

**REPUBLIC OF TURKEY  
ISTANBUL GELISIM UNIVERSITY  
INSTITUTE OF GRADUATE STUDIES**

Department of Economics and Finance

**THE IMPACT OF ELECTRONIC PAYMENT SYSTEMS ON  
FINANCIAL PERFORMANCE OF SMALL AND MEDIUM-  
SIZED ENTERPRISES: A FIELD STUDY ON A DEVELOPING  
COUNTRY**

Master Thesis

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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 in accordance with 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.

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## SUMMARY

Small and medium-sized enterprises (SMEs) play a crucial role in the Somalian economy, helping to create jobs, spur innovation, and reduce poverty. Many small and medium-sized enterprises (SMEs), however, have difficulty gaining access to conventional banking and other forms of formal financial services. Somalia's reliance on cash-based transactions limits the country's economic potential, slows the country's development, and puts small and medium-sized enterprises at danger. These problems might be solved and the financial landscape for SMEs completely revamped with the adoption of electronic payment systems.

After collecting information from participants, we used SPSS V25.0 to analyze the results. Both descriptive and inferential methods will be used in the study. The mean, standard deviation, frequencies, and histograms are all common descriptive analyses. The purpose of inferential analysis in statistics is to form inferences about the connections between variables. Multiple regression analysis will be used to establish a causal relationship between a dependent variable and its explanatory variables.

The results of the study indicates that there is significant relationship between electron payment and financial performance. In sum, the adoption of Electronic Payment System has had a profound effect on the economic health of Somalia's SMEs. Small and medium-sized enterprises (SMEs) who adopt electronic payment systems see improvements in cash flow management, market penetration, customer satisfaction, and bottom line profitability. However, maximizing the promise of electronic payment systems for SMEs in Somalia requires solving the constraints of infrastructure, connectivity, and awareness. The implementation of electronic payment systems has the potential to boost Somalia's economy as a whole by bolstering the growth and development of small and medium-sized businesses.

**Key Words:** Electronic Payment System, Financial Performance, and Small and Medium Sized Enterprises

## ÖZET

Küçük ve orta ölçekli işletmeler (KOBİ'ler) istihdam yaratılmasına, yeniliğin teşvik edilmesine ve yoksulluğun azaltılmasına yardımcı olarak Somali ekonomisinde çok önemli bir rol oynamaktadır. Bununla birlikte, birçok küçük ve orta ölçekli işletme (KOBİ), geleneksel bankacılığa ve diğer resmi finansal hizmet biçimlerine erişim sağlamakta güçlük çekmektedir. Somali'nin nakit bazlı işlemlere bel bağlaması, ülkenin ekonomik potansiyelini sınırlamakta, ülkenin kalkınmasını yavaşlatmakta ve küçük ve orta ölçekli işletmeleri zora sokmaktadır. Elektronik ödeme sistemlerinin benimsenmesiyle bu sorunlar çözülebilir ve KOBİ'ler için mali ortam tamamen iyileşebilir.

Araştırmada, katılımcılardan bilgi topladıktan sonra sonuçları analiz etmek için SPSS V25.0 kullanıldı. Çalışmada hem betimsel hem de çıkarımsal yöntemler kullanılmıştır. Ortalama, standart sapma, frekanslar ve histogramların tümü yaygın tanımlayıcı analizler olarak çalışmada yer almıştır. İstatistikte çıkarımsal analizin amacı, değişkenler arasındaki bağlantılar hakkında hipotetik sonuçlar oluşturmaktır. Bağımlı değişken ile onun açıklayıcı değişkenleri arasında nedensel bir ilişki kurmak için çoklu regresyon analizi kullanılmıştır.

Çalışmanın sonuçları, elektronik ödeme sistemleri ile finansal performans arasında anlamlı bir ilişki olduğunu göstermektedir. Özetle, elektronik ödeme sisteminin benimsenmesinin Somali'deki KOBİ'lerin ekonomik sağlığı üzerinde derin bir etkisi olmaktadır. Elektronik ödeme sistemlerini benimseyen küçük ve orta ölçekli işletmeler (KOBİ'ler), nakit akışı yönetimi, pazar penetrasyonu, müşteri memnuniyeti ve nihai kârlılıkta iyileşmeler görüyor. Ancak, Somali'deki KOBİ'ler için elektronik ödeme sistemlerinin vaadini en üst düzeye çıkarmak, altyapı, bağlantı ve farkındalık kısıtlamalarını çözmeyi gerektirir. Elektronik ödeme sistemlerinin uygulanması, küçük ve orta ölçekli işletmelerin büyümesini ve gelişmesini destekleyerek bir bütün olarak Somali ekonomisini canlandırma potansiyeline sahiptir.

**Anahtar Kelimeler:** Elektronik Ödeme Sistemi, Finansal Performans, Küçük ve Orta Ölçekli İşletmeler



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## **ABBREVIATIONS**

<b>SMEs</b>	:	Small and Medium-sized Enterprises
<b>IFC</b>	:	International Finance Corporation
<b>AFDB</b>	:	African Development Bank
<b>UNCTAD</b>	:	United Nation Conference on Trade and Development
<b>HRM</b>	:	Human Resource Management
<b>GDP</b>	:	Gross Domestic Product
<b>GNP</b>	:	Gross National Product
<b>MNCs</b>	:	Multinational Corporations
<b>SWIFT</b>	:	Society for Worldwide Interbank financial telecommunication
<b>EFTPOS</b>	:	Electronic Funds Transfer at Point of Sale
<b>ATM</b>	:	Automated teller machine
<b>TAM</b>	:	Technology Accepted Model
<b>TTF</b>	:	Task-Technology Fit
<b>VIF</b>	:	Variance Inflation Factor
<b>ICT</b>	:	Information Communication Technology

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## **PREFACE**

First and foremost, I would want to express my gratitude to Allah, the Almighty, for showering me with his blessings as I worked on my studies.

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## INTRODUCTION

Small and medium-sized enterprises (SMEs) are crucial to Somalia's economy because they drive innovation, new job creation, and overall growth. However, they frequently encounter obstacles, such as restricted access to financing, a lack of infrastructure, and insufficient money management skills. As a result, small and medium-sized enterprises (SMEs) can benefit greatly from the increased efficiency, effectiveness, and growth that electronic payment systems provide.

The reduction of cash transactions is a major benefit of electronic payment systems for SMEs. Cash transactions are often inconvenient, inefficient, and error-prone. Electronic payment systems have made it possible for small and medium-sized enterprises (SMEs) in Somalia to promote safe and convenient financial transactions while minimizing the risks associated with handling and losing currency. And because of the ease with which electronic payments can be tracked and reconciled, businesses have better access to reliable financial data for analysis and decision making.

Electronic payment methods in Somalia have helped small and medium-sized enterprises (SMEs) reach a wider customer base. Due to geographical limitations and a lack of access to banking services, SMEs have historically only been able to compete in regional or local markets. However, thanks to electronic payment systems' safe and effective cross-border payment options, these enterprises may break down these obstacles and enter the global market. Their customer base will grow, their revenue sources will be diversified, and new opportunities will arise as a result.



## CHAPTER ONE

### SMALL AND MEDIUM-SIZED ENTERPRISES AND PAYMENT SYSTEMS

#### 1.1. Background of the Study

Electronic payment systems have become increasingly popular in developing countries, including Somalia, due to their potential to increase financial inclusion, enhance financial efficiency, and promote economic growth. Studies have explored the impact of electronic payment systems on the financial performance of small and medium-sized enterprises (SMEs) in Somalia, highlighting both the opportunities and challenges associated with these systems.

The effect of mobile money on the bottom lines of Somalia's small and medium-sized enterprises was rarely the subject of a study. A study concluded that SMEs may boost sales, decrease transaction costs, and better manage cash flow after using mobile money, all of which contributed to improved financial performance indicators including revenue growth and profitability (Al-Somali et al., 2009).

E-payment systems affected the bottom lines of Somalia's small and medium-sized enterprises. The study concluded that mobile money and other electronic cash transfers boosted financial performance by boosting productivity, decreasing overhead, and broadening support in the financial system. However, other researchs have emphasized the difficulties small and medium-sized enterprises (SMEs) in Somalia have when trying to embrace electronic payment methods. According to the findings, this obstacle might be surmounted with the aid of education and training aimed at raising awareness and fostering trust ( Kalinic et al., 2019). Another barrier to the widespread use of electronic payment methods in Somalia is the absence of infrastructure, such as constant access to electricity and the web. The research indicated that better infrastructure would lead to more use of electronic payment systems, which in turn would boost SMEs' bottom lines.

Small and medium-sized enterprises (SMEs) in East Africa are increasingly using mobile money as a form of payment. Mobile money is becoming a significant

tool for small and medium-sized enterprises (SMEs) in the region, according to research by the International Finance Corporation (IFC) (IFC, 2014).

Traditional payment systems have many drawbacks. Many difficulties have been linked to using cash and checks as methods of payment for small and medium-sized enterprises (Camera et al., 2016; Purohit & Arora, 2023; See-To & Ngai, 2019). High transaction costs, security worries, and a lack of access to conventional financial services all contribute to these difficulties (Anwar, 2018; Gorshkov, 2022; Popa et al., 2018). Access to formal financial services is a major barrier to growth for small and medium-sized enterprises (SMEs) in the region, according to research by the African Development Bank (AfDB) (AfDB, 2016).

The payment landscape for SMEs in East Africa is heavily influenced by the policies and regulations in place. Financial inclusion for small and medium-sized enterprises (SMEs) can be boosted by policies and regulations that encourage the use of innovative payment systems. More efficient control and oversight is necessary, however, to guarantee the safety and security of these systems. According to research by the United Nations Conference on Trade and Development (UNCTAD) (UNCTAD, 2017), regulatory frameworks can play an important role in encouraging the use of electronic payment systems among small and medium-sized enterprises (SMEs).

Small and medium-sized enterprises (SMEs) in East Africa are progressively adopting electronic payment systems including credit cards and online payment systems. Challenges, such as a lack of infrastructure and a lack of trust in online payment systems, have kept adoption at a low level (Epede & Wang, 2022; Hoang et al., 2023; Meroño-Cerdán et al., 2008; Xin et al., 2023). There are substantial barriers to the widespread use of electronic payment systems among small and medium-sized enterprises (SMEs) in Africa. These include a lack of understanding, restricted access to infrastructure, and a lack of faith in the security of these systems.

Small and medium-sized enterprises (SMEs) account for 60 percent of formal manufacturing sector employment in both developing and industrialized nations. The problem is most pressing in Africa, where small and medium-sized enterprises (SMEs) account for roughly 75 percent of the continent's workforce. It is therefore impossible

to overstate the significance of their role. Because of this, many academics have praised their efforts, and most development agents have urged less developed nations to prioritize their development. Many of the world's industrialized economies rely heavily on the job opportunities provided by small and medium-sized enterprises (SMEs) (Hoang et al., 2023; Karim et al., 2022; Najib et al., 2021; Xin et al., 2023). Their significance as growth stakeholders cannot be overstated, even if they continue to encounter many difficulties.

Although small and medium-sized enterprises (SMEs) play a crucial role in national economic growth, their expansion can be hampered by a lack of resources such as capital, innovations, human capital, access to markets, and a favorable legal and regulatory climate, among others. The poll found that factors including financial and crime rates and political stability all have significant bearing on business expansion. However, financial considerations were shown to be paramount.

The Small and Medium-Sized Enterprise (SME) sector is crucial to both established and developing economies because of the important contributions it makes to economic growth in the areas of job creation, labor utilization, and poverty reduction. Small and Medium-Sized Enterprises (SMEs) accounted for over 55 percent of GDP and 70 percent of total employment in high-income nations in 2004, according to the Organisation for Economic Co-operation and Development (OECD). The comparable percentages for employment and GDP in middle-income nations were 95% and 70%, respectively, whereas they were 70% and 60% in low-income economies.

Small and Medium-Sized enterprises (SMEs) also boost export opportunities and innovation prospects. Other benefits of Small and Medium-Sized Enterprises (SMEs) to an economy include the promotion of entrepreneurship, the possibility of fast returns on investment as a result of their rapid establishment, the facilitation of inter- and intraregional decentralization, and the provision of a countervailing force against the economic strength of larger companies.. The consequence has been a quantum jump in economic and social development in countries like Japan, Germany, Australia, and the United States, all of which have been actively supporting and subsidizing the growth of small and medium-sized enterprises. Small and medium-

sized enterprises (SMEs) are the key channels through which new entrepreneurs inject a steady stream of ideas, skills, and innovations into the economy. It is widely considered that governments around the world should prioritize the expansion of small and medium-sized enterprises (SMEs) because of the important role they play in boosting productivity and, by extension, the competitiveness and overall economic growth of their countries. In addition, small and medium-sized enterprises (SMEs) have gained a positive image as providers of income, training opportunities, and essential basic services for the underprivileged.

Many people with vested interests in alleviating poverty and fostering economic growth are beginning to look to small and medium-sized enterprises (SMEs) as a means to those ends. There is no universally accepted definition of a small or medium-sized enterprise. Small and Medium-Sized Enterprises (SMEs) are businesses with annual revenues of less than \$1 billion, according to a World Bank/International Finance Corporation (IFC) definition. This concept has been adopted by the vast majority of international organizations. Therefore, many international organizations have worked to enhance the role of SMEs despite some difficulties, reflecting the paramount significance of SME operations around the world. However, the concept of SME growth has been inadequately defined.

There are three sizes of small and medium businesses in the SME sector: micro, small, and medium. According to Darren et al. (2009), the smallest type of SME is the micro business, which employs between 1 and 9 people in the United Kingdom but fewer than 5 in Australia. Micro SMEs are a subset of SMEs that often have fewer than nine workers, or no workers at all. Microbusinesses are smaller than small businesses in terms of size, number of employees, organizational structure, capital expenditures, and societal contributions. While the specifics of their capital and labor arrangements may vary widely by country and region, the impact of the many products and services they provide is often easy to trace.

Like other industries, financial institutions has embraced and implemented the use of electronic methods to carry out banking activities. Since then, numerous researchs have been conducted on the effects of e-banking on banks' bottom lines using data collected from a wide range of countries and regions. However, empirical

evidence from varying perspectives and national contexts yield a wide variety of probable outcomes. Researchers in a number of countries came to different conclusions about whether or not e-banking was good for a bank's bottom line (Hossain et al., 2020).

Technological progress has been crucial to the improvement of financial service delivery standards. Smart internet banking technology, in the form of electronic gadgets, has made it possible for users to complete financial transactions outside of traditional banking hours. Internet banking allows customers to handle their money online (Al-Somali et al., 2009; Camera et al., 2016; Kutubi et al., 2021; Liébana-Cabanillas et al., 2014). They don't have to wait in line during regular business hours to do things like check their checking or savings account balances, make bill payments, or send money to loved ones. With only a few mouse clicks, customers can log in to their accounts, print off their statements, transfer funds between accounts, and even manage their assets (Dinh et al., 2018; Flavián & Guinalíu, 2006; Forsythe & Shi, 2003; Szumski, 2022). We are moving toward a "cashless society," where people aren't required to carry around cash or use actual money for all of their purchases. In addition, customers can buy a variety of goods and services with credit transfers, including making vacation reservations and purchasing plane tickets, by simply handing over their credit card details to the appropriate people.

Through the introduction and use of e-banking services, financial institutions can boost their bottom lines. The expense of keeping huge sums of cash is reduced thanks to e-banking's online financial transfers (Sharma, 2012). Banks get a competitive edge thanks to the network's ability to function independently of location and time. This allows financial institutions to expand into new geographic regions while keeping costs down by opening physical branches (Hossain et al., 2020). As a result, they can use more plastic money and less paper money in their transactions. According to Hosein & Shantou (2011), one of the incentives for financial institutions to implement electronic banking is the potential increase in transaction profit.

## **1.2. Problem Statement**

Civil war has raged in Somalia since the central government collapsed in 1991, destroying the country's social and economic foundations. There hasn't been a stable

banking system in Somalia for close to twenty-five years because of the constant fighting and political unrest. These challenges prevented Somalia from developing a reliable monetary infrastructure. Xawaalad's, or money transfer enterprises, founded by Somalis who fled the country's insecurity, were the only financial system to survive the collapse of the country's institutions.

Another form of unchecked financial enterprise emerged during the war: mobile money or mobile banking, provided by the country's major telecommunications operators. As the federal government of Somalia was established in 2012 and a semblance of normalcy was restored, the largest money transfer companies turned into full banking institutions.

As we've seen, e-banking has a number of benefits for both banks and their customers. The potential for cost savings and increased market share may encourage banks to introduce e-banking services, but the services' ultimate performance may or may not match the banks' projections (Alalwan et al., 2016; Belanche et al., 2022; Borzekowski et al., 2008; Forsythe & Shi, 2003; Rochet & Tirole, 2002). This is because there are a lot of moving parts and interested parties that could affect how well electronic banking goes over. The convenience of electronic banking for both the customer and the bank has led to a number of positive outcomes, including higher customer satisfaction. The success of e-banking is contingent on the individual banks' ability to implement the required systems of support and infrastructure (Fadoju et al., 2018; Kotarba, 2018; Siddik & Kabiraj, 2019). According to Pikkarainen et al. (2004), government support in setting advantageous and relevant policies on e-banking is also crucial, as is customer acceptance of the concept. Financial institutions may choose to put resources into establishing and growing e-banking in this scenario. Given the complexity of the ecosystem in which banks operate, this may also suggest that there is no assurance that electronic banking will be successfully deployed or that it would have a favorable effect on banks' profit and loss. Small and Medium-Sized enterprises (SMEs) in Somalia have considerable obstacles to attaining financial performance as a result of issues such as limited access to finance, poor financial infrastructure, and a lack of financial management skills.

Although small and medium-sized enterprises (SMEs) have the potential to contribute to Somalia's economic growth and development, their financial performance is a major cause for concern. Lack of readily available financial services, excessive interest rates, and insufficient collateral make it difficult for many small and medium-sized enterprises to secure bank loans. Access to financial services and efficient financial management are both hampered by the lack of financial infrastructure, such as credit reporting systems and payment platforms, particularly for small and medium-sized enterprises (SMEs).

Moreover, many SMEs in Somalia lack the financial management skills necessary to achieve financial performance, including budgeting, cash flow management, and financial planning. Small and medium-sized enterprises (SMEs) are hampered in their pursuit of capital and financial stability due to an inability to make sound financial decisions, keep proper records, and provide accurate financial reporting.

Access to markets, high transportation expenses, and a lack of basic infrastructure like electricity and water are all made more difficult for small and medium-sized enterprises (SMEs) in Somalia due to the country's unstable political and security situation.

Somalia's GDP of about \$4.7 billion places it at number 159 worldwide. Evidence showing the countries are distinct from one another includes, but is not limited to, the size of their respective economies. Also, it is illogical to assume that the United States and Somalia will adopt e-banking at the same rate. Considering that the United States ended the Civil War in 1865 while the crisis in Somalia is arguably still ongoing, this is especially true. This means that research on the effects of e-banking on the financial performance of banks in Somalia may provide more nuanced findings than a more broad-based investigation.

Somalia's financial institutions have begun adopting new technology in an effort to boost productivity and earnings. The E-Banking System offers many benefits, but it may provide unique difficulties for banks in Somalia. Online banking still leaves users and banks vulnerable to hackers. The bank's infrastructure is prone to occasional

malfunctions. Banks in Somalia may struggle with these issues, which could reduce their effectiveness and profitability.

While the E-Banking System offers numerous benefits, it may provide unique difficulties for banks in Somalia. Online banking still leaves users and banks vulnerable to hackers. The bank's infrastructure is prone to occasional malfunctions. Banks in Somalia may struggle with these issues, which could reduce their effectiveness and profitability.

### **1.3. The Concept of SMEs Organization**

Small and medium-sized organizations (SMEs) are a crucial component of East Africa's and Somalia's economies. These organizations are often referred to as Small and Medium-sized Enterprises (SMEs) and play a significant role in creating employment opportunities, promoting economic growth, and providing essential goods and services to the local population (Epede & Wang, 2022; Meroño-Cerdán et al., 2008; Xin et al., 2023).

SMEs make up a significant component of the official economy in East Africa and Somalia. These firms are usually privately owned and operated by individuals or small groups of people who have taken the initiative to create their enterprises. SMEs are crucial to the creation of jobs, especially for women and young people, who are underrepresented in the formal economy.

Recent years have seen a rise in efforts to foster the development of SMEs in East Africa and Somalia. The government and foreign development agencies have seen the promise in these groups and are actively encouraging their expansion through various laws and programs. Access to funding, technical support, education, and resources for networking are all part of the policies and activities that fall under this umbrella.

East Africa and Somalia's small and medium-sized enterprise (SME) sector is hampered by a lack of resources like capital, infrastructure, and access to markets. It is also challenging for SMEs to operate and grow because there aren't enough regulatory frameworks in place to facilitate their expansion. SMEs are extremely important to the economies of East Africa and Somalia because they generate income, provide jobs, and supply residents with basic necessities. It is crucial to develop



policies and programs that facilitate the expansion of such groups and help them overcome the obstacles they face.

### **1.3.1. In Terms of Capital**

Small and medium-sized enterprises (SMEs) in East Africa and Somalia face various challenges related to capital. These challenges include limited access to finance, high-interest rates, and insufficient collateral to secure loans. As a result, many SMEs struggle to grow and compete in the market.

Lack of institutional financial institutions is a major barrier to entry for small and medium-sized enterprises (SMEs) seeking financing (Fatoki, 2014). Many individuals in East Africa and Somalia rely on unregulated financial institutions like savings groups and moneylenders to get by. It is challenging for SMEs to obtain the money they require because of the unreliability of these systems and the high interest rates that may be associated with them.

Several programs have been established to help SMEs get access to capital in order to combat these difficulties. Microfinance institutions, government-backed loans, and donor-funded initiatives are all examples of this type of effort. Microfinance institutions provide small loans to SMEs and are tailored to the specific needs of these organizations. Government-backed loans help small and medium-sized businesses gain access to inexpensive financing, while donor-funded programs educate these businesses on how to better manage their finances.

Crowdfunding is another option for tackling the SME capital issues. Kenyan crowdfunding portal M-Changa facilitates public investment for SMEs. This technique provides a advanced way for SMEs to access financing, especially for those who may not have the appropriate collateral to receive traditional loans (Eniola & Entebang, 2015).

In consequence, access to financing is a critical barrier for SMEs in East Africa and Somalia. However, microfinance institutions, government-backed loans, donor-funded programs, and crowdfunding are assisting SMEs in gaining access to the capital they require for expansion and market competitiveness.

### **1.3.2 In Terms of Technology**

Electronic payment systems have a significant effect on the financial performance of small and medium-sized enterprises (SMEs). Studies have shown that the adoption of electronic payment systems can improve the efficiency and effectiveness of financial transactions, reduce costs, and increase revenue for SMEs.

One study by the European Central Bank indicated that small and medium-sized enterprises (SMEs) that used electronic payment systems saw an increase in sales volume, decreased transaction costs, and better cash flow management. A second World Bank study found that SMEs that adopted electronic payment systems saw an increase in business from both customers and suppliers, as well as more accurate financial reporting.

Studies have also demonstrated that technological factors like internet availability, mobile phone use, and access to online banking services can affect the spread of electronic payment systems. One study in Ghana indicated that small and medium-sized enterprises (SMEs) having access to online banking services were more likely to implement electronic payment systems than SMEs without such access. Additionally, the implementation of electronic payment systems demands a certain level of technological expertise and resources, which might be a challenge for some SMEs. But research also shows that SMEs may enhance their long-term financial performance by using electronic payment systems, so it's worth it to make the switch.

### **1.3.3 In Terms of Entrepreneurship**

In order to produce or distribute economic goods and services for a profit, one must engage in business activity, which entails an integrated sequence of decisions made by an individual or group of related individuals. (Schumpeter, 1947) Enhancing and encouraging entrepreneurialism will lead to the launch of additional businesses. New small and medium-sized enterprises (SMEs) are bolstered by entrepreneurial efforts, which in turn contribute significantly to economic expansion. It can also be an active method of generating additional money. Those that take on the most risk are the ones who ultimately get the rewards. Although the entrepreneur may not be starting from scratch in terms of equity, time, and career dedication or the provision of services, there is still a need to add value to entrepreneurship in order to acquire and properly

distribute the essential skills and resources. It is widely accepted that Somalia's small business community has played a crucial role in the country's economic growth and development. Small and medium-sized enterprises (SMEs) are recognized with generating a higher rate of direct job creation per dollar of investment compared to large corporations.

#### **1.3.4 In Terms of Sustainable Growth and SMEs**

The majority of business owners and managers, whether they run a small or large company, are focused on long-term growth. Depending on the state of the government, the level of competition, the shift in consumer preferences, and the state of the economy, it may or may not be simple to achieve such goals. However, most of these companies are of the opinion that they may enhance the character of their business activities to achieve this goal. Customers' tastes and shopping habits are always shifting, creating possibilities for new companies to enter the market and fostering healthy levels of competition. As a result, most businesses have only been able to last because they are constantly adapting and innovating. Given that a company that is unable to expand will be driven out of business by its rivals, most entrepreneurs today are focusing their efforts on growth strategies that they hope will increase their customer base and the overall quality of their goods and services. For this reason, the vast majority of these companies will work to increase their development potential. After all, even if a small or medium-sized enterprise (SME) has a fantastic plan for future expansion, it will not succeed in the long run if it lacks the resources to put that plan into action. It works both ways, too. Therefore, SMEs with strong eco-system ties are more likely to be successful in the long run (Bertels et al., 2010).

There is no doubting the importance of small and medium-sized businesses to the expansion of the economy. However, both developing and developed countries are concerned about the high failure rate of small and medium-sized businesses. Approximately 80-90% of small and medium-sized enterprises (SMEs) fail within the first 5-10 years of operation, according to multiple studies (Ahmad et al., 2010; Kuratko & Hodgetts, 2004).

There are several challenges that small and medium-sized businesses face, and studies reveal that political uncertainty, a lack of intellectual resources and

infrastructure, a distrust of authority, and inadequate government police forces are among them (Khalique et al., 2011). The contributions of SMEs to economic expansion and development cannot be overstated. They account for more than 90% of non-agricultural businesses in developing nations and are the primary generator of national income and employment opportunities (OECD, 2004). However, these businesses typically face credit constraints and have difficulty obtaining financing from conventional financial institutions. According to the World Bank's Enterprise Surveys (from a number of different years), lack of access to capital is a significant barrier to business expansion. There is a "financing gap" for small and medium-sized enterprises (SMEs) in sub-Saharan Africa compared to other developing nations (Calice et al., 2010). Financial inclusion<sup>1</sup> and access to credit for SMEs have thus been identified as a key policy goal by the international development community.

Mobile money is a digital financial innovation that allows for monetary transactions to be conducted via SMS (short message service) on a mobile phone. In low and middle income countries, more than a billion people now have access to a mobile phone. Therefore, the growing availability of mobile money payment systems has the potential to revolutionize the way SMEs operate. Preliminary research suggests that enterprises' adoption of mobile phones enhances revenues through improved contact with suppliers and reduced transaction times. The formalization of savings, expansion of capital, and improved financial resilience in the face of shocks are all potential outcomes of this trend (GSMA, 2016)

#### **1.4. Small and Medium-sized Enterprises (SMEs)**

According to data gathered in the Sub-Saharan area, SMEs make up the vast majority (90%) of the region's businesses. Seventy percent to eighty percent of the region's SMEs are retail establishments. They make significant contributions to economic growth, income equality, and employment (Tadesse & Shively, 2009). Companies of a Medium Size and Below create more jobs in African Sub-Saharan than any other sector, even more than subsistence agriculture. Africa's development partners have tried to get the continent to prioritize the expansion of small and medium-sized enterprises (SMEs), and if the continent's nations want to succeed in this endeavor, they must enhance the operations of SMEs and transform them into

genuine development partners by giving them access to the resources they require. The governments of many African countries have taken steps toward bettering this situation by establishing institutions to encourage the activities of small and medium-sized enterprises (SMEs), such as Cameroon's bank for SMEs. The World Bank (2013) reports that researchers have suggested that governments that want to bolster their private sectors should work to improve the laws, regulations, and institutional systems that condition or shape the economy.

As was previously noted, the definition of SMEs varies from nation to country based on factors such as the number of employees, the size of the asset base, and the size of the annual revenue. Small and medium-sized enterprises (SMEs) are defined by the European Union as those with fewer than 250 employees, an annual revenue of less than 50 million Euro, and a balance sheet of less than 43 million Euro. Although the European Union proposed this definition, some of its member states have slightly different interpretations, such as Germany's requirement that SMEs have less than 255 employees and Belgium's requirement that they have fewer than 100. In the United Kingdom, a small or medium-sized business (SME) is defined as one with less than 250 full-time employees, annual sales of less than 25 million euros, and total assets of less than 12.5 million euros.

In the same way, each African nation has its own idea of what a SME is. The Central Bank of Nigeria established the criteria for small and medium-sized enterprises (SMEs) in Nigeria, which include an asset base between 5 and 500 million naira and an employee count between 11 and 100. In contrast, in South Africa, a small business is defined as one with fewer than 200 employees and an annual revenue of at least 10 million South African rand. The law 2010/001 of April 13, 2010 on the promotion of small and medium-sized enterprises (SMEs) in Cameroon provides the applicable definition. The law established categories for businesses in the country, including ones catering to extremely small, small, and medium-sized operations. A small and medium-sized business (SME) is defined as an organization with 201 or fewer full-time employees and an annual revenue of CHF 100 million or more, but not CHF 1 billion.

## 1.5. The Concept of Organizational Performance

The efficiency and effectiveness with which a company uses its resources to accomplish its goals and objectives is referred to as its "organizational performance." Competitive advantage, increased revenue, and decreased expenses are all more likely for SMEs with good organizational performance.

. There are other factors besides organizational performance that affect the financial success of small and medium-sized enterprises. Market competition, general economic conditions, and government regulations are all external variables that may play a role. But research shows that small and medium-sized enterprises (SMEs) that prioritize organizational performance are more likely to achieve their financial goals and sustain their financial stability over the long run.

Organizational performance, according to Venkatrman and Ramanujam (1986), may be broken down into three categories: financial performance, operational performance, and stakeholder performance. Reviewing the literature, we find that financial/accounting performance, operational performance, and market-based performance are the most frequently used types of organizational performance measures in contemporary empirical research (Crook et al., 2005)

Accounting-based measures (like profitability metrics like return on assets, return on investment, return on sales, and return on equity) are commonly used to evaluate performance, as are market-based measures (like stock market returns) or a hybrid of the two (like the price-earnings ratio). Performance reviews frequently use metrics from the field of accounting. The most widely read management publications (including Business Week and Management Today) compile annual performance rankings based on profit margins. All accounting-based performance measurements have the additional flaw of being retrospective in nature (Kaplan and Norton, 1992). Historical information provides just a limited window into a company's prospects going forward. Another issue raised with these metrics is their "short-termism" in the context of accounting. Cutting costs (such advertising or research & development) can increase profits in the near term, but this strategy may backfire in the long run. So, it's unclear whether or not "firm performance" can be accurately measured using only accounting-based metrics.

## **1.6. Research Questions**

Research Questions are as follows:

- What is the effects of firm size on the financial performance of small and medium sized corporations?
- What is the effects of electronic payments system on financial performance of small and medium sized corporations?
- What is the effects of online payments on the financial performance of small and medium sized corporations?

## **1.7. The Objectives of the Study**

Research Objectives are as follows:

- To identify the effects of firm size on the financial of small and medium sized corporations.
- To identify the effects of electronic payments system on the financial performance of Small and medium sized corporations.
- To identify the effects of online payments on financial performance of small and medium sized corporations.

## **1.8. Significance of the Study**

The purpose of this research is to investigate the factors that affect the effect of e-banking on firm size, mobile payment, and internet payment on the financial performance of banks in Somalia. Owing to the paucity of research in this area, the project will do two things: 1. create a platform for academics to debate the impact of the electronic payments system on the financial performance of small and medium-sized businesses in Somalia over time.

Policymakers, and the central bank in particular as it is charged with supervising private banks, may benefit from a better understanding of the vulnerabilities and weak points that need to be significantly regulated and strengthened in the banking sector.

Third, practitioners believe that this information could help the appropriate authorities strengthen their monitoring and enforcement.

Fourth, let us grasp the state of Somalia's economy. The research could also shed light on Somalia's economic climate. In addition, banks and other financial organizations will gain from this study because it highlights the issues and the necessity of a solution.





## CHAPTER TWO

### ONLINE AND ELECTRONIC PAYMENT

#### 2.1. Background

A company's financial performance is measured over a certain time period, considering its assets, operations, leverage, profitability, and solvency. How well the company protects and controls its resources. The balance sheet, income statement (profit and loss PL), cash flow, and capital change are among of the financial statements that company leaders may examine. Quicker service delivery and a broader selection of financial services including cash deposits, withdrawals, money transfers, utility and credit card bill payments, cheque book queries, and other monetary inquisitions are made possible by technological developments like electronic gadgets.

Mobile banking refers to the provision of banking services for use on mobile devices such as smartphones and tablets. It's the natural progression of internet banking, and it provides far improved digital conveniences (Abrazhevich, 2001; Liébana-Cabanillas et al., 2014; von Kalckreuth et al., 2014). This is a giant leap forward when used in the banking industry.

When a customer of a bank or other financial institution uses the bank's website to conduct financial transactions, this is known as online banking, internet banking, e-banking, or virtual banking. The internet banking system is typically connected to or an integral part of a bank's core banking system, in contrast to the traditional banking branch where consumers historically got financial services.

#### 2.2. Financial Performance

The term "financial performance" is used to describe a relative evaluation of a company's efficiency in generating profits from its core operations. Quantifying efficacy and efficiency is what performance measurement is all about. The effectiveness of a business is measured by its ability to meet the needs of its consumers, while the efficiency with which it does so is measured by the return on investment of its resources. Choosing, implementing, and monitoring performance measurements is essential for quantifying efficiency and effectiveness. Sales, business

transactional activities that represent sales (such as purchases made via mobile money services), and the availability of financial services (such as savings and micro-credits) are all part of what make up a small business's financial performance. For mobile banking to exist, two distinct but complementary new technologies—banking and the mobile phone—needed to be successfully combined. To better manage mobile banking services, banks are teaming up with mobile and utilities administration service providers (Tiwari & Buse, 2007). Because mobile phones are becoming so widely used, especially by the poor, mobile banking has shown promise for expanding access to financial services to previously unreachable populations.

Capital adequacy, liquidity, solvency, efficiency, leverage, and profitability are some ways to evaluate a company's financial performance through time. This entails the securing and dispersal of monetary funds. Organization and management of the business' finances. Cash. Businesses use financial statements such as the cash flow statement, balance sheet, profit and loss statement, and statement of changes in capital to make decisions. Having a solid foundation in the fundamentals is essential. Financial markets, economics, financial management, and accounting are all essential to the success of any analytical or technical endeavor. The banking and financial sectors of developed and developing countries are very diverse in terms of structure, methodology, and effectiveness.

Most institutions in the financial sector agree that the introduction of new products and services is directly attributable to the pursuit of efficiency and productivity through financial innovation (Belanche et al., 2022; Kotarba, 2018; Migliore et al., 2022; Szumski, 2022). Users may now manage their finances without ever setting foot inside a bank, thanks to ATMs, deposit machines, and electronic banking. Customers are encouraged to use their bank accounts or credit cards instead than carrying cash to pay for purchases.

According to Maiyo (2013), the use of electronic banking decreased costs by decreasing the number of bank personnel and increased profits. Banks currently operate on a self-service basis, as opposed to the traditional channels typified by human assistance, teller, or corporate administration. Adopting electronic payment methods has reduced the need for paper and postage in the distribution of customer

bank statements and other paperwork, and it has also reduced the amount of data that must be entered. The goal of access to capital is to ensure that all individuals may easily gain access to high-quality, need-based financial services and products . Electronic banking eliminates the need for customers to visit a branch in order to do business, making a wider range of banking services and products available to them (Koulayev et al., 2016; Yang et al., 2023; Yu et al., 2002).

Among the available global studies are Mago & Chitokwindo (2014) states that examination of mobile banking and financial performance in Zimbabwe. E- banking was proven to be a significant factor in determining a bank's success. Asare & Sakoe (2015) looked specifically at Ghana in an effort to establish a link between e-banking and financial services; they were successful.

### **2.3. Firm Size**

Since the size of a company is so frequently employed as a control factor in empirical corporate finance studies, it receives little to no attention in a significant number of research publications while being one of the most important factors. Companies of varying sizes differentiate themselves in a number of tangible and intangible ways. This means that there is no single agreed-upon definition of business size. In 2005, the OECD categorized small and medium-sized enterprises (SMEs) as those with 10-249 workers.

A company's size is a significant factor in determining its profitability. Large corporations can make their wares or provide their services for much less money if they use the neo-classical notion of economies of scale (Niresh & Velnampy, 2014). Companies of varying sizes differentiate themselves in a number of tangible and intangible ways. Furthermore, larger corporations can take benefit of working in capital-intensive industries, where they face less competition and can earn higher profits due to their size.. Researchers are interested in the concept of firm size because it has historically been very informative. Today's managers need to be cognizant of its significance in order to succeed in the current competitive climate.

Although American companies can get 100% of their funding through common stock, the cash flows generated by the company are still the property of the owners. When a corporation issues both debt and equity, it effectively splits its cash flow in

two, with the safer stream going to the debt holders and the riskier stream going to the investors.

Company profitability can be gauged in part by looking at the size of the company (Oyelade, 2019). Scale is critical to firm performance and the business environment, as seen by the rise and pervasive effect of large enterprises, or multinational corporations (MNCs), in the context of international integration. New economic geography theory and research demonstrates the connection between economic growth and the increase of corporate size. Expanding existing institutions is crucial to a country's or region's economic growth. In contrast, economies of scale allow organizations to increase output, decrease costs, integrate new technologies into existing processes, reduce procurement costs, increase competitiveness, etc. Electronic Payment System

In recent years, mobile payments have changed company operations, particularly for small and medium-sized organizations (SMEs) (Eniola & Entebang, 2015; Meroño-Cerdán et al., 2008; Xin et al., 2023). The term "mobile payments" describes the practice of making purchases of products and services via a mobile device, such as a smartphone, tablet, or wearable. Since they are convenient, secure, and economical, SMEs are increasingly adopting mobile payments (Fatoki, 2014; Liebenau et al., 2019; Ma & Cheok, 2022).

According to Vaidya (2011), the widespread use of mobile banking platforms has had far-reaching effects on the financial services industry and beyond. It all started with text messages, but today's mobile banking is essentially a digital replacement for classic internet banking (Okiro & Ndungu, 2013). Today, in addition to checking balances and receiving alerts, customers can make transfers, redeem coupons, deposit checks, and give payroll instructions all from the convenience of their smartphones.

As the term is used by banks, "mobile banking" refers to the convenience of conducting a variety of banking activities via a mobile device. Making a purchase with a mobile device, whether in-store or online, is not the same thing as beginning an electronic funds transfer at point of sale (EFTPOS) transaction. The earliest kind of mobile banking was text message banking. The first European banks to offer mobile banking to customers did so in 1999, not long after the advent of WAP-enabled mobile phones.

Both banks and their customers can profit from mobile banking's many features. With the advent of mobile banking, customers are no longer restricted by their physical location. There is no time limit on banking, so you can do it whenever it is convenient for you (Floh & Treiblmaier, 2015; Joewono et al., 2017; Purohit & Arora, 2023; Takieddine & Sun, 2015). The convenience of mobile banking also extends to better control over and security for one's cash reserves.

Somalia's banks are following suit, pouring resources into mobile technologies in order to secure a foothold in the market and boost their competitiveness in a number of ways. This development has been helped by the widespread expansion of high-speed digital cellular networks. Telco providers and software developers have been instrumental in the proliferation of increasingly capable smartphones. The proliferation of mobile devices can be attributed to the decreasing price of data transmission. With more and more manufacturers getting in on the action, smart devices have become more affordable, driving the expansion of the global mobile market (Shah & Clarke, 2010).

The phones facilitate spoken exchanges, internet monitoring (through GPS), and text message alerts on monetary dealings. Many Somalians in Somalia rely on mobile phones not just as a low-cost method of communication but also as a way of survival. A significant portion of all calls are used to send money from cities to rural areas. The most common way to send money to someone in Somalia from anywhere in the world right now is through a mobile money service. The UN and other international organizations like CARE-Somalia use this channel for a variety of financial activities, including setting up bank accounts with banks and other money receiving institutions. Mobile phone technology has made it possible for hitherto unbanked people to engage with the financial system. As cited in (World Bank, 2018)"

The private sector in Somalia is responsible for the country's developing telecommunications sector. In all of Somalia's major cities, private companies provide low-priced fixed-line, mobile, and internet services at the best imaginable quality, with the cheapest international calling rates. Customers are able to send money, make payments, and buy things with their mobile phones because of the widespread availability and quick expansion of telecommunications systems.

Based on the findings, e-banking has a positive effect on the relationship between banks and their customers, as stated by Bahl (2012). The bankers claim that issuing such bonds will boost banks' overall efficiency. The internet, short message service (SMS) on mobile phones, outdoor marketing, and television are the next most popular means through which banks promote e-banking (Joewono et al., 2017;Lassar et al., 2005; Mugambe, 2017; Purohit & Arora, 2023; Takeddine & Sun, 2015; Tounekti et al., 2021). Olwande & Ngaba (2019) found that mobile banking significantly affects the success of Kenya's commercial banks.

#### **2.4. Electronic and Online Payment**

Consumers are increasingly adopting online payments, and small and medium-sized enterprises (SMEs) have embraced this payment method quickly to remain competitive. Online payments provide SMEs a variety of benefits, such as increased sales, enhanced client experiences, and lower expenses. Reaching a wider customer base is one of the key benefits of online payments for SMEs. Corporations may take payments from clients all around the world thanks to online payments, which makes it simpler for them to grow their clientele and increase sales (Alalwan et al., 2016; Belanche et al., 2022; Forsythe & Shi, 2003; Joewono et al., 2017; Lassar et al., 2005; Mugambe, 2017; Purohit & Arora, 2023; Rochet & Tirole, 2002; Takeddine & Sun, 2015; Tounekti et al., 2021). Online payments can also be quicker and more convenient for consumers, which may boost repeat business and customer loyalty. Because clients can quickly make purchases without leaving their homes or workplaces, SMEs that accept online payments may give customers a more effortless shopping experience.

Traditional "brick and mortar" banks began exploring ways to cut costs by offering some online banking services in the early 1990s, when the internet was just beginning its industrialization. As a result of the early successes, several banks boosted their online presence by creating more user-friendly websites where consumers could do things like download documents, create new accounts, and process loan applications. Then, online-only banks appeared, competing with traditional banking institutions by offering customers a full range of banking services and products without the need for physical locations (Berg & Kim, 2022; Georgescu & Jeflea, 2015; Liebenau et al., 2019). Online banking first appeared in the early 1980s in both the

United Kingdom and the United States. Despite its widespread recognition presently, the term first sprang to prominence to mean something completely different by the late 1980s.

The term "online banking" describes the practice of handling one's financial affairs using electronic means, such as a computer, television, landline telephone, and terminal. In 1981, four large New York City banks (Chase Manhattan, Citibank, Chemical, and Manufacturers Hanover) experimented with this novel approach to doing business; it first failed owing to client acclimation but revived in the mid-1990s. Concerns about security and a lack of experience with internet banking made many hesitant to give it a try. In the 1990s, financial companies exploited online banking to expand without increasing customer service or face-to-face engagement.

In the 1990s, more people got computers and hooked them up to dial-up home internet, therefore more people spent time online, says Shannak (2013). In 1994, Stanford Federal Credit Union pioneered full-service internet banking. Customers can take advantage of e-Banking services whenever they like thanks to the proliferation of personal computers and the Internet. When it came to large financial transactions, however, many customers in the 1990s did not trust online banking as being safe enough. As a result, financial institutions have made significant investments to strengthen and advertise the safety of their online banking services.

As a result of globalization and growing rivalry in all industries across the globe, many companies have adjusted their practices to more efficiently and affordably serve their customers. A major shift, however, has occurred in the way goods and services are exchanged as a result of the rapid growth of systems based on electronic technology, particularly those involving the internet and personal computers. In order to cut costs, provide better and more consistent service to customers, and streamline their most important services, several service providers have used modern technology. More and more companies outside the banking sector are selling banking products and services, giving customers more options than ever before for their financial needs. To attract and keep customers in an industry as intricate as banking, financial institutions need to establish a new technology channel. As the internet continues to expand, it will become the primary channel via which

users can access banking services regardless of their time zone or physical location. For this reason, the internet has become an integral part of banks' long-term plans.

Online banking goes under many names, including Internet banking, online banking, virtual banking, and others. It paves the way for convenient account access, speedy business transactions, and up-to-the-minute information on a wide range of financial offerings, even on the go. The reach of modern banking has no geographical limits and has stood the test of time. Technology's implementation within banking has altered the sector worldwide for the better. In the mid-1990s, when banks first started offering internet banking, many clients were wary about making financial transactions in this new medium. In order to make online buying mainstream, electronic commerce had to be widely accepted; this was made possible by trailblazing companies like America Online, Amazon.com, and eBay. Eighty percent of US institutions offered Internet banking by the year 2000. Consistent client usage rose over time. With more than 20% of its overall clientele now using online banking, Bank of America achieved 3 million online banking users sooner than any other bank in history. While JPMorgan Chase reported over 750,000 customers using its online banking service, Citigroup reported 2.2 million global internet connections.

Although making purchases and transfers via computer is nothing new, online banking is relatively recent. Online banking refers to the practice of conducting financial transactions over the internet, such as wire transfers, bill payments, account maintenance, mortgage payments, and the acquisition of financial assets like CDs and savings accounts. When using Internet banking, a customer's account information may be viewed on the bank's World Wide Web server rather than on the customer's personal computer. According to Net-Banker, an Internet bank is one that allows customers to check their account balances and make transactions through the web. Banks that are accessible through the World Wide Web go by several names: virtual, cyber, net, interactive, and online. Internet banking is gaining popularity as a result of the broad availability of computers and mobile phones. Clients may now make payments, inquire about their balances, set up or cancel recurring payments, apply for loans, and pay off their mortgages and credit cards all from the convenience of their own homes. There was a trade-off between the advantages of online banking and the



costs that would be incurred, and at first, banks were less profitable as a result of the new technology's impact on their expenses (Ndinda, 2017).

Banks that offer mobile or online banking have recently encountered extremely complicated online services due to concerns over customers' privacy and safety in the digital sphere. This means that banks need to improve the security and reliability of their online banking platforms. This necessitates added costs for financial institutions to win back consumers' trust in e-banking and internet banking. Some Somalian banks are implementing automated electronic services to increase their revenues,

The financial sector has not been immune to the ripple effects of technological progress on the rest of society. When it comes to a company's success and core competencies, technology is now often seen as the major component thanks to the advent of electronic banking (Alalwan et al., 2016; Berg & Kim, 2022; Georgescu & Jeflea, 2015; Grüşchow et al., 2016; Kotarba, 2018; Liebenau et al., 2019; Siddik & Kabiraj, 2019; Takieddine & Sun, 2015). Therefore, both domestic and foreign banks are increasing their investments in e-banking's delivery of cutting-edge technologies to their customers. Banks offer a wide variety of banking services including internet banking, mobile banking, automated teller machine services, Paying bills, reading statements, sending and receiving money electronically, and using credit cards are all examples of e-finances. One other element that sets online banking apart is its compatibility with personal finance management programs. Customers can manage their money with multiple banks and credit unions from the same convenient location. Online banking is viewed more as an addition to, rather than a replacement for, conventional banking. Financial institutions in the country have adapted to xawaaladas, or other forms of money transfer, a technique that hardly few banks do embrace, despite decades of progress. But in recent years, the financial sector has expanded at an unprecedented rate. As the bank's procedures became more competitive and effective, wage expenses would decrease and other charges would be cut, leading to increased financial productivity (Humphreys, 2000, as quoted by Rana, 2015). Because of the convenience and efficiency of online banking, banks are able to attract a larger number of customers and generate more income.

ATMs, phones, computers, the World Wide Web, and most recently, mobile phones, all provide customers with access to electronic services. Many people now

have easy access to the wide range of IT services that can be found online (Floh & Treiblmaier, 2015; Indrayani, 2014; Tounekti et al., 2021). The internet has been beneficial for both banks and their consumers. Banks save money and increase efficiency while customers enjoy the convenience of being able to tend to their financial needs regardless of where they happen to be at the moment. The rapid development of technology has contributed greatly to the improvement of service quality in the banking industry. Customers can now make their payments for utilities, tuition, and other services without making a special trip to an office during regular business hours to stand in line at a counter.

People may now start taking care of their banking services via ATM or online, eliminating the need to leave the comfort of their homes. In addition, the majority of banks have entered a new market by forming partnerships with telcos to offer banking services to telco clients (Okiro & Ndungu, 2013). This is because of how popular smartphones are becoming and how advanced their software, like iOS and Android, has really become.

However, banks leverage information and communication technologies to boost the quality of their client service, simplify their operations, and make better business decisions. This enables them to keep up with the competition in the banking industry, which is expanding and diversifying at a rapid pace. After all, in industries with fierce competition for new business, like banking (Luka & Frank, 2012), customers are the single most important determinant in a company's success or failure.

Since e-banking eliminates the need for banks to build and staff branch locations, it improves the profitability of financial institutions (Hosein, 2009). Since E-banking can replace most face-to-face transactions, this could also reduce the need for bank workers to interact with consumers. As a result, this gives financial institutions a way to save costs elsewhere. It has been found that if banks expand their E-banking offerings, their operational expenses will go down and their profitability will go up ( Tasman et al., 2020).

There can be no doubt that commercial banks play a crucial role in a successful economy. In their role as the most prominent providers of financial services in the country, banks must prioritize efficiency and effectiveness above all else. According

to Aregbeshola and Binuyo (2014), modern company processes have been profoundly impacted by the introduction of ICT as a result of recent technical breakthroughs. These days, the effectiveness of SACCOs relies heavily on information and communication technology (ICT), which represents a promising technological potential. Reduced expenses, lower distribution network costs, shorter supply times, crucial customer service, technological innovation, market development, and improved market share are only some of the ways in which ICT helps to SACCO profitability. One of the advantages of electronic banking goods and services delivery for banks is that it allows them to execute more transactions in less time, which in turn increases their total profitability.

Online banking is available from a wide variety of Somalian banks. Banks in Somalia have taken a major hit despite the country's progress. Somalia's banks have struggled in part because the central bank doesn't play a significant role and the government doesn't prioritize protecting institutions. The recent decade has seen widespread use of computerized services by Somalia's banking sector. They have thousands of users using their services online. However, banks are generating a fortune off of these digital offerings. This indicates that the bank's online bank has contributed significantly to the bank's improved financial performance.

## **2.5. Technology Acceptance Model**

Many studies have utilized different models to investigate, foretell, and shed light on the reasons behind people's positive or negative reactions to information systems. The technology acceptance model is an important framework in this area (Venkatesh & Davis, 2000). The basic objective of (TAM) is to provide an explanation of the factors that provide to technological acceptance. Furthermore, the model aids academics and professionals in comprehending why a specific system is controversial.

Furthermore, both attitude and perceived utility are affected by how easy it is to use. According to TAM, a system's favorable opinion increases when its perceived usefulness and ease of use increase (Bailey et al., 2017). So, a more positive outlook on using the system has a beneficial effect on actual system use. Since technology becomes more useful as it becomes easier to use, TAM argues that this factor determines how useful people find it to be.

Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are two factors that influence a customer's decision to use a service, as revealed by TAM and other studies (PEOU). Because of this, the TAM has been compared to online banking by some. Customers are more likely to utilize a service if it is easy to do so, and the TAM has been proven to be useful in encouraging the widespread usage of Internet and mobile banking (Al-Okaily et al., 2020; Belanche et al., 2022; S. P. Chen, 2008; León, 2021; Najib & Fahma, 2020). The TAM speculates that users' feelings toward the service are a determining factor in how often it is employed. The customer's opinion of the service's convenience may not be the sole factor in determining how they feel about it (Lassar et al., 2005; Tounekti et al., 2021; Yousafzai et al., 2005). Interesting results came from a question about trust. While many users reported feeling secure when accessing the service, it is important not to discount the opinions of those who did not. There did not appear to be a distinct demographic of those who felt unsafe. There was a pattern to the things that made folks uneasy. The basic objective of TAM is to provide an explanation of the factors that contribute to technological adoption (Au & Kauffman, 2008). Furthermore, the model aids academics and professionals in comprehending why a specific system is controversial. This model is relevant to the research because it may be used to foresee and explain the acceptance of Information Technology (IT), the technology that dominates modern culture.

## **2.6. Hypothesis Development**

In what follows, we'll talk about how to construct a research hypothesis.

### **2.6.1. Firm Size and Financial Performance of SMEs.**

A crucial element that might affect a company's financial performance is its size. Because they sometimes have limited resources, small and medium-sized enterprises (SMEs) may find it difficult to compete with larger businesses that operate in the same industry. But, research has shown that SMEs may also benefit from a few things that help with their financial performance.

The adaptability and agility of SMEs is one of its benefits. SMEs can rapidly adjust to consumer demands and market shifts, which can help them stay competitive. Also, SMEs frequently have more intimate connections with their clients, which can improve client loyalty and encourage repeat customers. As an outcome, SMEs might

be able to increase customer satisfaction levels, which might lead to better financial results. The capacity for the development of SMEs is another benefit. SMEs frequently have more freedom when it comes to experimenting out new ideas and taking chances, which may lead to the development of cutting-edge goods and services (Humphrey et al., 2001; Karim et al., 2022; Menne et al., 2022a, 2022b; Mugambe, 2017). This might help Enterprises in standing out from the crowd and luring in new clients. SMEs could also be more receptive to new trends and technology, which can help them remain ahead of the competition and maintain a strategic advantage.

H1: There is a positive relationship between Firms size and financial performance of Small and medium-sized enterprises (SMEs).

### **2.6.2 Electronic payment and financial performance of SMEs.**

In order to streamline their operations and expand their client base, more and more small and medium-sized businesses (SMEs) in East Africa are choosing to accept mobile payments. Many research have looked at the connection between mobile payments and the monetary success of SMEs in East Africa (Alalwan et al., 2016; Kutubi et al., 2021; Mugambe, 2017).

East African consumers and small and medium-sized enterprises (SMEs) are increasingly using mobile payments. The financial performance of SMEs in the region has been the subject of several research on the impact of mobile payments; some of the important findings are mentioned here.

SMEs' financial performance significantly improved after using mobile payments. According to the study, which surveyed Businesses in Kenya, those that used mobile payments had greater return on assets (ROA) and return on equity (ROE) than those who did not. Another evidence that mobile payments can assist SMEs in lowering expenses and boosting profitability comes from the fact that Businesses that accepted mobile payments also had greater net profit margins. Firms that accepted mobile payments had an increase in sales and customer traffic, suggesting that mobile payments might help SMEs reach more clients and boost their competitiveness. Mobile payments can also assist SMEs in lowering transaction costs related to conventional payment methods like cash and cheques (Gorshkov, 2022).

Mobile financial transactions, say Bangens & Soderberg (2010), boost productivity in small and medium-sized enterprises. This is due to the fact that doing business transactions via mobile financial transactions helps to reduce transaction times. Most of small and medium-sized enterprises (SMEs) prefer doing financial transactions via mobile phone than conducting them via bank. This is because they help people save money by reducing the need for them to physically meet to make or collect payments. Because of this, they are able to drastically cut their operational costs while also boosting their efficiency. SMEs can benefit from mobile financial transactions since they help mitigate information asymmetry and market inefficiencies. Hence, they can save money and time by using their mobile phones to conduct financial transactions, which is a faster and more comfortable alternative to traditional banking.

Commercial banks' financial performance is affected by customers' use of mobile banking features such Money Transfer between Accounts/E-funds Transfer, Bill Payment, and Command for Cheques Issued and Bank Statements. The bank's revenue has skyrocketed in the past five years because to these M-banking services. Prepaid cards, automated teller machines, voice mail/landline interfaces, smart cards, and point-of-sale networks and online resources are all ways in which the banking system might benefit from technological advancements, as evidenced by the research of Karjaluo et al. (2002).

The convenience of the mobile platform eliminates the need for handling physical currency. Because of this improvement, financial results at the banks have improved. Electronic banking has a considerable positive effect on the bottom lines of commercial banks. The increasing use of smartphones is expected to fuel further growth in the mobile banking industry. Mobile banking is convenient for customers because it allows them to bank "on the fly." It is important to remove any obstacles that users may have when attempting to use mobile banking. Expanding a commercial bank's mobile banking footprint, increasing customers' familiarity with its apps, and decreasing the risks and threats connected to banking on a mobile device are all ways to boost profits. Hence, this idea was put out after reviewing the relevant research.

H2: There is a significant relationship between electronic payment systems and financial performance of Small and medium-sized enterprises.

### **2.6.3 Online Payment and Financial Performance of SMEs.**

The correlation table shows that using internet banking is positively related to having a healthy financial situation. If the other factors remain the same, the increased usage of online banking will boost the bottom line for publicly traded banks. In principle, mobile banking is the next logical step after online banking. Recent developments in technology have made it possible to conduct internet banking from any device, be it a desktop, laptop, or even a mobile phone. Banks can cut costs and improve customer service by facilitating electronic and mobile banking. The bottom line of banks will strengthen as a result of these efficiency gains (Al-Okaily et al., 2020; Berg & Kim, 2022; Eniola & Entebang, 2015; Georgescu & Jeflea, 2015; Tounekti et al., 2021). There has been some improvement in bank efficiency thanks to mobile banking, but it hasn't been very significant. As a result, the following theory was put up.

H3: There is a significant relationship between online payment and financial performance of Small and medium-sized enterprises.

## **2.7. Determinants of Financial Performance**

Corporate governance, sales revenue growth, access to financing, market share, assets, human resource capacity, technology (mobile banking), outputs, and expenses are just few of the aspects that impact the financial performance of SMEs. However, it is challenging to compare SMEs because to the wide variation in market share and output. The total assets of a small or medium-sized enterprise (SME) also rely on the capital intensity and certain fluctuations within a specific time frame. The next section will examine some of the factors that affect the success of small and medium-sized enterprises financially.

### **2.7.1. Human Resource Capacity.**

The success of any business depends on its capacity to attract and retain talented workers. Therefore, HRM is crucial when gauging a company's viability in the marketplace. According to Bamback and Lawyer (1997), poor management is a primary cause of failure for many businesses. Nakhaima (2016) claims that a lack of professionalism is one reason why so many small and medium-sized enterprises

(SMEs) have failed. This is due to the fact that only a small fraction of SMEs really hire any skilled people at all. Human resource elements, such as the results achieved by employees in terms of commitment, empowerment, growth, and competence, can have a significant impact on business performance. A strong human resource department positively affects the bottom line of small and medium-sized enterprises. Still, most SMEs don't value their employees. It's also true that they lack the means to make use of available human resources.

### **2.7.2. Corporate Governance.**

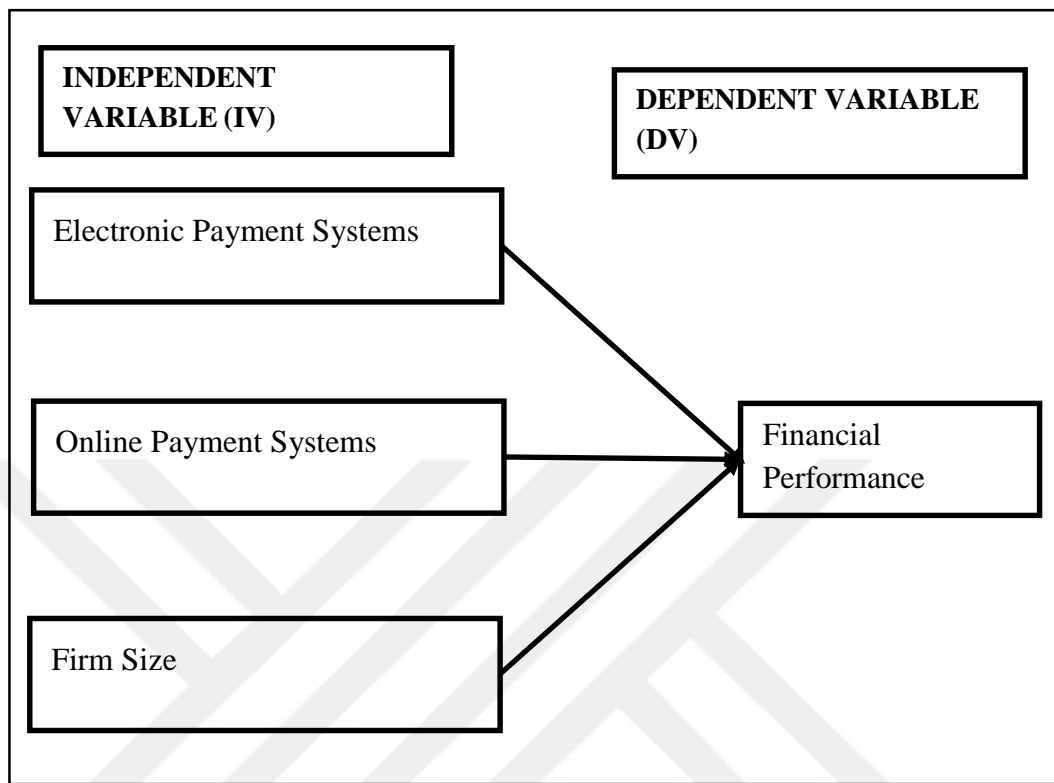
When discussing how businesses are managed, the term "corporate governance" is typically employed. Good corporate governance is a growth stimulant for SMEs since it increases their chances of long-term financial success. However, many SMEs fail to implement corporate governance standards because their leaders mistakenly believe that such measures are more suited to multinational corporations (Kirui, 2016). Financial success is possible for SMEs with good corporate governance. while poor corporate governance leads to poor financial returns.

### **2.7.3. Access to Finance.**

One barrier preventing the expansion and development of SMEs is the difficulty in gaining access to finance and capital. Self-financing and borrowing from family and friends are usually insufficient to cover the full range of SMEs\* business operations, but these options are sometimes the only ones available to firm owners due to credit constraints. Because they cannot qualify for long-term loans, SMEs must rely on more expensive forms of short-term funding. Exorbitant bank fees and penalties, a high cost of borrowing, and other financial hurdles are a reality that SMEs must face (Nakhaima, 2016).

Lacking sufficient capital, SMEs are unable to expand, meet the immediate needs of their customers, or keep up with the times. To increase their competitiveness, small and medium-sized enterprises (SMEs) need access to finance so they may invest in cutting-edge tools, techniques, and personnel. When able to obtain financing quickly and easily, SMEs perform better financially. When people need money quickly, they often turn to high-interest, short-term loans, which can have a devastating impact on their financial stability. The Figure 1 displays research model.





**Figure 1.** The Research Model

## **CHAPTER THREE**

### **AN IMPLEMENTATION ON SMES IN SOMALIA**

#### **3.1 Research Design**

As defined by Ellis & Levy (2010), is the overarching strategy for gathering, analyzing, and interpreting the data needed for the study. Study design is important because it lays out a plan for gathering and analyzing the data that will be utilized to address the research question or statement of need. In this study, a thorough questionnaire will be developed to elicit the necessary information from the participants. The goal of quantitative research is to collect numerical data that can provide further context for an event, which can then be analyzed using mathematical tools. More importantly, employing quantitative data will be the more efficient and judicious way to examine the hypotheses of this study. In this study, a questionnaire prepared in the light of previous studies in the literature was used.

The study's target population consists of senior managers and department heads of small and medium-sized enterprises (SMEs) in Mogadishu, Somalia, which have adopted electronic payment (banking) services. Mogadishu residents are a good target market since they use payment (banking) services at significantly higher rates than those in other parts of Somalia.

#### **3.2 Economic Indicators**

Despite the absence of efficient national governance, Somalia nevertheless has a sizable informal sector that is mostly supported by agriculture, livestock, money transfer services, and telecommunications. The government of Somalia is unable to collect internal taxes, and as of 2017, the country's external debt, which is primarily in arrears, was estimated to be equivalent to nearly 77% of its GDP.

Agriculture is the most significant industry, and typically, livestock accounts for around 40% of GDP and more than 50% of export revenue. The majority of the population consists of nomads and semi-pastoralists who rely on livestock for their subsistence. Because of expansion in the agricultural, construction, and telecommunications sectors, economic activity is predicted to have expanded by 2.4% in 2017. The majority of Somalia's small industrial sector has been robbed, and the

equipment has been sold for scrap metal. This sector is dependent on the processing of agricultural products.

Since the fall of the central government in 1991, Mogadishu, the capital of Somalia, has seen the emergence of the first gas stations, supermarkets, and air routes to Turkey. The biggest market in Mogadishu sells everything from food to electronics. Hotels are still in operation with the help of private security militias. Outside of Mogadishu and a few provincial capitals, formalized economic growth has not yet spread, and in the city itself, security concerns are the primary driver of commerce. In most major cities, telecommunications companies offer wireless services, and they also provide the lowest rates for international calls on the continent. Money transfer/remittance services have sprung up all over the country in the absence of a formal banking sector, handling up to \$1.6 billion in remittances annually, though international concerns over the money transfers into Somalia continue to threaten these services' ability to operate in Western countries. 2017 saw Somalia elect a new president and bring in unprecedented amounts of foreign aid and investment, which is encouraging for the country's rehabilitation.

In 2021, Somalia increased by half a million people, a 3.02 percent growth in population. Although the rate of increase is slowing, the current population of 17.07 million represents an all-time high for the time period under study. The overall population has been steadily rising over the past few years.

The country's economic data indicate the chances and problems it is facing. One such metric is the Gross Domestic Product (GDP), which counts all the products and services generated inside Somalia's borders. However, dependable GDP data are hard to come by because of persistent hostilities and the absence of a powerful central authority. According to estimates, Somalia's GDP will be about \$7.9 billion in 2021.

Similar to this, the Gross National Product (GNP) accounts for the money Somali nationals earn at home and abroad. Unfortunately, there is a lack of data on GNP, making it challenging to determine how well the economy of the nation is doing overall.

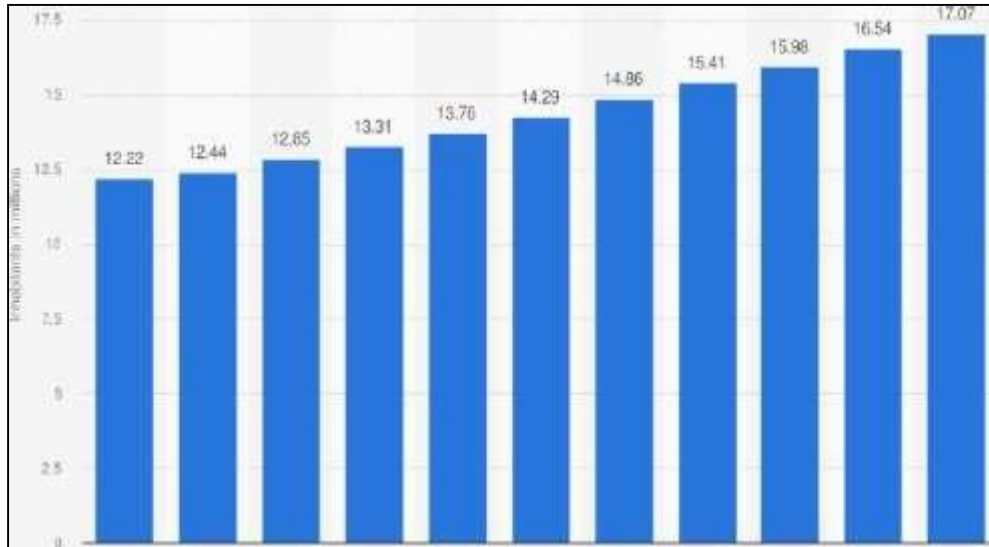
Another important economic indicator is inflation, which measures the general rise in prices over time. Inflation in Somalia has been a recurring problem, partly fueled by

elements including currency depreciation, conflict, and restricted access to essential services. The anticipated rate of inflation for 2021 is 5.7%. (World Bank, 2021). For a variety of products and services, Somalia is significantly dependent on imports. The main imports of the nation are manufactured products, machinery, food, and gasoline. However, due to low domestic production, Somalia's economy faces difficulties in remaining stable and developing.

Exports are essential to the nation's ability to make money. Livestock, seafood, and bananas are among Somalia's top export products. With initiatives to enhance livestock exports and investigate new markets, the export sector has recently displayed some signs of growth. The export industry still has issues with infrastructure, access to markets, and quality requirements.

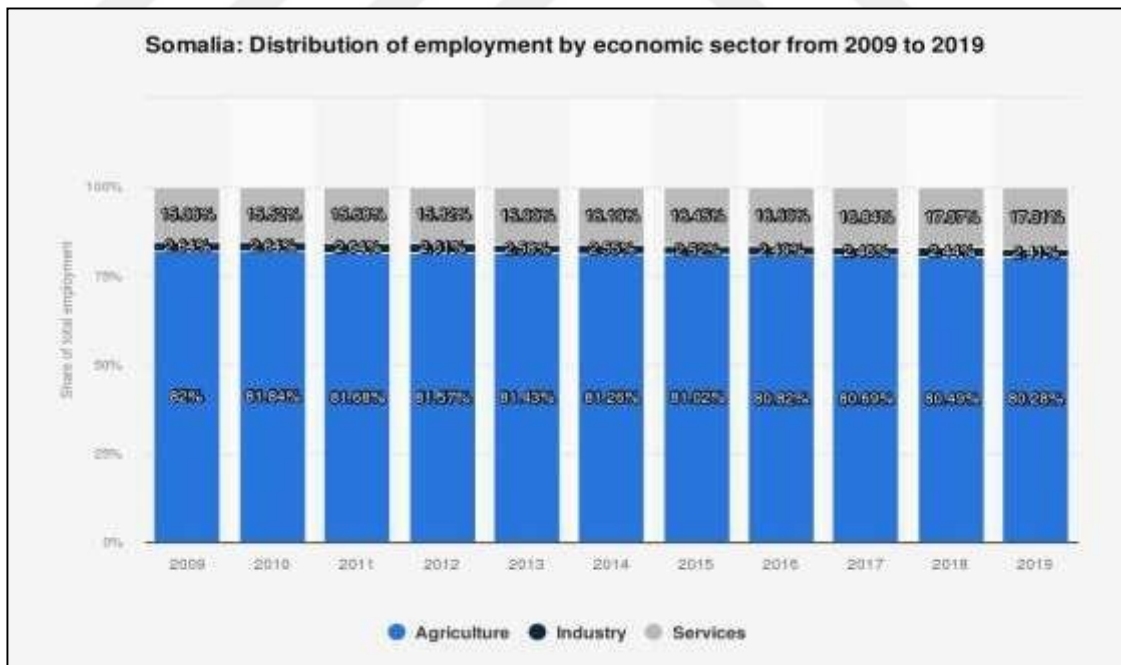
In Somalia, unemployment is a serious problem. The unemployment rate is still high, especially for young people. The high unemployment rate is a result of a lack of employment possibilities, inadequate programs for skill development, and persistent hostilities. The total unemployment rate was predicted to be about 20% in 2021, while the rate for young people was projected to be around 60%. (World bank, 2021)

Despite these difficulties, Somalia has a sizable population, which may offer chances for economic development. Around 16.6 million people were thought to be living there as of 2021. For sustainable economic development, it is essential to invest in education, vocational training, and job creation programs to fully use the potential of this people (World Bank, 2021). The following graphics show some indicators about Somalia Economy respectively.



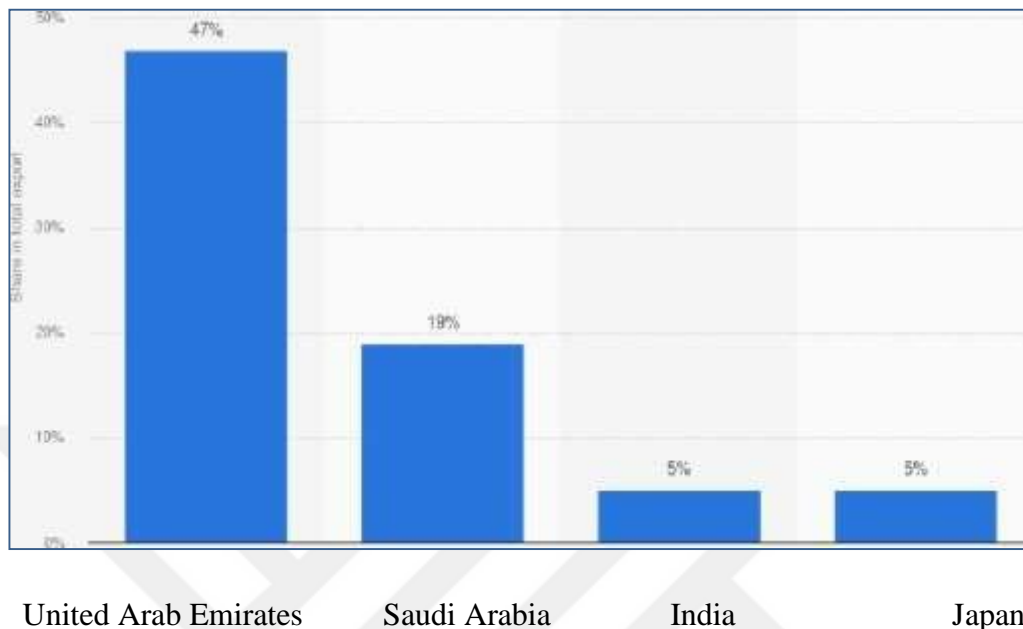
**Graphic 1:** Somalia: Total population from 2011 to 2021 (in million inhabitants)  
Source: (World Bank, Statista)

The total population in Somalia increased by 0.5 million inhabitants (+3.02 percent) in 2021. While the growth is slowing down, with 17.07 million inhabitants, the total population is at its peak in the observed period. Notably, the total population continuously increased over the last years.



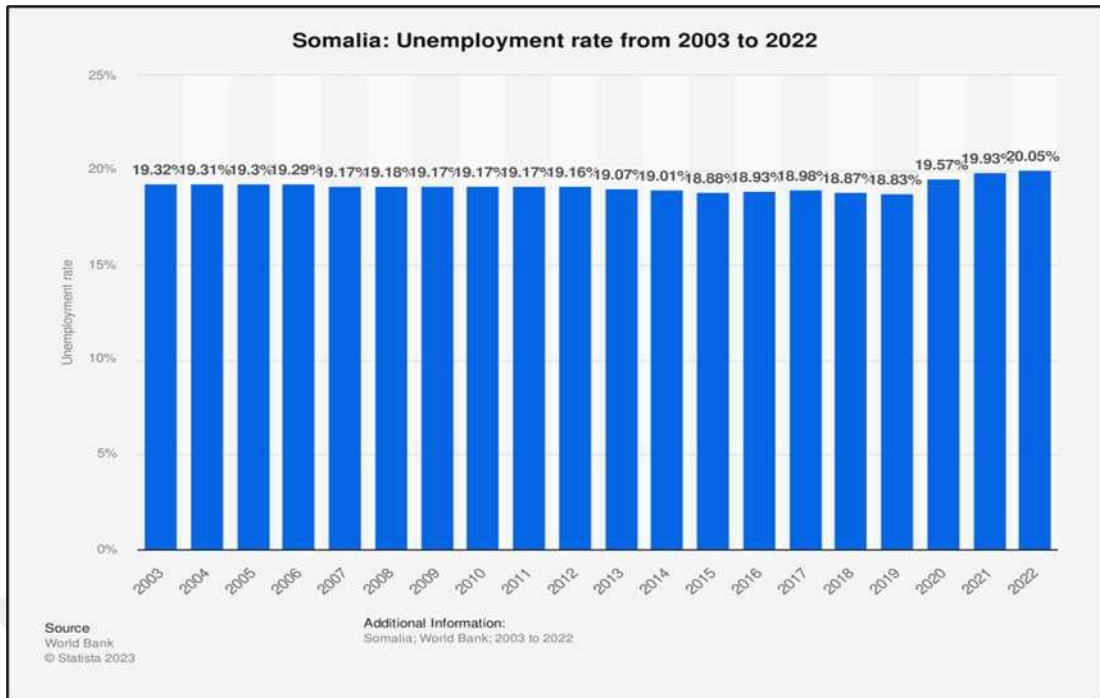
**Graphic 2:** Distribution of employment by economic sector from 2009 to 2019 (Statista)

The graph shows the distribution of employment in Somalia by economic sector from 2011 to 2021. In 2021, 26.28 percent of the employees in Somalia were active in the agricultural sector, 17.71 percent in industry and 56.01 percent in the service sector.



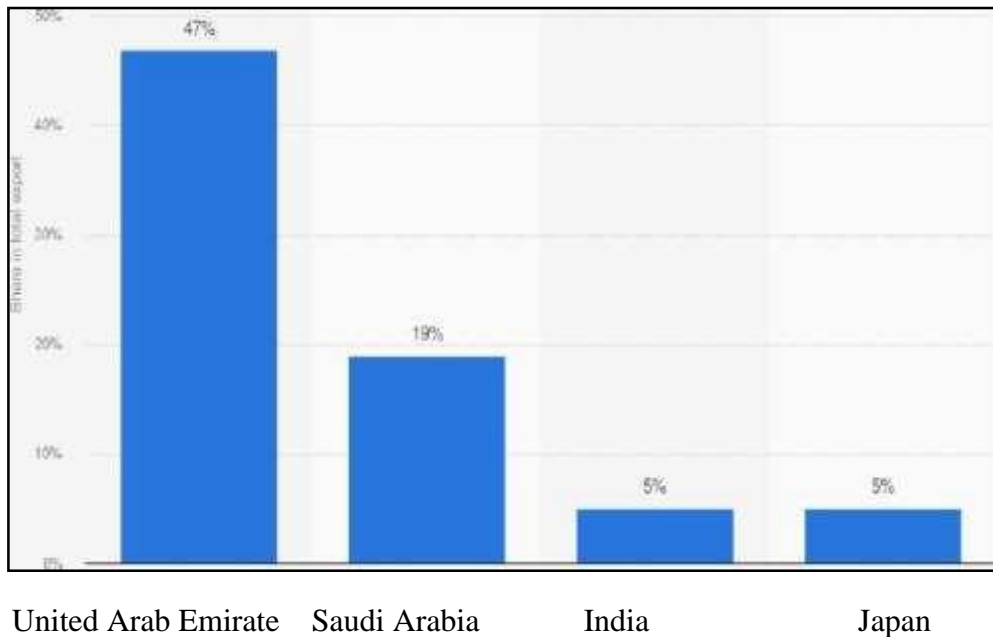
**Graphic 3:** Countries with the most exports in Somalia. Source: (World Bank, Statista)

This graph shows the most important export partner countries for Somalia in 2019. In 2019, the most important export partner of Somalia was the United Arab Emirates, with a share of 47 percent in exports.



**Graphic 4:** Somalia Unemployment rate from 2003 to 2022

In 2022, the unemployment rate in Somalia remained nearly unchanged at around 20.05 percent. Nevertheless, 2022 still represents a peak in the unemployment rate in Somalia.

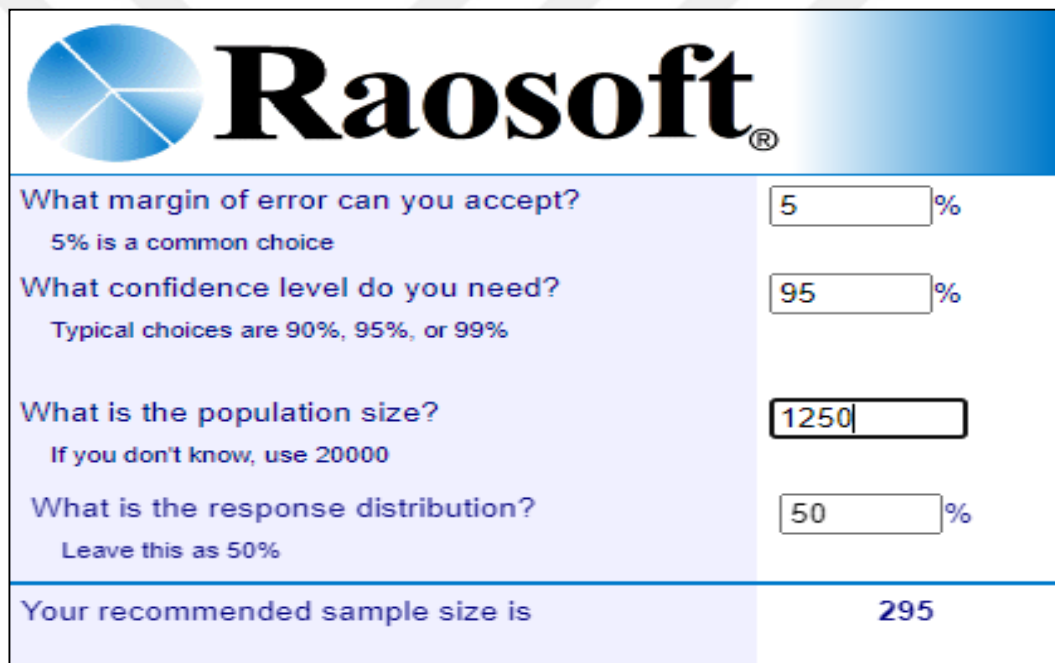


**Graphic 5:** Countries with the most import in Somalia. Source: (World Bank, Statista)

This graph shows the most important import partners for Somalia in 2019. In 2019, the most important import partner for Somalia was the United Arab Emirates with a share of 32 percent in all imports.

### 3.3 Population and Sample size

We targeted Somalia's top executives along with all those working for SMEs during our data collection procedure. Because top-level managers at SMEs know best whether or not electronic payment can boost SMEs' financial performance (Space, 2014). Over 1,250 SME representatives will fill out the survey. Figure 2 displays calculation of the research sample by using an online calculator.



The image shows a screenshot of the Raosoft online sample size calculator. The interface is blue and white. At the top left is the Raosoft logo, which consists of a blue circle with a white pie chart inside, followed by the word "Raosoft" in a bold, black, sans-serif font. Below the logo, there are four input fields with corresponding labels and instructions:

What margin of error can you accept? 5% is a common choice	<input type="text" value="5"/> %
What confidence level do you need? Typical choices are 90%, 95%, or 99%	<input type="text" value="95"/> %
What is the population size? If you don't know, use 20000	<input type="text" value="1250"/>
What is the response distribution? Leave this as 50%	<input type="text" value="50"/> %
<b>Your recommended sample size is</b>	<b>295</b>

**Figure 2.** Sample size of the study

For accurate adaptation of population features from a sample, a large enough sample size is required (Space, 2014). The sample will consist of small and medium-sized businesses (SMEs) in Somalia, and the researcher will employ cutting-edge research techniques to choose them. Images from the book's online sample size calculator, which stars Uma Sekaran and Roger Bougie, are included.



### **3.4 Data Collection and Sampling Technique**

The process through which data is gathered is called "data collection." Primary data and secondary data are the two basic categories of information sources. The investigation team's method is employed to gather information for the study. Small and medium-sized businesses (SMEs) in Somalia are asked to fill out surveys with a five-point Likert system rating system ranging from (strongly agree) 5 to (strongly disagree) 1. Formal and informal questionnaires serve the same purpose (Space, 2014) by gathering questions that respondents must answer.

Investigations rely heavily on primary sources. Google forms, in particular, have become increasingly popular for online data collecting because of the enormous number of people they can contact and the speed with which they can respond. Previous studies have shown that questionnaires are a common method of collecting information about Firm size, electronic payment, and online payment. Non-probability sampling will be utilized to choose study participants from the intended population. The researcher chooses which individuals will and will not take part in the survey under this sampling strategy. This approach will not give the intended participants a level playing field in terms of enrollment in the study.

### **3.5 Theoretical Model**

As was explained in the prior section, this study uses many independent variables to evaluate the importance of a single dependent variable. In the meantime, the effects of company size, mobile payment, and online payment on the financial performance of Somalia's SMEs will be investigated. Primary data collected via questionnaire distribution will be analyzed using SPSS analytical software, building on the outcomes of data collection.

### **3.6 Research Quality**

Validity in quantitative research refers to "the degree to which a data collection technique, i.e. concept, measures what was intended to be measured" (Heale & Twycross, 2015). In most circumstances, a questionnaire's validity is assessed separately from the validity of each individual item or group of questions. With the use of the content validity index, the researcher will make sure that the questions being

asked in this study are as reliable as they can be. The study's questions will be written as plainly as feasible, and the researcher will conduct isolated tests of each hypothesis. The study's questions may need to be adapted somewhat to account for the fact that it will be performed in English. However, every precaution will be taken to limit the impact of the oversight.

The term "reliability" describes the degree to which repeat measurements yield the same result. As reported by (Heale and Twycross, 2015) The credibility of the questionnaire could be strengthened through pilot testing, revision, and additional testing. In this study, Cronbach's alpha will be used to examine the consistency of each construct. Cronbach's alpha requires that it be at least 0.70. However, we'll be extra cautious to cut down on mistakes. When talking about measurements, reliability is how close to perfect they are.

### **3.7 Data Analysis and Data Screening**

After collecting information from participants, we used SPSS V25.0 to analyze the results. Both descriptive and inferential methods will be used in the study. The mean, standard deviation, frequencies, and histograms are all common descriptive analyses. The purpose of inferential analysis in statistics is to form inferences about the connections between variables. Multiple regression analysis will be used to establish a causal relationship between a dependent variable and its explanatory variables.

Before diving into an analysis, it's important to undertake some preliminary data screening. Finding out whether or not the variables are normally distributed and looking for missing values fall under this category. Both cases will be analyzed using SPSS. In order to carry out statistical analysis, the assumption of normality must be met for the most parametric test.

Data must follow a normal distribution, or a bell curve with a mean of 0 and a standard deviation of 1 for this claim to hold. Any parametric test can be conducted if the assumption holds. The normalcy assumption will be tested by looking for skewness and kurtosis. If the range of skewness is less than one and the range of kurtosis is less than three, then the data has a normal distribution.

### **3.8 Descriptive Analysis**

When performing a descriptive analysis, it may seem that certain shapes best fit each data situation. Because it provides measurements and summaries of the data set, it helps explain and understand its properties. Means, medians, ranges, extremes, central tendencies, and kurtosis are some of the statistics that can be described using this technique. Statistical significance assessment of hypotheses about the factors that affect financial performance reveals the features of the research sample.

### **3.9 Person Correlation**

Results are interpreted using the  $r$  value of the coefficient of correlation. A null hypothesis is either accepted or rejected based on its significance- $p$  value. The results are analyzed using the  $R$  value. This study provides an explanation of the interplay between the dependent and independent variables. We found a strong enough link between the variables known to impact the profitability of electronic payments in Somalia to warrant conducting an experiment to put our hypothesis to the test. This technique is used to decide whether or not a change in one variable may be referred to a change in another. Researchers can use multiple regression analysis to evaluate the strength of a relationship between an outcome (the dependent variable) and multiple predictor variables, and to rank the relative importance of those predictors. Multiple regression analysis allows researchers to isolate the impact of individual predictors on the connection between the outcome and the dependent variable.

Each independent variable's predictive power is indicated by its regression coefficient, as stated by Sekaran and Bougie (2016). Furthermore, Linear predictions can be made between two or more independent variables using multiple linear regression which is an improvement over standard linear regression (Field, 2013). Multiple linear regression is a necessary tool for the researcher to fully comprehend the effects of each independent and dependent variable.

Multiple linear regression necessitates the use of an interval scale for the mathematical correlations between the independent variables and the dependent variable. This statistical approach can then be utilized to develop a forecasting model.

### **3.11 Results and Discussion**

There is optimism and belief in a modern Somalia. We all have a part to play in the reconstruction of Somalia. When they join actions, they can make an impact. Banks in Somalia are using this philosophy as the basis for their work to aid in the country's community and economic development and to begin the (slow) process of rebuilding.

Somalia's growing economy can benefit from the introduction of modern banking practices because SMEs have a deep understanding of the country's unique financial demands. In Somalia, customers from all walks of life, from large corporations to small businesses to government agencies, can go to their bank and receive all the financial services they need. Offering financial solutions includes retail banking, commercial and corporate banking, mobile and online payments, ATM banking, SWIFT transfers, international money transfers, and much more.

Somalia's SMEs (small and medium-sized enterprises) are characterized by their limited market share, few resources, and small number of employees. These businesses are essential to Somalia because they are the primary source of national income and employment.

However, small and medium-sized enterprises (SMEs) in Somalia face a number of challenges, including a lack of skilled labor, inadequate infrastructure, and restricted access to financing. Small and medium-sized businesses have been hampered by the country's history of violence and instability, which has prevented their growth and development.

Despite these challenges, work is under way to encourage the expansion of Somalia's burgeoning SME sector. Training and education programs, as well as easier access to funding, are just a few examples of the ways in which business owners are being helped by current efforts.

Somalia's SMEs provide a significant challenge but also hold great promise for the country's economic development. With the right kind of assistance and investment, they may increase employment, production, and long-term economic growth. This chapter's empirical findings represent the final samples of Somalia's SMEs. In the

following sections, we give the results, including both the findings themselves and the wider ramifications of those findings. The questionnaires used to collect data are the most vital aspect of this study. Using the SPSS statistical package, data collected through formal surveys is analyzed. Different kinds of data analysis are used to transform raw data into actionable insights. The outcomes of each study question are also analyzed. In this chapter's final section, we present a brief summary of what we learned through this inquiry.

For each quantitative variable in this study, skewness and kurtosis values don't over the threshold. For data to be considered normally distributed, both the skewness and kurtosis values must fall within the range of 1 to 3.

### 3.12 Descriptive Analysis in Demographic Outline

#### 3.12.1 Gender

Table 1 displays the respondent's gender descriptive statistics. Out of 295 respondents, the results show that 214 (or 72.5% of the sample) are male and 81 (or 27.5% of the sample) are female. According to these numbers, there is a gender gap of more than half.

**Table 1.** Gender of the respondents

Gender	Feature	Frequency	Percentage %
<b>Respondents gender</b>	Female	81	27.5
	Male	214	72.5
	Total	295	100.00

#### 3.12.2 Age

Table 2 shows demographic data about the respondent base on their age. 295 people participated in the survey, and the results show that 123 (41.7% are between the ages of 51 and above, with 25.1% between the ages of 41 and 50. were 33 70 (23.7%) were at the age range of 31 to 40, and only 28 (9.5%) were in their early

twenties. According to these numbers, the disparity in ages is significantly higher than fifty percent.

**Table 2:** Age of the Respondents

<b>Demographic profile</b>	<b>Details</b>	<b>Frequency</b>	<b>Percentage (%)</b>
<b>Age</b>	20-30	28	9.5
	31-40	70	23.7
	41-50	74	25.1
	51 and above	123	41.7
	Total	295	100.00

### 3.12.3 Level of Education

Table 3 shows descriptive data about the respondent's educational background. It turns out that 32.2% of respondents (95 total) hold some category of master degree. The next largest group is comprised of those with a bachelor's degree (88, or 29.8%), followed by those with a high school or less (69, or 23.4%). 43 people are PHD holders (14.6%). This indicates that the vast majority of survey takers have at least some college education and should be able to answer questions accurately.

**Table 3:** Level of Educations

<b>Demographic profile</b>	<b>Details</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Academic Qualification</b>	High school or less	69	23.4
	Bachelor degree	88	29.8
	Master degree	95	32.2
	PhD	43	14.6
	TOTAL	295	100.00

### 3.12.4 Firms Industry of the Respondents

Table 4 indicates types of firms participated by industry.

**Table 4.** Industry Type of Firms

<b>Industries type</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Agriculture and livestock	20	6.8
Food beverage	80	27.2
Communication	24	8.1
Financial institutions	27	9.1
Real estate brokers	34	11.5
Others	110	37.3
Total	295	100.00

### **3.12.5 Firms Number of Employee**

Table 5 shows descriptive data about the firm's respondent number of employee. It turns out that 124 (42.3%) which is the largest number indicates that they have less than 10 employees. The next largest group (93, or 31.5%) were the range of 11-50 employees, followed by (58, or 19.7%) in the range of 51-100. In addition, the last group, which is the least number 20 (6.8%), has the range of 101-250. This indicates that number of employees were too high in small enterprises than the medium and larger enterprises.

**Table 5.** Number of Firms

<b>Number of employee</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Less than 10	124	42.3
11-50	93	31.5
51-100	58	19.7
101-250	20	6.8
Total	295	100.00

### **3.12. 6 Reliability Test**

The conclusions of this study can be broken down into four variables: financial performance; firms size; electronic payment; and online payment. The results of the reliability test are used to verify the veracity of claims in a number of different contexts. The results of the above study are summarized in Table 6

**Table 6.** Reliability Test

<b>Variable</b>	<b>Number of Statements</b>	<b>Cronbach's Alpha</b>
Firm size	6	0.792
Online payment	10	0.755
Electronic payment	7	0.759
Financial performance	8	0.803

Cronbach's alpha for each measure is shown in Table 8. For Financial Performance it was 0.803, for Firms size it was 0.790, for Mobile payment it was 0.759, and for Online payment it was 0.755. The results indicate that Cronbach's Alpha is higher than 0.7. This proves that the statements used to assess participants' understanding of the The parts of the study were appropriate.



### 3.12.7 Factor Analysis

Table 7 shows factor loads and Cronbach's alpha values.

**Table 7.** Factor Analysis

	Factor Loads	Cronbach alpha
(AVE= KMO= .892)		<b>.792</b>
1) The size of the company has impact on financial performance over time.	.792	
2) Small and medium sized corporation face an issue on electronic payments systems and modern technology.	.785	
3) Firm size impact the level of risk in its financial operations.	.790	
4) Firm size influences the level of competition in the market and, in turn, its financial performance.	.785	
5) Size of a firm affects its ability to secure financing.	.790	
6) The size of the company has impact on financial performance over time	.782	
(AVE= KMO= .893)		<b>.759</b>
7) Banking services are now substantially more accessible around the clock thanks to mobile banking.	.755	
8) Mobile banking requires a far shorter time commitment than conventional banking.	.764	
9) There is no need for customers to physically visit a location to communicate with the bank.	.766	
10) This might be a game-changer for reaching those who don't have bank accounts.	.753	
11) Mobile loan income has risen thanks to the introduction of credit scoring algorithms.	.759	
12) Users worry about losing money due to carelessness or blunders when sending funds via mobile banking.	.750	
13) Our corporations has invested heavily in online banking and electronic payment systems.	.769	
(AVE= KMO= .896)		<b>.755</b>
14) Online banking and use of electronic payment system have improved the image of our corporation among its customers.	.750	
15) Data and information processed through our company's online banking and electronic payment systems are always protected.	.753	
16) Customers fear online banking, and use of electronic payment systems due to fear of hacking of their accounts by web hackers.	.765	

17) The bank has made a good chunk of change from online banking, and the fees are reasonable.	.752	
(AVE= KMO= .896)		<b>.803</b>
18) The use of online banking and electronic payment systems increase in return on assets of our corporation.	.810	
19) The corporation has experienced an increase in return on assets.	.801	
20) The corporation has experienced an increase in market share.	.799	
21) Since implementing numerous kinds of self-service technologies, the firm has seen a rise in its sales volume.	.804	
22) The corporation has increased of the number of new clients.	.798	
23) The company's long-term financial success is affected by its size.	.803	

### 3.13 Descriptive Statistics on Responds

In this work, information on how to quantify hidden variables, one indicator at a time is described using descriptive statistical analysis. A statistical description of the relationship between financial results, Firm size, electronic, and online-based payment methods. The outcomes of the six indicators used to measure the Firms size are displayed in Table 8. A majority (74%) of respondents agree or strongly agree with Q1, but a sizable minority (15%) disagree or strongly disagree. 11% of respondents either partially or completely reject the claim. 75% percent of respondents in Q2 strongly agreed or agreed, 17% were neutral, and either 8% disagreed or strongly disagreed.

In the third quarter, 73% of respondents gave a positive response. After that, 20% of people say they don't agree or disagree, and 7% say they don't disagree or strongly disagree. In the fourth quarter, 77% agreed or strong agreement with the indication, 14% were neutral, and 9% were in disagreement or strong disagreement.

As of Question 5, 73% of participants express some level of agreement with the indicator. The next largest group, at 20%, is undecided, followed by the 7% who either disagree or strongly disagree. Seventy percent of respondents give a positive or strong response to Q6; twenty percent give a neutral or negative response; and ten percent give a negative or strong negative response.

**Table 8.** Distribution of Firm Size Indicator Score Frequencies.

	<b>Firms size</b>					
<b>Indicators</b>	<b>Statements</b>	5	4	3	2	1
Q1	The size of the company has impact on financial performance over time.	119	100	43	9	24
Q2	Small and medium sized corporation face an issue on electronic payments systems and modern technology.	100	122	50	7	16
Q3	Firm size impact the level of risk in its financial operations.	110	107	59	11	8
Q4	Firm size influence the level of competition in the market and, in turn, its financial performance.	100	129	42	9	15
Q5	Size of a firm affects its ability to secure financing.	113	103	58	8	13
Q6	The size of the company has impact on financial performance over time	100	123	54	6	12

The six metrics used to check electronic payment systems are summarized in Table 9. For the second quarter, 68% of respondents are in agree or strongly agree, 23% are neutral, and 9% are in disagree or strongly disagree. In quarter 3 all survey takers in Q3 were in the "strongly agree" or "agree" camp.. In Q4, 75% of respondents either strongly agree or agree with the indicator, 18% neither agree nor disagree, and 7% disagree or strongly disagree.

76% of respondents found the indicator to be true or mostly true in Q5. The next largest group, at 18%, is undecided, followed by the 6% who either disagree or

strongly disagree. Seventy percent of respondents give a positive or strong response to Q6; twenty percent give a neutral or negative response; and ten percent give a negative or strong negative response.

**Table 9.1** Frequency Distribution of Indicators' Scores for Electronic Payment

<b>Electronic payments</b>						
<b>Indicators</b>	<b>Statements</b>	5	4	3	2	1
		Q1	Banking services are now substantially more accessible around the clock thanks to mobile banking.	103	104	61
Q2	Mobile banking requires a far shorter time commitment than conventional banking.	80	122	68	9	16
Q3	There is no need for customers to physically visit a location to communicate with the bank.	97	122	55	9	12
Q4	This might be a game-changer for reaching those who don't have bank accounts.	96	126	54	8	11
Q5	Mobile loan income has risen thanks to the introduction of credit scoring algorithms.	111	107	54	7	16
Q6	Users worry about losing money due to carelessness or blunders when sending funds via mobile banking.	104	122	53	8	8

Table 10 displays the results of evaluating online payment across five categories. Eighty percent of respondents agree or strongly agree with Q1, while

twenty percent disagree or strongly disagree. Ten percent of those polled disagree with the statement, while another two percent strongly disagree. Sixty-eight percent of respondents indicated they either strongly agreed or agreed in Q2, with 23% expressing uncertainty and 9% expressing strong disagreement.

Seventy-four percent of respondents in Q3 stated they either somewhat or completely agree with the statement. Eight percent of respondents who neither agree nor disapprove and eighteen percent of respondents who provide no response use the indicator. Seventy-five percent of people in Q4 said they either strongly agreed or agreed with the sign. The next largest group (18%) fell somewhere in the middle, expressing neither strong agreement nor strong disagreement.

In Q5, 76 percent of people stated they somewhat or completely agree with the sign. After that, 6% of respondents disagree or strongly disagree, and 18% don't have a strong opinion either way.

**Table 10.** Frequency Distribution of Online payments Indicator Scores

	<b>Online payment</b>					
Indicators	Statements	5	4	3	2	1
Q1	Our corporations has invested heavily in online banking and electronic payment systems.	104	122	53	8	8
Q2	The convenience of online banking and other electronic payment methods has helped boost our company's reputation among our clientele.	73	130	67	11	14

Q3	Data and information processed through our company's online banking and electronic payment systems are always protected.	107	109	60	8	11
Q4	Customers worry that their financial information will be stolen if they use online banking or electronic payment methods.	97	126	50	8	14
Q5	The bank has made a good chunk of change from online banking, and the fees are reasonable.	98	121	51	12	13

Table 10 shows the results of the six variables used to measure monetary success. There are nine percent (9%!) of respondents that disagree or strongly disagree with the assertion. Seventy percent of respondents in Q2 expressed agreement or strong agreement, twenty-one percent expressed neither agreement nor disagreement, and nine percent expressed extreme disagreement. In the third quarter, three quarters of respondents expressed agreement or strong agreement. The next two largest groups, at 7% and 18% respectively, are those who neither strongly agree nor disagree with the indicator. Nearly three-quarters (74%) of Q4 respondents said they either strongly agreed or agreed with the indicator, while 18% said they neither agreed nor disagreed and 8% said they disagreed.

74% of participants agree or strongly agree with the question 5 indication. Following this are 7% who disagree or strongly disagree and 19% of responders who are neither agreeing nor disagreeing. In Q6, 70% of respondents strongly agreed or agreed, 20% disagreed or did not respond, and 10% strongly disagreed or disagreed. Table 11 displays the results for the firm size.

**Table 11.** Frequency Distribution of the Ratings for the Financial Performance Measures.

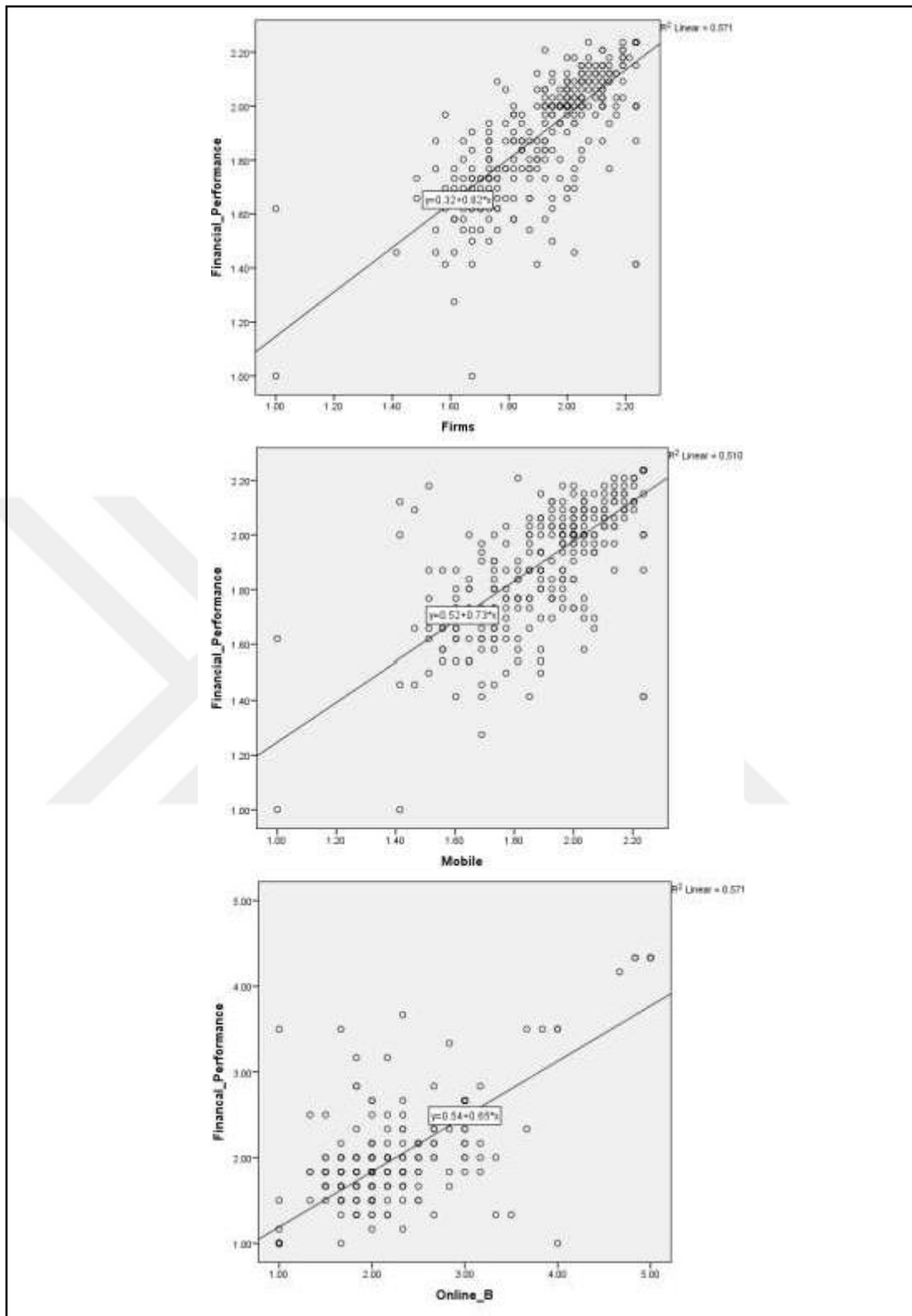
	<b>Financial performance</b>					
Indicators	Statements	5	4	3	2	1
Q1	The use of online banking and electronic payment systems increase in return on assets of our corporation.	117	95	57	10	16
Q2	The corporation has experienced an increase in return on assets	80	127	63	10	15
Q3	The corporation has experienced an increase in market share.	105	118	53	9	10
Q4	The volume of the corporation sales has increased since the corporate adopt the various forms self-service technology.	87	133	53	10	12
Q5	The corporation has increased of the number of new clients.	103	115	57	10	12
Q6	The size of the company has impact on financial performance over time.	118	112	41	8	16

### **3.14 Test of Hypothesis**

The study employs a single statistical analysis, chosen with care to meet its aims. The statistical analysis employed Multiple Linear Regression (MLR). The next section will go into the study's methodology and results.

This research achieved its objectives by employing multiple linear regression. All responses are compiled using information gathered from scales of firms size, electronic payment, online payment, and financial performance. MLR is utilized due to the large number of independent variables and the single dependent variable (Financial Performance). MLR may be used to predict the financial performance of SMEs by investigating the influences of firm size, mobile payment, and online payment. Multiple linear regression analysis requires a number of presumptions. Linearity between the independent and dependent variables is the first requirement. A graph and the value of the correlation between the variables will be used for this purpose.





**Graphic 6:** Dependent vs. Independent Variable Scatter Plot

Table 12 displays correlation co-efficients

**Table 12.** Correlation Matrice

	V1	V2	V3	V4
Firm Size	1			
Electronic Payment	0.503**	1		
Online Payment	0.497**	0.674*	1	
Financial Performance	0.528**	0.621*	0.549**	1

\*p<0.01; \*\* p<0.05

Table 12 displays the correlation between financial performance and firm size indicates a linear relationship that is positive ( $r=0.528$ ). The correlation between financial performance and electronic payment systems is also linear in the positive direction (0.621).. However, business size, electronic payment, and online payment are highly connected with financial success, therefore these independent variables will remain in the analysis. This proves a base for the original hypotheses.

The second assumption, which states that the independent variables must not have a strong correlation with one another, must next be verified. This is sometimes referred to as the model having no multicollinearity. This hypothesis is tested using the Variance Inflation Factor (VIF) value. The absence of multicollinearity in the model is indicated by a VIF value under 10. Table 13 displays VIF values.

**Table 13.** Variance Inflation Factor for Independent Variables

Factor	VIF
Firm Size	4.947
Online Payment	2.455
Electronic Payment	5.319

As shown in Graphic 8, there is little to no correlation between the independent variables. This supports the validity of the second hypothesis.

The Durbin-Watson test is used to check for any correlation between the residuals in the final assumption. The threshold must be between (1.5-2.5) in order to

dedect, there are no autocorrelation problems with the model. Table 14 displays the study's findings.

**Table 14.** Statistics from the Durbin-Watson Test

	<b>Value</b>
<b>Durbin Watson</b>	2.033

Table 14 shows that there is no autocorrelation in this model, hence that hypothesis can be tested (Skore:2.033). All of the necessary conditions for doing multiple linear regression analysis are present. To accomplish the first and second goals, multiple linear regression is used.

Table 15 explain the test of hypotheses.  $R^2 = 0.629$  indicates that 62.9% percent a significant portion of the financial results attributed to Firms Size, Electronicpayment, and Online payment. The remaining 37.1% can be attributed to factors outside the scope of this investigation. Therefore, it is suggested that more independentvariables be included for a more accurate outcome. The p-values in Table 15 are all less than 0.05, indicating that the variables utilized do in fact affect Financial Performance. Table 15 shows a significant interaction between the independent variables and financial performance as indicated by the value of the coefficient. In terms of financial performance, all the components are significant because their p- values are smaller than the threshold set by the alpha value (0.05). Thus, the size of the firm, the prevalence of mobile payment, and the prevalence of online payment all play significant roles in determining financial success.

**Table 15.** The Result of Hypotheses

<b>Factors</b>	<b>t-Value</b>	<b>p-Value</b>	<b>Decision</b>	<b>R<sup>2</sup></b>
Firm size	4.201	0.01	+	0.629
Electronic Payment Systems	3.827	0.03	+	
Online Payment Systems	3.290	0.03	+	

### 3.15 Summary of Hypotheses Testing

Three elements are examined in this paper that have an impact on financial results. The affect of indidepent variables on financial performance is predicted using multiple linear regression. The results of the statistical tests performed to address the research objectives are presented in Table 16. There is a strong statistical relationship between all of the factors and Financial Performance. Below the table, we examine this in greater detail.

**Table 16.** Summary For Hypotheses

No	Hypothesis	Outcome
<i>H<sub>1</sub></i>	The firm size significantly affects the financial performance of SMEs	Supported
<i>H<sub>2</sub></i>	The electronic payment systems significantly affects the financial performance of SMEs	Supported
<i>H<sub>3</sub></i>	The online payment systems significantly affects the financial performance of SMEs	Supported

A SMEs' ability to make money is essential to its expansion and progress. As a result, it's essential to consider factors like firm size, mobile payments, and online payments when assuring a steady flow of cash to support a SME's expansion. This study demonstrates the importance of firm size in SMEs' financial performance, which is demonstrated by a sharp rise in the number of firms. For traditional banking customers who use products based on information technology platforms, Online banking is performed entirely mechanically. Customers who use internet banking services can access their accounts, transfer money between accounts, and make payments online. This study demonstrates that the ease of use and familiarity with the software of online banking, which has a significant impact on the financial performance of SMEs. To deliver on its promises of 24 hour availability, low error rates, and speedy financial service delivery, mobile banking primarily relies on information and communication technology (ICT). The variety of services has expanded as a result of technological advancements, the proliferation of mobile

banking coincided with the proliferation of high-speed broadband connections, and the population of internet users has become more mature. The fact that banks have learned about the advantages of mobile banking and are now more eager to provide it as a choice to customers is a significant element in the expansion of mobile banking. This study demonstrates that mobile payments have a significant impact on banks' financial performance due to the convenience of managing money without dealing with cash.



## **CONCLUSIONS AND RECOMMENDATION**

### **Conclusion**

This section provides a concise overview of the most significant results. The results show that the aims of the study were accomplished. Both the study's limits and potential future lines of inquiry are highlighted. In spite of its caveats, this study contributes to the field.

The effects of firm size, electronic payments, and online payments on financial performance are the focus of this research. A SME's ability to generate profits is essential to the institution's future success. Therefore, firms size, electronic payment, and online payments are fundamental to a SME's growth by guaranteeing a steady inflow and outflow of funds. According to the results of this research, the potential for financial loss increases with both the quantity and variety of uncertainties (risks) considered in an analysis of financial and non-financial aspects. Banks can monitor characteristics like company size, industry, and international presence when deciding where to place ATMs. Banks can now investigate security measures to counter hacking, equipment breakdown, and scams that threaten user privacy after significant results on these concerns in relation to bank and SME financial performance.

### **Recommendations And Contribution**

To better inform small and medium-sized enterprises (SMEs) on the advantages and proper use of electronic payment systems, the government, financial institutions, and relevant stakeholders should increase both awareness and education. This will assist business owners get over their initial hesitation and learn the necessary information to fully use the technology. For electronic payment systems to be widely used, it is essential that the underlying digital infrastructure be improved. There has to be an increase in the accessibility and reliability of payment systems and internet access across the country. This will ensure that small and medium-sized businesses (SMBs) across all of Somalia have access to reliable electronic payment systems.

Payment service providers and financial institutions should take stringent security measures to address concerns about cybersecurity and fraud. Safeguarding the financial transactions and private information of SMEs requires the use of encryption technology, two-factor authentication, and fraud detection systems.

Managers in Somalia may benefit from the conclusions of this study when deciding how to implement automated teller machine, mobile, and internet banking services. The most important factors are the criterion for nationwide distribution and the amount of ATM cards issued. The total amount of money transmitted via mobile banking and the number of mobile banking customers both affect financial performance.

To date, there has been empirical research in the field of finance. Related to in study of commercial banks, Hossain, 2021) focused on the effects of information and communication technology (ICT), the financial sector, and bank shareholders on returns. This research contributes to the current body of knowledge by investigating the impact of automated teller machines, mobile banking, and online banking on economic outcomes. Unlike previous studies, which focused on commercial banks, this one looks specifically at Islamic financial institutions.

Financial Performance is the dependent variable, and this research aids in enhancing its measurement. The Internet's continued significance in business conducted online is undeniable. E-banking studies and widespread implementation in developed nations have been given high profile and substantial support. On the other hand, there is a dearth of study in emerging nations where e-banking is just making its debut.

Implications for stakeholders in developing-country e-banking are provided by this study, with particular attention paid to Somalia and to countries sharing cultural characteristics with Somalia. E-banking technology developers learn about the impact that automated teller machines, mobile banking, and online banking have on consumers' propensity to use these services.

### **Future Research Avenue**

Further research into this problem is strongly recommended. This study suggests that

future researchers either add the recommended construct to the model or remove it entirely. Taking into account additional variables, such as the rise of online banking and retail, among others. Moreover, future research needs to use larger samples. Online surveys are used in this investigation. The results of this study suggest that respondents were too busy with the significance and urgency of their jobs to fill out the questionnaire. Online and email surveys could be used in the future to obtain data on this matter. This means that people can complete their inquiry from their mobile device, regardless of their location. Management and bank personnel can save time by addressing questions asked via web forms or electronic mail.

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.



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- <https://www.statista.com/map/africa/somalia/> (Access Date: May 2023)
- <https://www.gsma.com/> (Access Date: May 2023)
- World Bank (2014) Economic Indicators
- World Bank (2019) Economic Indicators
- World Bank (2023) Economic Indicators

## APPENDIXES

1-

### QUESTIONNAIRE

#### The participants

Thanks for given your precious time and contribution for this scientific research. You right answers will help to make this study effort meaningful. I kindly request you to fill questionnaire with following instructions.

1. Please answer all of the items
2. Be sure to read the statements and response carefully

#### Gender:

1- Female  2- Male

#### Age:

1- 20 - 30  3- 41 - 50

2- 31 - 40  4- Above 50

#### Education:

1- High school or less  3- Master degree

2- Bachelor degree  4- PhD

#### Firm size:

##### Number of employee

1- Less than 10  3- 51 100



**Firm's industry**1. Agriculture and livestock 4. Communication 2. Food beverage 5. Financial institutions 3. Real estate broker 6. Others **Firm size**

		1	2	3	4	5
Indicators	Statements					
Q1	The size of the company has impact on financial performance over time.					
Q2	Small and medium sized corporation face an issue on electronic payments systems and modern technology.					
Q3	Firm size impact the level of risk in its financial operations.					
Q4	Firm size influence the level of competition in the market and, in turn, its financial performance.					

Q5	Size of a firm affects its ability to secure financing.					
Q6	The size of the company has impact on financial performance over time					

### Electronic Payments

	Statements					
Q1	Mobile banking has enabled 24/7 accessibility to financial services significantly.					
Q2	Time spent in mobile banking is low compared to the traditional banking.					
Q3	Clients can easily interact with bank; express themselves without visiting their branches.					
Q4	There is great potential of using this for tapping into the unbanked community.					
Q5	Use of credit scoring systems has increased the revenue generated from mobile loans.					

Q6	When transferring money through mobile banking the users afraid that they will lose money due to careless and mistakes.					
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### Online payment

		1	2	3	4	5
	Statements					
Q1	Our corporations has invested heavily in online banking and electronic payment systems.					
Q2	Online banking and use of electronic payment system have improved the image of our corporation among its customers.					
Q3	Our corporation always ensures security of data and information that is operated on the online banking and electronic payment systems.					
Q4	Customers fear online banking, and use of electronic payment systems due to fear of hacking of their accounts by web hackers.					
Q5	Charges on online banking are friendly and the bank has generated a lot of revenue from the same.					

## Financial performance

Indicators	Statements					
Q1	The use of online banking and electronic payment systems increase in return on assets of our corporation.					
Q2	The corporation has experienced an increase in return on assets					
Q3	The corporation has experienced an increase in market share.					
Q4	The volume of the corporation sales has increased since the corporate adopt the various forms self-service technology.					
Q5	The corporation has increased of the number of new clients.					
Q6	The size of the company has impact on financial performance over time.					

## 2- Ethical Appovement Form



T.C.  
İSTANBUL GELİŞİM ÜNİVERSİTESİ REKTÖRLÜĞÜ  
Etik Kurul Başkanlığı

**ETİK KURUL KARAR ÖRNEĞİ**

Toplantı No	Toplantı Tarihi	Toplantı Saati	Toplantı Yeri
2023 – 04	19.04.2023	14.00	Online

**KARAR NO: 2023-04-125:** Lisansüstü Eğitim Enstitüsü, Ekonomi ve Finans (İngilizce) Tezli Yüksek Lisans Programı 211428086 numaralı Khalid Abdulkadir AWALE' nin "The Impact Of Electronic Payment Systems On The Financial Performance Of Small And Medium-Sized Enterprises: A Field Study On a Developing Country" konulu çalışması görüşüldü yapacağı anket sorularının, etik kurallara uygun olup olmadığını tespit etmek üzere, İGÜ Etik Kurulumuzun 08.03.2023 tarih ve 2023-03 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**

BİRİM Etik Kurul Başkanlığı 19.04.2023 TARİH 2023 – 04 ETİK KURUL TOPLANTI TUTANAĞI KARAR ÖRNEĞİ

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