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Department of Economics and Finance

THE EFFECTS OF ELECTRONIC BANKING SYSTEM ON THE FINANCIAL PERFORMANCE OF BANKS IN SOMALIA (SALAAM SOMALI BANK)

Master Thesis

HAWO ABDI GEDI

Supervisor

Assoc. Prof. Dr. Lokman KANTAR

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DECLARATION

I hereby declare that in the preparation of this thesis, scientific ethical rules have been followed, the works of other persons have been referenced by the scientific norms if used, there is no falsification in the used data, any part of the thesis has not been submitted to this university or any other university as another thesis.

Hawo Abdi Gedi

DATE

TO ISTANBUL GELISIM UNIVERSITY

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The thesis study of Hawo Abdi Gedi titled The Effects of electronıc bankıng system on the fınancıal performance of banks in somalıa has been accepted as MASTER THESIS in the Department of Economics and Finance by our jury.

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SUMMARY

Electronic banking, also known as e-banking, refers to the use of electronic and telecommunication networks to provide a wide range of value-added products and services to bank customers. It is a result of integrating e-commerce in the banking and financial services sector. The electronic banking system in Somalia lags behind global standards, resulting in a delayed introduction of electronic banking in the country. This study examined the effects of electronic payments, mobile banking, online banking, and financial performance. This study used a survey method with 133 respondents. The respondents are collected from people in Somalia. The data obtained in the study were processed using the IBM SPSS Statistics analysis tool V25.0. Quantitative methods of data collection were used in this study with questionnaires. Electronic banking systems have significantly transformed the financial landscape of Salaam Somali Bank and the broader banking sector in Somalia. This study has established that electronic banking has not only enhanced the efficiency of banking operations but has also improved customer satisfaction through more accessible and faster services.

The study also acknowledges challenges such as cyber security threats and the need for continuous technological upgrades. However, this study has limitations in getting some detailed data because of confidentiality reasons which made the data collection very difficult since most of the commercial banks could not provide the critical information that was required because of fear that competitors could use the information for their gains.

Keywords: Financial performance, mobile banking, online banking, electronic payments.

ÖZET

E-bankacılık olarak da bilinen elektronik bankacılık, banka müşterilerine çok çeşitli katma değerli ürün ve hizmetler sunmak için elektronik ve telekomünikasyon ağlarının kullanılmasını ifade eder. Bu, e-ticaretin bankacılık ve finansal hizmetler sektörüne entegrasyonunun bir sonucudur. Somali'deki elektronik bankacılık sisteminin küresel standartların gerisinde kalması, ülkede elektronik bankacılığın geç devreye girmesine neden oluyor. Bu çalışmanın amacı elektronik ödemeler, mobil bankacılık, çevrimiçi bankacılık ve finansal performansın etkilerini incelemektir. Bu çalışmada 133 katılımcıyla anket yöntemi kullanılmıştır. Ankete katılanlar Somali'deki insanlardan oluşan bir koleksiyon. Çalışmada elde edilen veriler IBM SPSS İstatistik analiz aracı V25.0 kullanılarak işlenmiştir. Bu çalışmada anketlerle nicel veri toplama yöntemleri kullanılmıştır. Elektronik bankacılık sistemleri, Salaam Somali Bank'ın ve Somali'deki daha geniş bankacılık sektörünün mali manzarasını önemli ölçüde dönüştürdü. Bu çalışma, elektronik bankacılığın yalnızca bankacılık işlemlerinin verimliliğini artırmakla kalmayıp, aynı zamanda daha erişilebilir ve daha hızlı hizmetler yoluyla müşteri memnuniyetini de artırdığını ortaya koymuştur.

Çalışma aynı zamanda siber güvenlik tehditleri ve sürekli teknolojik yükseltme ihtiyacı gibi zorlukları da kabul ediyor. Ancak bu çalışmanın gizlilik nedenlerinden dolayı bazı detaylı verilerin elde edilmesinde sınırlamaları vardır ve bu da veri toplamayı çok zorlaştırmıştır; çünkü ticari bankaların çoğu, rakiplerin bilgileri kendi çıkarları için kullanabileceği korkusuyla gerekli olan kritik bilgileri sağlayamamışlardır.

Anahtar Kelimeler: Finansal performans, mobil bankacılık, çevrimiçi bankacılık, elektronik ödemeler.

TABLE OF CONTENTS

CHAPTER THREE
RESEARCH METHODOLOGY

ABBREVIATIONS

ATM:	Automated Teller Machine
B2C:	Business-to-consumer
CFS:	Cash Flow Statement A cash flow statement
EFT:	Electronic Funds Transfer
GM:	Gross Margin
GP:	Gross Profit
GPM:	Gross Profit Margin
ICT:	Information and Communication Technology
NI:	Net Income
NS:	Net Sales
OP:	Operating Margin
ROA:	Return on Asset
ROE:	Return on Equity
ROI:	Return on Investment
ROS:	Return on Sales
SMS:	Short Message Services
SPSS:	Statistical Package Social Sciences
SSB:	Salaam Somali Bank

LIST OF TABLES

PREFACE

I would like to thank God the almighty and merciful who gave us the strength and patience to accomplish this work. Secondly, I want to express my sincere thanks and gratitude to Associate Professor Lokman KANTAR, for all his flexibility, adaptability, inspiration, courage, and unceasing support during my work and research. Also, I want to thank my parents for their continued prayers and encouragement, they helped me financially and morally, believed me when everyone believed me, and held me by an arm to overcome the trials of life. I am truly grateful for his gesture, and I hope to be useful one day for him.

INTRODUCTION

The rise of electronic banking systems has been a transformative force in the global banking sector, offering unprecedented convenience and efficiency. In Somalia, where traditional banking infrastructure is often challenged by geographical and political factors, the adoption of electronic banking has the potential to significantly enhance the financial performance of banks. This thesis aims to explore the effects of electronic banking on the financial outcomes of banks within Somalia, examining how digital platforms and tools influence profitability, operational efficiency, and customer satisfaction.

The importance of this study stems from Somalia's unique economic and regulatory environment, which presents both opportunities and obstacles for the implementation of advanced banking technologies. As Somali banks increasingly turn to electronic solutions to expand their reach and streamline operations, it is crucial to assess the tangible impacts of these technologies on their financial health. This analysis will focus on key performance indicators such as cost-to-income ratios, return on assets, and customer growth rates, providing a comprehensive overview of the financial benefits and potential drawbacks associated with electronic banking.

Furthermore, this research will delve into the adaptation processes of banks in Somalia, exploring how these institutions integrate electronic banking into their existing frameworks and the challenges they face in this digital transition. By conducting empirical studies and analyzing secondary data from leading banks that have adopted these systems, the thesis will offer valuable insights into the strategic decisions that drive financial success in the context of electronic banking. The findings are expected to contribute to the broader understanding of digital banking's role in enhancing the financial landscape in emerging markets like Somalia.

CHAPTER ONE

INTRODUCTION

This chapter presents the background to the study and, a statement of the problem. It further presents the General Objectives of the Study, Specific Objectives of the Study, Research Questions, the Scope of the Study including; Contents, Geography, and Times, and lastly Significance of the Study.

1.1. Background of the Study

In today's fast-paced and highly competitive global market, organizations must employ effective and efficient strategies to survive, thrive, and generate profits that contribute to their growth. One crucial aspect of successful marketing management is prioritizing customer satisfaction, and recognizing customers as essential stakeholders. Researchers and organizations have long recognized the importance of customer satisfaction and service quality, with studies demonstrating a strong correlation between service quality and customer satisfaction (Wilson, Zeithaml, Bitner, & Gremler, 2008).

The banking industry has undergone significant transformation, moving away from manual systems like ledger cards to embrace electronic systems for information retrieval, storage, and processing. Internet technology, in particular, holds immense potential to revolutionize banks and their services. Some even argue that the Internet will disrupt traditional models of developing and delivering bank services (DeYoung, 2001). The widespread availability of Internet banking is expected to impact the range of financial services offered by banks, the methods employed to deliver these services, and ultimately the financial performance of banks.

Internet banking has emerged as a strategic resource for enhancing efficiency, operational control, and cost reduction in the banking sector. By replacing paper-based and labor-intensive methods with automated processes, internet banking enables higher productivity and profitability. However, despite its potential benefits, limited evidence exists regarding the actual impact of Internet banking on banking profitability. Recent empirical studies suggest that Internet banking does not

independently influence banking profitability, although this may change as Internet usage becomes more widespread.

In India, there has been a growing availability of financial products and services through the Internet, making it a significant distribution channel for several banks (Malhotra and Singh, 2004). According to Bhattacharya and Thakor's (1993) contemporary banking theory, banks play a vital role, along with other financial intermediaries, in the capital allocation process of an economy. The literature on financial intermediation, centered on information asymmetries, provides a powerful framework to understand how banks operate. It assumes that different economic agents possess varying pieces of information on relevant economic variables, and they will utilize this information for their benefit (Freixas and Rochet, 1998). Asymmetric information gives rise to adverse selection and moral hazard problems. Adverse selection occurs before the transaction and is related to the lack of information about the lenders' characteristics. Moral hazard, on the other hand, occurs after the transaction and relates to the lenders' incentives to behave opportunistically.

Previous studies have primarily focused on the relationship between loans, deposits, and other variables, but Josiah and Nancy (2012) explored different variables. Their study involved 27 commercial banks in Kenya from 2006 to 2007. The findings indicated a significant positive relationship between e-banking and return on assets (ROA) in the banking industry of Kenya. Overall, the study concluded that the adoption of e-banking, particularly the use of debit cards and ATMs, provided customers with convenient 24/7 access to their money.

The Disconfirmation theory of consumer satisfaction emphasizes the importance of customer retention and loyalty. It is a practical theory that addresses the post-purchase evaluation of product quality based on pre-purchase expectations (Jamal, 2014). Customer satisfaction is considered a cognitive-based phenomenon, with cognition often studied through the expectations/disconfirmation paradigm. This paradigm suggests that expectations stem from customers' beliefs about the performance level a product or service will provide (Oliver, 2013). Customer satisfaction is related to the magnitude and direction of disconfirmation, which

represents the difference between post-purchase and post-usage evaluations of product/service performance and the pre-purchase expectations (Sharma and Ojha, 2014).

Electronic banking, also known as e-banking, refers to the use of electronic and telecommunication networks to provide a wide range of value-added products and services to bank customers (Steven, 2002). It is a result of the integration of e-commerce in the banking and financial services sector (Ovia, 2001). Electronic banking operates in the business-to-consumer (B2C) domain, offering traditional banking services such as balance inquiries, checkbook requests, stop payment instructions, balance transfers, account opening, and facilitating payments on behalf of customers who shop online.

The introduction of electronic banking has significantly enhanced banking efficiency in serving customers. Information and Communication Technology (ICT) plays a crucial role in Kenya's electronic banking system (Steven, 2002). Information systems are indispensable for the banking industry in Kenya, as they are closely tied to the entire cash flow of most banks.

The application of information and communication technology concepts, techniques, policies, and implementation strategies has become of utmost importance for banks to remain locally and globally competitive (Connel and Saleh, 2004). Technological advancements have played a vital role in improving service delivery standards in the banking industry. Automated Teller Machines (ATMs) and deposit machines allow consumers to conduct banking transactions outside of traditional banking hours. Online banking enables individuals to check their account balances and make payments conveniently without visiting a physical bank branch.

This study aims to examine the differences between Internet banks and non-Internet banks in terms of profitability, cost efficiency, asset quality, and other characteristics by analyzing financial statements from 1998 to 2006. The study not only explores whether the Internet delivery channel affects the financial performance of commercial banks but also investigates the mechanisms behind these changes. It utilizes a comprehensive set of ten financial performance measures to gain insights into the underlying factors influencing bank performance.

E-banking facilitates various elements such as accurate transaction statements, current account summaries, transfers in different currencies, utility bill payments, customs payments, electronic transaction confirmations, and the management of credit cards (Singh K, 2006).

In Africa, electronic banking is gradually gaining traction. For example, Madueme (2009) emphasizes that Nigerian banks, in line with globalization, must embrace electronic banking services to enhance effective service delivery and exceed customer satisfaction.

The electronic banking system in Somalia lags behind global standards, resulting in a delayed introduction of electronic banking in the country. Cash remains the dominant medium of exchange. Modern e-banking methods such as Automated Teller Machines (ATMs), internet banking, and mobile banking are relatively new to the Ethiopian banking sector. Information and communication technologies play a crucial role in advancing banking services by introducing electronic banking to facilitate various activities, including viewing account balances, initiating payment requests, transferring funds efficiently, accessing account histories, and paying bills (Gikandi and Bloor, 2010). Therefore, this study focuses on examining customer satisfaction levels in electronic banking through the lens of service quality dimensions. Additionally, it aims to identify the challenges associated with e-banking usage in commercial banks in Somalia, with a particular focus on Salaam Somali Bank as a case study.

1.2. Problem of the Study

The introduction and use of electronic banking have received different perceptions. One view is that it may not have created customer satisfaction for bank clients. Despite the use of ATMs, EFT, and mobile banking, several customers in selected banking institutions still complain about their services and are not satisfied with their quality. Shortfalls in the use of the system include breakdowns of ATMs, long queues at ATM service points, retention of customer cards, limited knowledge of the use of ATM cards, fraudulent transactions, and its operation in just a few languages (Carlos & Tiago, 2018). Furthermore, customers complain about network

downtime, online theft, and fraud, non-availability of financial services, payment of hidden costs of electronic banking like Short Message Services (SMS) for sending alerts, mandatory acquisition of ATM cards, and non-acceptability of bank cards for international transactions, among other issues, despite repeated efforts by the management of these selected banks to address these concerns (Ismail Ali, 2013). It is against this background that the researcher was prompted to investigate and find out the effect of electronic banking in enhancing customer satisfaction in Mogadishu, Somalia.

1.3. Purpose of the Study

The purpose of the study was to examine the relationship between e-banking and the financial performance of selected commercial banks in the case of Salaam Somali Bank.

1.4. Objectives of the Study

The study will be guided by the following objectives:

- To assess the effects of the mobile banking performance of Salaam Somali Bank.
- To establish the effect of Internet banking on the financial performance of Salaam Somali Bank.
- To identify the effects of e-payments on the financial performance of Salaam Somali Bank

1.5. Objectives of the Study

- What is the relationship between the mobile banking performance of Salaam Somali Bank and its financial performance?
- What is the relationship between Internet banking and the financial performance of Salaam Somali Bank?
- What is the relationship between e-payments and the financial performance of Salaam Somali Bank?

1.6. Research Hypothesis

HO: There is a significant positive relationship between e-banking and the financial performance of commercial banks.

1.7. Scope of the Study

1.7.1. Geographical Scope

The study will be carried out in Salaam Somali Bank, with a focus on bank customers who are knowledgeable about electronic banking and customer satisfaction. Salaam Somali Bank (SSB) is a bank headquartered in Mogadishu, the capital city of Somalia.

1.7.2. Content Scope

The study will examine the effect of e-banking and the financial performance of Salaam Somali Bank Branch.

1.7.3. Time Scope

The study will take place over six months, from April to September 2023. Secondary data was collected from a period ranging from 2015 to 2022. The selected study period was considered sufficient for data collection and the presentation of findings, aiming to provide valuable information for both academic purposes and decision-making

1.8. Significance of the Study

With the rapid development of Information Technology, banks are increasingly relying on conducting banking transactions electronically. The study conducted may enable bank executives and policymakers to become aware of electronic banking as a product of electronic commerce. This awareness can help them make strategic decisions regarding the implementation and utilization of electronic banking.

The research is significant as it aims to identify the factors that hinder the implementation of electronic banking in Salaam Somali Bank. By addressing these factors, the findings of the study can assist the selected banking institutions in improving their electronic service quality and enhancing customer satisfaction. This can be achieved by focusing on the dimensions that have the highest impact on customer satisfaction.

Moreover, the study may serve as a foundation for future researchers to conduct further research in the field of electronic banking. By building upon the findings and insights of this study, subsequent researchers can delve deeper into the intricacies of electronic banking and explore new avenues for improvement and innovation.

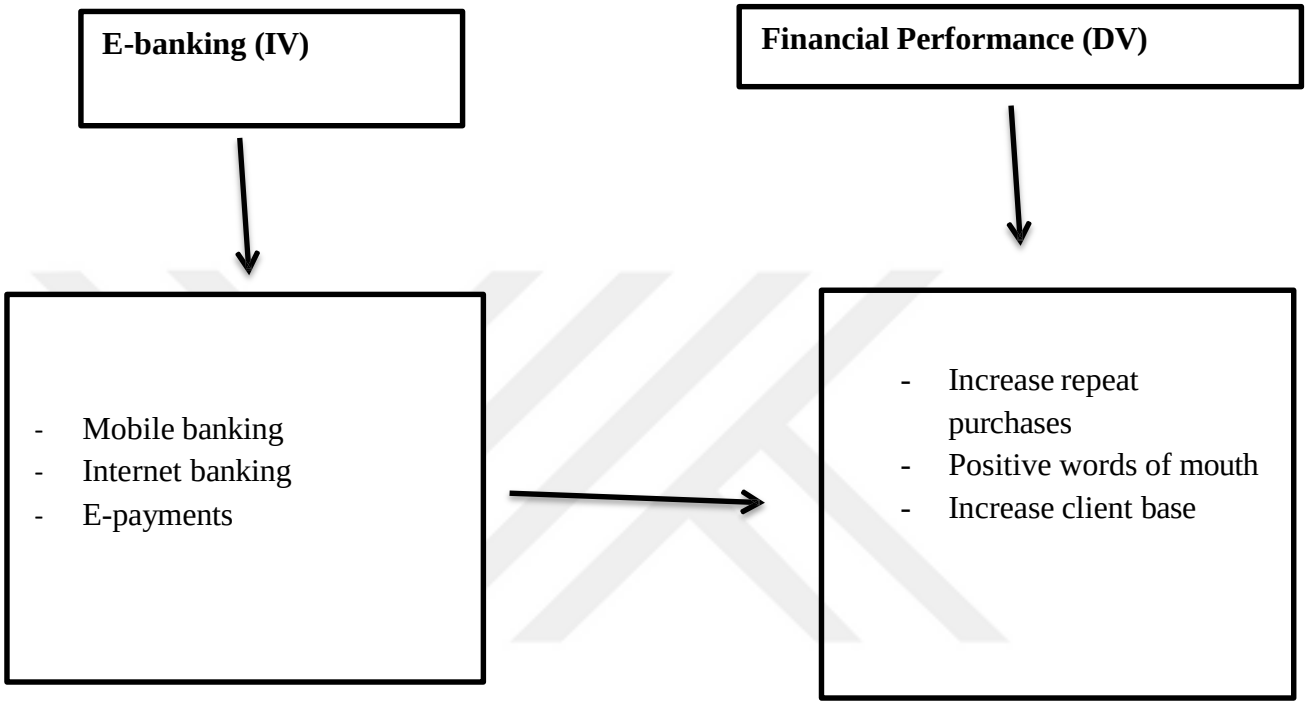
Furthermore, the study highlights the problems associated with manual processes such as delays, inaccuracies, and inefficiencies. It emphasizes how the impact of e-banking can overcome these challenges and completely transform traditional banking processes.

1.9. Conceptual Perspective

A Conceptual framework showing the relationship between E-banking and

Customer satisfaction

Figure 1 Conceptual framework



Source: Khalifa & Liu (2011)

The conceptual framework in Figure 1 illustrates that e-banking influences the level of customer satisfaction. E-banking is broken down into smaller constructs such as the use of ATMs, electronic funds transfer, and mobile banking. These components of e-banking contribute to the overall customer experience. Customer satisfaction, in this framework, is conceptualized in terms of increased repeat purchases, positive word-of-mouth, and an expanded client base. These outcomes indicate a high level of satisfaction among customers who engage with e-banking services.

However, the relationship between e-banking and customer satisfaction can be modified by external factors. The nature of government policies, the level of technology available, and the economic climate can all influence the overall relationship between e-banking and customer satisfaction.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

Information technology advancements have caused a substantial upheaval in the banking sector. The purpose of this study is to examine how electronic banking affects commercial banks' financial performance in light of this change. This chapter includes important terms and important information about information technology and electronic banking, gathered from a variety of reliable sources including reports, newspapers, periodicals, textbooks, and the Internet.

Key ideas that are important to the study are defined, explained, and discussed in the literature review. These ideas include, among other things, electronic banking, checks, automated teller machines (ATMs), and information technology.

2.2. Theoretical perspective

2.2.1. Bhattacharya and Thakor (1993) Contemporary Banking Theory

According to the contemporary banking theory proposed by Bhattacharya and Thakor (1993), banks and other financial intermediaries play a crucial role in the distribution of capital within the economy. The literature on financial intermediation is a highly effective tool to describe how banks work. The assumption behind information asymmetries in this literature is that various economic agents will exploit their knowledge of pertinent economic variables for personal gain. These agents are thought to possess varying pieces of information about these variables (Freixas and Rochet, 1998). Asymmetric information causes issues with moral hazard and adverse selection. Due to a lack of knowledge about the characteristics of the lenders, An asymmetric information problem called adverse selection occurs before the transaction. Moral hazard develops following the purchase. It has to do with the lenders' motivations to act opportunistically.

Connell and Saleh (2004) describe how three different parties consumers, enterprises, and issuers are involved in smart card schemes.

Customers: Due to this new payment instrument's increased convenience, customers are likely to embrace it. These kinds of features are necessary for a payment instrument like this to be accepted: anonymity; security (which includes trustworthy authentication methods and ways to compensate users for losses, thefts, or malfunctions); liquidity; low transaction costs (which include less handling and clearing of paper money); and speed (which includes quicker updating of balances and transaction times).

Businesses: Pre-paid cards are profitable for suppliers of products and services since they handle cashless expenses and don't result in interest losses on cash holdings. Converting from credit card to smart card payments can also result in significant savings because smart cards process all of the payments at the end of the business day, which eliminates the need for remote connections for each payment.

Card Issuers: Due to the many benefits that smart cards offer, both customers and retailers are prepared to invest. Smart card businesses can be successful businesses for those putting out new concepts, at least until the pressure of competition diminishes the additional revenues.

The introduction of e-commerce and information and communication technology (ICT) has generated ongoing disputes as to whether and how it improves bank performance, despite the potential benefits. Adopting and utilizing ICT involves risks and expenses that go along with possible rewards. It also calls for corresponding investments in organization, creativity, and skills. Though ICTs and e-business strategies generally have a beneficial effect on bank performance, it's crucial to remember that ICTs by themselves are not a cure-all.

The study that is being given here shows that e-banking has a favorable impact on profitability and turnover. It also has some effect on employment, especially when e-commerce is incorporated into larger bank business strategies. Furthermore, Kariuki (2005) offers proof that the adoption of e-banking can boost bank performance by increasing market share, diversifying product offerings, personalizing services, and improving responsiveness to customer needs.

2.2.2 Contrast Theory

Contrast theory, according to Dawes et al. (1972), is the propensity to emphasize the differences between one's attitudes and the attitudes indicated by assertions of external opinion. It was first put forth by Hovland, Harvey, and Sherif in 1987. In contrast to assimilation theory, this theory provides a different viewpoint on the post-usage evaluation process and yields divergent predictions about how expectations impact satisfaction.

The advent of automated teller machines (ATMs) has greatly enhanced the ease of accessing bank account funds in terms of customer behavior, particularly in contrast to the conventional approach of making cash withdrawals at the counter. Banks looking to implement ATM technology should think about joining existing national or international networks, such as Visa or Mastercard, or invest heavily in growing their ATM networks, to improve consumer satisfaction. As opposed to trying to reduce the difference between their expectations and real experiences, consumers, according to contrast theory, often experience a "surprise effect" that accentuates or magnifies this gap. This is where contrast theory differs from assimilation theory.

Contrast theory states that any difference between the customer's experience and their initial expectations is magnified in that direction. A product or service could be viewed as wholly inadequate, for example, if a business sets high standards through its advertising yet the customer's experience only somewhat meets those standards. Positive disconfirmation, on the other hand, will also be amplified if a business purposefully sets low expectations in its advertising and then exceeds them. It is implied that commercial banks should carefully manage client expectations in their advertising and service delivery when applying contrast theory to their business. When unreasonable expectations are set and not fulfilled, it can cause dissatisfaction Instead, delivering more than what is promised might leave clients feeling pleasantly surprised, which will eventually increase their level of satisfaction. According to this view, commercial banks ought to consistently provide novel goods and services that surpass their clients' expectations. This strategy is essential for raising consumer satisfaction and maintaining market competitiveness.

2.3. Types of E-Banking

2.3.1. The Card System

The distinctive method of electronic payment is the card system. Credit and debit cards are settled with smart cards, which are plastic cards with embedded circuitry. Their unique capacity to safely handle, modify, and run several apps on a single card is what makes them so strong (Amedu, 2005). Smart cards can be used as debit cards, credit cards, and ATMs (automated teller machines) depending on how sophisticated they are. It is noteworthy that the Spanish Financial Institution has the largest acceptance and implementation of smartcards throughout Europe, even if electronic cards are becoming more and more popular in Uganda and the United States (Amedu, 2005).

The goal of introducing the Smart Card into the Ugandan market was to solve problems associated with carrying actual currency (Amedu, 2005). These cards, which include a microchip that stores information, may be carried like credit cards and are electronically filled with a monetary value. This microchip has a virtual "purse" where the electronic monetary value is kept. Furthermore, security mechanisms included in smart cards protect transactions between cardholders. The ability to pay for products and services directly using smart cards at merchants, shops, and other establishments is another convenience they provide. Just like with cash, transactions may take place between people without the banks or other intermediaries being involved. Immediate valuation is ensured by this mechanism, which functions without the need for central clearance. Apart from that, the system makes it easier for parties to transfer value to one another; it functions similarly to actual currency.

2.3.2 The Automated Teller Machine (ATM)

The main and commonly recognized method of carrying out financial transactions and fulfilling financial obligations is the physical usage of paper money on a global scale. However, the percentage of cash transactions is rapidly declining, especially in developed nations (Amedu, 2005). More than half of all transactions in

the United States are made using cash, which is still a very common form of payment compared to countries in Europe. The fact that cash transactions are not electronic should not be overlooked. The advent of the automated teller machine (ATM), an electronic instrument, has substantially decreased the need for physical currency handling and in-person bank branch visits. Using a cash dispenser (the machine), an ATM allows bank clients to take out cash from their accounts; the amount is immediately deducted from the consumers' accounts. ATMs' ability to operate outside of banks' physical locations is a major benefit. As a convenience to consumers, they are usually located in a variety of places such as retail establishments, malls, and gas stations.

2.3.3 Direct Deposit and Withdrawal Services

Customers can utilize it to have specific deposits into their accounts, including salary or social security payments, approved automatically. For a charge, you can also give the bank permission to take money out of your account to cover recurring expenses like your mortgage, installment loans, insurance premiums, and energy payments.

2.3.4 Pay by Phone System

Customers can also call financial institutions and leave instructions for individual invoices to be paid or for money transfers between accounts.

2.3.5 Point-of-Sale Transfer Terminal

Customers can pay for retail transactions with a check card, which is simply a renamed debit card. This card resembles a credit card, but it differs in one important way: the money for the transaction is sent right away from the customer's account to the store's account. This means you are no longer able to take advantage of the credit card "float," which is the period between making a transaction and paying the credit card bill. Since money is deposited instantaneously at the point of sale, it is essential to be cautious and keep a careful eye on spending to prevent overdraft fees and other costs.

2.3.6 Personal Computer Banking Services

It offers consumers the ease of quickly and easily engaging out a variety of banking tasks electronically utilizing a personal computer. Customers have access to online account balances, account transfer requests, and remote electronic bill payments.

2.4. Related Literature

2.4.1. Financial Statements

financial statement, also known as a financial report, is an official record that details the financial performance and operations of an organization, person, or other company. Financial statements are intended to give pertinent information about the entity's financial performance, financial status, and changes over time. Financial statements are meant to provide a wide variety of consumers with information that will help them make educated financial choices.

2.4.2. Cash Flow Statement

A cash flow statement (CFS) has been an obligatory part of a business's financial filings since 1987. It documents the company's inflow and outflow of cash and cash equivalents. Investors can gain insightful knowledge about the company's cash flow, funding sources, and operational performance from the CFS. It's crucial to comprehend the CFS's structure and apply it to financial analysis.
It's critical to remember that the cash flow statement is different from the balance sheet and income statement in that it only includes real cash transactions; future cash flows booked on credit are not included. As a result, cash on The income statement and balance sheet's net income, which includes both cash and credit sales, is not the same as CFS. Through an analysis of the CFS, investors may have a thorough grasp of a company's operational processes, cash flow, and use of funds. Investors may evaluate the company's financial health and make wise judgments with the use of this information.

2.4.3. Statement of Financial Profit

A type of financial statement called a profit and loss (P&L) statement shows all revenues, expenses, and expenditures for a specific time, usually a fiscal quarter or year. These documents offer crucial information about a business's capacity to turn a profit by raising sales and efficiently controlling expenses. There are several names for the P&L statement, such as "income statement," "income and expense statement," or "statement of profit and loss." P&L statement often has a set format for its structure. It starts with a revenue portion and then subtracts several expenses related to operating the firm. The cost of products sold, operational expenditures, tax charges, and interest expenses are usually included in these costs. The net revenue or profit is represented, both literally and symbolically, by the final sum. It's important to note that creating your profit and loss statement is made easier by the abundance of free templates that are accessible online. The income statement is one of the most important financial statements for a firm, along with the balance sheet and the statement of cash flows. Even if each statement is important on its own, they are most useful when taken as a whole to give a complete picture of a company's financial situation.

2.4.4. Statement of Comprehensive Income

Comprehensive income is the change in net assets of a company that comes from non-owner sources during a specific period. It includes all recognized revenue and costs for that time frame. Some components are included in this statement, including revenue, financing costs, tax charges, discontinued operations, profit sharing, and profit/loss.

The income statement that shows changes in equity connected to owners is usually not the same as the comprehensive income statement that firms provide. On the other hand, businesses might choose to include all of this information in a single declaration. To prevent combining owner and non-owner operations, which may mask the underlying facts, many businesses, nevertheless, favor the separate statement treatment.

Firms can offer a clearer picture of the entire performance and financial performance resulting from non-owner operations by disclosing comprehensive income independently. As a result, there is less chance for shareholder misunderstanding from owner-related transactions when analysts and investors examine the comprehensive income statement on their own and get a better picture of the company's performance

2.4.5. Notes to the Account

A collection of notes that are mentioned throughout the main body of the financial statements is referred to as the notes to the accounts. Additional information on the figures included in the accounts is provided in the notes. It's important to recognize the significance of these figures. Without the notes, the accounting is not comprehensive. Investors who only read the main text of the reports and disregard the annotations run the risk of misleading.

2.4.6. Statement of Change in Owner's Equity

A financial statement used in company accounting that summarizes the sources and uses of funds and explains changes to cash or working capital is called a statement of change in financial position. The operations-related actions that impact a company's cash situation are the main subject of this statement. Cash inflows like income and cash outflows like capital expenditures are both included in changes in the financial situation. Its goals are to track changes in cash and working capital over a certain time and to give a thorough picture of how money is being used inside the organization.

2.4.7. Financial Raio

The success of an organization and financial stability can be forecast with financial ratios. The financial accounts may be used to determine the majority of ratios. Financial ratios may be used to compare the company's financial performance to that of other companies and look for trends**.** Sometimes a bankruptcy can be forecasted using ratio analysis.

2.4.8. Liquidity

The amount that a security or asset can be purchased or sold for on the market without having any effect on the price of the security or asset is measured by this metric. Liquidity is unique because of the volume of trading it sees. Assets that are straightforward to buy, sell, or transfer are regarded as liquid assets.

Current Ratio

The current ratio, also known as the current or working capital position, is a typical financial indicator used to evaluate a company's liquidity since it represents the proportion of current assets that are readily accessible to cover current liabilities. Using this ratio, one can assess a company's capacity to meet short-term obligations with its readily available short-term assets (notes payable, current portion of term debt, payables, accrued expenses, and taxes). Larger current-to-voltage ratios are ideal, according to the theory

Formula:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Acid Ratio

The acid ratio is the second ratio we'll talk about. Another name for this ratio is the quick ratio. The ability of a company to pay down its most liquid liabilities immediately is calculated using this ratio. Never forget that assets with a quick cash conversion rate are considered liquid. Except for inventory, which frequently converts to cash more slowly, the majority of current assets are quite liquid**.** Utilize the following formula how to get the acid ratio:

Formula:

Acid Ratio = Current Assets_ Inventory ÷ Current Liabilities

By excluding any inventories, the acid ratio concentrates on a company's current liquidity. It provides insight into the company's capacity to fulfill its responsibilities even in scenarios where inventory may take longer to turn into cash by taking into account only the most easily accessible assets.

A higher acid ratio indicates a stronger ability to meet short-term liabilities, as the company has a larger proportion of highly liquid assets relative to its current obligations. However, it's important to note that the ideal ratio can vary by industry and company circumstances.

Profitability

A group of financial indicators that are used to evaluate how profitable a company is about its expenditures and other pertinent expenses during a given time frame. For the majority of these ratios, a greater number indicates that the business is performing well as compared to the ratio of a rival business or the same ratio from previous years.

The profit margin, return on equity, and return on assets are a few instances of profitability ratios. It's crucial to remember that while examining these ratios, some prior information is required to draw pertinent comparisons.

The gross profit margin (GPM), operating margin (OM), return on equity (ROE), return on assets (ROA), return on sales (ROS), and return on investment (ROI) are common profitability ratios that are used to assess a company's success.

Gross Margin

Gross margin refers to the profitability of goods and services. It enables you with the cost of producing the goods. It is calculated by multiplying the quotient by 100 after dividing gross profit (GP) by net sales (NS):

Gross Margin = Gross Profit/Net Sales * 100

GM = GP / NS * 100

Operating Margin

Operating margin takes into account production costs such as overhead and administrative expenses that are not directly connected to the product or service's production.

It is computed by multiplying the quotient by 100 after dividing operating profit (OP) by net sales (NS):

Operating Margin = Operating Profit / Net Sales * 100

OM = OP / NS * 100

Return on Assets

Return on Assets measures how effectively a company produces income from its assets. To calculate it, divide the current year's net income (NI) by the total asset value (A) of the company, then multiply the quotient by 100:

Return on Assets = Net Income / Assets * 100

ROA = NI/A * 100

Return on Equity

Return on Equity is the ratio of a company's profits to the capital it is invested in it. To calculate it, divide the total amount invested by shareholders (SI) by net income received (NI), and then multiply the quotient by 100.

Return on Equity = Net Income / Shareholder Investment * 100

ROE = NI / SI * 100

2.4.9. Budget Control

The process of effectively managing every expense in a family or company budget to prevent heading beyond is known as budget control.

Its purpose is to ensure that expenditures do not exceed the allocated amounts and to avoid creating a net loss by aligning operational expenses with projected revenue for a given period.

Several key elements are involved in budget control. First, it is crucial to prepare a realistic budget that accurately reflects income sources and anticipated expenses. This involves carefully estimating revenue and categorizing expenses to create a comprehensive financial plan.

Monitoring income levels is another important aspect of budget control. Regularly tracking and evaluating actual income against projected income helps identify any discrepancies and enables adjustments to be made to the budget as necessary. This ensures that the budget remains aligned with the actual financial resources available.

2.5. Empirical Review

Customers' trust in e-banks' privacy policies has been questioned (Gerrard and Cunningham, 2003). Users' willingness to provide sensitive personal information and complete financial transactions online is largely determined by their level of trust (Friedman et al., 2000; & Wang et al., 2003). Privacy is an important factor that may influence customers' decisions to use e-based transaction systems.

E-banking systems frequently use encryption technology to increase security and privacy. This is a basic element of all bank websites. In addition to this technology, additional distinctive identifiers that help protect user accounts include passwords, mother's maiden name, dates that are easy to remember, and automated logouts that happen after a certain amount of inactivity (Hutchinson and Warren, 2003).

Customers may use online banking services anytime they want, from any place, with the great level of convenience that e-banking provides. Many people consider having easy access to computers to be an important advantage (Daniel, 1999; Black et al., 2001; Polatoglu and Ekin, 2015; Gerrard and Cunningham, 2003). However, Factors

influencing service quality that affect customer happiness and discontent must be taken into account. Dissatisfaction may be caused by elements like availability, functionality, responsiveness, attentiveness, and friendliness, but satisfaction can also come from elements like integrity, reliability, responsiveness, and availability (Johnston, 1995).

Additionally, the success of e-banking relies on the ability to meet users' needs through various features available on the website. Features like interactive loan calculators, exchange rate converters, and mortgage calculators draw the attention of both users and non-users to the bank's website (Gerrard and Cunningham, 2003). Convenience has been shown to have a positive effect on customer satisfaction. A UK study (White and Nteli, 2014) identified five main criteria of service quality: security-related issues, convenience, speed, timeliness of service, and product variety or diverse features.

According to Tomiuk and Pinsonneault (2001), using electronic banking significantly influences customer loyalty among users but harms non-users. Customer care and retention are crucial, given the convenience, ease, and speed of banking services. Raman et al. (2015) emphasized that customer satisfaction, commitment, loyalty, and retention are critical indicators influenced by the quality of service delivery.

Customer satisfaction is often defined as the result of cognitive and affective evaluations, where perceived performance is compared to expectations. If perceived performance falls short of expectations, customers are likely to be dissatisfied, whereas exceeding expectations leads to satisfaction (Saha, 2005). The operational constraints regarding consumer location, customer satisfaction, and the software capabilities of the bank can influence the decision to adopt electronic banking services and affect the overall level of satisfaction (Boateng and Molla, 2016).

In the e-banking sector, characteristics of high service quality including cost-effectiveness, ease of use, security, and responsiveness, are essential for enhancing customer satisfaction (Speece, 2003). Cost savings in e-banking allow for lower service and higher interest rates, providing a competitive advantage (Gerlach, 2000; Jun and Cai, 2001). The design, content, and security of online banking websites

significantly influence user satisfaction (Jayawardhena and Foley, 2000; Broderick and Vachirapornpuk, 2012).

Customer loyalty, often measured through repeat purchase frequency and attitudinal commitment, is influenced by factors like perceived value, brand perception, and cost-effectiveness (Hwang, 2015; Al-Jabri and Sohail, 2012). Loyalty reflects a customer's willingness to continue doing business with a particular entity, even in the face of competitive alternatives (Power & Associates, 2009). Establishing a commitment is required for building customer loyalty to the customer's best interests and generating positive advocacy (Michael, 2012). Customer satisfaction alone does not guarantee loyalty; instead, it's the development of committed customers who advocate for the business that truly adds value.

2.6. Research Gap

The literature review highlights how ATM services have transformed the way financial products and services are delivered to bank customers, having a transformative effect on the financial industry. This progress has not, however, been without difficulties as financial institutions look for more effective methods to improve their service offering while clients continue to demand better service quality (Banga, 2017). According to the adage, "For every step forward in development, many challenges must be faced, fought, and overcome." This emphasizes the idea that challenges and barriers frequently accompany success (Banga, 2017). Not an exception is the growth of ATM services in the banking sector, which has presented its own set of difficulties.

Khalifa & Liu (2012) examined the Disconfirmation theory of consumer satisfaction, however they did not specifically discuss how electronic banking affects customer happiness. Therefore, by examining the precise impacts of electronic banking on customer satisfaction, this study seeks to close that gap.
After investigating the relationship between customer satisfaction and behavioral reactions, Hwang (2015) concluded that happier consumers respond more favorably. The present study aims to fill the vacuum left by Hwang's study, which did not directly examine the impact of electronic banking on customer satisfaction.

The adoption of e-banking was the main focus of previous research, but with the satisfactory adoption levels attained, this is no longer a fundamental topic. Thus, the goal of this study is to reorient attention to comprehending how electronic banking and customer satisfaction are related.

Furthermore, it's important to note that this study is unique in its geographical scope, as it seeks to investigate the effect of electronic banking on financial performance in Somalia. This geographical gap in the study necessitates the exploration of how electronic fund transfers, including various methods such as wire transfers, ATM withdrawals, point-of-sale transactions, direct deposits, and online bill payments, impact electronic banking in this specific context. These electronic fund transfers are typically processed securely through an Automated Clearing House (ACH) network, which is a crucial component of the study's investigation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter will shed light on the methodology of this study and explain deeply the following section such as a description of the research design, study population, sample size, Sampling Techniques, research instrument, Sources of data, method of data collection, data analysis, limitation of the study and ethical consideration.

3.1. Research Design

A research design, according to Kothari (2008), is the conceptual framework used to carry out a study. It acts as a guide for the researcher's actions during the data collecting, measurement, and analysis phases, from formulating the hypothesis and considering its application to the real world to examining the data at hand.

The study is descriptive, and the researcher used both qualitative and quantitative methods.

The researcher employed a quantitative approach and employee-collected data to better understand how financial institutions and e-banking are performing. Through qualitative

Methods and interviews, the actions and effects of electronic banking on the functioning of financial institutions were described.

3.1.1 Study Population

The study population will comprise 200 respondents, which were drawn from the bank selected 2 banks and these Banks included, including Salaam Somali Bank, The researcher chose these banks mainly because they were the ones at the forefront of embracing technology in banking more specifically electronic banking

3.1.2 Sample Size

The sample size is obtained by use of a formula. The Slovene formula is used to determine the minimum sample size of the study population. The target population is 200 using Slovene's (1960) formula which is as follows;

n= N/ 1+ N(e2)

Where n=sample size

N population size

e= margin of error of 5%

n= N/ (1+ N(e2)

n= 200/ 1+200(0.0025)

= 133.33 Respondents

3.2.3 Sampling Technique

This study will employ a purposive sampling technique to select a sample. Purposive sample technique the researchers consciously will decide who to include in the sample. The main aim is to collect reliable information. For this study, it is preferred since it saves money and time.

3.2.4 Research Instrument

This study will use the questionnaire as a tool for gathering and collecting the data and information required. Because it may target respondents in widely separated places and because the necessary information can be quickly and easily gathered from the respondents. A questionnaire is a type of information tool where individuals are asked to respond to the same set of questions in a specified order. The questionnaire is a formalized set of questions for obtaining information from respondents Guidelines for questionnaire construction are provided at each stage of the process, besides on research objectives of the study. The type of data to be collected, the amount of time available, and the study's objectives all played a role in the tool selection. Questionnaire techniques are used for collecting primary data as they provide an efficient way to collect responses from a large sample size.

With the help of existing questionnaires, Researchers will develop a questionnaire by modifying irrelevant questions to achieve and answer research questions**.**

3.2.5 Data Sources

a) Primary Data

Primary data was collected directly from the respondents. This was done through administering a structured questionnaire with the help of one research assistant. Respondents were guided through the questionnaire to ensure a high level of accuracy in the data collection process.

b) Secondary Data

Secondary data was collected from journal articles published by companies such as the Emerald Publishing Group and from other relevant publications on the topic. Other secondary sources were Newspapers, reports, and conference proceedings.

3.2.6 Data Collection

Data was collected through administering a questionnaire that contained close-ended questions relating to each study variable the items in the questionnaire were attached such that; Strongly agree, Agree, Not sure, Disagree, Strongly disagree. Mean that are close to Disagree and strongly disagree reflect Disagreement while that mean that are at least equal to Agree, indicate agreement. A mean that is close to uncertain indicates uncertainty. Based on how much they agreed or disagreed with the assertions in the questionnaire, the respondents provided their answers.

3.2.7 Questionnaire Survey

Data is collected under these using closed-ended questionnaires. Questions were asked and a list of valid responses was presented to the respondents for selection (Gibson, 2000). These responses were in terms of the extent to which the respondents agreed with the statement in question. The questionnaires were self-administered by the researcher.

3.3 Realibility and Validity of Research Instruments

3.3.6 Reliability

Reliability means how reliable our data is. I believe that my dissertation reliability is sufficiently high because the same title would be conducted later on with the same interview questions and the same respondents (i.e. Employees from selected commercial banks in Salaam Somali Bank. Hence the answers collected will be seen as enough trustworthy data that can be applied to any other developing countries. But it should be noted that, if the same investigation is conducted after a very long time, the results may not be the same as the ones collected.

3.3.7 Validity

The most important factor, validity, shows how well an instrument assesses the things it is meant to measure. Kothari (2004) stated. According to Anastasi and Urbina (1997) once more, "validity refers to the extent to which the test measures what it purports to measure." To measure the validity of data in this study, the construct validity was employed. According to Smith (1981) cited in van Zyl and van der Walt, (1994), “construct validity concerns the extent to which a test/ questionnaire measures a theoretical construct or trait.

3.4 Data Analysis

From the field, data was compiled, sorted, edited, and coded to have the required quality accuracy, and completeness. Due to accuracy in performing the statistical functions, For data analysis, many scholars use statistical software such as SPSS because of its accuracy in performing statistical functions. The SPSS with 20 versions was used in this study for statistical analysis of data collected through the questionnaire. The data and findings have to be presented in the form of tables. The data was analyzed according to the research questions to facilitate reporting and inferring meaningful conclusions.

3.5 Limitations of the Study

The study also faced the challenge of getting some detailed data because of confidentiality reasons which made the data collection very difficult since most of the commercial banks could not provide the critical information that was required because of fear that competitors could use the information for their gains.

3.6 Ethical Considerations

The entire research process was conducted with due respect to ethical considerations in research. The researcher obtained the consent of the respondents to participate in the study. The researcher will also mind treating the respondents’ views with utmost confidentiality. In general, a high degree of openness regarding the purpose and the nature of the research was observed by the researcher.

3.7 Analysis, Interpretation, and Presentation Findings

3.7.1 Gender

Table 1: Gender

		Frequency	Percent
Valid	Female	39	29.3
	Male	94	70.7
	Total	133	100.0

Primary Data (Source 2024)

Table 1 shows that 29.3% were female while 70.7% were males. This shows that respondents were more male than female. This was confirmed by the responses from the questionnaires filled where males were more than females. More significantly it shows that data obtained is free of gender bias.

3.7.2 Age

Table 2: Age

		Frequency	Percent
Valid	20-30	113	85.0
	30-40	15	11.3
	40-50	4	3.0
	50 and above	1	.8
	Total	133	100.0

Primary Data (Source 2024)

Table 1 shows that 85.0% of the respondents were between 20-30, 11.3% were between 30–40, 3.0% were between 40-50 and .8% above 50 years. This implies that there was a fair representation of the population as almost all classes were represented and the data provided reflected the views of the entire population the majority of the respondents are mature which means they can give a mature view.

4.1.3 Marital status

3.7.3 Martial Status

Table 3: Marital status

		Frequency	Percent
Valid	Divorced	5	3.8
	Married	22	16.5
	Single	105	78.9
	Widowed	1	.8
	Total	133	100.0

Primary Data (Source 2024)

Table 3 shows that 78.9% of respondents are single, 16.5% are married, 3.8% are divorced and .8% are widowed.

3.7.4 Education level

Table 4: Education level

		Frequency	Percent
Valid	Certificate	17	12.8

	Degree	86	64.7
	Diploma	11	8.3
	Others (Specify)	19	14.3
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 64.7% of the respondents were first-degree holders, 14.3% were others(specify), 12.8% were certificates and 8.3% were diplomas. This implies that the respondents are educated which means can read, understand, and interpret questionnaires reliably. The data collected was believed to be reliable and was thus processed to present findings.

3.7.5 Period served (Experience)

Table 5: Period served

		Frequency	Percent
Valid	1-5 years	105	78.9
	10 and above	11	8.3
	6-10years	17	12.8
	Total	133	100.0

Primary Data (Source 2024)

3.8 Mobile Banking

3.8.1 Mobile banking helps me complete transactions quickly and efficiently

Table 6: Mobile banking helps me complete transactions quickly and efficiently

		Frequency	Percent
Valid	1	8	6.0
	2	5	3.8
	3	31	23.3
	4	47	35.3
	5	42	31.6
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 35.3% of the respondents chose 4, 31.6% chose 5, 23.3% chose 3, 6.0% chose 1, and 3,8 chose 2.

3.8.2 I trust that my personal and financial information is secured when using mobile banking

Table 7: I trust that my personal and financial information is secured when using mobile banking

		Frequency	Percent
Valid	1	6	4.5
	2	7	5.3
	3	44	33.1
	4	50	37.6
	5	26	19.5
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 37.6% of the respondents chose 4, 33.1% chose 3, 19.5% chose 5, 5.3% chose 2, and 4.5% chose 1.

3.8.3 Mobile banking has made it easier for me to keep track of my incom and expenses

Table 8: Mobile banking has made it easier for me to keep track of my income and expenses

		Frequency	Percent
Valid	1	9	6.8
	2	13	9.8
	3	31	23.3
	4	46	34.6
	5	34	25.6
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 34.6% of the respondents chose 4, 25.6% chose 5, 23.3% chose 3, 9.8% chose 2 and 6.8% chose 1

3.8.4 I find mobile banking to be a time-saving way to manage my financial tasks

Table 9: find mobile banking to be a time-saving way to manage my financial tasks

		Frequency	Percent
Valid	1	7	5.3
	2	10	7.5
	3	37	27.8
	4	44	33.1
	5	35	26.3
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 33.1% of the respondents chose 4, 27.8% chose 3, 26.3% chose 5, 7.5% chose 2 and 5.3% chose 1.

3.8.5 I find that using mobile banking has positively influenced my overall financial management

Table 10: find that using mobile banking has positively influenced my overall financial management

		Frequency	Percent
Valid	1	11	8.3
	2	15	11.3
	3	34	25.6
	4	50	37.6
	5	23	17.3
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 37.6% of the respondents chose 4, 25.6% chose 3, 17.3% chose 5, 11.3% chose 2 and 8.3% chose 1.

3.9 Internet Banking

3.9.1 Customers fear online banking and use of electronic payment systems due to fear of hacking of their accounts by web hackers

Table 10: Customers fear online banking, and the use of electronic payment systems due to fear of hacking of their accounts by web hackers.

		Frequency	Percent
Valid	1	14	10.5
	2	26	19.5
	3	48	36.1
	4	25	18.8
	5	20	15.0
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 36.1% of the respondents chose 3, 19.5% chose 2, 18.8% chose 4, 15.0 chose 5 and 10.5% chose 1.

3.9.2 Internet banking allows me to have more control over my financial activities

Table 11: Internet banking allows me to have more control over my financial activities.

		Frequency	Percent
Valid	1	7	5.3
	2	14	10.5
	3	42	31.6
	4	48	36.1
	5	22	16.5

	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 36.1% of the respondents chose 4, 31.6% chose 3, 16.5% chose 5, 10.5% chose 2, and 5.3% chose 1.

3.9.3 The bank always ensures the security of data and information that is operated on the online banking platform

Table 12: The bank always ensures the security of data and information that is operated on the online banking platform

		Frequency	Percent
Valid	1	5	3.8
	2	12	9.0
	3	48	36.1
	4	44	33.1
	5	24	18.0
	Total	133	100.0

Primary Data (Source 2024)

This figure aboveshows that 36.1% of the respondents were choose 3, 33.1%were choose 4, 18.0% choose 5, 9.0% choose 2, 3.8% choose 1.

3.9.4 The bank has invested heavily in online banking

Table 13: The bank has invested heavily in online banking.

		Frequency	Percent
Valid	1	5	3.8
	2	13	9.8
	3	39	29.3
	4	50	37.6
	5	26	19.5
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 37.6% of the respondents chose 4, 29.3% chose 3,19.5% chose 5,9.8% chose 2, and 3.8% chose 1.

3.9.5 Using Internet banking has a positive on my overall financial performance

Table 14: Using Internet banking has a positive impact on my overall financial performance

		Frequency	Percent
Valid	1	13	9.8
	2	11	8.3
	3	40	30.1
	4	39	29.3
	5	30	22.6
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 30.1% of the respondents chose 3, 29.3% chose 4, 22.6% chose 5, 9.8% chose 1, and 8.3% chose 2.

3.10 Electronic Payments

3.10.1 Has the use of online banking and electronic payment systems improved the goodwill of the bank's customers

Table 15: Has the use of online banking and electronic payment systems improved the goodwill of the bank's customers

		Frequency	Percent
Valid	1	8	6.0
	2	10	7.5
	3	35	26.3
	4	52	39.1
	5	28	21.1
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 39.1% of the respondents chose 4, 26.3% chose 3, 21.1% chose 5, 7.5% chose 2, and 6.0 were chosen 1.

3.10.2 When transferring money through mobile banking services, the users are afraid that they will lose their money due to carelessness and mistakes

Table 16: When transferring money through mobile banking services, the users are afraid that they will lose their money due to carelessness and mistakes.

		Frequency	Percent
Valid	1	14	10.5
	2	40	30.1
	3	40	30.1
	4	23	17.3
	5	16	12.0
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 30.1% of the respondents chose 2, 30.1% chose 3, 17.3% chose 4, 12.0% chose 5, and 10.5% chose 1.

3.10.3 Considering the adoption of electronic payment systems, how much positive impact do you believe it has had on the overall financial performance and profitability of your bank?

Table 17: Considering the adoption of electronic payment systems, how much positive impact do you believe it has had on the overall financial performance and profitability of your bank?

		Frequency	Percent
Valid	1	9	6.8
	2	10	7.5
	3	48	36.1
	4	45	33.8
	5	21	15.8
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 36.1% of the respondents chose 3, 33.8% chose 4, 15.8% chose 5, 7.5% chose 2, and 6.8% chose 1.

3.10.4 To what extent do you perceive electronic payment systems to be secure in protecting sensitive financial information

Table 18: To what extent do you perceive electronic payment systems to be secure in protecting sensitive financial information?

		Frequency	Percent
Valid	1	9	6.8
	2	13	9.8
	3	50	37.6
	4	44	33.1
	5	17	12.8
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 37.6% of the respondents chose 3, 33.1% chose 4, 12.8% chose 5, 9.8% chose 2, and 6.8% chose 1.

3.10.5 The use of electronic payment systems makes it easier to track and manage expenses

Table 19: The use of electronic payment systems makes it easier to track and manage expenses.

		Frequency	Percent
Valid	1	7	5.3
	2	9	6.8
	3	40	30.1
	4	44	33.1
	5	33	24.8
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 33.1% of the respondents chose 4, 30.1% chose 3, 24.8% chose 5, 6.8% chose 2 and 5.3% chose 1.

3.11 Fianacial Performance

3.11.1 Has the bank increased new account openings?

Table 20: Has the bank increased new account openings?

		Frequency	Percent
Valid	1	6	4.5
	2	11	8.3
	3	47	35.3
	4	41	30.8
	5	28	21.1
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 35.3% of the respondents chose 3, 30.8% chose 4, 21.1% chose 5, 8.3% chose 2 and 4.5% chose 1.

3.11.2 The volume of the bank's sales has increased since the bank adopted the various forms of self-service technology.

Table 21: The volume of the bank's sales has increased since the bank adopted the various forms of self-service technology

		Frequency	Percent
Valid	1	6	4.5
	2	12	9.0
	3	43	32.3
	4	49	36.8

	5	23	17.3
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 36.8% of the respondents chose 4, 32.3% chose 3, 17.3% chose 5, 9.0% chose 2and 4.5% chose 1.

3.11.3 The bank has experienced an increase in return on assets

Table 22: The bank has experienced an increase in return on assets.

		Frequency	Percent
Valid	1	9	6.8
	2	18	13.5
	3	49	36.8
	4	38	28.6
	5	19	14.3
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 36.8% of the respondents chose 3, 28.6% chose 4, 14.3% chose 5, 13.5% chose 2 and 6.8% chose 1.

3.11.4 The bank has increased in return on assets due to electronic technology.

Table 23: The bank has increased in return on assets due to electronic technology.

		Frequency	Percent
Valid	1	8	6.0
	2	17	12.8

	3	46	34.6
	4	39	29.3
	5	23	17.3
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 34.6% of the respondents chose 3, 29.3% chose 4, 17.3% chose 5, 12.8% chose 2, and 6.0% chose 1.

3.11.5 The bank has experienced increased market share.

Table 24: The bank has experienced an increase in market share.

		Frequency	Percent
Valid	1	4	3.0
	2	10	7.5
	3	32	24.1
	4	56	42.1
	5	31	23.3
	Total	133	100.0

Primary Data (Source 2024)

The figure above shows that 42.1% of the respondents chose 4, 24.1% chose 3, 23.3% chose 5, 7.5% chose 2 and 3.0% chose 1.

3.12 Empirical Sections

3.12.1 KMO and Bartlett's Results

Table 25 KMO and Bartlett's Results

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**,**859
Bartlett's Test of Sphericity	Approx. Chi-Square	1043,125
	df	190
	Sig.	,000

The correlation matrix is checked to evaluate whether the data set is suitable for factor analysis. If the correlation coefficient between variables is 0.30 or above, the variables are considered suitable for factor analysis. As can be seen here, the variables are considered suitable for factor analysis since the correlation coefficient is 0.859 and the significance value is <0.05.

3.12.2 Total Variance Explained

Table 26: Total Variance Explained

Total Variance Explained									
		Initial Eigenvalues		Extractions sums of Squared Loadings			Rotation Sums of Squared Loadings		
Components	Total	% Of variances	Cumulative %	Total	% of Variances	Cumulative %	Total	% Of Variances	Cumulative %
1	6,637	34,932	34,932	6,637	34,932	34,932	3,605	18,975	18,975
2	1,834	9,653	44,585	1,834	9,653	44,585	3,219	16,942	35,917
3	1,349	7,099	51,684	1,349	7,099	51,684	2,386	12,557	48,474
4	1,168	6,150	57,834	1,168	6,150	57,834	1,778	9,360	57,834
5	,982	5,167	63,001						
6	,876	4,608	67,609						
7	,730	3,844	71,453						
8	,665	3,499	74,953						
9	,653	3,439	78,392						
10	,617	3,245	81,637						
11	,572	3,010	84,647						
12	,517	2,720	87,366						
13	,449	2,362	89,729						

14	,423	2,226	91,955						
15	,387	2,039	93,994						
16	,350	1,844	95,838						
17	,321	1,690	97,528						
18	,259	1,364	98,892						
19	,210	1,108	100,000						

Extraction Method: Principal Component Analysis.

There are different methods for determining the number of factors. One of these methods is that factors with an eigenvalue statistic (Eigenvalue) greater than 1 are determined to be significant. According to the variance percentages and eigenvalue statistics explained in Table 2, 4 factors appear to be significant. According to the table, these four factors explain 57.834% of the total variance. After the number of factors is determined, a common variance table is needed to understand which variables explain how much of their variance.

Table 27**:** Communalities

Communalities		
	Initial	Extraction
I trust that my personal and financial information is secured when using mobile banking.	1,000	,638
Mobile banking has made it easier for me to keep track of my income and expenses.	1,000	,603
I find mobile banking to be a time-saving way to manage my financial tasks.	1,000	,479
I find that using mobile banking has positively influenced my overall financial management	1,000	,659
Customers fear online banking, and the use of electronic payment systems due to fear of hacking of their accounts by web hackers.	1,000	,502
Internet banking allows me to have more control over my financial activities.	1,000	,551
The bank always ensures the security of data and information that is operated on the online banking platform.	1,000	,572
The bank has invested heavily in online banking.	1,000	,449
Using Internet banking has had a positive impact on my overall financial performance.	1,000	,530
Has the use of online banking and electronic payment systems improved the goodwill of the bank's customers?	1,000	,511
When transferring money through mobile banking services, the users are afraid that they will lose their money due to carelessness and mistakes.	1,000	,680
Considering the adoption of electronic payment systems, how much positive impact do you believe it has had on the overall financial performance and profitability of your bank?	1,000	,625
To what extent do you perceive electronic payment systems to be secure in protecting sensitive financial information?	1,000	,633
The use of electronic payment systems makes it easier to track and manage expenses.	1,000	,671
Has the bank increased new account openings?	1,000	,614
The volume of the bank’s sales has increased since the bank adopted various forms of self-service technology.	1,000	,603

The bank has experienced an increase in return on assets.	1,000	,630
The bank has an increase in return on assets due to electronic technology.	1,000	,582
The bank has experienced an increase in market share.	1,000	,456

Extraction Method: Principal Component Analysis.

Communality is the amount of variance a variable shares with other variables included in the analysis (Hair et al. 1998). In factor analysis, variables with low common variance (for example, below 0.50) are removed from the analysis and the factor analysis is performed again. In this case, both KMO and explained variance value increase. In the common variance table shown in Table 3, in the first case, variables below 0.50 were removed from the analysis and re-analyzed, so variables falling below 0.50 were not removed from the analysis again. In the table, the variables with the highest common variance are shown in bold and italic. The next stage is to obtain interpretable meaningful factors. Therefore, a rotated factor matrix is needed.

Table 28: Rotated Component Matrix

	Component			
	1	2	3	4
I find that using mobile banking has positively influenced my overall financial management	,797			
Mobile banking has made it easier for me to keep track of my income and expenses.	,685			
Using Internet banking has a positive impact on my overall financial performance.	,645			
Internet banking allows me to have more control over my financial activities.	,624			
Has the use of online banking and electronic payment systems improved the goodwill of the bank's customers?	,609			
I find mobile banking to be a time-saving way to manage my financial tasks.				
I trust that my personal and financial information is secured when using mobile banking.				
The bank has an increase in return on assets due to electronic technology.				

Has the bank increased new account openings?		,733		
The volume of the bank's sales has increased since the bank adopted various forms of self-service technology.		,682		
The bank has experienced an increase in return on assets.		,633		
The use of electronic payment systems makes it easier to track and manage expenses.		,631		
The bank always ensures the security of data and information that is operated on the online banking platform.		,600		
The bank has invested heavily in online banking.				
Considering the adoption of electronic payment systems, how much positive impact do you believe it has had on the overall financial performance and profitability of your bank?			,685	
To what extent do you perceive electronic payment systems to be secure in protecting sensitive financial information?			,640	
The bank has experienced an increase in market share.			,623	
When transferring money through mobile banking services, the users are afraid that they will lose their money due to carelessness and mistakes.				,820

Customers fear online banking, and the use of electronic payment systems due to fear of hacking of their accounts by web hackers.				,620

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 10 iterations.

When the rotated factor matrix is examined according to Table 4, it is observed that which survey questions explain which components best. While preparing this table, the variables with the highest value above 0.50 in any component were considered as the explainers of the components. The last stage of factor analysis is the naming of the obtained components. Since the obtained components are the determination of independent variables that are thought to explain the Financial Performance dependent variable, which is the main subject of the research, the factors are named Financial Performance (FP), Internet Banking (IB), Mobile Banking (MB) and Hand-electronic Banking (EB) according to the survey scale. Factor analysis has been completed. The relationship of dependent and independent variables obtained from factor analysis will be analyzed in the next stage with multiple regression analysis.

Empirical Test Results

Before testing the relationships between dependent and independent variables, the correlation relationship between the variables and descriptive statistics must be performed. Co-correlation analysis is a statistical method used to measure the linear relationship between two variables or the relationship of one variable with two or more variables, and the degree of this relationship, if any. The purpose of correlation analysis is; It is to see in what direction the independent variable (X) and the dependent variable (Y) change. Pearson correlation coefficient results between the variables are shown in Table 5. Assuming a linear relationship between the variables, the Pearson Correlation test was applied.

Table 29: Correlation

3.12.3 Correlation

Table 30**:** Correlation

		FP	IB	MB	EB
Pearson correlations	FP	1,000	,640	,205	-,625
	IB	,640	1,000	-,001	-,422
	MB	,205	-,001	1,000	,003
	EB	-,625	-,422	,003	1,000
Sig. (1-tailed)	FP	.	,000	,009	,000
	IB	,000	.	,497	,000
	MB	,009	,497	.	,485
	EB	,000	,000	,485	.
N	FP	133	133	133	133
	IB	133	133	133	133
	MB	133	133	133	133
	EB	133	133	133	133

According to the results in Table 5, there is a positive 0.64 relationship between the FP variable and the IB variable and a negative 0.625 relationship with the EB variable; The relationship between the FP variable and the MB variable is positive and a low relationship of 0.205 was observed. Table 6 and Table 7 show the descriptive statistics of the variables.

3.12.4 Model Summary

Table 31**:** Model Summary

					Change Statistics					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**R Square Change**	**F Change**	**df 1**	**Df 2**	**Sig. F Change**	**Durbin - Watson**
1	,778[a]	,606	,596	,63527832	,606	66,025	3	129	,000	1,917

a. Predictors: (Constant), EB, MB, IB
b. Dependent Variable: FP

According to the result in Table 6, the Durbin-Watson test statistic, which is close to 2, shows that the variables do not have autocorrelation. If the variables have autocorrelation, that is, past period values affect current period values, this causes the regression result to be misinterpreted.

Table 32: Model Results

Coefficients									
	Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Collineariy Statistics	
Model	B	Std. Error	Beta	T	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1 (Constant)	-4,211E-17	,055		,000	1,000	-,109	,109		
IB	,457	,061	,457	7,494	,000	,336	,578	,822	1,217
MB	,207	,055	,207	3,745	,000	,098	,316	1,000	1,000
EB	-,433	,061	-,433	-7,094	,000	-,553	-,312	,822	1.217
a. Dependent Variable: FP									

According to the results in Table 7, it is tested whether there is a multicollinearity problem between the variables. The value that best tests the existence of this problem is the VIF value. If VIF values are between 1 and 5, it is accepted that there is no multicollinearity problem between the variables. Since the VIF values of the independent variables are between 1 and 5, it is understood that there is no multicollinearity problem between the independent variables included in the model as variables. Again, when the regression model results are examined, the variables Internet banking (IB), Mobile Banking (MB), and Electronic Banking (EB), which are thought to explain the dependent variable Financial Performance (FP) variable, are adj. The R2 value seems to explain 0.596 (59.60%). This shows that explanatory variables explain approximately 60% of the explained variables. This rate is expected

to be higher. The equation results between the dependent and dependent variables are shown below.

Regression equation according to the model;

FP= -4,21+0,457 IB+ 0,207 MB-0,433 EB

According to these results, it is observed that while Internet Banking and Mobile Banking variables affect the financial performance of banks positively, the Electronic Banking variable affects it negatively and statistically significantly.

Independent T-test and ANOVA test were applied to understand whether the answers given in the survey varied according to categories such as gender, educational status, marital status, and age. If the number of categories is 2, independent T-test results are considered sufficient to measure the relationship. However, if the categories are more than 2, that is, if there are more than two options such as education status rather than male or female, it is more appropriate to apply ANOVA tests. Therefore, while the independent T-test was applied for gender, ANOVA tests were applied for other variables.

3.12.5 Independent T Test Result

Table 33: Independent T-Test Results

Independent Samples Test									
	Levene's Test for Equality of Variances					t-test for Equality of Means		95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
FP Equal variance assumed	,051	,822	2,050	131	,042	,38585319	,18820137	,01354598	-75816039
Equal variances not assumed			1,997	67,194	,050	,38585319	,19322304	,00019888	-77150749
IB Equal variances assumed	,062	,804	1,185	131	,238	,22545151	,19017955	-,15076901	-,60167203
Equal variances not assumed			1,180	70,302	,242	,22545151	,19113746	-,15573135	-,60663436
MB Equal variance	,047	,829	1,442	131	,152	,27362865	,1896638	-,10163605	-,64889335

assumed									
Equal variances not assumed			1,501	77,772	,137	,27362865	,18228486	-,08928940	-,63654671
EB Equal variance Assumed	2,845	,094	-,996	131	,321	-,18977303	,19047664	-,56658126	,18703520
Equal variances not assumed			-898	57,914	,373	-18977303	,21127201	-61269323	,23314718
a. Dependent Variable: FP T test Grup (Gender 1: Male, 2: Female)									

A total of 133 participants responded to the survey, 94 of whom were men and 39 of whom were women. Independent t-test determines whether the answers given to the survey vary depending on whether the respondents are male or female.

H0: There is no difference between the averages of the two groups.

HA: There is a difference between the averages of the two groups.

Leven's test analysis results are made according to the Equal variances assumed and Equal variances not assumed fields. If the distributions are not equal between groups, it is considered more appropriate to interpret them according to the second method. Since there is a serious difference between the groups participating in the survey, this research will be construed according to the results of the second method, namely Equal variances not assumed. When the analysis results are examined, the FP variable significance is 0.05 and is considered statistically significant, meaning that the answers given for the FP variable are different for male and female participants.

In other words, the answers to questions affecting FP can be interpreted as different for male and female participants.

Anova Tests Results

When the analysis results in Table 9 are examined, if there are more than two age groups, whether the answers between the groups are different should be analyzed with ANOVA tests instead of independent t-tests. Participants in the survey were determined as the first group aged 20-30, the second group aged 30-40, the third group aged 40-50, and the fourth group aged over 50. According to the ANOVA test results, which tested whether the answers given by the participants in these four groups to the questions were different, it was understood that the answers given to the questions about the FP, IB, and EB variables other than the questions about MB were statistically significantly different from each other. However, since the number of participants in some categories was less than 2 people, the post-hoc test, which shows which groups there were differences, could not be applied.

3.12.6 Anova Tests Results

Table 34: Anova Tests Results

ONEWAY EP IB MB EB BY Age

MISSING ANALYSIS.

→ **Oneway**

ANOVA					
	Some of Squares	**df**	**Mean Square**	**F**	**Sig,**
FP Between Groups	14,347	3	4,782	5,244	,002
Within Groups	117,653	129	,912		
	132,000	132			

Total					
IB Between Groups	14,200	3	4,733	5,183	,002
Within groups	117,800	129	,913		
Total	132,000	132			
MB Between Groups	,143	3	,048	,047	,987
Within Groups	131,87	129	1,022		
Total	132,000	132			
EB Between Groups	8,567	3	2,856	2,984	,034
Within Groups	123,433	129	,957		
Total	132,000	132			

When the analysis results in Table 10 are examined, the participants in the survey were determined as Single in the first group, Married in the second group, Divorced in the third group, and Widowed in the 4th group. According to the ANOVA test results, which tested whether the answers given by the participants in these four groups to the questions were different, it was understood that the answers given to the questions about the FP, IB, and EB variables other than the questions about MB

were statistically significantly different from each other. However, since the number of participants in some categories was less than 2 people, the post-hoc test, which shows which groups there were differences, could not be applied.

Table 35: Anova Test Analysis Results for Age Variable

ANOVA					
	Some of Squares	**df**	**Mean Square**	**F**	**Sig,**
FP Between Groups	11,562	3	3,854	4,128	,008
Within Groups	120,438	129	,934		
Total	132,000	132			
IB Between Groups	11,761	3	3,920	4,206	,007
Within groups	120,239	129	,932		
Total	132,000	132			
MB Between Groups	1,063	3	,354	,349	,790

Within Groups	130,937	129	1,015		
Total	132,000	132			
EB Between Groups	12,728	3	4,243	4,589	,004
Within Groups	119,272	129	,925		
Total	132,000	132			

When the analysis results in Table 10 are examined, the participants in the survey were determined as Single in the first group, Married in the second group, Divorced in the third group, and Widowed in the 4th group. According to the ANOVA test results, which tested whether the answers given by the participants in these four groups to the questions were different, it was understood that the answers given to the questions about the FP, IB, and EB variables other than the questions about MB were statistically significantly different from each other. However, since the number of participants in some categories was less than 2 people, the post-hoc test, which shows which groups there were differences, could not be applied.

Table 36: Anova Test Analysis Results for Marital Status Variable

ANOVA					
	Some of Squares	**df**	**Mean Square**	**F**	**Sig,**
FP Between Groups	13,506	3	4,502	4,901	,003
Within Groups	118,494	129	,919		
Total	132,000	132			

IB Between Groups	12,529	3	4,176	4,509	,005
Within groups	119,471	129	,926		
Total	132,000	132			
MB Between Groups	,418	3	,139	,136	,938
Within Groups	131,582	129	1,020		
Total	132,000	132			
EB Between Groups	5,512	3	1,837	1,874	,137
Within Groups	126,488	129	,981		
Total	132,000	132			

When the analysis results in Table 11 are examined, the survey participants are determined as Certificate first group, Degree second group, Diploma third group, and Other (specify) 4th group. According to the ANOVA test results, which tested whether the answers given by the participants in these four groups to the questions were different, it was understood that the answers given to the questions about the FP and IB variables were statistically significantly different from each other. According to the Post-Hoc test results, it is understood that the answers given to the questions are different between the participants whose education level is a Degree and the

participants whose education level is a Diploma. Post-hoc test results are stated in detail in the appendices of the thesis.

Table 37**.** Anova Test Analysis Results for Educational Status Variable

ONEWAY FP IB MB EB BY Education level

→ Oneway

ANOVA					
	Some of Squares	**df**	**Mean Square**	**F**	**Sig,**
FP Between Groups	13,506	3	4,502	4,901	,003
Within Groups	118,494	129	,919		
Total	132,000	132			
IB Between Groups	12,529	3	4,176	4,509	,005
Within groups	119,471	129	,926		
Total	132,000	132			
MB Between Groups	,418	3	,139	,136	,938
Within Groups	131,582	129	1,020		
	132,000	132			

Total					
EB Between Groups	5,512	3	1,837	1,874	,137
Within Groups	126,488	129	,981		
Total	132,000	132			

When the analysis results in Table 12 are examined, those who participated in the survey with 1-5 years of experience were determined as the first group, those with 10 and above years of experience were determined as the second group, and those with 6-10 years of experience were determined as the third group. According to the ANOVA test results, which tested whether the answers given by the participants in these three groups to the questions were different, it was understood that the answers given in any of the variables did not differ according to experience at the 5% significance level.

Table 38**.** Anova Test Analysis Results for Experience Status Variable

ONEWAY FP IB MB EB BY Experience

→ Oneway

ANOVA					
	Some of Squares	**df**	**Mean Square**	**F**	**Sig,**
FP Between Groups	3,024	2	1,512	1,524	,222
Within	128,976	130	,992		

Groups					
Total	132,000	132			
IB Between Groups	4,820	2	2,410	2,463	,089
Within groups	127,180	130	,978		
Total	132,000	132			
MB Between Groups	,173	2	,086	,085	,918
Within Groups	131,827	130	1,014		
Total	132,000	132			
EB Between Groups	,967	2	,484	,480	,620
Within Groups	131,033	130	1,008		
Total	132,000	132			

CONCLUSION AND RECOMMENDATIONS

Conclusions

Electronic banking systems have significantly transformed the financial landscape of Salaam Somali Bank and the broader banking sector in Somalia. This study has established that electronic banking has not only enhanced the efficiency of banking operations but has also improved customer satisfaction through more accessible and faster services. The transition to digital platforms has resulted in cost reductions, higher transaction speeds, and increased transparency, contributing positively to the financial performance of the bank. Moreover, adopting electronic banking has facilitated a broader customer base, reaching individuals in remote areas with limited access to banking services. This expansion has boosted the bank's deposits and revenues and played a crucial role in the economic empowerment of more population segments. However, the study also acknowledges challenges such as cyber security threats and the need for continuous technological upgrades. To sustain the benefits of electronic banking and mitigate risks, Salaam Somali Bank must invest in robust cyber security measures and ongoing staff training to keep pace with technological advancements. Overall, the effects of electronic banking on the financial performance of banks in Somalia, particularly Salaam Somali Bank, have been markedly positive. With strategic management, continuous investment in technology, and adherence to regulatory requirements, the future of banking in Somalia looks promising, with electronic banking at its core. This not only enhances the bank's performance but also significantly contributes to the economic development of the region.

Recommendations and Contribution

The study's findings provide empirical information that may assist managers in Somalia manage financial decisions on ATMs, mobile banking, and online banking. This is backed by (Mwai et al., 2018), who found that Kenyan ATM banking significantly influences the growth of the nation's commercial banks. The most significant influences are the number of ATM cards issued and the distribution

criteria used nationwide. According to (Sifunjo E. Kisaka, 2015), financial performance might be affected by both the amount of money sent via mobile banking and the number of customers. Online banking has benefited the financial system's productivity and efficiency, which has improved financial performance (Aduda & Kingoo, 2012).

Empirical financial research has been done up till now. (Aduda & Kingoo, 2012) focused on the impact of ICT, the financial system, and bank investors on performance; (Mwai et al., 2018) and (Hossain, 2021) addressed their research for commercial banks. The study adds to the current research by examining the effects of online, mobile, and ATM banking on financial achievement. This study focuses on Islamic banks, while earlier research was mostly concerned with commercial banks. The study also helps to improve the variable measurement for the dependent variable, Financial Performance. The Internet continues to be an important factor in online transactions. In developed countries, e-banking research and adoption have received considerable recognition and are well-grounded. On the other hand, in developing countries where e-banking is just beginning to emerge, there is a lack of research.

The findings of this study give relevant implications for stakeholders in e-banking in developing countries, with a particular focus on Somalia and other countries with cultural environments comparable to Somalia's. It educates those responsible for the development of technologies used in e-banking on the significance of ATMs, mobile and online banking on how it influences the adoption behavior of customers.

Future Research Avenue

It is strongly recommended that more research be conducted on this topic. According to the findings of this study, other researchers should modify the model by adding new constructions or removing the suggested construct. Including additional independent factors, such as e-banking, ecommerce, and others. Furthermore, additional research on all Islamic banks that deal with currency exchange should be conducted. This will allow for a comparison of the banks' financial performance.

In addition, future studies should have a larger sample size. This study makes use of online questionnaires. According to the study's findings, respondents did not have much time to complete the questionnaire and may have been unable to do so due to the importance and urgency of their jobs. Future research may consider using online and email surveys to collect data to address this issue. As a result, people can finish their inquiries on their phone or anywhere else. Responding to inquiries online or via email is more convenient for a manager and bank employees.

Furthermore, more time should be given so that a wider variety of answers can be considered. There are occasions when a bigger budget is necessary. Researchers in the future will have more time to focus on survey administration. Online or email surveys could be used in the future by academics to collect more data. Researchers have the option of providing surveys in person, online, or by email, and the Internet is implied

Limitations of the Study

The study also faced the challenge of getting some detailed data because of confidentiality reasons which made the data collection very difficult since most of the commercial banks could not provide the critical information that was required because of fear that competitors could use the information for their own gains.

Aside from that, the sample size is thought to be small. Because of the limited numberof questions submitted to the company, more than 133 questionnaires must be distributed in order to obtain additional evidence about financial performance. If there is more evidence, itis preferable to obtain data as quickly as possible.

Furthermore, the researcher has only one (1) month to complete the data collection forthis study, resulting in a constrained time frame for data collection. Due to time constraints, itwas not possible to visit and send questionnaires to the respondents for this investigation.

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APPENDIXES

1-

QUESTIONNAIRE

Dear Respondents,

I am a student at Istanbul Gelisim University pursuing a Master's degree in Economics and Finance. I am presently researching — THE EFFECTS OF the ELECTRONIC BANKING SYSTEM ON THE FINANCIAL PERFORMANCE OF BANKS IN SOMALIA **(**SALAAM SOMALI BANK). The findings will strictly be used for academic purposes only. Thank you for sparing your time to participate in the study.

Response guide

Tick in the appropriate box

Section A: Respondents Demographics

N0	Item	Response
1	Gender	Male Female
2	Age(years)	(20-30) (30-40) (40-50) (50 and above)
3	Marital status	Single Married Divorced Widowed
4	Education level	Certificate Diploma Degree Others (Specify)
5	Rank/Position	
6	Period served	(1-5years) (6-10years) (10 and above)

Section B- Mobile banking

	Very low	**Low**	**Medium**	**High**	**Very high**
	1	**2**	**3**	**4**	**5**
Mobile banking helps me complete transactions quickly and efficiently.					
I trust that my personal and financial information is secured when using mobile banking.					
Mobile banking has made it easier for me to keep track of my income and expenses.					
I find mobile banking to be a time-saving way to manage my financial tasks.					
I find that using mobile banking has positively influenced my overall financial management					

Section C – Internet banking.

	Very low	**Low**	**Medium**	**High**	**Very high**
	1	**2**	**3**	**4**	**5**
Customers fear online banking, and the use of electronic payment systems due to fear of hacking of their accounts by web hackers.					
Internet banking allows me to have more control over my financial activities.					
The bank always ensures the security of data and information that is operated on the online banking platform.					
The bank has invested heavily in online banking.					
Using Internet banking has had a positive impact on my overall financial performance.					

Section D - Electronic payments

	Very low	**Low**	**Medium**	**High**	**Very high**
	1	**2**	**3**	**4**	**5**
Has the use of online banking and electronic payment systems improved the goodwill of the bank's customers?					
When transferring money through mobile banking services, the users are afraid that they will lose their money due to carelessness and mistakes.					
Considering the adoption of electronic payment systems, how much positive impact do you believe it has had on the overall financial performance and profitability of your bank?					
To what extent do you perceive electronic payment systems to be secure in protecting sensitive financial information?					
The use of electronic payment systems makes it easier to track and manage expenses.					

Section E - Financial performance.

	Very low	**Low**	**Medium**	**High**	**Very high**
	1	**2**	**3**	**4**	**5**
Has the bank increased new account openings?					
The volume of the bank's sales has increased since the bank adopted various forms of self-service technology.					
The bank has experienced an increase in return on assets.					
The bank has an increase in return on assets due to electronic technology.					
The bank has experienced an increased market share.					

2- Ethical Approvement Form

T.C.
İSTANBUL GELİŞİM ÜNİVERSİTESİ REKTÖRLÜĞÜ
Etik Kurul Başkanlığı

ETİK KURUL KARAR ÖRNEĞİ

Toplantı No	Toplantı Tarihi	Toplantı Saati	Toplantı Yeri
2024 – 02	09.02.2024	14.00	Online

KARAR NO: 2024-02-101: Lisansüstü Eğitim Enstitüsü, Ekonomi ve Finans (İngilizce) Tezli Yüksek Lisans Programı 221428170 numaralı Hawo Abdı GEDI' nın "The Effects Of Electronıc Bankıng System On The Fınancıal Performance Of Banks In Somalıa (Salaam Somalı Bank)" konulu çalışması hakkında yapacağı anket sorularının, etik kurallara uygun olup olmadığını tespit etmek üzere, İGÜ Etik Kurulumuzun 12.01.2024 tarih ve 2024-01 sayılı toplantısında, İGÜ Etik Kurul Yönergesinin 12(1) maddesine göre değerlendirme yapmak üzere görevlendirilen öğretim elemanlarının raporları incelenmiş olup, ilgili çalışmada yer alan bilimsel araştırmanın etik kurallara uygun olduğuna oy birliği ile karar verildi.

ASLI GİBİDİR

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