

**EFFECTS OF INFORMATION COMMUNICATION TECHNOLOGY ADOPTION ON
FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS IN ELDORET TOWN
KENYA**

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DECLARATION AND APPROVAL

Declaration by the Candidate

This project is my original work and has not been presented for a degree in any other University or for any other award.

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Date: 29/OCT/ 2024

DEDICATION

This study is devoted to my husband, parents, brothers and sisters for their moral and financial support when I was writing this project report.



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ABSTRACT

Information and communication technology (ICT) played an essential part in boosting innovation, growth, and competitiveness in every industry, as recognized by Kenya Vision 2030. This eventually results in increased economic output. The stability of the economy has stabilized the general well-being of the general population. As the use of technology for inclusive finance has grown, financial barriers have fallen while people's standard of life has grown, credit system and resources allocation are becoming effectively feasible. The research's primary goal was to evaluate how the implementation of information and communication technology (ICT) affected the financial performance of Eldoret town, Kenya's savings and credit cooperative societies (SACCOS), which are governed by the SACCO Society Regulatory Authority (SASRA).which was achieved through the study of effect of internet banking on the financial performance of SACCOs in Eldoret Town, Kenya; assess the effect of ATMs on the financial performance of SACCOs in Eldoret Town, Kenya; and draw conclusions regarding the effect of mobile banking on the financial performance of SACCOs in Eldoret Town, Kenya. The study made use of the Diffusion Innovation, Resource-Based View, and Technology Acceptance Model theories. The study was significant since it would evaluate the financial performance and information technology implementation of several SACCOs hence beneficial to scholars and researchers who are interested in conducting additional research in this field, as it will act as background information.

Finally, the research could help the researcher identify the gaps in the body of current research in this field. To get precise and pertinent information about the phenomenon's current state, the study utilized a descriptive research design. SPSS version 29 was then used to analyze and present the data after it had been processed updated and coded. The study findings showed that mobile banking was essential for enabling customers and Sacco workers to save time (mean = 3.46, std deviation = 1.268) and that online banking significantly boosted transaction volume per day when compared to traditional methods (mean = 3.84, std deviation = 1.153). Due to Sacco's substantial ATM investment, client uptake grew dramatically (mean = 3.86, standard deviation = 1.162), boosting both customer contentment and operational efficiency, The study found that mobile banking's easily accessible and user-friendly enhanced convenience and attracted a variety of users also, it concluded that ATMs emerged as indispensable tools driving capital growth and revenue for the Sacco, thereby solidifying their pivotal role within modern financial infrastructure. Given that mobile banking services have been shown to be effective in improving customer satisfaction and time management, the study suggested that SACCOS prioritize on promoting and expanding these services. Additionally, the SACCOS ought to incorporate internet banking to increase the number of transactions made each day and improve financial effectiveness.



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LIST OF ABBREVIATIONS AND ACRONYMS

ACCOSSCA-Africa Confederation of Cooperative Society Savings and Credit Association

ATM - automated teller machine

CIB -Credit Information Bureau

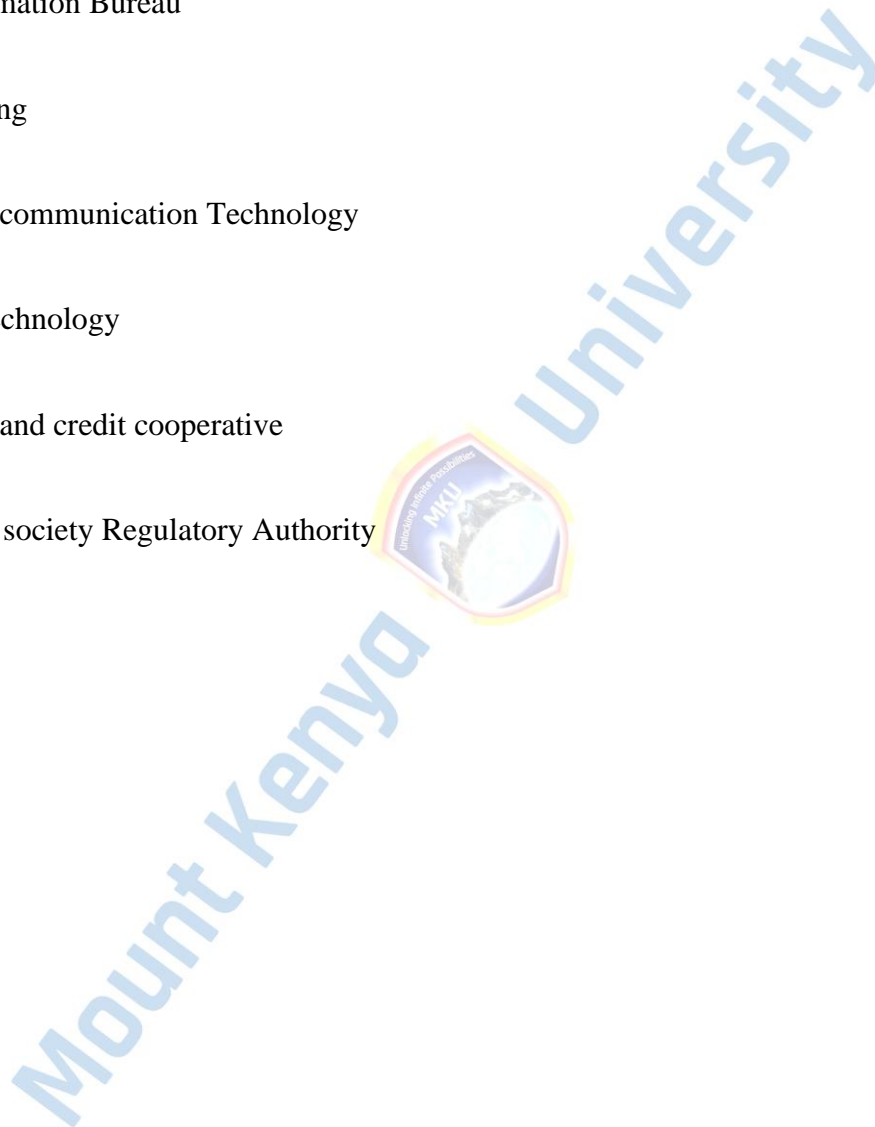
IB- Internet banking

ICT- information communication Technology

IT- Information technology

SACCO- savings and credit cooperative

SASRA -SACCO society Regulatory Authority





CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The current foundations of the cooperative movement consist of independence, individuality, democratic governance, membership, free and open membership, and financial inclusion (International Cooperative Alliance, 2017). Information and communication technology is the engine of today's economy (ICT), and innovations in technology, financial innovation flourished Over 250 million people globally are earning their living as members or employees of cooperatives (International Cooperatives Alliance, 2017).

The first cooperative was stated in 1844 by Rochdale society of Equitable pioneers, these cooperatives were consumer cooperative initiated by 28 persons had common goal nevertheless, William Raiffeisen and Herman Schulze formed the first Cooperative Society for Savings and Credit in Germany in 1849 alongside the objective of aiding those affected by the famine. (saving plus 2010) A number of nations, such as the US, Brazil, Colombia, and India, displayed support for this (Duguma & Han, 2018). In the late 1990s and early 2000s, mobile banking was officially introduced. after the realization, online banking began to gain traction. A few financial institutions, such as Wachovia and Well Fergo, introduced basic online services like checking account balances. Other notable developments in technology include the widespread adoption of mobile banking, The rapid shift from fiber-optic cables to wireless broadband and copper wire, and the expansion of these services (Cleveland, 2016). According to Lorenzo Bolognani's (2012) account, the development of WAP, SMS, and mobile internet banking applications, which use the internet to transmit money to a customer's cellphone

number for mpesa withdrawal, is part of the history of mobile banking. These technologies consist of, among other things, desktop and laptop computers, mobile devices, network security, productivity apps for enterprises, wired or wireless intranets, data storage, and security (Ashrafi and Murtaza, 2008).

Through the utilization of ICT, businesses can enhance their interaction efficiency and establish digital networking capabilities (Buhalis, 2003). By employing ICT, the obstacles of time constraints and geographical distance for accessing pertinent information are eradicated or significantly minimized, hence enhancing the coordination of tasks inside the boundaries of an organization (Spanos et al., 2011)

Eljelly (2004) characterises profitability as an enterprise's capacity for achieving financial success. Giving up on the project might not be the best course of action, even if it turns out that one or more of the components are not working. Regardless of size, profitability is seen as the primary goal of all commercial organisations, with the ultimate goal being the maximisation of shareholder value. All other sectors would have to make sure that they create enough money to be able to pay the expenditures incurred and eventually make profits, unless an organisation works as a charity. The gains might be distributed to members in the form of dividends or interest, capitalised, or held as retained earnings. Members of the SACCO subsector may own shares that will yield dividends at the conclusion of the fiscal year, or they may hold interest-bearing deposits that are not withdrawable. These would only be disclosed in the event that the businesses generate profits.

ICT infrastructure and innovation have been strategically incorporated and A set of guidelines is what is known as a policy designed to streamline organizational operations. The evolution of ICT has taken place in many countries policy is, in essence, a set of rules. However, the absence of an ICT policy can lead to incoherence, as highlighted by the The Centre for Development Informatics, University of Manchester (2010) . Regarding Kenya, SASRA has been proactively creating regulations that will streamline SACCO activities (SASRA, 2013). Habib (2011) conducted research and found that the implementation of ICT policies can enhance performance, specifically recommending the adoption of

ICT development policies to promote SME (Small and Medium Enterprises) growth., Despite the paucity of research on the application of ICT policies, the existing studies acknowledge its contribution to overall performance, but they do not specifically focus on the performance of SACCOs.

Despite the significant interest in ICT adoption, There's not enough of prominence in research with relation to the effect of strategic Integration of ICTs in Performance of SACCOs (Savings and Credit Cooperative Organizations). This is surprising considering that cooperatives globally have been adopting ICT in their regular duties. In the context of Kenya, the driving force behind the prioritization of ICT is the country's ambitious goal to become a fully developed nation by 2030, referred to as Vision 2030. The vision's main goal is to make Kenya to become newly industrializing, wealthy nation where everyone may live in a high standard of living (GoK, 2007). Within the financial services sector, Kenya is envisioned by Vision 2030 as having a growing, globally competitive financial sector that encourages high savings rates and the creation of employment.

The vision also includes plans to streamline informal finance and SACCOs. This aligns with the SASRA (Sacco Societies Regulatory Authority) report (2013), which emphasizes the critical role of the Kenyan SACCO industry in achieving the 10% annual economic growth target set out in Vision 2030. SACCOs play a central role in mobilizing both domestic and international financial resources, which is crucial for achieving the high-level growth target and funding key projects outlined in Vision 2030.

Supporting the significance of SACCOs, data from December 2013 indicates that from 2.97 million in 2012 to 3.3 million in 2013, SACCOs served an increasing percentage of members (SASRA, 2013). These numbers underscore the pivotal contribution of SACCOs to Kenya's economic growth. However exploring how strategic ICT adoption could strengthen SACCO performance in Kenya is crucial, given the increasing role that ICT plays in promoting organizational efficacy and efficiency. Understanding the potential benefits and challenges associated with ICT adoption in this sector can provide valuable

insights for policymakers, SACCOs, and other stakeholders, contributing to the overall development and success of SACCOs in Kenya's economic landscape(SASRA,2013).

In the past, SACCOs (Savings and Credit Cooperative Organizations) held the perception that their sub-sector was closed-off and isolated from other financial institutions, disregarding the presence of competition. Their operations were primarily limited to a common bond platform, existing in a state of relative equilibrium concerning product supply, demand, and membership. However, the current landscape has undergone significant changes, prompting managers to adopt a new perspective (SASRA,2013)

Today, managers are compelled to view the sub-sector as an open market, where organizations actively engage in buying and selling, thereby necessitating competition as a means to drive profitability (Thinyale, 2019). This shift in mindset has led to the realization that SACCOs must compete with other financial institutions and organizations within their industry to remain successful. To thrive in this evolving environment, SACCOs must now focus on enhancing their competitiveness. This may involve exploring innovative approaches, such as adopting technological solutions to streamline operations and improve the member experience. Additionally, investments in marketing and branding efforts may be necessary to attract a broader audience and expand their reach.

There are various methods available to evaluate the profitability of a business. One common approach involves examining its financial statements to compare the generated revenues with the incurred expenses. If the revenues exceed the expenses, the business is considered profitable, while if the revenues are lower than the expenses, it indicates a loss. Achieving profitability contributes to the growth of a business's asset base. Common metrics used to measure the size of a firm include total assets and equity. In a study conducted by Hirtle (2007), measures such as the total value of loans, total value of deposits, and total assets were employed to assess the size of institutions. Since credit unions typically hold a loans make up a significant percentage of their entire assets , this study focuses on utilizing total assets obtained from annual financial statements of SACCOs as an indicator of size.

Furthermore, Hirtle (2007) defines the size of a branch network as the number of full-service, permanent branches maintained by an organization, encompassing both stand-alone branches and those located within stores. Given that most SACCOs do not possess an extensive network of full-service branches, this study does not prioritize branch network as a primary consideration when evaluating size.

The Global Credit Union Council was founded in the early 1970s and is based in Madison, Wisconsin in the United States. Its goals include offering a global forum for association and discussion, supporting emerging movements, and providing extensive insurance and training. Research done in Bangladesh bank shows that ICT has assisted banking sector a lot, with investment in ICT banks. There are nearly 100 million individual members worldwide spread across more than 60 countries have been able to keep an integrated database of all of their customers, including their credit and debit information with every bank. This means that, should a customer wish to take out a loan in the banking industry, the bank can quickly confirm the project's viability and then use the Credit Information Bureau (CIB) to determine the person's creditworthiness, (Mugo, 2019)

The Financial institutions have adopted diverse tactics to heighten market competition from other business and to augment their own profitability. According to Satell (2017), a well-integrated financial innovation can give a company a competitive edge. Organizations can use a range of strategies to address business problems, including as breakthrough innovation, disruptive innovation, sustaining innovation, and basic research (Onyango, 2021). The organizational capacity in relation to the assets, expertise, and skills required to put a certain invention into practice to determines the innovation strategy. In Nairobi, Kenya, as a Pan-African organization, the Africa Confederation of Co-operative Society Savings and Credit Association (ACCOSSA) came into being in 1965. It developed in order to advance the objectives of the SACCO Society, provide an outlet to be discussed for Society members, insure life savings in addition to safeguarding loans, and educate players on a number of credit union topics. (2019, Thinyale).

Notably, the Kenyan government recognized cooperatives as being appropriate structures that could enable individuals to achieve their objectives while contributing to the post-independence economic growth of the nation. The SACCO Society movement rapidly gained momentum and spread across the country as a result of the government's action in response. These SACCOs provided a range of financial services, but whose most important recommendation was loans backed by members' share capital. (Gardeklint, 2009).

Ghana, Uganda, Nigeria, Tanzania, Kenya, and other English-speaking countries were among the first African countries to join SACCO. After beginning to recognize SACCOs in the 1960s, A large number of African countries that do not speak English joined SACCO in the 1970s. According to Muturi (2018). In an attempt to provide financial backing to the impoverished and working class and to advance inclusion of finance and reinforcement of financial services, SACCOs have recently undergone significant financial innovation. More than any other region in the world, Africa is dedicated to reaching the sustainable development goals and needs the financial innovations present in cooperative credit and savings institutions. Because to the creation of creative savings products, Ethiopian SACCOs have been able to raise more deposits, which has helped them keep their financial sustainability. Automation and digitalization have eliminated the need for paper records of transactions and simplified and increased transparency in South Africa, Kenya, Malawi, and Uganda, among other African nations. By expanding its membership outside of national lines, it lowers operating costs (Duguma & Han, 2018).

More than any other region in the world, Africa has dedicated itself to reaching the objectives of sustainable development and needs the financial innovations found in Savings and Credit Co-operative organizations. Because to the development of creative savings products, Ethiopian SACCOs have been able to raise more deposits, which has helped them keep their financial sustainability.

The number of SACCOs in Africa grew to the point in 1965 that the SACCOs on the continent established the Africa Confederation of Cooperative Society Savings and Credit Association

(ACCOSSCA), the primary goals of which were to further the SACCO ideals, offer SACCO insurance, and inform members of SACCO-related matters. However, research conducted in 2010 revealed that SACCOs in Africa are still having difficulties due to the continent's weak economy (Jepkorir 2022).

The Lumbwa Co-operative Society was the first cooperative in Kenya. Kenya Union of Saving and Credit Cooperatives were founded in order to replace Lumbwa Co-operative Society in the supply of agricultural inputs. It was founded in 1908 by European farmers in order to take advantage of economies of scale through the purchase of seeds, chemicals, fertiliser, and other agricultural inputs before selling their products (Mutinda 2022).

In 1930, the Kenya Farmers Association received legal status as a cooperative society. (Mutinda, 2022).

The Kenyan government introduced, accepted, and oversaw cooperatives (Jepkorir, 2022). When the country gained its independence in 1963, there were more cooperative societies.

SACCOs in Kenya are categorized according to whether they can take deposits from clients (Deposit-taking SACCOs) or just mobilize funds without accepting deposits from clients (non-deposit taking SACCOs). The Commissioner of Cooperatives oversees and regulates SACCOs that do not accept deposits while DTS is strictly under the SACCO Societies Regulatory Authority's (SASRA) regulation nevertheless, as of 2017 Mwania studied by providing their clients and members with basic banking services (such accepting deposits, paying bills, utilizing ATMs, and other quasi-banking services),

DTS's front office savings activities (FOSA) allow them in order to boost their operating capital (Mugo, 2018). Specifically, the overarching objective from 1964 to 1993 was to use SACCOs to accelerate the country's economic growth, particularly in the rural regions. To be certain that SACCOs were appropriately guided to fulfill the development agenda of the government, supervised their operations while continuing to provide funding and subsidies in fact, SACCO societies are integral to practically every economic area (Khumalo, 2008). As a matter of in actuality, the regulating body considers the

Cooperative movement in Kenya to be among its main sources of funding. As stated by (Gachora 2017), Over thirty percent of the savings in the country come from the cooperative sector.

1.2 Statement of the problem

ICT adoption in SACCOs notwithstanding, not much is known concerning the impact of technology on financial performance. Previous research, such as Gichuki (2021), examined the influence of ICT usage and implementation on Sacco's output especially in terms of finance, inventions, as well as, innovativeness. The study focused on SACCOs in Nairobi County and primarily examined growth membership rather than information and communication technology. Mohamad (2019) study the study analyzed the mobile banking's effects on Kenyan commercial banks' financial performance and discovered a strong positive link between the economic performance of commercial banks and their capacity to use mobile banking. Other financial developments were not taken into consideration in this study, which concentrated on mobile banking. as Koech et al. (2021) conducted research on the implications of ICT adoption on a Sacco's financial performance, a study was conducted with a primary focus on computerization, while other studies were carried out at commercial banks rather than SACCOS in this case current study aimed to close the knowledge gap regarding the effects of ICT adoption on the financial performance of SASRA-registered deposit-taking SACCOs in Eldoret, Kenya.

1.3 Purpose of the study

This study set out to investigate how the implementation of information and communication technology (ICT) influences the financial performance of Eldoret town's savings and credit cooperative societies (SACCOS).

1.4 Research Objectives

The study was directed by the following three particular goals served that serve as guidelines:

- i. To find out how mobile banking influences SACCOs' financial performance in Kenya's Eldoret town.
- ii. To ascertain the impact of Internet banking on the SACCOs' financial performance in the Kenyan town of Eldoret.
- iii. To evaluate the impact of ATMs on Eldoret Town, Kenya, SACCOs' financial performance.

1.5 Research Questions

- i. To what extent has mobile banking affected the SACCOs in the Kenyan town of Eldoret's financial performance?
- ii. How has online banking affected the SACCOs in Eldoret, Kenya, in terms of its financial performance?
- iii. How does ATM impact the SACCOs's financial performance in Eldoret town Kenya?



1.6 Significance of the Study

The research would contribute to different SACCOs regarding to the utilization of information technology and how it can contribute to financial performance of SACCO. Innovation should be the key to every financial institution to keep going. The study will be used to educate the public about financial innovations and their impacts on the Saccos that accept deposits and their financial performance. As it would set the stage for later investigations on financial performance, it would also be important for future research.

1.7 Scope of the Study

This study focused on SACCOs that accept deposits in Eldoret town centering on the adoption of technology and how it affects its financial performance. The research collected primary data by collecting questionnaires from employees of saccos of selected departments by issuing questionnaires

to be filed by offices such as, management officer, Financial officer, ICT officer, operational officer, loan officer, customer service officer.

1.8 Limitation

The research was limited to financial innovations that is ATM, Internet banking and mobile banking however these are not the only technology innovations in relation to financial performance. The research was conducted at the Eldoret-based Saccos yet there are other institutions such as Banks in the economy that experience the same effect yet they are not considered, for a number of reasons, some respondents did not complete the questionnaires. One of the obstacles encountered during this study was respondents' apprehension about disclosing security and confidential information, the researcher was, however, take every precaution and considerations to ensure the most valid and reliable data collection for this study. With great determination and caution, the researcher overcame these obstacles by obtaining the necessary data while also upholding the ethical principles governing research.

1.9 Delimitation of the study

According to researchers like Donaldson et al (2013) and Alin and Irimie (2013), delimitation serve as study boundary, this particular study employed qualitative research methods within a descriptive research design which involve the use of questionnaires to collect firsthand information from Sacco employees.

1.10 Assumptions of the Study

The researcher's assumption is that the respondents cooperated with the researcher to facilitate data collection and therefore, the data collected from the sample study represented the entire population and are true.

1.11 Operational Definitions of key Terms

Adoption – refer to the process of accepting and integrating ideas.

ATM banking – is the practice of managing a bank customer's funds conveniently through the use of a specialized computer.

Communication – transferrin g of information from on point to another

Deposit taking Savings and credit cooperatives Societies - is SASRA's list of registered saccos, who must abide by its rules in order to provide front-office services to its clients.

Financial performance – Refer business operations over a certain period of time, always measured in monetary terms.

Internet banking – This entails the provision of a value-added product and services for bank clients via the use of telecommunications and internet networks.

Mobile banking - is the provision of banking and financial services via mobile telecommunication technology

Savings and Credit co-operatives – Refer to self-help cooperative that is democratically and member driven it is owned and run by constituents

Technology – is apparatus and machinery that applies scientific knowledge in a certain field for practical reasons.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature is all included in this chapter on effect of ICT on financial performance of a SACCOs. Financial performance is defined as the fulfilling established standards for correctness, completeness, efficiency, and effectiveness when completing a work, as stated by Anne (2015) in her study on the impacts of ICT adoption in Saccos. Financial performance metrics are employed to assess the efficiency with which an organization generates profits from its resources.

2.2 Empirical Literature

2.2.1 Mobile Banking Internet Banking and the Financial Performance of SACCOs

A previous study discovered that the financial performance of commercial banks had improved as a result of mobile banking. (Indigo, 2018). A majority of customers prefer to complete transactions at their own convenient location rather than working with banks. Thanks to advancements in technology, clients are able now reach a variety of services, such as checking their account balance, making deposits into their accounts, withdrawing cash, borrowing loans, and making loan payments. The following benefits are associated with mobile banking: Simple access to frequently requested data is readily available whenever, wherever, and at the customer's convenience in any format—all without the necessity to purchase expensive or additional equipment. Issuing the instrument to the bank directly. Guarantees of dependability, privacy, and data protection, lower transport fees because the client bears these expenses. According to (Kanini 2019), who conducted research on the financial performance and financial innovation strategy of deposit taking Saccos, the use of mobile banking has boosted delivery of customer care while reducing costs and boosting efficiency, which has improved client loyalty.

Mobile banking has assisted SACCO in accumulation of fund through deposits. Members of the SACCO upon opening an account, he or she is trained of mobile banking, one can be able to deposit money without necessarily coming to bank physically, these has increase deposit and therefore maximize capital growth. ICT allow SACCOS to always be ahead of competition. Customers are now

able to carry out online transactions thanks to information technology's contributions to financial services which enhances confidence in the financial sector, in terms of time and service delivery. Another area of information technology that has had a big influence on the financial services industry is financial reporting. The use of financial reports is being greatly enhanced by the ongoing modernizations surrounding information communication technology, which have led to perfection in a way that promotes prudent asset and liability management. In a study conducted by Fadzlan and Chong (2008), the researchers explored the several factors limiting Philippine banks' profitability from 1990 to 2005. Their empirical analysis demonstrated that the profitability of the bank was statistically strongly affected by almost all of the bank-specific determinant variables. The study also showed that variables including size, credit risk, and expense preference behavior exhibited a negative correlation with banks' profitability. Conversely, non-interest income and capitalization had a positive influence on profitability. Based on their analysis, Fadzlan and Chong (2008) found that inflation had a negative effect on bank profitability. However, they did not observe significant explanatory power for factors such as money supply, economic growth, and capitalization in the stock market in relation to the variations in profitability of banks in the Philippines.

Mobile banking has brought about a revolutionary transformation in the way individuals residing in developing countries conduct cash transfers, and it is currently positioned to offer an array of sophisticated financial services that has the potential to significantly affect people's lives. This advanced type of banking offers a number of beneficial features, such as offering clients with real-time updates and transaction alerts directly on their mobile phones, thereby offering them access to crucial account information. Through the convenience of short messages, individuals are promptly notified about immediate transactions occurring within their bank accounts. Moreover, mobile banking facilitates various transactions such as payments for utility bills, deposits, withdrawals, transfers, airtime purchases, requests for bank statements, and an additional thirteen essential banking tasks, all accessible in real-time through mobile devices. In order to enhance service delivery, banks, including

the Uganda-based traditional leased Bank (Buyer and lenders, 2006), have increasingly embraced technological advancements as a means of supplementing the services traditionally provided by personnel, as highlighted by Howcraft and Bacett (2006).

Mari studied how mobile banking was used in a European country in 2006. The research involved surveying 2006 bank customers located in the country, with data collected through a dedicated questionnaire administered to banking customers. The study's results revealed that certain attributes of mobile banking, such as relative advantage, compatibility, communication, and tradability, influenced its usage. Interestingly, the investigation found no evidence suggesting that quality and risk acted as barriers to adoption. Instead, the study highlighted the significant impact of technology perception and specific demographic variables on adoption rates.

In another study, "An empirical investigation of mobile banking adoption," done by Lin (2012), the results indicated that the benefits included compatibility, ease of use, ability, and integrity significantly influenced individuals' perspectives on mobile banking. These perspectives, in turn, translated into intentions to adopt mobile banking services. Dr. Shams conducted a survey in 2012, focusing on 200 bank customers in the city. The study was meant to find out what aspects customers were finding influential in their widespread adoption of mobile banking of various financial institutions in the city. Correlation analysis and analysis of variance (ANOVA) were used for finding out more about the services for mobile banking offered by various institutions. The research population was made up by individuals who lived in cities and were thought to be typical city bank clients.

The results supported the correlation analysis, revealing four distinct factors impacting the adoption of mobile banking: "Security/Privacy, Dependability, Efficiency, and Responsiveness." These factors were derived from an understanding of customers' perceptions regarding mobile banking. Additionally, the results from the ANOVA supported the notion that demographic factors significantly influenced customers' perceptions of mobile banking adoption. The research shed light on the various dimensions

influencing mobile banking adoption and provided valuable insights into customer perspectives in the context of the surveyed city (Shamsher, 2012).

Rahman and Farah (2012) conducted an in-depth study, directing their attention towards the comprehensive analysis of profitability indicators within the Non-Banking Financial Institution (NBFI) industry of Bangladesh. Through their meticulous research, they unveiled compelling evidence that revealed the profound impact of profitability indicator variables on the net profit of these institutions. In their investigation, the researchers identified net profit as the dependent variable, while encompassing a range of influential independent variables, namely current assets, financial expenses, long-term liabilities, interest income, and operating revenue. Based on their extensive report, Rahman and Farah uncovered noteworthy insights regarding the these distinct factors' effects on profitability of Non-Bank sector in Bangladesh. Among the multitude of independent variables scrutinized, their analysis distinctly highlighted the significant influences exerted by the liquidity condition and operating efficiency, further emphasizing their pivotal role in shaping the profitability landscape within the NBFI industry of Bangladesh.

In a notable study conducted by Wamalwa (2012), an in-depth exploration was undertaken to analyze how regulatory actions impact how well credit and savings work cooperative institutions (SACCOs). Through meticulous analysis, the researcher arrived at a compelling conclusion that compliance with governance rules, prudential regulations, and reporting requirements had a profound positive influence on SACCO performance. The findings indicated a significant improvement in various aspects of SACCO operations as a direct result of adhering to these regulatory measures. Similarly, Imran, Abdul et al. (2012) embarked on an insightful investigation regarding the the function of technology in information (IT) in enhancing the efficiency of banks. Their study delved into the relationship between investment in IT and various efficiency measures within the banking sector. The results presented a compelling narrative, showcasing the transformative impact of information systems investment. Such

investment was found to contribute to market share growth, operational cost reduction, enhanced customer service, and the facilitating of innovative product and service introductions.

Olweny, 2020 the globe calls for improved adoption of legislation that promote innovation and betterment, as well as more funding for the development of ICT infrastructure. There is still more be carried out in terms of deploying technology because its early acceptance was difficult to use and had a narrow range. Karachi (2022) asserts that There isn't getting around the fact that Sacco's was left adrift in the post-Covid-19 its age at the bottom of the digital ocean and must now implement online financing for both quick (loans for mobile devices) and long-term (loans for development).

As of 2013, Anazodo (2013) discovered in his research that most institutions have not yet fully utilized the potential of information and communication technology in their operations, in spite of benefits and competitive pressure. Particular obstacles include unethical behavior, inconsistent energy and internet connectivity, and specialized skills.

Alalwan et al. (2016) looked into what influences people's adoption of mobile banking. 343 people completed a form for a field survey that was used to gather information. The study's findings demonstrated that expectations had a significant and positive impact on behavioral intention regarding performance, expectations regarding effort, pricing expectations, and trust. According to the study, respondents' The plans to using mobile banking were significantly affected by their prior experiences as well as their assessments of the service's usefulness, ease of use, risks, and dangers. The research was centered on mobile banking uptake rather than how it affects financial outcomes. The study was conducted in Jordan rather than Kenya.

Yousafzai (2012) argues that the process of adopting ICT banking is sophisticated and complex instead of solely focusing on adoption itself, it is crucial to consider personal, social, psychological, feasible, and behavioral features associated with the customer. Such considerations are more significant as they ultimately lead to the intended behavior. Additionally it is imperative that banks guarantee that

innovative ICT solutions align with their profitability goals (Akombo, 2011). Information technology (IT) is the automation of processes, controls, and information generation through the use of computers, software, telecommunications, and auxiliary devices like automated teller machines and debit cards.

(Khalifa, 2000). IT encompasses the utilization of electronic technology in various aspects. Rechukwu (2000) highlights several financial services that have witnessed significant transformation due to the adoption of ICT. These services include creating an account, requiring customers to open accounts, processing and capturing transactions. The adoption of self-service facilities, including automated customer service machines, has been made easier by the development of information and communication technology. Using these gadgets, potential clients can finish the account opening process online. Additionally, ICT aids customers in validating their account numbers and provides instructions on obtaining their debit cards, credit cards, and financial records. Technology used for communication includes software as well as hardware used for creating connections between various computer hardware elements and enable transmission of information across geographical regions (Laudon & Laudon, 2001).

The performance for Deposit Money Banks is influenced by various factors, taking into account the effects of information technology (IT). However, the extent of this impact can vary depending on macroeconomic conditions, technological capacity, workforce skills, literacy levels, and the interventionist role of the state in promoting technical progress (Ernst & Ganiatsos, 2004). In a research project by Kyakulumbye and colleagues (2009) among Uganda local governments, it was emphasized that organizations should assess their employees' IT knowledge and skills. This evaluation is crucial as it can influence the organization's decision to adopt and effectively utilize Information and Communication Technology (ICT). By understanding the employees' IT proficiency and prior experiences, organizations can make informed choices regarding ICT adoption, implementation, and utilization.

In a comprehensive empirical analysis carried out by Anyatonwu, Ezie, and Dabwor (2017), the researchers explored the application of ICT and its impact on banks' competitive performance within the emerging economy of Nigeria. To ensure a comprehensive analysis, Both inferential and descriptive research designs were used in the study , utilizing a t-test as a statistical tool to assess the significance of the findings. Remarkably, their extensive investigation revealed a notable beneficial link between ICT adoption and the performance of banks in Nigeria. Consequently, the study's outcomes suggest that the integration and utilization of ICT in the banking sector can have a substantial and favorable impact on banks' competitive performance within the Nigerian market. Similarly, in another noteworthy Wilson, Odo, and Ikenna's (2014) study investigated at the various ways that information and communication technology (ICT) improves bank profitability. The researchers focused their analysis on a representative sample comprising 25% of banks holding listings on the Nigeria Stock Exchange thereby ensuring comprehensive coverage of the Nigerian banking landscape. Employing the widely recognized ordinary least squares (OLS) regression technique, The study's goal was to evaluate the significance of IT spending in relation to future operating performance. Interestingly, contrary to the initial expectations, the regression analysis produced results that were incongruent with the a priori assumptions. Specifically, the study findings indicated that the banks under investigation's future operating performance was not significantly impacted by IT spending during the study period.

The contradictory conclusions from this two separate research highlight how complex and particular to the situation the link is between ICT adoption and bank performance in Nigeria. While the investigation by Dabwor, Ezie, and Anyatonwu (2017) reveals a promising favorable correlation between ICT adoption and banks' competitive performance, the study by Wilson *et al* (2014) challenges the assumed impact of IT spending on future operating performance. These contrasting outcomes underscore the need for further extensive research in this domain, as the complexities and nuances of ICT integration within the banking sector in Nigeria warrant a comprehensive and nuanced understanding of its implications for banks' competitive positioning and overall performance.

Mabwai (2016) sought to determine how Mobile banking has had an impact on the financial performance of Kenya commercial banks. Only secondary data, obtained from commercial banks' financial accounts, was utilized in the research. The data were assessed using regression and descriptive analysis. Kenyan commercial banks appeared to have performed better since implementing mobile banking, according to the report. Only commercial banks had been the subject of this investigation; SACCOs were not.

The impact of Information Communication Technology has use on the financial success of microfinance enterprises in Rwanda, an investigation was investigated by Harelimana (2017). An instance of International Microfinance Network. The study used a descriptive research style and included 132 financial institutions that were selected at random. Between 2011 and 2015, the study employed statistical techniques to analyze both quantitative and qualitative data on a representative sample. The study concluded that while financial innovations positively impacted profitability, their effect on profitability was found to be low because microfinance firms hadn't invested much investments in these new technologies (Harelimana, 2017). Instead of focusing on DTS in Kenya he studies concentrated on the financial performance of microlending companies. Kishore & Sequeira's 2016 study on mobile banking in rural Karnataka discovered that behavioral intentions to use mobile banking services were significantly influenced by performance expectations, effort efficiency, attitude, and social influence.

The study focused on microfinance compared to ICT's effect on SACCOs' financial success. Not in Kenya, but in rural Karnataka, the study was carried out.

2.2.2 Internet Banking Internet Banking and the Financial Performance of SACCOs

Internet banking is the process of using a public or private network, like the internet, to access accounts, complete transactions, and obtain the most recent information on financial goods and services.

Internet banking, or A technology called "e-banking" permits customers of banks to access the bank's website at any time to obtain information about their accounts Providing broad details regarding the goods and services the bank provides (Penida & Sunsern, 2012).

Research on the impact of ICTs in Kenya was conducted by Wachira et al. (2014). Data was gathered using questionnaires, and the results demonstrate that increased usage of ICTs has been linked with higher deposit rates, higher dividend rates, and higher market share. The SACCO's infrastructure facilitates easy communication and helps to develop new markets. Research also suggests that ICT performance and policy are impacted.

Research on the effectiveness of ICT on SACCO operations had been carried out by Ileri (2017), who utilized a descriptive approach to study with Nairobi Town as his base of operations. The results demonstrate that the financial management system helped the SACCO produce timely and accurate monetary statements. Additionally, it showed the system enhanced the output of cash flow and balance sheet statements as well as asset maintenance. In short, the system of management strengthens SACCO execution. The results generally show that a technological approach increases a firm's competitiveness since innovative enterprises are better equipped to leverage ICT for productivity.

The research conducted by Wamalwa (2012) and Imran, Abdul et al. (2012) adds significant value to the understanding of regulatory compliance and IT investment within the financial industry. Their comprehensive analyses shed light on the positive outcomes resulting from adhering to governance rules, prudential regulations, and reporting requirements in the case of SACCOs. Furthermore, their findings emphasize the instrumental role of IT investment in driving efficiency and fostering innovation within the banking sector. These insights contribute to a broader knowledge base and provide valuable guidance for policymakers, practitioners, and stakeholders in the financial realm.

The implementation of systems for information and communication technology (ICT) offers numerous advantages, compelling many banks to invest in IT. This trend is particularly evident in Pakistan, where

organizations recognize IT as a competitive tool for success. Gaitho (2010) conducted a survey focusing on credit risk management practices employed by Savings and Credit Cooperative Organizations (SACCOs) functioning in Nairobi County. The results indicated that the majority of SACCOs utilized credit risk management practices as a means to mitigate risks and establish objective credit risk appraisals. Furthermore, the study highlighted that many SACCOs heavily relied on the ability of portfolio managers to manage credit risk with judgment and skill rather than relying on standardized systems for credit and credit risk decisions. The findings shed light on the prevailing approach within SACCOs, emphasizing the significance of experienced professionals in driving credit risk management practices. The exploration of the benefits associated with adopting ICT systems in the banking sector, in addition to the examination of Practices for managing credit risk within SACCOs, as elucidated by Gaitho (2010), provide valuable insights into industry dynamics. These observations advance our knowledge of technology's function and risk management strategies in enhancing operational efficiency, mitigating risks, and fostering sustainable growth within the financial sector.

The examination of the relationship between size and cost efficiency in financial institutions has been a subject of interest in various studies, such as Ranganan et al. (1998) and Kongiri (2012). These studies have utilized regression analysis as a prominent tool to investigate this relationship. Notably, Brooks (2008) emphasizes the significance of regression analysis, considering it the most crucial tool in the econometrician's toolkit. Regression analysis aims to describe and evaluate the association between a given variable and one or more other variables. It serves as an endeavor to explain the fluctuations in a variable by referencing movements in one or more other variables (Brooks, 2008). In the context of testing the relationship between size and cost efficiency of Cooperatives for Savings and Credit (SACCOs) with Front Office Service (FOSAs) in Kenya, the researchers employed regression analysis as the chosen technique. The dependent variable in this analysis was the efficiency ratio, while the independent variables consisted of all assets (acting as a stand-in for size). Additionally, control variables such as capital adequacy, management quality (represented by staff costs), return on assets

(ROA), and liquidity were included to account for their potential impact on the relationship. This approach allowed the researchers to examine the intricate dynamics between size and cost efficiency, shedding light on the elements impacting performance of SACCOs with FOSAs in Kenya. By employing regression analysis and considering relevant control variables The study's goal was to provide insightful perspectives of the relationship under investigation and offer a comprehensive understanding of the determinants of cost efficiency in this specific context.

Koech *et al* (2021) did a research on effects Use of information and communication technologies on SACCO's financial performance societies , the research was done in Bomet county and was guided by agency theory, Primary data were used in a cross-sectional study approach, which included structured questionnaires ,the findings indicated that computerizations had improved loan disbursement and loan recovery ,the study further established that minority of the SACCOS within Bomet county had computerized there processes hence utilization of ICT that showed to have change production process, reduction in cost of operation and widen competition. The research was concentrated on computerizations without considering other technologies including internet, ATM, and mobile banking Gichuki (2021) came to the its conclusion according to his findings, membership is what renders a SACCO, and that a SACCO could not exist without membership. The study investigated a number of implications, which includes growth in membership, net assets, revenue, and net income of SACCOs. The membership growth rate was the primary indicator of performance evaluated by the researcher, and correlation analysis was employed to evaluate the relationship. The findings demonstrate a favorable relationship between total assets and SACCO participation, which in turn positively impacts the functioning of the organization. The findings generally demonstrate an extremely positive association between total assets, net revenue, net income, and SACCO membership.

Okiro (2013) examined on how Kenyan financial institutions' operations have been impacted by online and mobile banking. Depending on its goals and the specific type of data it was studying, the study used both descriptive and qualitative research methodology. The aim was to provide the audience with

an extensive understanding of internet and mobile banking, its application in financial organizations, and its impact on their efficiency. Primary sources were used in the data collection process. Both closed-ended and unrestricted questionnaires were given out to the intended respondents. The obtained data was evaluated using both quantitative and qualitative methodologies. Statistical data analysis was used to examine qualitative data. There was shown to be a positive association. The current analysis focused only on DT SACCOs in Kenya, although all financial institutions were the subject of the prior study.

Mulwa (2017) evaluated how online banking affected Kenyan commercial banks' financial results. The method employed was descriptive design. Forty commercial banks were the study's entire target audience. The study used a data collection form and the Pearson coefficient of correlation to determine the effect of online banking on bank performance. The impact of internet banking on financial performance has been examined using multiple regression analysis and other inferential tests. The investigation showed that commercial banks' return on assets (ROA) increased as a result of the rise in online customer deposits made possible by internet banking. The study's findings indicated that there was a strong correlation between the financial success of commercial banks and online. Ali (2018) examined Kenyan ABSA Bank in his examination of the effects of the internet banking on the commercial banks' monetary performance. The study looked at ABSA Bank of Kenya's financial performance over the course of six years, from 2012 to 2017, using a descriptive research design. Questionnaires were used to collect primary data, and the SPSS program was utilized for analysis. findings from the survey, the accessibility, fees, commissions, and risks associated with online banking are all having an increasing effect on commercial banks' ability to remain solvent. The survey also highlights how strategies for lowering online banking risks and enhancing internet banking security are helping commercial banks' financial performance. The research additionally discovered study focused on that the financial performance of commercial banks is negatively impacted in a statistically meaningful way by the expenses and fees linked with mobile banking. For an opinion on whether financial institutions should offer internet banking, the paper states that more research is required. To

close this gap, the current research was conducted. In addition, Ali (2018) looked at the risks relating to online banking, including those related to operations, security, foreign exchange, and strategy. The present study focused on the eleven Saccos that accept deposits in Eldoret, while the previous study was based on commercial banks and was conducted at Absa Bank.

According to Ireri et al. (2017), after investigating how IT affected Sacco operations in Nairobi, they concluded that ATMs will be the primary means of access for Sacco members to access their accounts, savings, and loan disbursements. The automated teller machine (ATM) improved productivity and efficiency inside the SACCO, had an additional effect on SACCO performance. Kamau (2018) studied the cutting-edge technological products and financial performance of Nairobi City County's SACCOs accepting deposits. The study, which employed a descriptive survey research approach, included 410 management staff members of SACCOs in Nairobi City County that accept registered deposits. Questionnaires are utilized to collect data for the study. The findings indicated a strong correlation between technological creativity and financial performance.

According to Luka (2012), an organization's ability to reinvent its work processes and routines in order to accommodate ICT will determine how much money it can invest in ICT. Olajide (2015) came to the conclusion that ICT is an essential resource for expanding organizational effectiveness and preserving a competitive edge in the market. Effective administration and operation in the public and private sectors depend on a strong ICT policy. ICT policy is a set of fundamental guiding principles that affect choices and activities necessary to keep the business operating smoothly. According to Asma (2020), business-savvy entrepreneurs have realized the value of information technology (IT) tools in achieving their objectives. It facilitates the attainment of organizational goals and streamlines processes. ICT is a tool used to accomplish corporate objectives and is an important indicator of success in all organizations nowadays. It allows businesses to further improve their internal processes.

According to Siddik (2016). The research determines whether online banking affects a bank's financial condition, in 2014, Rauf et al. investigated the effects of online banking on liquidity and asset quality.

The researchers arrived at Researchers discovered that the growth of online banking was positively correlated with and the improvement of asset quality and liquidity throughout Pakistan's banking. The main source of money for banks is internet banking, which has led to increased opportunities for revenue development, according to Mateka & Omagwa (2017), who conducted research and found that Online banking boosts earnings and plays a significant role in bank cost management. that results from a broad distribution of loans to consumers with few limits, which raises interest. The internet may help inform clients about their payments, when they are due, and whether they have fallen behind on their payments through the use of electronic remitters and advice.

2.2.3 Automated Teller Machine Internet Banking and the Financial Performance of SACCOs

An automated teller machine, or ATM, is a device which permits users to access banking services. (Maloney2017) ATM is a computerized telecommunication device that customer use to access bank services without the help of a teller. It is user friendly since a customer does not need to visit bank for service. A personal password and a plastic card incorporated with magnetic strips which act as the customer's identity are needed to access a machine. ATM can perform task such as cash withdrawals, printing of statements and payments of funds. Adoption in ICT in banking sector allow customers to access their bank account to make transactions at their place of comfort without necessarily going to bank. Morris (2004) concurs with this fact, stating that ATMs have made banking services available in rural areas. Therefore, it is possible to deposit and withdraw money in rural areas. He keeps going by saying that even though using ATMs makes transferring money easier, Banks constantly have concerns about machine security and the need for more repair. The customer can check their balance, financing cash, and make cash withdrawals. without necessarily going to bank. Ondigo (2018) according to his research, a SACCO's The financial performance is greatly and favorably affected by the use of ATMs since they boost productivity and lower transaction costs, which improves financial performance. Transaction costs have decreased thanks to ICT. Liu (2022) noted that Information security and cyber security is becoming a challenge within the industry for financial services . SACCOs ought to put

security assurance and network, data, and system security into Machine Internet may safeguard their members when using their mobile devices to transact by investing in additional safety technology layers. With the advancement of technology, Numerous saccos have experienced internal attacks and system invasions., and data loss. Sim swap portability makes sure that the member's account and the sim card serial number are safely related. If the member changes or loses their mobile device or their sim card, transaction requests are stopped from accessing their accounts. Social engineering fraud has been on the rise for a while; thieves prey on the weak by collecting their PIN numbers and then stealing their funds.

(Tsuma et al 2015) concluded that saccos in Kenya plays important role in saving mobilization, promotion of investments economic growth and eradication of poverty. Adoption of Information Communication Technology in saccos, has brought about mobile banking which has been a key driver of financial inclusion in most saccos. It has also brought about ATMs, agent network, in case a member requires physical cash. By making heavy ATM, smartphone, and online banking usage, smart cards, and ongoing services, and the capacity to offer a wide variety of products and services, the saccos have been able to enhance the customer service that the financial services sector offers.

In a research study conducted by Njoroge (2001) in Kenya, the focus was on examining the connection between dividend payouts as well as financial ratios. The study's conclusions lead to the deduction that, when making dividend decisions, the most crucial variable to consider is the return on assets. This suggests that the profitability and efficiency of a company, as measured by the return on assets ratio, play a significant role in determining dividend payouts. Similarly, Maina (2002) conducted a study with the goal of looking at the connection between dividend payments and investment decisions. The study concluded that indeed a relationship existed between these two factors. This implies that the decisions made regarding dividend payments can have an impact on investment decisions within a company. The research conducted by Njoroge (2001) and Maina (2002) provides valuable insights into the interplay between dividend policies, financial ratios, and investment decisions. Their findings

highlight the importance of considering financial performance indicators, such as return on assets, when making dividend decisions. Moreover, it underscores the influence of dividend payments on investment choices within a company.

According to Zeithaml (2010), the enhancement of service quality emerged as a crucial component for gaining a competitive edge in the 1990s. They emphasized that improvements in information technology played a significant role in facilitating such advancements. Zeithaml also emphasized the importance of striking a balance between utilizing technology and maintaining personalized, human interaction—a concept referred to as "high tech and high touch." Strategic considerations should take precedence over technology choices when determining the best approach. There is a general belief that an organization's performance is enhanced by information technology.

However, it is worth noting that caution has been expressed regarding the potential replacement of employees with technology, as highlighted by Urgo (2006). This cautionary perspective underscores the need to carefully consider the implications of technology implementation on the workforce. Additionally, Rubenstein and Geisler (2010) stress that efficient utilization of technology requires investment in both technology and human resources. Merely adopting technology without adequately supporting it with skilled human resources may hinder its effectiveness. The insights provided by Zeithaml (2010), Urgo (2006), and Rubenstein and Geisler (2010) shed light on the connection between information technology and service quality as well as business performance. They emphasize the importance of leveraging technology while considering strategic factors, managing the impact on employees, and investing in human resources to maximize the benefits of information technology implementation.

Heskett (1990) highlights that information communication technology use has an effect on both customers and service providers in service firms. Various studies have explored information and communication technology's effects on management and marketing strategies. Mathe and Dagi (2006) conducted research and found that the utilization of information technology contributes to the

successful implementation of international strategies in service industries. This suggests that the role of information technology is a crucial role in supporting and enabling global business operations. According to Martell (2008), information technology accelerates changes in how marketing activities are conducted. It enables firms to more effectively monitor the pricing of rivals and conduct more accurate market research, and communicate and share information more effectively with others. This implies that information technology enhances marketing capabilities and facilitates more efficient and informed decision-making.

Porter and Millar (1985) assert that the Implementation of information technology brings about modifications to the production procedure, reduces costs, expands the competitive landscape, and promotes the creation of new business opportunities. This emphasizes the transformative power of information technology in driving operational efficiency, cost reduction, and fostering innovation. Jackson (2010) shares a similar perspective, emphasizing the relationship between information technology and competitive advantage. Developed nations are encouraged to leverage information technology to effectively compete with low-priced competitors from developing countries. On the other hand, Bonk (2006) highlights the significance of small and medium-sized businesses that use telecommunications, information resources, and computer technologies to survive in the era of globalization. It highlights the necessity for these firms to leverage information technology to become effective niche players in the competitive market. These perspectives collectively underline the significant role of information technology in service firms, influencing various aspects such as strategy, marketing, operations, cost reduction, competition, and global business expansion. They emphasize the need for firms to embrace and effectively utilize information technology to remain competitive and thrive in a rapidly evolving business landscape.

The main objective of every SACCO is maximization of capital growth, prudent management of assets and liability and attainment of financial stability. These happens only through adoption of ICT which has brought about financial innovation Liangi (2020)

In conclusion, research from the past has shown that the introduction of successful innovations by entrepreneurs has resulted in positive economic profits. Therefore, internet banking, mobile banking, and ATMs have significant effects on the organisation. According to Schumpeter (2010), an entrepreneur's primary role is to bring innovations into the economy, and his profits are a reward for carrying out this role.

2.3 Theoretical Review

Theoretical framework is the foundation from which all knowledge is contracted that provide structure and vision of a study, Azadeh (2014)

2.3.1 Theory on Diffusion and Innovation

The French sociologist Gabriel Tarde appeared in 1903 with his first historical argument of theory (Toews, 2003). Diffusion of innovation is the method by means of which people adopt a novel concept, product, or behavior. (Rogers 2011) came to the conclusion that The Diffusion of Innovation hypothesis is considered when technological innovation is presented and modified to meet the needs of users at all levels to be a useful change model for leading the innovation. he also stresses the need of peer networking and communication in the adoption strategy.

The theory of diffusion of innovations, according to Kelly (2021), describes how new advancements in science, technology, and other disciplines penetrate into communities and civilizations before being utilized extensively. The theory of innovation diffusion aims to elucidate the principles and reasoning underlying the assimilation of innovative ideas and methods, which may require prolonged periods.

Over time, innovation has prompted the advancement of communication and information technology (ICT). ICT is the framework and elements of contemporary computing, comprising all hardware, software, networking hardware, and systems that, when put together, enable individuals and businesses to function successfully and efficiently.

This theory explains why ATMs have become popular in the banking sector overall, so it is essential for the study because it sets forth an advantageous change model that might direct technological innovation and make sure that it is made available and modified to satisfy the demands of every potential adopter.

2.3.2 Technology Acceptance Model

The Technology Acceptance Model (TAM), established by Davies in 1986 served as the foundation for the research project of the effects of information and communication technology (ICT) adoption on SACCO performance in Eldoret. The primary focus of this model is understanding how users accept technology and how their knowledge of it is utilized within organizations. The significance of technology acceptance is evident as computer systems have been found to have limited effectiveness if they are not embraced by users, as highlighted by Davies in 1989. In light of this, the researcher aimed to identify the reasons behind organizations' reluctance to accept technology adoption. Additionally, Nzibonera et al. (2018) demonstrated that the environment can hinder the adoption and usefulness of technology, emphasizing the importance of organizational awareness. Given the relevance of TAM to this study, it provides valuable insights into users' acceptance of mobile devices and how their integration impacts the organization as a whole. By incorporating TAM, the research aimed to acquire an extensive understanding of the variables affecting ICT adoption in addition to how it affects Eldoret SACCO performance.

2.3.3 Resource based view theory

The investigation of how the use of information and communication technology (ICT) affected the performance of SACCOs in Eldoret got started with the resource-based view (RBV) hypothesis, which was first proposed by Birger Wernerfelt in 1984 and further developed by Jay B. Barney and other scholars in 1991. The core tenet of the RBV theory is that a firm's capability and resources are evaluated to ascertain its edge over competitors

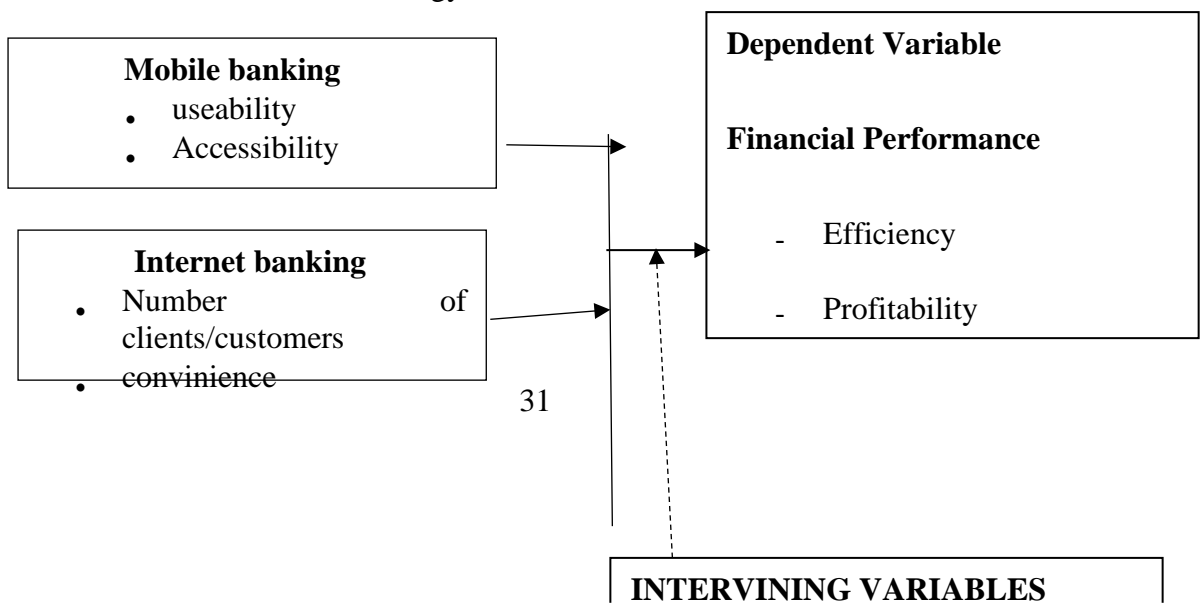
According to Barney (1991), a firm's competitive advantage is derived from four key characteristics: value, uniqueness, imperfect imitability, and innovation. This theory greatly contributes to strategic understanding by elucidating the relationship between firm performance and its resources.

The RBV theory holds particular relevance to the study of technology adoption, especially in the context of internet banking service. Internet banking has significantly transformed various industries through technological advancements, and the value of technology resources has played a crucial role in driving growth. As highlighted by Furr and Eisenhardt (2021), the RBV theory continues to demonstrate its impact on financial performance in contemporary times. Using the RBV theory, the research to explore how the adoption of ICT, specifically internet banking, influences the performance of SACCOs in Eldoret. The theory provided a framework for assessing the value, rarity, imperfect imitability, and uniqueness of technology resources within the SACCO context, shedding light on how these resources contribute to the competitive advantage and overall financial performance of the organizations. Through the lens of RBV theory, The purpose of the study was to learn more about the strategic implications of ICT adoption and its effects on Eldoret's SACCOs' performance, ultimately contributing to the body of knowledge surrounding technology-driven transitions in the industry.

2.4 Conceptual Framework

INDEPENDENT VARIABLES

Information communication technology



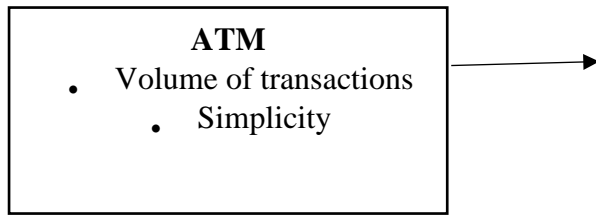


Figure 1 Conceptual Framework Source: Researcher (2024)

2.5 Summary Gap

Research on the effectiveness of ICT on SACCO operations was carried out by Ileri (2017), who based his study in Nairobi Town. while the current study will take place in Eldoret. Wachira et al.'s (2014) study investigated the way Kenyans perceived the effects of ICTs., the research was done in Nairobi, questionnaires were collected as primary data by use of and the current study focuses on in Eldoret and will use secondary data.

Mohamad (2019) study the study analyzed the mobile banking's effects on Kenyan commercial banks' financial performance and discovered a strong positive link between the economic performance of commercial banks and their capacity to use mobile banking. Other financial developments were not taken into consideration in this study, which concentrated on mobile banking.

Additionally ,it omitted the element of liquidity that supports financial performance. Research on the effect of online banking on Bangladeshi banks' performance expanding economy was conducted by Siddik et al. (2016). Analysis showed that the bank's Return on Equity begins to increase with e-banking. According to the study's findings, a user's inclination to use mobile banking is influenced by elements like utility, simplicity of usage, regarded dangers, and prior experiences. The investigation ignored other financial innovation constructs in favor of focusing only on electronic banking. The new study was conducted in Kenya and is going to expand its scope by incorporating more financial innovation constructs, whilst the previous study was based in Bangladesh.

Harelimana (2017) studied on impact of utilization of information communication technology, The

study found that while financial innovations positively impacted profitability, it was determined that the benefit was rather marginal because microfinance institutions had not made many investments in those technologies. The study left out liquidity in instead of emphasis on financial success. The investigation was conducted in Rwanda using systematic and straightforward random sampling. The dependent variable of the study, which has taken place in Kenya, is the financial performance of deposit-taking SACCOs in that country.

Ali (2018) focused on the study on ABSA Bank of Kenya in order to explore the impact of internet. the impact of banking on commercial banks' financial performance, the study found that the availability, fees, commissions, and the hazards linked to virtual banking are swiftly impacting the financial viability of banks that deal with commerce. The study solely looked at Barclays Bank of Kenya. The scope of the study was enlarged to include deposit accepting SACCOs in Kenya as well as other aspects of financial innovation, as the study only examined online banking.

Gichuki (2021) conducted a study on the effects of ICT adoption and use on SACCO performance, innovativeness, and effectiveness; the study focused on SACCOs in Nairobi County, whereas the current study is focused on SACCOs in Eldoret. Koech *et al* (2021) did research on effects of ICT adoption on SACCO societies' financial performance; the study was carried out in Bomet County guided by agency theory, the current study was based on diffusion and innovation theory, Technology Acceptance Model and RBV theory, the study dwell much on computerization, current study focuses on variables that are internet banking, ATM and mobile banking.

The studies done globally and regionally have concentrated in studying commercial banks and discovered an advantageous association between ICT and financial performance ,those done locally the study did SACCOs research but most of those research concentrated much on management function on ICT, and different innovations apart from the one in this study,Therefore study will there seek to

determine the connection between The monetary results of SACCOs and ICT ,taking the eleven deposit taking SACCOs in Eldoret town Koech *et al* (2021).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

A description of the research techniques and protocols used in the study is given in this chapter. This chapter covers the design of the research as well as the data collecting, data analysis, target demographic and sample for the study, and data gathering.

3.2 Research Methodology

The study's research methodology was quantitative. The study's objective was to gather quantitative data from a representative sample of Eldoret Town's SACCOS by using this method, using questionnaires to collect data on financial performance metrics and ICT adoption. Statistical analysis techniques of mean, percentages and standard deviation was applied to analyze the data.

3.3 Research Design

A research study is guided by the broad structure provided by the research design.in addressing a specific research problem, investigating factors such internet banking, ATM usage, and mobile banking. The present investigation specifically used a descriptive research design, which involved qualitative research methods. As highlighted by Mugenda and Mugenda (2003), a descriptive research design aims to accurately depict the various aspects of a situation without exerting any influence, ensuring an objective representation of he phenomenon that's being studied. The careful design of the study sought to provide a comprehensive depiction of the research context, minimizing biases in data collection and reducing errors in data interpretation. By employing a descriptive research design, the

study aimed to provide detailed insights into the mobile banking, ATM usage, and internet banking variables, shedding light on their current state and offering valuable information for further analysis and decision-making.

3.4 Location of the Study

The choice of focusing was on all the licensed SACCOs in Eldoret town Kenya as the study area was deemed ideal due to several reasons. Firstly, Eldoret town serves as a significant urban hub with a thriving SACCO sector, making it a suitable representation of the broader SACCO landscape in Kenya. By selecting Eldoret as , the study area the research's target to capture the diverse characteristics, dynamics, and operational practices of licensed SACCOs within a specific geographical context.

Additionally, Eldoret town's SACCOs were considered an appropriate sample to represent other licensed SACCOs outside Eldoret. As a well-established urban center, Eldoret attracted a variety of SACCOs operating in different sectors and catering to various clientele. By studying the effect of ICT adoption on the financial performance of SACCOs in Eldoret, the research sought to draw insightful conclusions that could be extrapolated to similar licensed SACCOs operating in other regions of the country. Furthermore, Eldoret town's SACCOs were likely to have experienced similar technological advancements and faced comparable challenges related to ICT adoption. By focusing on this specific group of licensed SACCOs, the goal of the study was to acquire a thorough understanding of how ICT affected their financial performance , considering the distinctive qualities and dynamics of the SACCO sector in Eldoret. Moreover, Eldoret town's SACCOs were easily accessible for data collection and interaction with key stakeholders. This proximity facilitated efficient data gathering processes, including surveys, interviews, and observations, which contributed to the overall feasibility and practicality of the study.

3.5 Target Population

The study's focus centered on 66 employees affiliated with the Sacco Society Regulatory Authority (SASRA)-licensed deposit-taking SACCOs in Eldoret has identified the presence of eleven SACCOs

operating in the town. Consequently, the researcher aimed to encompass all eleven of these deposit-taking SACCOs in Eldoret as the target population, establishing a comprehensive approach to capture a representative sample and gather insights into the effects of various factors, including the use of ICT, on these SACCOs' overall operations and financial results.

3.6 Sample Size Determination

Table i: Target Population and Sample Size

SACCO	Target Population Category	Target population	Sample population
AFYA Sacco	Director and Human Resource officers	6	6
ANABKOI Sacco	Credit officers	6	6
BORESHA Sacco	Credit officers, finance officers	5	5
HARAMBEI Sacco	Credit officers, finance officers	6	6
IMARISHA Sacco	Credit officers, finance officers	6	6
KENYA POLICE Sacco	Credit officers, finance officers	5	5
MAGEREZA Sacco	Credit officers, finance officers	7	7
MWALIMU Sacco	Credit officers, finance officers	6	6
NOBLE Sacco	Credit officers, finance officers	6	6
UKULIMA Sacco	Credit officers, finance officers	6	6
STIMA Sacco	Credit officers, finance officers	7	7
Total	Credit officers, finance officers	66	20

Source: Researcher (2024)

3.7 Sampling Procedure and techniques

The study employed a census design technique to select the sample size, which contributed to the research's general consistency and dependability findings. By adopting this technique, the study aimed

to enhance the generalizability of the conclusions drawn from the data, expanding the potential applicability of the results beyond the specific sample. The utilization of the census design technique played a crucial role in minimizing selection bias, a common concern in research studies. This technique ensured that every member of Equal opportunities were available to the target demographic to be included in the study, thereby reducing the risk of biased representation. This approach further enhanced the credibility and validity of the study's findings.

Furthermore, the application of statistical tests within the framework of the census design technique added an additional layer of rigor to the research. These statistical tests allowed the researcher to conduct an organized and impartial analysis of the data, providing quantitative evidence to support the study's conclusions. By employing statistical tests, the study aimed to establish a clear cause-and-effect relationship between the adoption of Information Communication Technology (ICT) and the financial performance of deposit-taking SACCOS in Eldoret Town. The comprehensive utilization of the census design technique, along with the incorporation of statistical tests, contributed to the increased reliability and validity of the study's conclusions. The findings derived from this approach can be confidently applied to similar contexts and offer insightful information about how ICT adoption affects Eldoret Town's deposit-taking SACCOS's financial performance

3.8 Test of Validity

Quality is important aspect in research, quality determines validity and Validity is a measure of accuracy and applicability (Bryman & Bell, 2011). Creswell (2012) asserts that the validity of a measurement is dependent upon its ability to accurately capture the intended construct—more specifically, the degree to which test participant differences as captured by the measurement actually represent those differences After that, the researcher used a variety of analytical techniques to draw conclusions from the data that had been gathered, including editing to eliminate inconsistencies, classifying the data according to similarities, and finally tabulating the data to relate variables.

3.9 Reliability

Mugenda and Mugenda (2002), describes reliability of research instruments measured in terms of the degree research device generate comparable results after repeated trials. The researcher then did piloting to members of the population who were not be part of the sample to access the reliability instruments.

3.10 Data Analysis methods and Procedures

To comprehensively examine the collected data, quantitative descriptive statistics were used in the investigation, which encompassed different actions including the calculation of means, standard deviations, and percentages. In order to ensure the data's reliability and accuracy, meticulous verifications for accuracy and comprehensiveness precision were carried out using the questionnaires, following the defined protocols specified by Mugenda & Mugenda (2013). To maintain consistency and uniformity in data presentation for analysis, sequential coding was meticulously applied. The researcher used version 29 SPSS, or the Statistical Package for the Social Sciences for statistical analysis, a widely recognized software tool specifically designed for data analysis. The utilization of this advanced software enabled the researcher to efficiently process and interpret the collected data, facilitating a comprehensive exploration of the research objectives.

Furthermore, the findings obtained from the analysis were effectively displayed with a variety of graphic tools, such pie charts, tables, and graphs. These visual representations were thoughtfully selected and strategically incorporated to enhance the clarity and comprehensibility of the results. By utilizing these visual aids, the researcher aimed to provide readers with a more accessible and intuitive understanding of the data, facilitating a deeper engagement with the findings and promoting a better grasp of the overall research outcomes.

3.11 Ethical Consideration

Ethics played a fundamental role in this study, ensuring the protection of participants' privacy, rights, and overall well-being. The ethical considerations encompassed various aspects, such as maintaining professionalism, decorum, and respect throughout the research process. Following the guidelines put forth by Bulmberg et al. (2011), a comprehensive framework was implemented to safeguard the ethical integrity of the study. Ethics encompasses a set of established rules and principles that guide appropriate behavior, with the primary objective of preventing any harm or negative consequences to individuals involved in the research. Adhering to these principles, the study upheld ethical standards to maintain the dignity, welfare, and rights of the participants.

To ensure compliance with ethical standards, a letter of consent was carefully composed and presented to the prospective respondents. This letter explicitly outlined the nature of the study, emphasizing the voluntary nature of participation. By obtaining informed consent from the participants, the study respected their autonomy and right to make an independent decision regarding their involvement. Furthermore, the researcher obtained essential clearances from relevant ethical review boards, such as the Mount Kenya University ERC (Ethics Review Committee) and NACOSTI (National Commission for Science, Technology, and Innovation). These clearances validated the adherence to ethical guidelines and demonstrated the researcher's commitment to conducting the study in an ethically sound manner.

Additionally, an introductory letter from the Mount Kenya Post graduate School was provided to establish the researcher's credentials and affiliation. This step further enhanced the ethical transparency of the study and facilitated a professional approach to gathering and analyzing data. The moral implications went farther beyond the initial stages of the study to encompass the storage and management of collected data. Data confidentiality and anonymization were prioritized to protect the privacy and identities of the players. Stringent measures were implemented to ensure that the data remained secure and accessible only to authorized personnel involved in the research. By following these moral guidelines, the study aimed to uphold the highest standards of ethical conduct, safeguarding

the well-being, privacy, and rights of the participants. The inclusion of ethical considerations in the research process reflects the researcher's commitment to conducting responsible and respectful research, promoting trust, and maintaining the integrity of the study's outcomes.



CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter provides the research findings and the analysis of the study's findings. The chapter presents the analysis of the research findings based on the goals of the research and resultant implication of the findings.

4.2 Demographic Characteristics of Respondents

4.2.1 Work experience

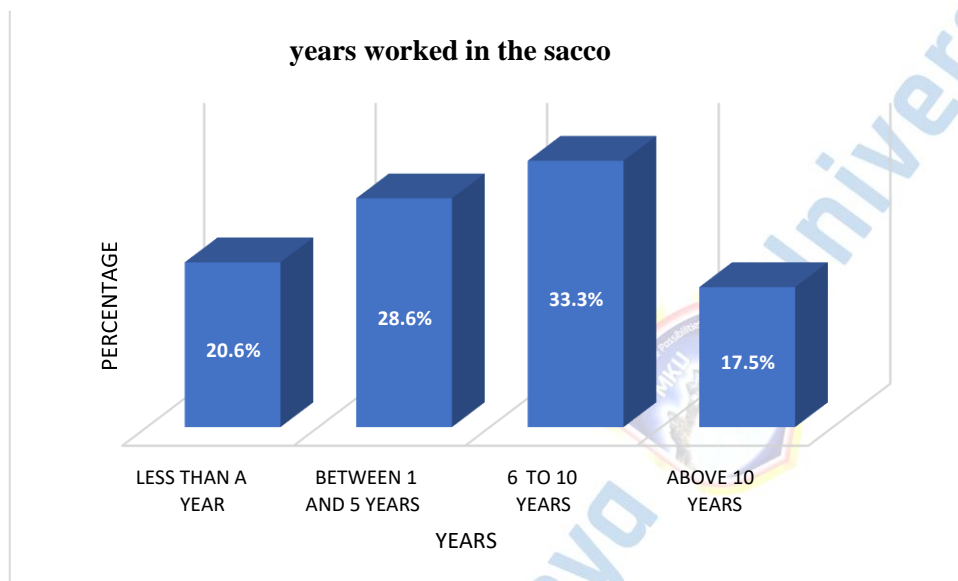


Figure 2 Work Experience Source: Researcher (2024)

The analysis shown in figure showed that among the 63 bank employees surveyed, 33.3% had been employed for 6 to 10 years, and 28.6% had been employed between 1 and 5 years. Those with less than a year of experience comprised 20.6%, while 17.5% had been with the bank for over 10 years. The cumulative distribution indicated that 82.5% had been employed for up to 10 years.

4.2.2 Level of education

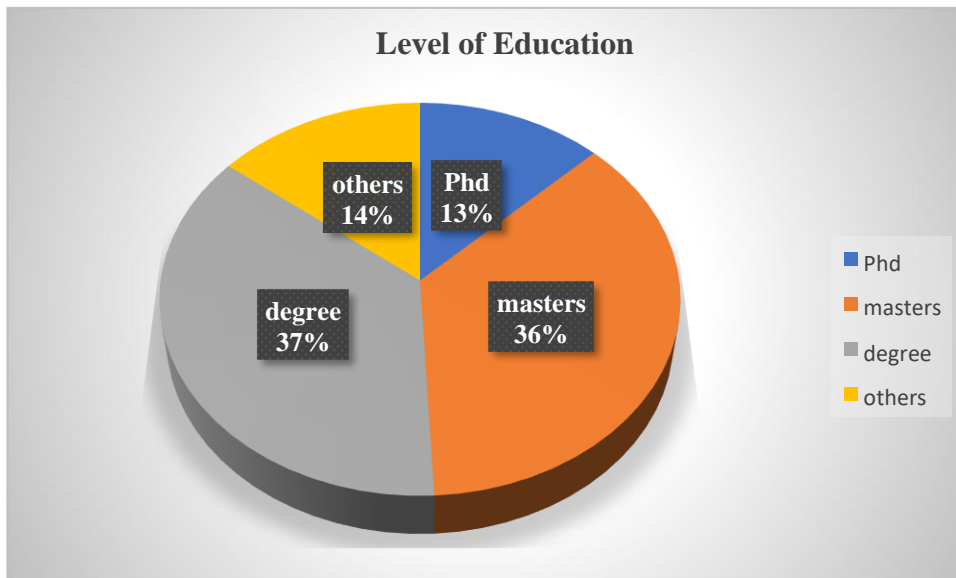


Figure 3 Work Experience

Source: Researcher (2024)

The analysis, as presented in figure 3, showed that, among the 63 individuals surveyed, 36.5% held a master's degree and another 36.5% had a bachelor's degree. PhD holders constituted 12.7%, while 14.3% had other forms of education. The cumulative distribution showed that 85.7% had at least a degree.

4.3 Descriptive Statistics

4.3.1 Mobile Banking and the Financial Performance of a SACCO

Table ii: Mobile Banking and the Financial Performance of a SACCO

	N	Min.	Max.	Mean	Std. Dev.
Both clients and Sacco personnel have saved time by using mobile banking to make deposits and withdrawals.	63	1	5	3.46	1.268
Accessing mobile banking is simple.	63	1	5	3.73	1.194
Customers generally choose mobile banking services because of the advantages it offers, which include the option to pay bills at their convenience.	63	1	5	3.79	1.220
The ability for customers to put money into their savings accounts through mobile banking has mobilized savings among Sacco members.	63	1	5	3.75	1.164
Information can be conveniently accessed with mobile banking, particularly checking account balances.	63	1	5	3.83	1.185
New financial services and products, like investment opportunities, insurance, and microloans, can be introduced through mobile banking.	63	1	5	3.84	1.081
A huge amount of data from mobile banking may be studied to learn more about the preferences, behavior, and financial demands of its users.	63	1	5	3.79	1.233
Valid N (listwise)	63				

Source: Researcher (2024)

According to the analysis, customers and Sacco workers both saved time while using mobile banking for deposits and withdrawals (mean = 3.46, standard deviation = 1.268). It emerged that mobile banking was relatively accessible (mean = 3.73, standard deviation = 1.194). Due to advantages like the ease of paying bills, users favored mobile banking (mean = 3.79, standard deviation = 1.220). Sacco members' savings were also mobilized by mobile banking (mean = 3.75, standard deviation = 1.164). Checking account balances and other information was made simple by using mobile banking (mean = 3.83, standard deviation = 1.185). Furthermore, mobile banking generated data that offered insights into member behavior and preferences (mean = 3.79, standard deviation = 1.233) and provided a platform for cutting-edge financial goods and services (mean = 3.84, std deviation = 1.081). It was concluded from these results that the financial performance of deposit-taking SACCOs in Eldoret Town was significantly improved by implementing the use of ICT, particularly mobile banking. Additionally, the efficiency of Sacco staff and clients was boosted by the time savings associated with using mobile banking for deposits and withdrawals. Because of its convenient features, such as the ability to pay bills online, clients embraced mobile banking due to its easy accessibility. Among Sacco members, mobile banking usage also encouraged saves, indicating that it promoted improved money management.

Firstly, according to the analysis, consumers and Sacco workers both saved time while using mobile banking for deposits and withdrawals. This finding suggests that mobile banking offers increased efficiency by streamlining the process of depositing and withdrawing funds. The time saved benefits both clients, who can conveniently manage their transactions, and Sacco employees, who can allocate their time to other important tasks, improving overall operational productivity. Secondly, it was discovered that using mobile banking was simple. The convenience and accessibility of mobile banking make it a preferred method for clients. This ease of access allows customers to conveniently engage in

banking activities at their convenience, without the need to visit physical branches. The accessibility of mobile banking enhances customer satisfaction and promotes a positive banking experience.

Moreover, Customers favored mobile banking because of benefits including easy bill payment. The ability to conveniently pay bills through mobile banking simplifies the financial management process for clients, providing them with a convenient and user-friendly experience. This feature contributes to customer satisfaction and loyalty, as it addresses a common need and pain point for individuals. Additionally, checking account balances and other information was made simple by using mobile banking. This accessibility to real-time information empowers clients to stay informed about their financial status, empowering people to decide with knowledge about their finances. The ease of accessing account information through mobile banking enhances financial transparency and control for clients.

Furthermore, new financial services and products were made possible by mobile banking. The flexibility and capabilities of mobile banking technology enable SACCOs to introduce new and innovative offerings to their members. This fosters a culture of innovation and allows SACCOs to stay competitive in the market, attracting and retaining customers seeking innovative financial solutions.

Lastly, the use of mobile banking produced information that offered insights into the preferences and conduct of members. The analysis of this data can help SACCOs gain a deeper understanding of their members, their needs, and their preferences. This information can be used to customize offerings, create focused marketing plans, and enhance overall customer engagement and satisfaction.

The results of this investigation align with Delf's (2017) study, which emphasized that the emergence of mobile banking has been a game changer in the performance of SACCOs. The current findings demonstrate the positive implications of adopting mobile banking, including time-saving benefits, easy accessibility, bill payment convenience, mobilization of savings, easy access to information, and the

platform for innovative financial products and services. These align with Delf's notion that mobile banking has significantly transformed SACCO performance. However, the findings differ from Kim's (2020) argument that mobile banking, which is unsecured in SACCOs, negatively affects performance. The current analysis did not indicate any negative mobile banking's effect on SACCO performance. In fact, the findings highlight the positive aspects and benefits associated with mobile banking adoption. It is significant to remember that the examination focused on the positive implications and advantages of mobile banking, suggesting that the security concerns raised might not have been significant factors in the context of the study another study perspective raised valid concerns about the security aspect of mobile banking, it is essential to consider that the analysis's conclusions showed that SACCO performance has significantly improved as a result of the use of mobile banking.

Overall, the alignment with Delf's (2017) research suggests that mobile banking has indeed been a game changer in SACCO performance, while the disagreement with Kim (2020) indicates that the negative impact of unsecured mobile banking on performance might not be universally applicable or significant in the context of the analyzed SACCOs.

Therefore, inconclusion, the findings of this analysis highlighted the significant positive implications of adopting the use of mobile banking on the financial performance of the deposit-taking SACCOs in Eldoret Town.

The study demonstrates that mobile banking saves time, improves accessibility, provides bill payment convenience, mobilizes savings, facilitates easy access to information, serves as a platform for innovation, and generates valuable data insights. These findings underscore the ability of mobile banking to revolutionize the banking industry by boosting overall performance, client satisfaction, and operational efficiency.

4.3.2 Internet Banking and the Financial Performance of SACCOs

Table iii Internet Banking and the Financial Performance of a SACCOs

	N	Min.	Max.	Mean	Std. Dev.
When compared to conventional means, the volume of transactions made each day via internet banking has increased.	63	1	5	3.84	1.153
Clients can simply access a variety of items by using internet banking.	63	1	5	3.84	1.081
The usage of internet banking for bill payment has enhanced the Sacco brand because it is user-friendly.	63	1	5	3.79	1.233
The ability to do online banking from outside the Sacco property makes it convenient.	63	1	5	3.84	1.153
The ability to do online banking from outside the Sacco property makes it convenient.	63	1	5	3.57	1.279
ICT makes remote work feasible, giving workers the freedom to operate from any location.	63	1	5	3.75	1.270
Compliance management that is automated solutions lower the risk of legal problems by assisting firms in adhering to regulatory regulations.	63	1	5	3.70	1.240

Employee adaptability to study at their own speed is provided via e-learning platforms, which also lower training expenses.

Valid N (listwise) 63

Source: Researcher (2024)

The analysis demonstrated that, in comparison to conventional techniques, online banking boosted daily transaction volume (mean = 3.84, standard deviation = 1.153). With internet banking, customers may quickly access a range of items (mean = 3.84, standard deviation = 1.081). Bill payment via internet banking enhanced the Sacco's reputation and was easy to use (mean = 3.79, standard deviation = 1.233). Furthermore, the convenience of internet banking off Sacco property was observed (mean = 3.84, standard deviation = 1.153). Technologies made remote work achievable, giving workers flexibility (mean = 3.75, standard deviation = 1.270).

The findings of this study indicated that the utilization of information and communication technology, specifically the usage of online banking. Comparing internet banking to traditional techniques, the investigation showed that there was a daily increase in transaction volume, indicating improved productivity and efficiency. With internet banking, users could simply access a range of products, giving them a more convenient and all-encompassing financial services experience. Additionally, the Sacco's reputation was enhanced and customer satisfaction increased by the user-friendly nature of online banking for bill payment.

The findings of the analysis highlight the positive impact of adopting information communication technology, particularly internet banking's impact on financial results of deposit-taking SACCOs in Eldoret Town. Several key aspects emerged from the study that demonstrate the benefits of internet banking. Firstly, internet banking resulted in. This indicates that internet banking offers greater efficiency and productivity, enabling more transactions to be processed within a given timeframe. This

finding suggests that the implementation of internet banking technology can significantly enhance the operational capabilities of SACCOs, all greater volume of transactions daily in comparison to conventional techniques owing them to handle a larger volume of transactions and serve a greater number of customers effectively.

Secondly, clients utilizing internet banking had easy access to a wide range of products. This accessibility provided them with a comprehensive suite of financial services, giving them the ability to handle their accounts, conduct transactions, and investigate different options conveniently. The availability of multiple products through internet banking enhances customer satisfaction by providing them with greater choice and flexibility in meeting their financial needs.

Moreover, internet banking's impact on bill payment improved the image of the SACCOs. By offering a user-friendly platform for bill payments, SACCOs can enhance customer convenience and satisfaction. This improvement in the SACCOs' image suggests that internet banking positively influences customer perception and contributes to building a positive reputation for the institution.

Additionally, the study highlighted the convenience of ATM outside the SACCO premises. This aspect is particularly significant as it indicates that customers can access banking services anytime and anywhere, providing them with flexibility and convenience in managing their finances. The ability to conduct transactions remotely contributes to client loyalty and satisfaction.

Additionally, the analysis showed that the procedure for transferring funds through internet banking enhanced cost effectiveness among clients. By utilizing internet banking for fund transfers, customers can save time and resources that would otherwise be required for traditional methods. This finding suggests that internet banking offers a cost-effective solution for customers, enabling them to transfer funds efficiently and reducing transaction costs. Lastly, the adoption of information communication technology, including internet banking, enabled remote work and provided flexibility for employees. This aspect highlights the benefits of ICT in facilitating modern work practices, such as remote work

arrangements. The flexibility offered by ICT enhances employee satisfaction and productivity, contributing to overall organizational effectiveness.

In conclusion, the findings of this analysis underscore the significant positive implications of adopting information communication technology, specifically internet banking, for the Eldoret Town deposit-taking SACCOs cash flow results. As the data shows, the amount of transactions through internet banking rises, provides easy access to various products, improves the SACCOs' image, offers convenience outside the premises, enhances cost efficiency, and enables flexibility for employees. These findings highlight the revolutionary potential of ICT to enhance overall performance, customer satisfaction, and operational efficiency in the banking industry. The results of this study align with the study carried out by James (2022), which emphasized the significant role played by internet banking in enhancing organizational performance. James's study, in line with the current findings, highlighted the positive implications of adopting information communication technology, particularly internet banking, in improving operational efficiency and customer satisfaction. Both studies pointed the increased transaction volume facilitated by internet banking, the easy access to a variety of products, the improvement in the organization's image, the convenience of banking outside the premises, the cost efficiency of fund transfer systems, and the flexibility provided to employees. Together, these findings reinforce the notion that internet banking plays a vital and influential role in driving organizational success and elevating performance in the modern digital era.

4.2.1 ATM Adoption and the Financial Performance of a SACCOs

Table iv: ATM Adoption and the Financial Performance of a SACCOs

	N	Min.	Max.	Mean	Std. Dev.
Sacco has invested heavily on ATM and the rate of uptake by 63 clients increase	1	5	3.86	1.162	

Investment of ATM by Sacco has increased the volume of transactions per day	63	1	5	3.81	1.306
ATM has positively influence capital growth hence increases of revenue to the Sacco	63	1	5	3.76	1.241
ATM has improved image of the Sacco hence increase membership	63	1	5	3.73	1.153
ATM has reduced work of employee, therefore reducing the number of employees which in turn is a benefit to the Sacco	63	1	5	3.79	1.297
ATM has increase loan disbursement due to amount deposited in to accounts directly from ATMs hence benefit to the bank	63	1	5	3.57	1.254
ATM has saves time that could be taken in queuing for the 63 services physically in Sacco premises	1	5	3.63	1.395	
Valid N (listwise)	63				

Source: Researcher (2024)

The analysis showed that Sacco's heavy investment in ATMs increased client uptake (mean = 3.86, std deviation = 1.162). This investment also raised the volume of transactions per day (mean = 3.81, std deviation = 1.306). ATMs positively influenced capital growth and revenue (mean = 3.76, std deviation = 1.241). The improved image of the Sacco increased membership (mean = 3.73, std deviation = 1.153). The workload reduction for employees, leading to fewer employees and benefits for the Sacco, was significant (mean = 3.79, std deviation = 1.297). Lastly, ATMs increased loan disbursement and saved time spent queuing (mean = 3.57, std deviation = 1.254 and mean and standard deviation, respectively, are 3.63 and 1.395). These results indicated the deposit-taking SACCOs' financial performance in Eldoret Town was greatly enhanced by implementing the use of information communication technologies, in particular the investment in ATMs. The purchase of ATMs increased client adoption, suggesting that ATMs were a major factor in attracting and retaining

customers. This investment also raised the volume of transactions per day, indicating that ATMs were facilitating more efficient and faster transactions.

The analysis's conclusions highlight the significant positive implications of Sacco's heavy investment in ATMs for the Eldoret Town SACCOs that accept deposits and their financial performance. Several key aspects emerged from the study that demonstrate the benefits of investing in ATMs. Firstly, the analysis revealed that Sacco's investment in ATMs increased client uptake. This finding suggests that ATMs played a crucial role in attracting and retaining customers. The convenience and accessibility provided by ATMs likely contributed to the positive response from clients, leading to an increase in their engagement with the Sacco. Secondly, the investment in ATMs resulted in a higher volume of transactions per day. This indicates that ATMs facilitated more efficient and faster transactions, enabling customers to conduct their banking activities with greater ease and convenience. The increased transaction volume suggests that ATMs were successful in streamlining and expediting the banking processes, enhancing operational efficiency for both the Sacco and its clients. Furthermore, ATMs positively influenced capital growth and revenue. The availability of ATMs likely enhanced the image and reputation of the Sacco, attracting more individuals to become members. This increased membership, in turn, contributed to capital growth and revenue generation for the Sacco. The improved image of the Sacco, as a result of the investment in ATMs, likely instilled trust and confidence in potential members, motivating them to join the organization.

Additionally, the study demonstrated that investing in ATMs led to a reduction in workload for employees, resulting in a decreased number of required staff members. This reduction in workforce overheads translates to cost savings and benefits for the Sacco. By automating certain banking processes through ATMs, the Sacco was able to streamline operations, optimize resource utilization, and achieve greater efficiency. Lastly, the analysis revealed that ATMs played a significant role in increasing loan disbursement and saving time spent on queuing. The availability of ATMs likely facilitated faster loan processing and disbursement, improving the overall customer experience.

Moreover, the convenience of ATMs allowed customers to avoid long queues, saving them valuable time when accessing financial services.

The findings of this analysis align with the research conducted by Kingston and Harry (2019), which demonstrated that the successful adoption of ATMs contributes to the achievement of best-in-class performance for SACCOs. In their study, Kingston and Harry highlighted the significant role played by ATMs in enhancing various aspects of SACCO operations. The current findings, in line with their research, emphasize the positive implications of investing in ATMs, including increased client uptake, higher transaction volumes, improved capital growth and revenue, increased membership, reduced employee workload, and enhanced loan disbursement processes. The consistency between these findings and Kingston and Harry's research reinforces the notion that ATMs, when effectively implemented, have the potential to drive SACCOs towards achieving exceptional performance, positioning them as leaders in the industry. In conclusion, the findings of this analysis underscore the significant positive implications of investing in ATM regarding the Eldoret Town SACCOs' deposit-taking financial performances. The study demonstrates that investing in ATMs leads to an increase in client uptake, higher transaction volumes, improved capital growth and revenue, increased membership, reduced workload for employees, and enhanced loan disbursement processes. These findings highlight the ability of ATMs to revolutionize the banking industry by boosting overall performance, customer happiness, and operational effectiveness .

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter includes all the research findings in accordance with the study's objectives and conclusions is made by the researcher. The chapter also includes recommendations for additional research and conclusions from the study.

5.2 Summary of the Analysis

The results showed that most of the respondents, 33.3%, had worked for 6 to 10 years in the SACCOs. Further, the findings indicated that cumulatively, that 85.7% had at least a degree.

5.2.1 Mobile banking and Financial Performance of SACCOs

The analysis demonstrated that mobile banking Has a significant impact on clients' and Sacco employees' time savings (mean = 3.46, standard deviation = 1.268)., highlighting its efficiency in handling transactions. Furthermore, it was), which improved its usability and attractiveness to users. Clients showed a preference for mobile banking, found to be easy to obtain (average = 3.73, standard deviation = 1.194). particularly due to its convenient bill payment features (mean = 3.79, std deviation = 1.220), indicating its practicality in various financial tasks. Furthermore, Sacco members' mobilization of savings was also successfully aided by mobile banking (mean = 3.75, standard deviation = 1.164), providing improved financial inclusion in the community. Furthermore, it made important data, such as account balances (mean = 3.83, standard deviation = 1.185), easily accessible, empowering consumers to make wise financial decisions.

5.2.2 Internet Banking and the Financial Performance of the SACCOs

If compared to traditional methods, the data indicated that the daily transaction volume through internet banking grew significantly (mean = 3.84, standard deviation = 1.153). indicating its effectiveness in facilitating financial transactions and potentially boosting revenue. Additionally, with internet banking, customers can effortlessly obtain a range of products (mean = 3.84, standard deviation = 1.081), suggesting its versatility and ability to cater to diverse customer needs. Furthermore, paying bills online through internet banking enhanced the Sacco's public image, and its simple user interface was praised. (mean = 3.79, std deviation = 1.233), illustrating its positive impact on client contentment and the standing of the company. Moreover, the ease of using internet banking away from Sacco locations was brought out (mean = 3.84, standard deviation = 1.153), highlighting its accessibility and adaptability to various environments.

5.2.3 ATM Adoption and the Financial Performance of the SACCOs

The research findings indicated that Sacco's heavy investment in ATMs significantly increased client uptake (mean = 3.86, std deviation = 1.162), positively impacting operational efficiency and customer satisfaction. Additionally, this investment led to a notable increase in the volume of transactions per day (mean = 3.81, std deviation = 1.306), further enhancing revenue generation and service delivery. ATMs emerged as a pivotal tool in driving capital growth and revenue for the Sacco (mean = 3.76, std deviation = 1.241), solidifying their role in modern financial infrastructure.

5.3 Conclusion of the Study

According to the study's findings, it indicates that, clients and Sacco workers both saved time while using mobile banking for deposits and withdrawals, demonstrating improved efficiency. It was concluded that mobile banking was easily accessible, making it a preferred method for clients. A conclusion was made that Customers favored mobile banking because of features like easy bill paying. It was also concluded that Sacco members' funds were mobilized by mobile banking, revealing that it promoted improved money management. Additionally, the study showed that using mobile banking made it easier to obtain information, such checking account balances. It was also determined that mobile banking provided a platform for advanced financial services and solutions. The study also found that member behavior and preferences might be inferred from data collected by mobile banking. These results suggested that the financial performance of deposit-taking SACCOs in Eldoret Town was significantly improved by the implementation of information communication technology, particularly the usage of mobile banking. The study concluded that mobile banking offers increased efficiency, convenience, and accessibility for clients. It was also concluded that mobile banking features like bill payment convenience and access to real-time information contribute to customer satisfaction. Moreover, the study highlighted that mobile banking enables SACCOs to introduce innovative offerings and gain valuable customer insights through data analysis.

The study found that the use of information and communication technologies greatly enhanced the financial performance of deposit-taking SACCOs in Eldoret Town in particular the usage of internet banking. Firstly, it was concluded that When compared to traditional techniques, internet banking increased the volume of transactions each day, showing improved productivity and efficiency. This finding suggests that the implementation of internet banking technology can significantly enhance the operational capabilities of SACCOs, allowing them to handle a larger volume of transactions and serve a greater number of customers effectively. Secondly, it was concluded that with internet banking, customers could simply access a range of products, giving them a more convenient and all-encompassing financial services experience. The availability of multiple products through internet banking enhances customer satisfaction by providing them with greater choice and flexibility in meeting their financial needs. Furthermore, it was concluded that Online banking for bill payment was more user-friendly and enhanced the SACCO's reputation, which in turn increased customer satisfaction . By offering a user-friendly platform for bill payments, SACCOs can improve customer convenience and perception, contributing to a positive reputation for the institution.

Additionally, a conclusion was made that internet banking provided convenience outside the SACCO premises, allowing customers to access banking services anytime and anywhere. This flexibility and convenience in managing finances contribute to customer satisfaction and loyalty. Moreover, it was concluded that The internet banking fund transfer mechanism increased consumer cost effectiveness.

By utilizing internet banking for fund transfers, customers can save time and resources, leading to reduced transaction costs and improved cost effectiveness. Lastly, it was concluded that the adoption of information communication technology, including internet banking, enabled remote work and provided flexibility for employees. This aspect highlights the benefits of ICT in facilitating modern work practices, enhancing employee satisfaction and productivity.

The study concluded that the heavy investment in ATMs by deposit-taking SACCOs in Eldoret Town has yielded significant positive implications for their financial performance. Through a comprehensive

analysis of the data, it was evident that the adoption of ATMs has resulted in a multitude of benefits for the SACCOs. There was a clear conclusion from the study that the use of ATMs has resulted to a positive increase in client uptake, indicating their effectiveness in attracting and retaining customers. The convenience and accessibility provided by ATMs have played a pivotal role in driving client engagement and satisfaction, ultimately contributing to the growth of the SACCOs' customer base.

Additionally, it was evident from the findings that ATMs have significantly increased the volume of transactions per day, streamlining and expediting banking processes for greater operational efficiency. The ability to conduct transactions quickly and conveniently through ATMs has not only enhanced the general client experience but also made it possible for the SACCOs to handle a higher volume of transactions, leading to increased efficiency and productivity. Moreover, the study revealed that the investment in ATMs has positively influenced capital growth and revenue for the deposit-taking SACCOs. The availability of ATMs has enhanced the image and reputation of the SACCOs, attracting more individuals to become members and invest in their services. This increase in membership has directly contributed to capital growth and revenue generation, solidifying the financial position of the SACCOs within the industry.

Furthermore, the analysis indicated that the adoption of ATMs has resulted in a reduction in employee workload, leading to cost savings and other benefits for the SACCOs. By automating certain banking processes, the SACCOs have been able to optimize resource utilization and achieve greater operational efficiency. This has translated into reduced workforce requirements and improved resource allocation, ultimately benefiting the SACCOs' financial performance. Lastly, the study highlighted the significant role played by ATMs in increasing loan disbursement and saving time spent on queuing. The availability of ATMs has facilitated faster loan processing and disbursement, streamlining the lending process and improving customer satisfaction. Additionally, customers have been able to avoid long queues by utilizing ATMs, saving them valuable time when accessing financial services.

5.4 Recommendations of the Research Study

Based on the research findings, the study recommended that:

- i. A continued investment in ATMs to be sustained so as to maintain the observed increase in client uptake and operational efficiency since it has proven pivotal in driving revenue growth and solidifying the Sacco's position within the modern financial landscape.
- ii. Adopting innovative and cutting-edge technology components should be a top priority for SACCOs since they are still essential to maintaining organizational growth and competitiveness.
- iii. Given their demonstrated effectiveness in improving customer satisfaction and time management, the SACCOs ought to focus on growing and promoting mobile banking services.
- iv. To boost daily transaction volumes and enhance financial efficiency, the SACCOs needs to make use of internet banking

5.5 Suggestion for Further Study

The research findings indicate that there is a need for additional research to delve into the long-term impacts of sustained investment in ATMs on client uptake and operational efficiency. It is recommended to conduct a comprehensive study that investigates the extended effects of these investments over a prolonged period of time. This future research should aim to examine the evolution of these investments over the long term and analyze their influence on revenue growth and the Sacco's overall positioning within the dynamic financial sector. By exploring these aspects in depth, a more comprehensive understanding of the sustained effects and potential benefits of long-term ATM investment can be gained.



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Consent Form

I am **Chepkoech B Cheruiyot**, a master student at Mount Kenya University. I am conducting a study on

“EFFECTS OF INFORMATION COMMUNICATION TECHNOLOGY ADOPTION ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOs IN ELDORET TOWN”

I would like to let you know that this study counts as a portion of my master's degree requirements. I am requesting your permission to recruit you to simply and voluntarily contribute to this study. Code numbers were used in place of names to ensure confidentiality, and the data collected will not be shared with third parties. It is voluntary to take part in the study. The participants face no risks in this initiative. Before I include you in this research, would you please write your name the following declaration

I have read the purpose and I hereby agree/disagree to participate in this study.

Name

Respondent (coded)

Principal investigator

Name: **Chepkoech B Cheruiyot** Sign:



For any questions or further clarifications, kindly contact the;

Chairman,

Mount Kenya University,

Ethics Review Committee,

P.O Box 342-0100 **Thika**.

APPENDIX 1

QUESTIONNAIRE

SECTION A: GENERAL INFORMATION

1. For how long have you been working in the bank?

Less than a year

Between 1 and 5 years

Between 6 and 10 years

Above 10 years

2. What is the Level of your education?

PHD

Masters level

Degree /Diploma

Others.....

PART B: SPECIFIC INFORMATION

Q1. To find out how ATM adoption influence the financial performance of the Sacco

What extent do you agree with the following claims regarding the way ATMs affect financial performance?

Statements	SA	A	N	D	SD
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Sacco has invested heavily on ATM and the rate of uptake by clients increase					
Investment of ATM by Sacco has increased the volume of transactions per day					
ATM has positively influence capital growth hence increases of revenue to the Sacco					
ATM has improved image of the Sacco hence increase membership					
ATM has reduced work of employee, therefore reducing the number of employees which in turn is a benefit to the Sacco					
ATM has increase loan disbursement due to amount deposited in to accounts directly from ATMs hence benefit to the bank					
ATM has saves time that could be taken in queuing for the services physically in Sacco premises					

Q2. To establish the effects of Mobile banking in the financial performance of a SACCO

To what extent do you agree with the following statements on the effects of mobile banking in the financial performance of a Sacco?

Statement	SA	A	N	D	SD
Both clients and Sacco personnel have saved time through employing mobile banking to make deposits and withdrawals.					
Mobile banking is easily accessible					
Customers generally opt for mobile banking services because of its benefits, which include the option to pay bills at their convenience.					
The ability for customers to put money into their savings accounts through mobile banking has mobilized savings among Sacco members.					
Checking account balances and other information is simple to obtain while using mobile banking.					
New financial services and products, like investment opportunities, insurance, and microloans, can be introduced through mobile banking.					

A multitude of data is generated by mobile banking, which may be examined in order to find more about the preferences, behavior, and financial requirements of users					
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Q3. To examine the effects of Internet banking adoption on the financial performance of a Sacco

To what extent do you agree with the following statements on the effects of internet banking on the work performance?

Effects of ICT on efficiency of work performance	SA	A	UD	D	SD
When compared to conventional means, the volume of transactions made each day with internet banking has increased					
Clients can simply access a variety of items by using internet banking.					
The usage of internet banking for bill payment has enhanced the Sacco reputation as it is user-friendly.					
The convenience of online banking is that it may be accessed from locations other than the Sacco premises					
The use of fund transfer systems by consumers has increased cost effectiveness.					

Employees can operate remotely from any location with the help of information and communications technology.					
Automated compliance management solutions lower the risk of legal problems by assisting firms in adhering to regulatory regulations.					
Employees may study at their own pace with the flexibility of elearning platforms, which also save training costs.					

ERC Certificate



Mount Kenya University

Mount Kenya University



REF: MKU/ISERC/3500

Date: 05 March 2024

TO: CHEPKOECH B CHERUIYOT

REG: MBA/2021/42310

Dear Sir/Madam,

RE: EFFECTS OF INFORMATION COMMUNICATION TECHNOLOGY ADOPTION ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOs IN ELDORET TOWN

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **2544**. The approval period is **05/03/2024 - 04/03/2025**.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including informed consents, study instruments, MTA will be used
- ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

The Chairman
Mount Kenya University
Ethics Review Committee
P. O. Box 342 - 0100, Thika

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

DIRECTORATE OF GRADUATE STUDIES

MBA/2021/42310

6th March, 2024

*National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA*

Dear Sir/Madam,

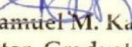
RE: CHEPKOECH B. CHERUIYOT – REGISTRATION NO. MBA/2021/42310

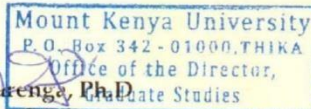
The purpose of this letter is to introduce the above named student who is pursuing **Master of Business Administration** in the department of **Accounting and Finance** in the school of **Business and Economics**.

The title of the research is “**Effects of Information Communication Technology Adoption on Financial Performance of Deposit Taking Saccos in Eldoret Town.**” It has been cleared by the University’s Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **March, 2024 and May, 2024**.

Any assistance accorded to the student will be highly appreciated.

Thank you.


Dr. Samuel M. Karenga, Ph.D.
Director, Graduate Studies
Enc.





REPUBLIC OF KENYA



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 941147

Date of Issue: 12/April/2024

RESEARCH LICENSE



This is to Certify that Ms. CHEPKOECH B CHERUIYOT of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Uasin-Gishu on the topic: EFFECTS OF INFORMATION COMMUNICATION TECHNOLOGY ADOPTION ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SACCOS IN ELDORET TOWN for the period ending : 12/April/2025.

License No: NACOSTI/P/24/33940

941147

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

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See overleaf for conditions

Research Permit from NACOSTI

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way:
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 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
 - iv. Result in exploitation of intellectual property rights of communities in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of communities
 - vii. Endanger public safety and national cohesion
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13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.


National Commission for Science, Technology and
Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
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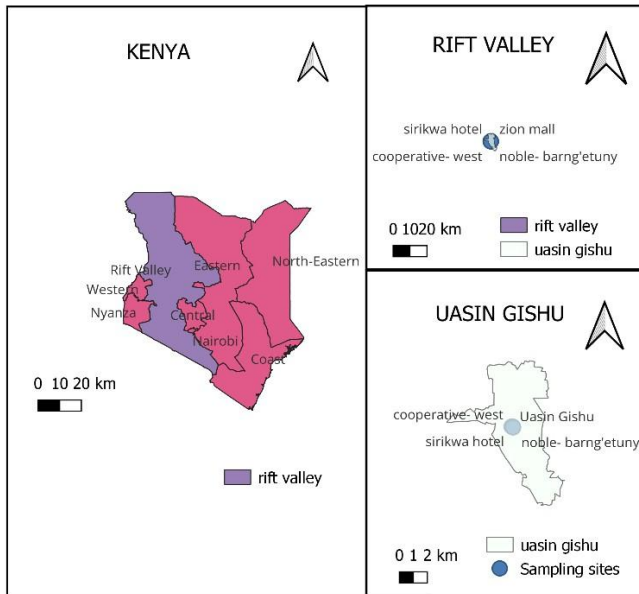
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