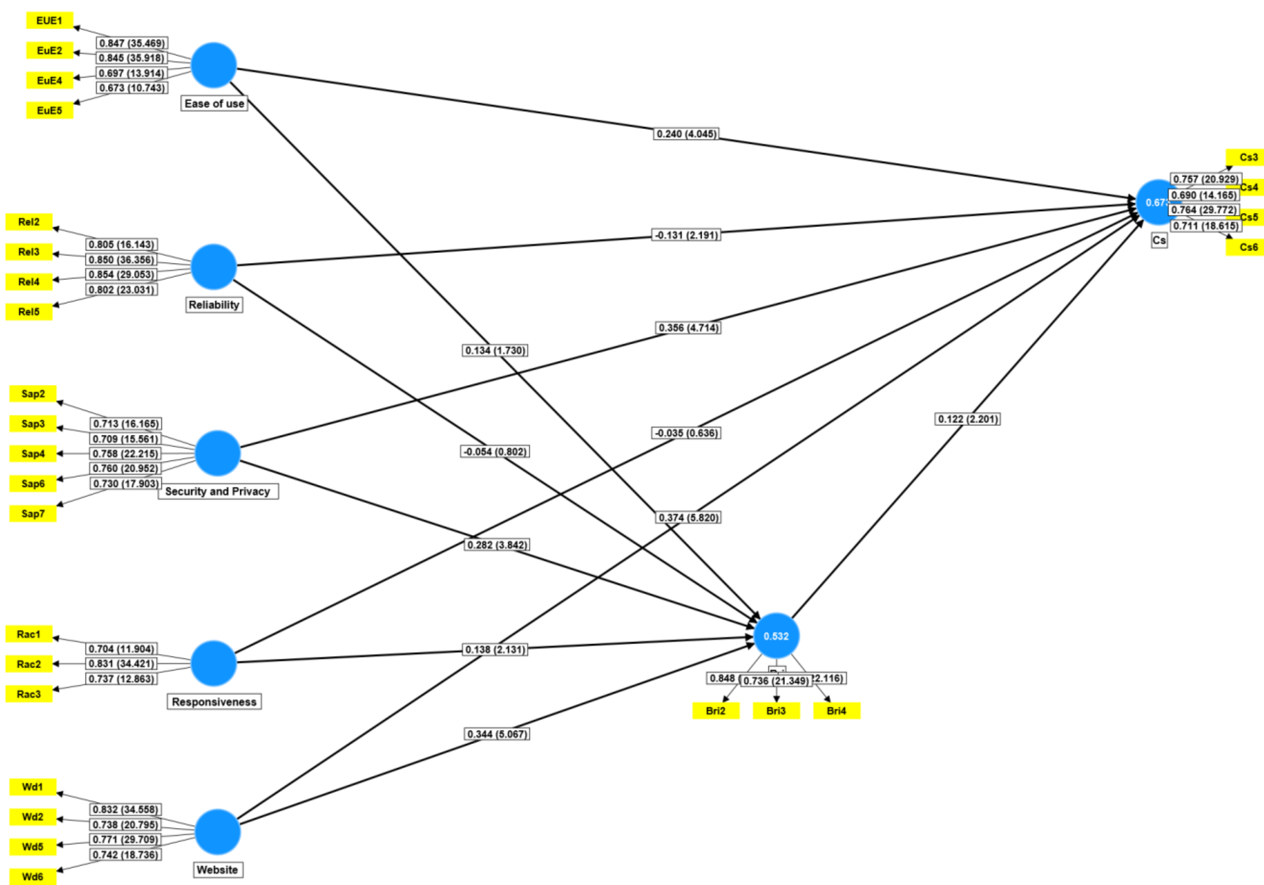
4.4.1.10. Website and Brand image

The interaction between Website and Brand image was supported and significant with the original sample (β) = 0.344, statistics (t) = 5.067, and significant value (p)< 0.01 indicating that Brand image is influenced directly and positively by Website and Web Based Mobile Phone Applications. This implies that a unit increase of Website and Web Based Mobile Phone Applications leads to 0.344 increases in the Brand image.

4.4.1.11. Website and Customer satisfaction

The relationship between Website and customer satisfaction was supported and significant with the original sample (β) = 0.374, statistics (t) = 5.820, and significant value (p)< 0.01 indicating that Customer satisfaction is influenced directly and positively by Website and Web Based Mobile Phone Applications. This implies that a unit increase of Website and Web Based Mobile Phone Applications leads to 0.374 increases in Customer satisfaction.

Figure 4. 3:The Bootstrapping Diagram



Source: Survey data (2022)

4.4.2. Mediation Effect Test

A mediation test is performed to determine whether a mediator construct can significantly convey the ability of an independent variable to a dependent variable (Ramayah, 2011). Similarly, the mediation test reveals the independent variable's indirect influence on the dependent variable via a mediator variable. Furthermore, (Hayes and Preacher, 2010)found that mediation analysis in multivariate analysis can be determined using a variety of techniques, including (1) simple techniques such as the causal steps approach (Baron, 1986) or the Sobel test (Sobel, 1982); and (2) newer approaches that require fewer unrealistic statistical assumptions. Among them are the product distribution technique (MacKinnon, 2004) and re-sampling procedures such as bootstrapping (Bollen, 1992) Because the PLS approach was utilized for the mediation test in this work, the hypotheses for the study were evaluated using the partial least squares (PLS) structural equations modeling (SEM) technique (Wold, 1985) And the mediation test is assessed using a bootstrapping 5000 re-sampling study in conjunction with hypotheses that have been developed (Hair et al,2011)

Table 4. 7:Specific Indirect Effect

Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Result
Rel -> Bri -> Cs	-0.007	-0.005	0.009	0.723	0.235	Not Supported
Wd -> Bri -> Cs	0.042	0.042	0.021	1.964	0.025	Supported
Eou-> Bri -> Cs	0.016	0.015	0.012	1.323	0.093	Not Supported
Sap -> Bri -> Cs	0.034	0.034	0.017	2.018	0.022	Supported
Rac -> Bri -> Cs	0.017	0.018	0.012	1.360	0.087	Not Supported

The mediation bootstrapping indicated established that Brand image mediates the causal relationship between Website and customer satisfaction which is statistically significant with a Beta (β) value and high t-value of above 1.96 ($\beta = 0.042$, $t = 1.964$, $p = 0.025$). The study result also indicated that Brand image mediates the causal relationship between Security and Privacy and customer satisfaction with a Beta (β) value and high t-value of above 1.96 ($\beta = 0.034$, $t = 2.018$, $p = 0.022$). The finding further shows that the mediation effect of the Brand image between Reliability and customer satisfaction was not supported and insignificant with β = -0.007and t =

0.723 indicating that the brand has no significant mediation effect on the relationship between Reliability and customer satisfaction.

Additionally, the mediation role of a Brand image on the relationship between ease of use and responsiveness was not supported and insignificant with the results consecutively β=0.016, t =1.323 and β=0.017, t =1.360.

4.4.3. Predictive Relevance

Furthermore, when the data points are predicted using the underlying latent variable scores, a cross-validated communality Q2 is produced. If, on the other hand, the prediction of the data points is acquired by the LVs that forecast the block in question, then the result is a cross-validated redundancy Q2. According to Fornell and Cha (1994), the model will have predictive quality if the cross-redundancy value is more than zero; otherwise, the predictive significance of the model cannot be determined. The resulting cross-verified redundancy was 0.648 based on the Smart PLS 4.0 findings. Chin (1998) established three criteria:

- if Q2 is 0.02, then the model has small predictive relevance,
- if Q2 is 0.15, then the model has medium predictive relevance, and
- if Q2 is 0.35, then the model has large predictive relevance.

This result supports the claim that the model has large predictive relevance quality as Shown in table 4.8

Table 4. 8:Predictive relevance

Dependent Variable	Cross validated redundancy Q^2predict	R Square
Customer Satisfaction	**0.648**	**0.673**

Source: Survey data (2022)

And the R Square statistics reveal how much of the variance in the exogenous variable is explained by the endogenous variable (s). (Falk, R.F. and Miller, N.B, 1992)suggested that for the variance explained of a given endogenous construct to be judged appropriate, R2 values should be equal to or greater than 0.10. As a general guideline (Hair J. R., 2011)suggested in scholarly research that focuses on marketing issues, R2 values of 0.75, 0.50, or 0.25 for endogenous latent variables can, as a rough rule of thumb, be respectively described as substantial, moderate, or weak.

4.4.4. Discussion of the findings

According to (Sardana and Singhania, 2018) E-banking plays a more critical role in the development of the banking industry by boosting customer satisfaction levels through reliability and tenability (Al-Zadjali, 2015). Customer satisfaction is associated with high-tech electronic banking, business performance, and customer intentions. When the customer is satisfied, business performance is enhanced, and hence the business can be flourished. Satisfaction has a strong connection to the quality of service. Online banks must seem to be more concerned about the customer perception of online banking services because the advantages of competitive services can easily be measured (Santos, 2003).

On this study, the following dimensions were used in this study: Reliability, Ease of Use, and Efficiency, Website Design, Privacy, Responsiveness, and this study discovered that Responsiveness did not have a significant positive effect on customer satisfaction for Commercial Bank of Ethiopia customers; the reason for this can be studied further by other researchers. Reliability and Ease of Use, Efficiency, Website Design, and Privacy have been found to have a beneficial influence on customer satisfaction, consistent with the findings of (Zeithaml, Parasuraman, and Malhotra, 2002; Sung, 2009; Swaid, 2007Maduand Madu, 2002; Sheng, 2010) and Madu and Madu, 2002).

The prosperity of a bank is directly related to the attitudes and preferences of its customers. Elevated electronic banking, corporate performance, and customer objectives are all linked to customer satisfaction. An organization's ability to grow and succeed depends on the satisfaction of its customers (Husnain & Akhtar, 2016). Customer pleasure is closely related to service quality. Online banks typically are more interested in customer opinions on online banking services because it is simple to evaluate the benefits of comparable services. Customer satisfaction, which is strongly influenced by the client's understanding of the overall service quality, underpins the absolute achievements of the quality regime (Ventre & Kolbe, 2020) .

The study result indicates that the dimension of Digital banking service quality are Ease of Use, Efficiency, Website Design, Privacy, and Responsiveness) significantly affect brand image consistency results with the previous studies (Aaker, 2012; Panda, 2019; Alkhawaldeh, 2020;

Yang., 2017). But reliability did not have a significant effect on the brand image of commercial banks of Ethiopia customers.

4.4.4.1. Digital banking service quality and Brand image

- **Reliability and brand image**

This study discovered that Reliability did not have a significant effect ($p > 0.05$) on brand image for Commercial Bank of Ethiopia customers; the reason for this can be studied further by other researchers. However, empirical studies have shown that a brand image had a significantly positive relationship with brand trust, and a higher brand image among the customers resulted in higher brand trust. This conclusion is consistent with the findings of (Al-Haddad, 2015; Roets CRQ, 2014), who have reported similar results on the positive relationship between brand image and brand trust in their works. Additionally, other contradictory findings were identified by (Muok, 2019) , who identified that reliability indicated a positive and significant effect on the logistic firms' brand image.

- **Ease of Use and Efficiency with the brand image**

The relationship between ease of use and efficiency with brand image Perceived Usefulness and Perceived Ease of Use was supported and significant with the original sample $\beta = 0.134$, statistics (t) = 1.730, and significant value (p) < 0.05 indicating that Ease of Use and Efficiency influences brand image directly and positively.

This result is consistence with the previous studies According to (Jogiyanto, 2009), "Perceived ease of use is defined as the extent to which a person believes that using a technology will be free from effort." From the definition, it can be seen that perceived ease is a belief in the decision-making process. If someone believes that information systems are easy to use then he will use them. According to (Widjana, 2010) "Perceived ease of use means the individual believes that using an information technology system will not be a hassle or require a large amount when used (of effort free of effort)." According to (Sebayang, 2017)"Ease of use is a belief about the decision-making process." If someone believes that information systems are easy to use then he will use them. Conversely, if someone believes that information systems are not easy to use then he will not use them. From the definition above, it can be seen that the perception of ease of use is an attitude where someone thinks that using technology will be free from effort.

Therefore, in the context of Commercial Bank of Ethiopia, when business strategies have much Focused on increasing the efficiency of Digital banking service quality it is possible to say that ease of use efficiency is a predictor of brand image.

- **Website Design with brand mage**

The study demonstrated a statistically validated link between Website Design with brand image**.** The findings are similar to those of (Iskandar, 2018) Web design or a website making the characteristics of a company or person can be the most important when a brand emerges what the public thinks about the brand service. The study conducted by (Tatik, 2021) confirms that environmental exposures can be derived from social media and websites managed by a company. However, the study findings contradict those of (Frida, 2021)according to the study website's and social media's quality may have no direct effects on the brand image.

So for the commercial bank of Ethiopia, the importance of web design is not just one-commerce but in a company that wants to show its character of a company, and when a brand image succeeds in doing its job brand image can give positive value to the company.

- **Security and Privacy with and brand image**

The study result indicated that Security and Privacy have a statistically significant effect on brand image. And the findings are similar to previous studies. According to (Ghasemi, 2017) web security is the most important factor in online brand belief. To increase the online brand belief of customers in Commercial Bank of Ethiopia by enhancing interbank interactions through the website, offering helpful instructions regarding the beneficial use of the website, and even allocating a page for different subjects with attention to customers' interests.

- **Responsiveness and brand image**

The study demonstrated a statistically validated link between Responsiveness and brand image. The findings are similar to those of (Muok, 2019) , who found that responsiveness has a positive and significant relationship with the firm's brand image.

4.4.4.2. Brand image and customer satisfaction

The relationship between Brand image and customer satisfaction was supported and significant with the original sample β = 0.122, statistics (t) = 2.201, and significant value (p) < 0.05 indicating that Brand image influences customer satisfaction directly and positively. This conclusion is consistent with (Neupane's, 2015; Wijaya's, 2018) findings, which revealed that brand image and customer satisfaction have significant positive relationships.

The banking industry in Ethiopia has seen remarkable growth in the number of banks. As a result, clients are not only careful when selecting a service provider, but also easily switch to another. For the bank's initial option, vivid information from digital plate form may be a trustworthy reference source that most consumers use when making a purchase decision. The choice to make a second purchase at the chosen bank is heavily influenced by the Digital banking service quality experience. As a result, the topic of how to develop and perused customers to use the Digital banking service quality has become increasingly essential to banks, particularly in the case of consumer banking services.

Finally, the research found that security and website design can boost brand image and ultimately create customer satisfaction. The meaning behind that statement is that customers are an important part of this discussion. The fact shows that the quality of website design and security issues have become an option to increase customer satisfaction. However, in the commercial bank of Ethiopia, security and website design were not the only factors that affected customer satisfaction. Instead, when the quality, ease of use, and reliability are as per the customer's expectations, the customer will be satisfied without examining the brand image perception. This means that the functional value of the digital banking service is not enough to be a proper major consideration in satisfying the customers of digital banking. At the same time, it is precisely the quality of the digital banking service itself that creates satisfaction in advance.

CHAPTER FIVE: SUMMARY OF MAJOR FINDINGS, CONCLUSION, AND RECOMMENDATIONS

This chapter summarizes the findings from Chapter 4, as well as the conclusions and suggestions. The chapter also includes recommendations for future research to answer the research question or achieve the research aim.

5.1. Summary of Major Findings

The goal of this study was to look into the Effect of Digital banking service quality on Customers' Satisfaction: The Mediating Role of Brand Image in the Case of Commercial Bank of Ethiopia. In addition, the study investigates the function of Brand Image as a mediator in the link between – Digital banking service quality (Reliability, Ease of Use Efficiency, Website Design, Security &Privacy, Responsiveness) – and Customer satisfaction.

The study gathered 250 questionnaires from a total sample size of 384 for this purpose, and the data was entered into SPSS 25 and Smart PLS 4. To fulfill the research's goal, the Structural Equation Model used a factor analysis called confirmatory factor analysis to reduce components that were not providing relevant results. As a result, the number of measurement elements decreased from 41 to 27. Internal consistency measures such as Cronbach alpha reliability, composite reliability, discriminant validity, and convergence validity have been thoroughly addressed before hypothesis testing. All of the composite reliability and AVE values computed in this study appear to satisfy the suggested threshold levels. Finally, the statistical studies conducted here indicate that the model has acceptable convergent validity and reliability. Cross-validated redundancy was also used to assess the model's predictive significance.

The research findings show that 59.6 percent of the respondents were female, 41.6 percent of the Respondents were under the age of 30, 69.6 percent of the respondents had a college/university award, 30.8 percent of the respondents were workers/officers, and 41.2 percent of the respondents had a Used Digital banking service six months to one year.

From the model, the relationship between brand image and customer satisfaction was supported and significant with the original sample $\beta = 0.122$, statistics (t) = 2.201, and significant value (p) < 0.05 indicating that brand image Influences customer satisfaction directly and positively. The link between responsiveness and brand image was also supported and significant with the original sample (β) = 0.138, statistics (t) = 2.131, and significant value (p) < 0.05 indicating that responsiveness influences brand image directly and favorably. The relationship between ease of use and customer satisfaction was supported and significant with the original sample (β) = 0.240, statistics (t) = 4.045, and significant value (p) < 0.05 indicating that customer satisfaction are influenced directly and positively by the ease of use. The relationship between reliability and customer satisfaction was supported and significant with the original sample (β) = 0.131, statistics (t) = 2.191, and significant value (p)< 0.05 indicating that customer satisfaction are influenced directly and positively by reliability.

The relationship between Service security and privacy with brand image was supported and significant with the original sample (β) =0.282, statistics (t)=3.842, and significant value (p) < 0.01 indicating that brand image is influenced directly and positively by Service security and privacy.

The link between service security and privacy with customer satisfaction was supported and significant with the original sample (β) =0.356, statistics (t) =4.714, and significant value (p) < 0.01 indicating that customer satisfaction is influenced directly and positively by Service security and privacy.

And the research finding shows that the relationship between website design and brand image was supported and significant with the original sample (β) =0.344, statistics (t) =5.067, and significant value (p) < 0.01, Similar relation between website design and customer satisfaction image which was supported and significant with the original sample (β) =0.374, statistics (t) =5.820, and significant value (p) < 0.01 indicating that website design influenced directly and positively by brand image and customer satisfaction.

However, the relationship between Responsiveness and Customer satisfaction was not supported and insignificant with β = -0.035 and t = 0.262 indicating that Responsiveness has not much significance with customer satisfaction. It is also indicated that the relationship between reliability and brand image was not supported and insignificant with β = -0.054 and t = 2.211 indicating that the reliability has not much significance with customer satisfaction.

The brand image also mediates the link between Web design and customer satisfaction, as well as the relationship between security and privacy and customer satisfaction.

So far, the research finding shows that the particular factor indicators do not demonstrate the function of brand image in mediating the role of the relationship between reliability, ease of use, and responsiveness to customer satisfaction.

5.2. Conclusion

The purpose of this study was to evaluate the influence of the Effect of Digital banking service quality on brand image and customer satisfaction using the Digital banking service quality measurement parameters and studying Commercial Bank of Ethiopia clients. The aspects of Digital banking service quality services are used to assess perceived fairness. The findings in chapter four indicate that ease of use, security and privacy, website, and web-based mobile application had a positive effect on brand image.

The study result also established that Reliability, Ease of Use and Efficiency, Website Design, Security & Privacy, and brand image had a positive and significant influence on customer satisfaction. However, Responsiveness showed an insignificant relationship with customer satisfaction.

The study also confirmed a theory that brand image with Digital banking service positively affects customer satisfaction and positively mediates the relationship between Website Design and security & Privacy and customer satisfaction. The study result indicated that brand image does not affect mediating ease of use, reliability, and responsiveness with customer satisfaction.

Based on the sample responses and data analysis findings, the study concluded that the effect of Digital banking service dimensions on brand image is found to be positive, indicating that customers of Commercial Bank of Ethiopia have shown that digital service positively affected customer brand image. Customers' satisfaction at Commercial Bank of Ethiopia is also influenced by their level of brand image. According to Commercial Bank of Ethiopia customers, Website Design are the most essential of the Digital banking service.

5.3. Recommendation

Based on the results of the analysis and the conclusion made, the following recommendations are forwarded:

- As per the finding of the study, Digital banking service quality has a positive and direct relationship with customer satisfaction, so To ensure the integrity of online transactions, security must be constantly improved because doing so will boost consumer confidence. To boost the trustworthiness and image of banks, security provisions should be made available on their websites in a clear way. The kinds of services offered by Digital banking services should be expanded, such as accepting deposits, and banks should take advantage of the chances to grow Digital banking services by addressing the issues. Since the study indicates that responsiveness has a direct and positive effect on customer satisfaction, when a Digital banking service failure happens, if a disgruntled customer is recovered after receiving appropriate compensation, he or she is far more likely to actively express grievances to the bank for the goal of building a recovery delivery system, which is a wonderful method to collect information about the banks' performance. A complaint tracking system, which includes a comment box, a customer complaint website, and a complaint management staff, is critical in allowing consumers to provide feedback about the bank. As a result, CBE's customers may opt to complain rather than defect to another bank. To achieve these goals, CBE should spend time developing and enhancing the CBE Digital banking service team that assists managers in tracking consumer complaints and the recovery process across the CBE, and there should be a way to measure the effectiveness and efficiency of the services of the Digital banking service quality services for users at the time of performing the transaction.

- As the study shows that Digital banking service quality has a positive effect on brand image and customer satisfaction, the management of Commercial Bank of Ethiopia must develop (in the area of Digital banking services) a Digital banking service that incorporates personalized Digital banking features rather than standardized ones. As per the research finding, most Digital banking service measurements have a positive and direct effect on brand image, so Commercial Bank of Ethiopia's Digital banking services initiatives should include more components of the Digital banking service to create a persuasive brand in the market. CBE management should also consider spending additional effort to increase the quality of digital services. The more satisfied clients are with excellent Digital banking service, the more they disseminate positive comments about the bank and the more financial services they use. It should be noted that retaining a current client is more cost-efficient than acquiring a new one; thus, CBE should reconsider their respective budget delivery.

According to the research findings, brand image has a direct positive effect on customer satisfaction, so Ethiopian commercial banks should work hard to be easily identified, top of mind in the banking industry, and the most competent bank in the eyes of the customer.

- Commercial Bank of Ethiopia must constantly revise and update its Digital banking services activities to increase Digital banking service transactions so that customers will be satisfied and advocate customers to the bank brand. This is because the research finding indicates that brand image has a mediation role on Digital banking service quality and customer satisfaction. The campaign to expand the availability of Digital banking services should encourage customers to use them. To satisfy customers, the digital bank service should go through the process of building a persuasive brand. To do this, the bank should collaborate with all stakeholders to create a digital society and a digital market that would avoid physical banking complications and the cost of service delivery through conducting digital campaigns.

5.4. Suggestions for Further Research

This study examined the effects of Digital banking services on customers’ satisfaction and the mediating role of brand image solely from the customer's perspective. Employees' perspectives on Digital banking services quality, as well as the influence they have on brand image and customer satisfaction, were not explored. As a result, the study suggests that future studies incorporate employee perspectives to get a more complete knowledge of the research topic. Furthermore, future studies may look at the impact of digital services on the brand image across sectors.

Reference

Aaker, D. A. (2012). Building Strong Brands. London: Simon & Schuster.

Aaker, J. (1997). Dimensions Of Brand Personality. Journal Of Marketing Research, 34, 347-357.

Abid H And Noreen U. (2006). Ready To E-Bank: An Exploratory Research On The Adoption Of E-Banking And E-Readiness Among Customers And Commercial Banks In Pakistan. . Spider, 31: 1-31.

Adisu. (2018). Effect Of E-Banking On Customer Satisfaction. Arba Minch University.

Ahmadalinejad, M. H. (2015). A National Model To Supervise Virtual Banking Systems Through The Bank 2.0 Approach. Advances In Computer Science: An International Journal, 4(1), 83–93.

Aijaz A. Shaikh, H. K. (2016). On Some Misconceptions Concerning Digital banking service qulity And Alternative Delivery Channels. International Journal Of E-Business Research, 12 (3).

Al-Dmour, Hani. (2005). Marketing Services. Amman, Jordan: Wael Publishing And Distribution.

Al-Gahtani, S. S. (2010). Modeling The Electronic Transaction's Acceptance Using An Extended Technology Acceptance Model. Applied Computing And Informatics, 47-77.

Al-Haddad, S. &. (2015). Integrating The Organizational Change Literature: A Model For Successful Change. Journal Of Organizational Change Management, 28(2), 234–262. Https://Doi.Org/10.1108/Jocm-11-2013-0215.

Alhawari, J. T. (2012). Trying To Measure Customer Satisfaction On The Quality Of The Online Services Using The Netqual Scale. Enterprise Performance Magazine, 97-106.

Alimen, N. &. (2010). Dimensions Of Brand Knowledge Turkish University Students' Consumption Of International Fashion Brands. Journal Of Enterprise Information Management, 23(4), 521–537. Https://Doi.Org/10.1108/17410391011061799.

Alkhawaldeh, A. A. (2020). Examining Antecedents And Consequences Of University Brand Image. Management Science Letters, 10(5), 953– 960. Https://Doi.Org/10.5267/J.Msl.2019.11.016.

Al-Smeran, S. I.-H. (2017, January). Impact Of Electronic Service Quality On Customers Satisfaction Of Islamic Banks In Jordan. International Journal Of Academic Research In Accounting, Finance And Management Sciences, 17, 170–188.

Al-Zadjali, M. A.-J.-B. (2015, September). Assessing Customer Satisfaction Of M-Banking In Oman Using Servqual Model. 6th Ieee International Conference On Software Engineering And Service Science (Icsess), B, 23–25.

Andreassen, W. &. (1997). The Impact Of Corporate Image On Quality, Customer Satisfaction, And Loyalty For Customers With Varying Degr. International Journal Of Service Industry Management, 35-39.

Andreea-Daniela & Cristina Duhnea. (2018). E-Banking And Customer Satisfaction With Banking Service. Strategic Management, Vol. 23, 003-009.

Ansebo, T. A. (2022). The Impact Of Electronic Banking On Customer Satisfaction: A Case Of Commercial Bank Of Ethiopia Hossana Town Branches. International Journal Of Health Sciences, 2910–2925.

At, Timothy. (2012). Electronic Banking Service And Customer Satisfaction In The Nigerian Banking Industry. International Journal Of Business And Management Tomorrow.

Bambang Sukma Wijaya, J. H. (2013). Dimensions Of Brand Image: A Conceptual Review From The Perspective Of Brand Communication. European Journal Of Business And Management, Vol 5, No.31, 55-64 Issn 2222-1905 (Paper) Issn 2222-2839 (Online).

Baron, R. M. (1986). The Moderator-Mediator Variable Distinction In Social Psychological Research: Conceptual, Strategic, And Statistical Considerations. Journal Of Personality And Social Psychology, 51(6), 1173–1182. Https://Doi.Org/10.1.

Bauer, H. F. (2006). E-Trans Qual: A Transactional Process-Based Approach For Capturing Service Quality In Online Shopping. . Journal Of Business Research, 59(7), 866-875.

Belay, H. (2020, July). The Effect Of Brand Image On Building Customer Satisfaction And Loyalty: In The Case Of Hilton Hotel Addis Ababa, Ethiopia. Saint Marry University College School Of Post Graduate Studies, 1-50.

Biljana Angelova And Jusuf Zekiri. (2011, 10 11). An Assessment Of Outsourcing Of Offshore Call Centres On Customer Service In Commercial Banks: A Case Of Zambia. International Journal Of Academic Research In Business And Social Sciences, 300-327.

Bk., Dick. (1994). Customer Loyalty: Toward An Integrated Conceptual Framework. Journal Of The Academy Of Marketing Science, 22: 99-113.

Blodgett, J.G., Wakefield, K.L., And Barnes, J.H. . (1995). "The Effects Of Customer Service On Consumer Complaining Behavior". Journal Of Service Marketing, Vol. 9 (4), Pp. 31-42.

Bollen, K. A. (1992). Bootstrapping Goodness-Of-Fit Measures In Structural Equation Models. Sociological Methods & Research, 21(2), 205–229.Https://Doi.Org/Https://Doi.Org/10.1177/0049124192021002004.

Brexendorf, J. K. (2007, September). Corporate Behavior Vs Brand Behavior: Towards An Integrated View. Journal Of Brand Management,

Bridgett R., Joseph L., Ameenah K., K. Williams And Roger B. . (2012). Pain Medicine. Wiley Periodicals, Inc., Pp. 13: 522–540.

Bultum, A. G. (2014). Factors Affecting Adoption Of Electronic Banking System In Ethiopian Banking Industry. Journal Of Management Information System And E-Commerce, 1-17.

Byrne, B. M. (2010). Structural Equation Modeling With Amos: Basic Concepts, Applications, And Programming (2nd Ed.). Routledge/Taylor & Francis Group.

Byrne, B. M. (2010). Structural Equation Modeling With Amos: Basic Concepts, Applications, And Programming (2nd Ed.). New York: Taylor And Francis Group.

Cajetan Ikechukwu Mbama, P. E. (2018). Digital banking service y, Customer Experience, And Financial Performance: Uk Bank Managers' Perceptions. Journal Of Research In Interactive Marketing, 432-451.

Carlson, J. (2010). Exploring The Relationships Between E-Service Quality, Satisfaction, Attitudes, And Behaviors In Content-Driven E-Service Web Site. Emerald Group Publishing Limited, 24, 127-112.

Cbe. (2021/22). Press Release. Addis Ababa, Ethiopia: Https://Www.Combanketh.Et/Cbeapi/Uploads/2013_Bd8aeedaad.

Chavana And Jayshree. (2013). Internet Banking- Benefits And Challenges In An Emerging Economy. International Journal Of Research In Business, 19-26.

Cheah& Phau. (2011). Attitudes Towards Environmentally Friendly Products: The Influence Of Ecoliteracy, Interpersonal Influence, And Value Orientation. Marketing Intelligence & Planning, Retrieved 2022, From Https://Doi.Org/10.1108/02634501111153674

Churchill, G.A. and Iacobucci, D. (2005) Marketing Research: Methodological Foundations. 9th Edition, Thomson/South-Western, Cincinnati.

Comrey, A. L. (1973). The First Course Is In Factor Analysis. New York.: Academic Press, New York, Isbn 13: 9780121835507,

Cooper, D. &. (2008). Business Research Methods (10th Ed.). New York: Mcgraw-Hill/Irwin.

Creswell, J. W. (2009). Research Design: Qualitative, Quantitative, And Mixed Methods Approach.3rd Edition. Sage Publications Inc.

Cronin, J., Michael K. Brady, M.K. And Hult, G.T. (2000). "Assessing The Effects Of Quality, Value, And Customer Satisfaction On Consumer Behavioral Intentions In Service Environments". Journal Of Retailing, Vol. 76 (2), Pp. 193-218.

Cronin, J.J. And Taylor, S.A. (1992). "Measuring Service Quality: A Reexamination And Extension". Journal Of Marketing, Vol. 56, July, Pp. 55-68.

D, Aaker. (1991). Manage Brand Equity. New York: The Free Press.

Da Silva, R. V. (2006). Cognitive, Affective, And Conative Behavioral Responses In Retail Corporate Branding. Journal Of Product And Brand Management, 515(5), 293 30.

Daniel, C. A. (2010). Using The Servqual Model To Assess Service Quality And Customer Satisfaction. Master Thesis, Umea University.

Davis, F. D. (1993). Perceived Usefulness, Perceived Ease Of Use, And User Acceptance Of Information Technology. Mis Quarterly, Jstor., 13(3), 319–340.

Dawes, R. M. . (N.D.). Fundamentals Of Attitude Measurement. 1972: John Wiley & Sons.

Dawes, R. M. (1972). An Experimental Analysis Of The Contrast Effect And Its Implications For Intergroup Communication And The Indirect Assessment Of Attitude. Journal Of Personality And Social Psychology, 21(3), 281–295.

Dawn D. And George M. (1990). In Search Of Brand Image: A Foundation Analysis. Advances In Consumer Research, Volume 17, 110-119.

Dc, Gensch. (1978). Image-Measurement Segmentation. J. Market. Res, 15: 84-94.

De Ruyter K, Wetzels M, Bloemer J. (1998). On The Relationship Between Perceived Service Quality, Service Loyalty, And Switching Costs. . International Journal Of Service Industry Management, 9: 436-453.

Doc, Ilir. (2009). Internet Theory Banking In System Banking. European Journal Of Business, Economics, And Accountancy, Vol.3, No.4.

Dr. Nischay K, Dr. S.S Bhakar. (2014). Effect Of Customer Satisfaction On Brand Image & Loyalty Intention: A Study Of Cosmetic Product. International Journal Of Research In Business And Technology, Volume 4 No.1.

Efron, B. And Tibshirani, R.J. (1993). An Introduction To The Bootstrap. New York: Chapman And Hall.

Erlang, Agner Krarup,Wikipedia 2022. (N.D.). Www.Wikipedia.Org. Retrieved July 22, 2022, From Https://En.Wikipedia.Org/Wiki/Queueing_Theory

Falk, R.F. And Miller, N.B. (1992). A Primer For Soft Modeling. Akron: University Of Akron Press.

Fishbein, M. (1967). A Behavior Theory Approach To The Relations Between Beliefs About An Object And The Attitude Toward The Object. In M. Fishbein (Ed.), Readings In Attitude Theory And Measurement (Vols. 389-400). New York: John Wiley & Sons.

Fornell, C. (1992). "A National Customer Satisfaction Barometer: The Swedish Experience". Journal Of Marketing, 56, Pp. 6-21.

Frida Johansson, M. H. (2021). The Effect Of Social Media Marketing Activities On Brand Image And Brand Loyalty. The Luleå University Of Technology.

G. Ghasemi, M. H. (2017). The Effect Of Customers' Off-Line Brand Image On Their Off-Line And Online Brand Use In Banking Service (Case Study: Bank Mellat). International Review Special Issues, 31-42.

G/Hiwot, S. (2018). The Role Of E-Banking Service Quality On Customer Satisfaction A Case Of Commercial Bank Of Ethiopia. Saint Marry University, 1-50.

Garvin, D. (1988). Managing Quality. New York: Macmillan.

Gerrard, P. A. (2003). The Diffusion Of Internet Banking Among Singapore Consumers. International Journal Of Bank Marketing, 21 (1), 16-28.

Grace, Kavengi, And Onyancha. (2013). The Impact Of Bank Brand Image On Customer Satisfaction And Loyalty: A Case Of Kenya Commercial Bank. European Journal Of Business And Management, Vol.5, No.21.

Griffiths, J. A. (2005). Student Searching Behavior And The Web: Use Of Academic Resources And Google. Library Trends, 53(4), 539-554.

Gronroos, C. (1996). Relationship Marketing Logic. Asia-Australia Marketing Journal, 4(1), 7-18, Http://Doi.Org/10.1016/S1320-1646(96)70264.

Gupta, K. (2012). Development Of An Instrument To Measure Internet Banking Service Quality In India. Res. World, 3, 11.

Hair, J. (1992). Multivariate Data Analysis With Readings. New York: 3rd Ed.

Hair, J. B. (2010). Multivariate Data Analysis. 7th Edition. New York: Pearson.

Hair, J. R. (2011). Pls-Sem: Indeed A Silver Bullet. Journal Of Marketing Theory And Practice, 19, 139-151.

Halstead, D. A. (1992). "The Effects Of Satisfaction And Complaining Behavior On Consumers Repurchase Behavior", Dissatisfaction And Complaining Behavior. Journal Of Satisfaction, Vol. 5, Pp. 1-11.

Hanafizadeh, P., Behboudi, M., Koshksaray, A. A., & Tabar, M. J. S. (2014). Mobile-Banking Adoption By Iranian Bank Clients. Telematics And Informatics, 31(1), 62–78. Doi:10.1016/J.Tele.2012.11.001.

Hansemark, O.C, & Albinson, M. (2004). Customer Satisfaction And Retention: The Experiences Of Individual Employees. Managing Service Quality, 14(1),40-57.

Hassan, S. &. (2019). Measuring The Effect Of Service Quality And Corporate Image On Student Satisfaction And Loyalty In Higher Learning Institutes Of Technical And Vocational Education And Training. International Journal Of Engines, 8(5), 533-538.

Hayes, A.F. And Preacher, K.J. (2010). Quantifying And Testing Indirect Effects In Simple Mediation Models When The Constituent Paths Are Nonlinear. Multivariate Behavioral Research, 45, 627-660.

Henderson, D. S. (2012). The Determinants Of Inter-Organizational And Internal In-House Adoption Of Xbrl: A Structural Equation Model. Internationaljournal Of Accounting Information Systms, 109-140.

Hendra Pratama,Budi Suprapto . (2014). The Effect Of Brand Image, Price, And Brand Awareness On Brand Loyalty: The Rule Of Customer Satisfaction As A Mediating Variable. Global Journal Of Business And Social Science Review, 52 – 57.

Heskett, J. J. (1994). Putting The Service-Profit Chain To Work. Harvard Business Review, 72, 164-174.

Hoehle, H., Scornavacca, E., & Huff, S. . (2012). Three Decades Of Research On Consumer Adoption And Utilization Of Electronic Banking Channels. A Literature Analysis. Decision Support Systems, 54(1), 122–132. Doi:10.1016/J. Dss.2012.04.010.

Hosseini, S., & Mohammadi, S. (2012). Review Banking On Biometrics In The World's Banks And Introduce A Biometric Model For Iran's Banking System. Journal Of Basic And Applied Scientific Research, 2(9), 9152–9160.

Hovland, C. I. (1957). Assimilation And Contrast Effects Reactions To Communication And Attitude Change. Journal Of Abnormal And Social Psychology, 55, 244-252.

Hulland, J. (1999). Use Of Partial Least Squares (Pls) In Strategic Management Research: A Review Of Four Recent. Strategic Management Journal, 20(2), 195-204.

Husnain, M., & Akhtar, M. (2016). Impact Of Branding On Impulse Buying Behavior: Evidence From Fmcg's Sector Pakistan. Int. J. Bus. Adm., 7, 59.

Hyun Baek, T. &. (2011). Exploring The Consequences Of Brand Credibility In-Services. Journal Of Services Marketing, 25(4), 260–272. Https://Doi.Org/10.1108/08876041111143096.

Iliachenko, E. (2006). Electronic Service Quality (E-Sq) In Tourism; Development Of A Scale For The Assessment Of E-Sq Of Tourism Website. Unpublished Doctoral Dissertation, Lulea University Of Technology.

Ilir, Doci. (2009). E-Business, Booklet -. In F. A. Ilir Doci Authorized Lecture Management Banking. Pristina: The European University Of Tirana, Republic Of Albania.

Imran Taqi,Ghulam Muhammad. (2020). Brand Loyalty And The Mediating Roles Of Brand Image And Customer Satisfaction. Market Forces College Of Management Sciences, Volume 15, Issue 1.

Ito, J. N. (2017). The Blockchain Will Do To The Financial System What The Internet Did To Media. Harvard Business Review, Digital Article. Retrieved From,https:// Hbr.Org/2017/03/The-Blockchain-Will-Do-To-Banks-And-Law-Firms-What-The.

Jamil Hammoud, Rima M. Bizri, Ibrahim El Baba. (2018, July-September). The Impact Of E-Banking Service Quality On Customer Satisfaction: Evidence From The Lebanese Banking Sector. Sage Jounals, 8(3), Https://Doi.Org/10.1177/2158244018790633.

Janahi, M. A. (2017). The Impact Of Customer Service Quality On Customer Satisfaction In Islamic Banking. Journal Of Islamic Marketing.

Jl, Aaker. (1997). Dimensions Of Brand Personality. Journal Of Marketing Research, 34: 3347-3357.

Jn, Kapferer. (2004). New Strategic Brand Management: Creating And Sustaining Brand Equity. Ser. Kogan.

Jogiyanto, &. A. (2009). Konsep Dan Aplikasi Pls (Partial Least Square) Untuk Penelitian Empiris. Yogyakarta: Bpfe.

Karjaluoto, H. M. (2002). Electronic Banking In Finland: Consumer Beliefs And Reactions To A New Delivery Channel. Journal Of Financial Services Marketing, 6(4), 346–361. Doi:10.1057/Palgrave.Fsm.4770064.

Kaul, V. A. (2019, January 25). Https://Teknospire.Com. Retrieved August 3, 2022, From Https://Teknospire.Com/Different-Ways-To-Banking-Digital-Online-Internet-Mobile-Banking-Neo-E-Banking/

Kaynak, E. & Harcar, T.D. (2015). Consumer Value Creation In Mobile Banking Services. International Journal Of Technology Marketing, 1(1), 62–78.

Keller, K. L. (2003). Strategic Brand Management: Building, Measuring, And Managing Brand Equity. (2nd Ed), Prentice Hall: Upper Saddle River, Nj.

Kennedy Okiro And Jacky Ndungu, K. (2013 , May). The Impact Of Mobile And Internet Banking On Performance Of Financial Institutions In Kenya. European Scientific Journal, 9, 1857 – 7881.

Khatoon, S., Zhengliang, X., & Hussain, H. (2020). The Mediating Effect Of Customer Satisfaction On The Relationship Between Electronic Banking Service Quality And Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. International Journal of e-Collaboration, 11(4), 1-10. doi:10.4018/ijec.2015100101Customer Purchase Intention: Evidence From The Qatar Banking Sector. Sage Open, 10.

Kolegija, V. (2018). Brand Image Theoretical Aspects. Integrated Journal Of Business And Economics, E-Issn: 2549-3280.

Kolodinsky, J. M. (2004). The Adoption Of Electronic Banking Technologies By Us Consumers. International Journal Of Bank Marketing,, 22(4), 238–259. Doi:10.1108/02652320410542536.

Kotler And Keller. (2012). Marketing Management. One Lake Street, Upper Saddle River, New Jersey 07458.: Pearson Education, Inc., Publishing As Prentice Hall.

Kumar, S. A. (2005). Research Methodology. Berlin: Eds., New Product Development, Springer.

Laukkanen, T. (2007). Internet Vs Mobile Banking: Comparing Customer Value Perceptions. Business Process Management Journal, 13(6), 788–797. Doi:10.1108/14637150710834550.

Lee, Gow-Guang, Lin, Hsiu-Fen. (2005). Customer Perception Of E-Service Quality In Online Shopping. Emerland Group Publishing Limited, 33(2), 161-176.

Lee, H. M. (2011). Brand Image Strategy Affects Brand Equity After M&A. European Journal Of Marketing, 45(7), 1091–1111. Https://Doi.Org/10.1108/03090561111137624.

Liao, S. S. (1999). The Adoption Of Virtual Banking: An Empirical Study. International Journal Of Information Management, 19(1), 63–74. Doi:10.1016/S0268-4012(98)00047-4.

M S Iskandar, K. Y. (2018). Role Of Web Design For Image Brand Toward Business. Iop Conf. Series: Materials Science And Engineering, 407.

Mackinnon, D. P. (2004). Confidence Limits For The Indirect Effect: Distribution Of The Product And Resampling Methods. Multivariate Behavioral Research, 39(1), 99–128. Https://Doi.Org/10.1207/S15327906mbr3901_4.

Mada, G. (2021, September-December). International Journal Of Business, Vol. 23, No. 3, 314-340.

Madu, C.N. And Madu, A.A. (2002). Dimensions Of E-Quality. International Journal Of Quality And Reliability Management, 19(3), 246-259.

Malhotra.Y. (2005). Integrating Knowledge Management Technologies In Organizational Business Processes: Getting Real Time Enterprises To Deliver Real Business Performance. . Journal Of Knowledge Management, 7-28.

Martin, A. L. (2014). An Information Delivery Model For Banking Business. International Journal Of Information Management, 334(2), 139–150. Doi:10.1016/J.Ijinfomgt.2013.12.00.

Mayer, R.C, Davis, J.H, & Schoorman, F, D. (1995). An Integrative Model Of Organizational Trust. Academy Of Management Review, 20(3), 709-734.

Mekdes, A. (2019). The Effect Of E-Banking Attributes On Customer Satisfaction: The Case Of Commercial Bank Of Ethiopia. Addis Ababa University College Of Business And Economics School Of Commerce Department Of Marketing Management Graduate Program Unit, 1-49.

Michael D. Clemes, Christopher Gan, Tzu-Hui Kao, Michelle Choong. (2008, July). An Empirical Analysis Of Customer Satisfaction In International Air Travel. Innovative Marketing, Volume 4, Issue 2.

Mitchell, J. (1988). Electronic Banking And The Consumer: The European Dimension. Policy Studies Institute., 679.

Morgan, Rory P. (2000). A Consumer-Orientated Framework Of Brand Equity And Loyalty. Int. J. Mark. Res., 42(1): 65-78.

Mugenda, O.M. And Mugenda, A.G. (2003). Research Methods, Quantitative And Qualitative Approaches. Nairobi: Act.

Müller, R. A.-D. (2014). Generation Y Students' Product Colour Preferences. Mediterranean Journal Of Social Sciences, 5(21), 69. Retrieved From Https://Www.Richtmann.Org/Journal/Index.Php/Mjss/Article/View/4179.

Muok, T. O. (2019). Effect Of Service Quality On Brand Image Of Logistic Firms In Mombasa County. Strategic Journal Of Business & Change Management, 502-521.

Neeraj B, Abebe S,Waktole F. (2020). The Impact Of E-Banking Services On Customer Satisfaction: The Case Of Commercial Bank Of Ethiopia Fekete. International Journal Of Advanced Research In Engineering And Technology, 1630-1642.

Nesro, H. (2020, August). Effect Of Brand Image On Customer Satisfaction And Loyalty: The Case Of Zenith Ethiopia Ltd. St. Mary's University School Of Graduate Studies Unpublished Work.

Neupane, R. (2015). The Effects Of Brand Image On Customer Satisfaction And Loyalty Intention In Retail Super Market Chain Uk. International Journal Of Science And Management, 9-26.

Nischay K. Upamannyu,S.S Bhakar. (2014). Effect Of Customer Satisfaction On Brand Image & Loyalty. International Journal Of Research In Business And Technology, 296-307.

Nischay K. Upamannyu,S.S Bhakar. (2014). Effect Of Customer Satisfaction On Brand Image & Loyalty Intention: A Study Of Cosmetic Product. International Journal Of Research In Business And Technology, 296-307.

Olaofe-Obasesin, Moses Odunayo,Ajibola, Olurotimi,Otunaya, Gbemisola Olabisi,Ekundayo, Olugbemileke,Akanni, Adeniyi,Lawal And Odunayo. (2020, July). Application Of

Queuing Theory On Banks Efficient Service Delivery. European Journal Of Accounting, Finance, And Investment, 6, 7.

Oliver And Richard L. (1997). A Behavioral Perspective On The Consumer. Science And Education, 93-97.

Padgett, D. &. (1997). Communicating Experiences: A Narrative Approach To Creating Service Brand Image. Journal Of Advertising, 26(4), 49–62. Https://Doi.Org/10.1080/00913367.1997.10673535.

Palmer, A. .. (2005). Principles Of Services Marketing. . (4th Ed.). Mcgraw-Hill.

Panda, S. P. (2019). University Brand Image As Competitive Advantage: A Two-Country Study. International Journal Of Educational Management, 33(2), 234–251. Https://Doi.Org/10.1108/Ijem-12-2017-037.

Parasuraman, A. Z. (1985). A Conceptual Model Of Service Quality And Its Implication. Journal Of Marketing, 49, Fall, 41-50.

Parasuraman, A., Zethamel, V.A, And Molhotra, A. (2005). A Conceptual Model Of Service Quality And Its Implication For Future Research. Journal Of Marketing, 49(4), 41-50.

Peterson K.Ozili. (2018). Impact Of Digital Finance On Financial Inclusion And Stability. Borsa Istanbul Review, 329-340.

Plummer, J. T. (1985). Brand Personality: A Strategic Concept For Multinational Advertising. . Marketing Educators' Conference. New York, Ny: Young & Rubicam.

Porter M. (1985). Competitive Advantage, Brand Equity In Hospital Marketing. (Vol. (2008a).). New York: J. Bus. Res., Free Press Kim Kh, Kim Ks, Kim Dy, Kim Jh, Kang Sh.

Qy, Gu. (2005). The Service Quality, Service Is Worth Of, The Research Of Customer Satisfaction And The Relation Of The Customer Loyalty-Take Certain Health Inspection Center In The Medical Center In Southern Taiwan As An Example. The National Cheng Kong University's High Level Manages Master's Incumbency, Particularly Class Master's Thesis.

Ramayah, T. S. (2011). Market Orientation, Service Quality And Organizational Performance In Service Organizations In Malaysia. Asia-Pacific Journal Of Business Administration, 3, 8-27.

Ranaweera C. And Prabhu J. (2003, Sep). On The Relative Importance Of Customer Satisfaction And Trust As Determinants Of Customer Retention And Positive Word Of Mouth", Journal Of Targeting, Measurement, And Analysis For Marketing, Vol. 12 (1), P. 82.

Ren, Yang Yu. (2006). The Research Of The Server Industry Brand Image. The Fu Ren University. Unpublished Master's Thesis.

Ren, Yang Yu. (2006). The Research Of The Server Industry Brand Image. The Fu Ren University. Unpublished Master's Thesis.

Revin Prasetia, T. Y. (2020). Impact Of Web Design, Assurance, Customer Service, And Brand Image On Intention To Adopt Internet Banking And Customer Loyalty At Bank Central Asia (BCA. International Journal Of Economics, Business, And Accounting Research (Ijebar), 291-298.

Robert A. And Patrick A. ((2009)). The Preference Gap: Ghanaian Consumers' Attitudes Toward Local And Imported Products. Afr. J. Bus. Manage., 3(8): 350-357.

Roets Crq, B.-D. A. (2014). Influence Of Social Image And Brand Trust On Mobile Phone Brand Equity Amongst African Generation Y Students. Mediterranean Journal Of Social Sciences, 5(21):75-84.

Romaniuk J, Sharp B . (2003). Measuring Brand Perceptions: Testing Quantity And Quality. J. Target. Meas. Anal. Mark, 11(3): 218-229.

Romdonny, J., Rosmadi, M. L. N. (2019). Factors Affecting Customer Loyalty In Products. Budapest International Research And Critics Institute-Journal (Birch-Journal), Vol 2, No 1, Page: 337-343.

Ronnie B., Anne W., Karinna N. (2006, Apr 1). The Evolution Of Brand Choice. Journal Of Brand And Management, 339-352.

Sabi, Humphrey, And Muki. (2014). Research Trends In The Diffusion Of Internet Banking In Developing Countries. Journal Of Internet Banking And Commerce, Vol. 19, No.2.

Sadia Khatoon, Xu Zhengliang, Hamid Hussain. (2020). The Mediating Effect Of Customer Satisfaction On The Relationship Between Customer Purchase Intention: Evidence From The Qatar Banking Sector. Sage Open, 1-12.

Salinas, E. M. (2009). Modeling The Brand Extensions' Influence On Brand Image. Journal Of Business Research,, 62(1), 50–60.

Sang Hk. (2009). The Effect Of Emotional Intelligence On Salesperson's Behavior And Customers' Perceived Service Quality. Afr. J. Bus. Manage, 4(11): 2343-2353.

Santos, J. (2003). E-Service Quality: A Model Of Virtual Service Quality Dimensions. Manag. Serv. Qual. Int. J, 13, 233–246.

Santos, J. (2003). E-Service Quality: A Model Of Virtual Service Quality Dimensions. Managing Service Quality: An International Journal, 13, 233–246.

Sara, F. (2021, July). The Effect Of Brand Image Benefit On Customer Satisfaction: The Case Of Ethio Telecom. Sanit Marry University School Of Business Department Of Marketing Management, 1-50.

Sardana, V., Singhania, S. (2018). Digital Technology In The Realm Of Banking: A Review Of The Literature. International Journal Of Research In Finance And Management, 1, 28–32.

Saunders, M., Lewis, P. & Thornhill, A. (2008). Research Methods For Business Students. Prentice Hall 4th Edition.

Saunders, M., Lewis, P., Thornhill, A. . (2007). Research Methods For Business Students. 4th Edition, Edinburgh Gate, Harlow.: Financial Times Prentice Hall,

Schaupp, L. A. (2005). A Conjoint Analysis Of Online Consumer Satisfaction. Journal Of Electronic Commerce Research, 6(2), 95-111.

Sekaran. (2006). Research Methods For Business: A Skill Building Approach (4th Ed.). Us: Wiley.

Selshi, A. (2019). The Impact Of Electronic Banking On Customers' Satisfaction: The Case Of Commercial Bank Of Ethiopia. Addis Ababa University. Addis Ababa.

Setyadi, A. A. (2017). Credit Risk Management: Implications On Bank Performance And Lending Growth. Saudi Journal Of Business And Management Studies, 2(B), 770–777. Https://Doi.Org/10.21276/Sjbms.

Shaikh, A. A. (2015). Mobile Banking Adoption. A Literature Review. Telematics And Informatics, 32(1), 129–142. Doi:10.1016/J.Tele.2014.05.003.

Shang, R. C. (2004). Extrinsic Versus Intrinsic Motivations For Consumers To Shop Online. Information And Management, 42(3), 401-413.

Sheng, T. A. (2010). An Empirical Study On The Effect Of E-Service Quality On Online Customer Satisfaction And Loyalty. Emerland Group Publishing Limited, 1(3), 273-283.

Shin, D. A. (2001). "Measuring Customers' Overall Satisfaction: A Multi-Attributes Assessment". Services Marketing Quarterly, Vol. 22 (1), Pp. 3-19.

Silshi And Abel. (2019). The Impact Of Electronic Banking On Customers' Satisfaction: The Case Of Commercial Bank Of Ethiopia. Addis Ababa University, 1-50.

Smith, Bolton & Wagner. (1999). A Model Of Customer Satisfaction With Service Encounters Involving Failure And Recovery. Journal Of Marketing Research, 356-372.

Sobel, M. (1982). Asymptotic Confidence Intervals For Indirect Effects In Structural Equation Models. Sociological Methodology, 13, 290-321.

Sunday A. Afolalu, Kunle O. Babaremu, Samson O.Ongbali, Abiodun A. Abioye, Ademola Abdulkareem, Samuel B. Adejuyigbe, (2019). Overview Impact Of Application Of Queuing Theory Model On Productivity Performance In A Banking Sector. Journal Of Physics: Conference Series, 1378.

Sung, Y. L. (2009). Service Quality Between E-Government Users And Administrators. . Electronic Journal Of I-Ways The Journal Of E-Government Policy And Regulation, 32(4), 241-248.

Sw, L. (2005). The Brand Image, Service Quality, And Consciousness Are Worth, The Research On Customer Satisfaction And The Relation Of Customer Loyalty: Take The Trip Industry As An Example. The Chin Yi University Tourist Business Department Institute.

Sw, Lin. (2005). The Brand Image, Service Quality, And Consciousness Are Worth, The Research On Customer Satisfaction And The Relation Of Customer Loyalty: Take The Trip Industry As An Example. The Chin Yi University Tourist Business Department Institute.

Swaid, S. A. (2007). Key Dimensions Of E-Commerce Service Quality And Its Relationships To Merging And Emerging Technologies. Processes And Institution, Bled, Slovenia, 1-15.

Tadesse A & Fayera Bakala. (2021). Effects Of Automated Teller Machine Service On Client Satisfaction In Commercial Bank Of Ethiopia Benyam. Heliyon 7, E06405.

Tale, B. (2021). The Impact Of Electronic Banking On Customer Satisfaction: In Commercial Banks Of Ethiopia The Case Of Commercial Bank Of Ethiopia's: North Addis Ababa District. Addis Ababa.

Tarawneh, N. .. (2011). The Impact Of Electronic Service Quality Dimensions In Achieving Satisfaction Among Representatives Of Enterprises Under The Social Security. Master Thesis, University Of The Middle East.

Tatik Suryani, A. A. (2021, September-December). Enhancing Brand Image In The Digital Era: Evidence From Small And Medium-Sized Enterprises (Smes) In Indonesia. Gadjah Mada International Journal Of Business -, Vol. 23, No. 3.

Tavaga. (2021, April). Https://Tavaga.Com. Retrieved From /Blog/Digital-Banking-Meaning-Benefits-Products-Types-Disadvantages-Future/.

Teketel A.And Dipak S. (2022, April 09). The Impact Of Electronic Banking On Customer Satisfaction Case Of Ethiopia Hossana Town Branches. International Journal Of Health Sciences, 6(S3), 2910–2925.

Tenenhaus, M. V. (2005). Pls Path Modelingcomputational Statistics And Data Analysis (Vol. 48).

Toor, A. M. (2016.). The Impact Of E-Banking On Customer Satisfaction: Evidence From Banking Sector Of Pakistan. Journal Of Business Administration Research, 5: 27–40.

Tronvoll, B. (2007). Customer Complaint Behavior From The Perspective Of The Service-Dominant Logic Of Marketing. Emerald Group Publishing Limited, 17(6).P601-620.

Venkatesh, V & Davis, F.D. (2000). A Theoretical Extension Of The Technology Acceptance Model: Four Longitudinal Field Studies. Management Science, 46(2),186-204.

Ventre, I., & Kolbe, D. (2020). The Impact Of Perceived Usefulness Of Online Reviews, Trust And Perceived Risk On Online Purchase Intention In Emerging Markets: A Mexican Perspective. J. Int. Consum. Mark, 32, 287–299.

Ward S, B. B. (1999).)Equatorius: A New Hominoid Genus From The Middle Miocene Of Kenya. 285: 1382-1386.

Widjana, M. (2010). Determinant Factor Penerimaan Terhadap Internet Banking Pada Nasabah Bank Di Surabaya. Sekolah Tinggi Ilmu Ekonomi Perbanas.

Wijaya, B. S. (2012). The Development Of Hierarchy Of Effects Model In Advertising. International Research Journal Of Business Studies, 73-85.

Wijaya, V. (2018). The Impact Of Brand Image On Customer Satisfaction: A Study Of Maxx Coffee In Surabaya. Journal Online Universities, 179-185.

Williamson, O. E. (2002). "The Theory Of The Firm As Governance Structure: From Choice To Contract.". Journal Of Economic Perspectives, 16 (3): 171-195.

Woisetschläger, D. M. (2012). Sponsorship Congruence And Brand Image: Apre-Post Event Analysis. European Journal Of Marketing, Https://Doi.Org/10.1108/03090561211202585.

Wold, H. (1985). Partial Least Squares. In: Kotz, S. And Johnson, N.L., Eds. (Vols. Vol. 6,). New York, 581-591: John Wiley, Encyclopedia Of Statistical Sciences.

Wright, A., & Ralston, D. (2002). The Lagging Development Of Small Business Internet Banking In Australia. Journal Of Small Business Management, 40(1), 51–57. Doi:10.1111/1540-627x.00038.

Wu, P. C. (2011). The Effect Of Store Image And Service Quality On Brand Image And Purchase Intention For Private Label Brands. Australasian Marketing Journal, 19(1), 30–39. Https://Doi.Org/10.1016/J.Ausmj.2010.11.001.

Wu, W.Y, C.S. Fu. (2009.). Services Officer Cognitions Toward Marketing Planning: A Hierarchical Cognition Of Marketing Audit Model. Afr. J. Bus. Manage, 3: 260-267.

Xd, Su. (2005). Customer Relationship Management And Loyalty: The Information Applies, The Subject Research Of Brand Image And Contact Results. The Yuen Zhi University Unpublished Master's Thesis.

Y And Yi. (1990). A Critical Review Of The Consumer. Review Of Marketing, American Marketing Association In Zeithaml, V.A, 68-123.

Yang, K. F. (2017). The Effect Of Service Quality On Customer Satisfaction, Brand Loyalty, And Brand Image. Ieee International Conference On Industrial Engineering And Engineering Management (Ieem), 2286.

Yang, Z. J. (2004). Measuring Customer Perceived Online Service Quality: Scale Development And Managerial Implications. International Journal Of Operations And Production Management, , 24(11), 1149-1174.

Yasseri., A.-B. (2005). Marketing Health Services, Scientific. Publishing Aliazo.

Yr, X. (2006). Construct The Related Study Of The Company Brand Image, Brand Loyalty, And Of Customer Response. . The National University Of Taipei. Unpublished Master's Thesis.

Yy, Shi. (2006). The International Well-Known Image Of The Cartoon Character Authorization Merchandise Brand, Brand Relates To Article Quality And Relates To Quality To The Research Of Brand Loyalty Influence. The Da Yep University. Unpublished Master's The.

Zavareh, F. B. (2012). Service Quality Dimensions And Their Effect On E-Customer Satisfaction In Internet Banking Service. Procida Social And Behavioral Sciences, 40, 441-445.

Zeithaml, V. A. (2002). Service Excellence In Electronic Channels. Managing Service Quality. An International Journal, 12(3), 135–139.

Zeithaml, V.A., Parasuraman, A. And Malhotra, A. ((2000a).). A Conceptual Framework For Understanding E-Service Quality: Implications For Future Research And Managerial Practice. Mis Working Paper Series. Cambridge, Ma, 1-49.

Zeithaml, V.A., Parasuraman, A. And Malhotra, A. (2002). Service Quality Delivery Through Websites: A Critical Review Of Extant Knowledge. Journal Of The Academy Of Marketing Science, 30(4), 362- 375.

Zeithaml, V.A., Parasuraman, A. And Malhotra, A. (2002). Service Quality Delivery Through Websites: A Critical Review Of Extant Knowledge. Journal Of The Academy Of Marketing Science, 30(4), 362-375.

Zikmund, W. B. (2010). Business Research Methods. 8th Edition,. South-Western: Cengage Learning.

Zj, Zhang. (2007). The Sneakers Brand Image Of A Consumer Is To The Research Of Customer Loyalty Influence: The Identification Of The Mode Of The Line Structure Equation. Taipei Municipal Education University, Athletics Department Master Class. Unpublished M.

Appendix 1

Questionnaires for customers

Questioner

Addis Ababa University

School of Commerce

Department of Marketing Management

(Questionnaire to be filled by Digital banking service quality Service Users)

Informed Consent Form

Researcher Name: Yohannes Tesfaye

Organization: Addis Ababa University, School of Commerce, Department Of Marketing management

Sir/Madam,

Background: You have been identified as one of the key persons for this study on ***"The Effect of Digital banking service quality on Customer Satisfaction: The Mediating Role of the Brand image in the Case of Commercial Bank of Ethiopia"***. This study is being carried out with permission from Addis Ababa University School of Commerce. Before you decide to take part in this study, you must understand why it's being conducted and what you'll be doing. Please take the time to thoroughly read the following information. If there is anything unclear to you, feel free to question the researcher. This research is part of the requirements for a Master's degree in Marketing Management. The study will be used purely for academic purposes and thus it does not affect you in any case. You're genuine, frank, and timely response is vital for the success of the study. Therefore, I kindly request you to respond to each question item carefully

Instruction:

- No need of writing your name.
- Use √ upon given choices alternatives.
- Please return the completed questionnaire in time, thank you in advance for your cooperation and timely response.
- The researcher assures you that the responses you provide will be kept confidential.

For further comments and information, you may contact me at - tesfayeyohannes42@gmail.com

Yours sincerely

Yohannes Tesfaye
Tell: 0911.44.27.05

General instruction: - please select the appropriate choice with a tick mark (√) or write your answer in the space provided.

Section I: Respondents' Characteristics

1. What is your age bracket?
   - From 18 to under 22 [ ]
   - From 22 to under 30 [ ]
   - From 30 to under 50 [ ]
   - Over 50 [ ]
2. What is your gender?
   - Male [ ]
   - Female [ ]
3. What is your highest level of education?
   - High School [ ]
   - College/University [ ]
   - Postgraduate [ ]
   - Other [ ]
4. What is your Job?
   - Worker/Officer [ ]
   - Businessman/Entrepreneur [ ]
   - Housewife [ ]
   - Student [ ]
   - Other [ ]
5. Length of Digital banking service Usage.
   - Under 6 months [ ]
   - From 6 months to under 1 year [ ]
   - From 1 year to 3 years [ ]
   - Over 3 years [ ]
6. Frequency of Digital banking service usage
   - Never [ ]
   - Once per month [ ]
   - Twice per month[ ]
   - 3 + times Per Month[ ]

Part II Dimension to measure Digital banking service quality

What is your level of agreement with the following statements relating to Digital banking service quality service in CBE (1- strongly disagree, 2- Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree)?

Code	Dimension	1	2	3	4	5
	Ease of use and Efficiency					
EuE1	You can easily find documentation on how to use Digital banking services.					
EuE2	The application process is very clear, quick, and easy to understand.					
EuE3	You can use Digital banking services easily.					
EuE4	I find the e-banking system to be flexible to interact with.					
EuE5	Learning to operate the E-Banking system is easy for me.					
EuE6	Digital banking services are provided in various languages.					
	Reliability					
Rel1	I have high confidence in the Digital banking services of the bank.					
Rel2	The Digital banking service is reliable.					
Rel3	Digital banking services perform the service right the first time.					
Rel4	I have always found Digital banking service channels in working order.					
Rel5	I prefer using Digital banking services instead of visiting the branch to do my transactions.					
	Security and Privacy					
Sap1	Digital banking services do not allow others to access my accounts.					
Sap2	Digital banking service provides high protection for my banking transactions.					
Sap3	Digital banking services are safe from fraud and hacking.					
Sap4	The security devices of the Digital banking services protect the data that is sent by me.					
Sap5	Digital banking services offer secure personal privacy.					
Sap6	I feel secure while making transactions over the Internet.					
Sap7	My Digital banking site does not share my personal information with other sites.					
	Responsiveness					
Rac1	Digital banking services are available 24/7.					
Rac2	Digital banking services respond immediately to clients' requests.					
Rac3	If there is any problem, help is immediately available.					
Rac4	Digital banking services provide answers to your banking questions.					
Rac5	The bank deals gently with customer complaints about electronic service.					
	Website					
Wd1	The bank website works properly using different screen settings.					
Wd2	The bank website has Clear design.					
Wd3	The bank website has an effective internal search tool.					
Wd4	The bank's website Tailoring content to the needs of specific users					
Wd5	The bank website has a short download speed.					
Wd6	The bank website provides feedback between users and the website (email, chat, online community, and suggested forms).					

Part III Dimensions to Measure Customer Satisfaction

What is your level of agreement with the following statements relating to Customer satisfaction in CBE (1- strongly disagree, 2- Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree)?

	Dimension					
	Customer Satisfaction	**1**	**2**	**3**	**4**	**5**
Cs1	I am satisfied with the transaction processing via Digital banking services.					
Cs2	I think I made the correct decision to use Digital banking service quality.					
Cs3	My satisfaction with Digital banking services is high.					
Cs4	I am satisfied with the bank's e-services quality.					
Cs5	Overall, the Digital banking services quality is better than I expected.					
Cs6	I am satisfied with the accuracy of data in Digital banking.					
Cs7	Digital banking service quality provides me with up-to-date information.					

Part IV Dimensions to Measure Brand Image

What is your level of agreement with the following statements relating to Band Image in CBE (1- strongly disagree, 2- Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree)?

	Dimension					
	Brand Image	**1**	**2**	**3**	**4**	**5**
Bri1	It makes me attractive and dependable for good impressions.					
Bri2	CBE Brand provides a solution to my expectations.					
Bri3	I feel delighted and feel the good frequency of use.					
Bri4	CBE brand looking for a cheap, desirable lifestyle gives me pleasure.					
Bri5	CBE is perceived by others, it promises to make me feel accepted in my social group.					

Thank You for Your Cooperation!!!