

**MICROFINANCE MOBILE SERVICES AND FINANCIAL  
PERFORMANCE OF SMALL AND MEDIUM SIZE ENTERPRISES IN  
TRANS-NZOIA COUNTY, KENYA**

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UNIVERSITY**

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## **DECLARATION**

The project presented is an original work having not been presented in any university or institution for a degree award. The authority from author or Kenyatta University should be sought prior to producing this project.

Signature .....Date.....

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This research project has been submitted for examination with my approval as the University Supervisor.

Signature .....Date.....

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## **DEDICATION**

I dedicate my project work first to the Almighty God for inspiration, knowledge and good health. I also dedicate it to my parents Mr. and Mrs. Richard Wanyama , my husband Wycliff Morara, my brothers Geoffrey, Humphrey, Cornelius and my sisters Hilda and Esther for their support, encouragement and love during the study.

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## **ABBREVIATIONS AND ACRONYMS**

<b>CBA</b>	-	Commercial Bank of Africa
<b>CBK</b>	-	Central Bank of Kenya
<b>GDP</b>	-	Gross Domestic Product
<b>KBA</b>	-	Kenya Bankers Association
<b>KIPPRA</b>	-	Kenya Institute for Public Policy Research and Analysis
<b>KNBS</b>	-	Kenya National Bureau of Statistics
<b>MPT</b>	-	Modern Portfolio Theory
<b>NACOSTI</b>	-	National Commission for Science and Technology
<b>RBV</b>	-	Resource based view
<b>ROE</b>	-	Return On Assets
<b>ROI</b>	-	Return On Investment
<b>SMEs</b>	-	Small and Medium size Enterprises
<b>SPSS</b>	-	Statistical Package for Social Sciences.
<b>WTO</b>	-	World Trade Organization

## OPERATIONAL DEFINITION OF TERMS

<b>Entrepreneur Training</b>	Includes initiatives and courses that are delivered using mobile devices to equip SMEs' managers, owners and workers with knowledge and skills needed to identify opportunities, develop business ideas and manage resources effectively to create and grow SMEs.
<b>Financial Performance</b>	Is a measure of financial health of the SMEs. It is the ability of SMEs to generate profits and sustain growth. The measures of financial performance. Financial Performance was measured using Return of Assets (ROA) and Return on Investments (ROI).
<b>Micro-finance Mobile Services</b>	These are micro-finance services provided through mobile platforms to the SMEs. These services include mobile banking, mobile payments, mobile credit, and savings facilities, aimed at enhancing financial performance for SMEs.
<b>Mobile Credit Facilities</b>	These are loans and credit services provided through mobile technology. They were

measured the volume of credit accessed, the frequency of borrowing, and the impact of mobile credit on business expansion and financial performance.

**Mobile money transfer/  
payments**

The money transfer and payment services offered by mobile platforms. They were measured by transaction volumes, transaction speeds, and cost reductions.

**Mobile Savings**

These are how stakeholders in SMEs use mobile device access to savings accounts and other savings products. This was measured by , how much money they saved, and how secure and convenient they utilizing mobile savings..

**Small and Medium Size  
Enterprises**

These are businesses characterized by their moderate scale of operations, typically employing a limited number of workers and generating moderate revenue. In Trans-nzoia county,SMEs are vital contributors to local economic activity and community development.

## ABSTRACT

Small and medium-sized enterprises are major drives of economies worldwide constituting more than ninety percent of the industries in both developed and developing economies. However the financial performance for most small and medium-sized enterprises is declining in most economies including Kenya due various factors including shift from being product-drive to market-driven to meet their complex financial needs. Globalization, technological advancements, competition, capital adequacy and lack of financial inclusion pose significant challenges to financial viability and growth of the enterprises. Despite several challenges small and medium-sized enterprises continue to play major roles to economies. This study investigated mobile microfinance services and financial performance of small and medium-sized enterprises in Trans-Nzoia County in Kenya. The specific objectives included mobile credit facilities, mobile savings services and mobile money transfer or payments on financial performance of small and medium-sized enterprises. The study further explored how entrepreneurial training moderated the relationship between mobile microfinance services and financial performance of the small and medium-sized enterprises. The study was anchored on the resource-based view theory, modern portfolio theory, Modigliani and Miller's capital structure theory, and the financial growth nexus theory from 2018 to 2023. The study employed descriptive research design, targeting 197 small and medium-sized enterprises in Trans-nzoia County. Small and medium-sized enterprises owners served as the unit of analysis, and respondents were selected through simple random sampling methods. Primary data was collected using a closed-ended, semi-structured questionnaire utilizing a five-point Likert scale. The study ensured validity by achieving a satisfactory construct score of 0.7 or higher. Quantitative data was analyzed through descriptive, correlation and multiple linear regressions, and all ethical considerations were adhered to. The study revealed significant relationships between mobile microfinance services and small and medium-sized enterprises financial performance. The moderating effect of entrepreneur training was also tested and confirmed to influence this relationship. The recommendations highlighted the need for further studies to explore additional factors influencing small and medium-sized enterprises performance, as well as the importance of enhancing financial literacy and entrepreneurial training to maximize the benefits of mobile financial services for small and medium-sized enterprises.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Small and medium-sized enterprises (SMEs) are crucial to economic development because of their significant contributions to the economy for their ability to meet consumer and industrial needs, enhancing economic stability and reducing income disparity (Kaplinsky & Morris, 2019; Lu et al., 2021). By creating job opportunities and developing an experienced staff that supports future industrial growth, these businesses also significantly contribute to the fight against unemployment (Nursini, 2020; Misra & Mohanty, 2021). Furthermore, to maintain competitive economies, SMEs play a critical role in fostering entrepreneurial talent and embracing technological advancements (Del-Guidice et al., 2021; Rauch et al., 2020).

In USA SMEs constitute businesses with up to 500 or fewer employees representing 99.9 % of all US businesses, and in terms of job creation from 1995 to 2020, SMEs have accounted for 12.7 million jobs compared to 7.9 million jobs attributed to large enterprises. In addition to creating jobs, SMEs help the USA economy by fostering community growth, career advancement, and enhanced public services through taxes and paychecks. They also form the basis of growth in the economy (Willetts and Atkins, 2023; Jhamb & John, 2022).

In UK 99% of the enterprises are SMEs, with over 5.7 million of them operating nationwide (Mwale, 2020). SMEs in UK and other European countries are businesses with 250 or fewer employees and such businesses are categorized with annual turnover 40 million pounds and a balance sheet total not exceeding 34 million pounds (Bassi &

Guidolin, 2021). As remarked, SMEs, in the past five years, have created more than 2 million jobs, and currently the employment creation via SMEs stood at 16.3 million jobs representing 60% of all jobs in UK. In essence, SMEs having been identified as the ladders of high-income economies are leaning to attain economic development and prosperity (Cinar & Bilodeau, 2022; Purwandani & Michaud, 2021).

In Africa SMEs have also been recognized as a factor for economic growth and development in the context of low-income economies (Okoye, et al., 2023; Opute, et al., 2021). In Nigeria SMEs totaled to 99% of all companies and contributed to 87% of employment in manufacturing and agricultural sector in Nigeria, and also accounted for 10% contribution to Gross Domestic Product (GDP) (Eniola, et al., 2019).

In Kenya SMEs have not only contributed to employment creation but also enhance economic prosperity to both individual business owners and government (Assimwe, 2021; Alumasa & Muathe, 2021; Omondo & Jagongo, 2018). In the context of Africa, however, the underwhelming performance of SMEs has made it difficult to reap its benefits (Eniola, et al., 2021; Muturi & Njeru, 2018; Rotich, et al., 2015).

The World Bank (2022) states that SMEs are essential to Kenya's economic structure, accounting for more than 80% of the workforce and roughly 33% of the GDP of the nation. Despite their importance, SMEs in Kitale Town, Trans-Nzoia County, face significant challenges impacting their performance. Recent statistics indicate that approximately 70% of SMEs in Kenya struggle with access to finance, which directly affects their operational efficiency and growth prospects. Lack of adequate financial resources hinders SMEs from investing in essential infrastructure and technology, thereby impacting their overall performance and sustainability (KNBS, 2023)

Moreover, the economic impact of SMEs extends beyond job creation to include substantial contributions to local economies. In Kitale Town, SMEs are central to local economic activities, yet recent studies highlight that many of these enterprises report low growth rates and high failure rates, primarily due to limited access to microfinance services and market volatility (Omondo & Jagongo, 2023). Since SMEs are thought to be essential for poverty reduction and promoting economic development in Kenya. As noted by the International Finance Corporation (IFC, 2023), SMEs in Kenya face barriers such as inadequate financial services, which impede their ability to thrive and compete effectively.

The performance of SMEs in Trans-nzoia County is indicative of broader challenges faced by similar enterprises across Kenya. Recent reports emphasize that enhancing access to microfinance mobile services can significantly improve SMEs' financial performance by providing them with better liquidity and financial management tools (KIPPRA, 2024).

### **1.1.1 Microfinance Mobile Services**

Microfinance mobile services are microfinance services provided through mobile platforms to the SMEs. These services include mobile banking, mobile payments, mobile credit, and savings facilities, aimed at enhancing financial performance for SMEs. Microfinance Mobile services are specialized banking services for individuals or low-income earners, reason being to a large number, the SME's are structured for small balance account service provision which in most cases not accepted by main stream banks due to the smaller transaction fees charged in comparison to the mainstream financial sectors. Therefore, the microfinance provides financial services which include

loans and deposits to low income earners, and the self-employed people who assumed to be neglected by the banking institution. In terms of transformation on mobile money transfer/payment, it has been reported that SME`s are still lagging, a negative impact leading to declined performance. There is very little literatures on consequences, challenges and antecedents in mobile money transfer/payment of SME`s banking sector, despite the economic impact it has on financial performance(Agbim, 2020; Nkwabi & Mboya, 2019).

SME`s in a global market are presented with new emerging opportunities that can be capitalized as a competitive edge in terms of improved product process and innovation of services and product in both local and international environment, Shirokova, Osiyevskyy, Laskovaia, & MahdaviMazdeh, (2020). The transition tracing back to the rising use of mobile money transfer has been rapid and has penetrated globally from 1999, 60 million customer subscriptions by 2011 an outstanding growth in comparison with other technology adoption, (Shirokova, *et al.*, 2020). Therefore, the conceptualization of money transfer has been defined in extant literature as set off activities, facilities or products implemented by microfinance institution that enable sending and receiving money from one location or globally, (Must and Ludwig, 2010, Davidson & Penicaud, 2011, Shirokova, *et al.*, 2020, Sun, Maksimov, Wang, & Luo, 2021). Other than lending, the microfinance services may also include financial and business education as well as offering checking and savings.

It has been evidenced in the past studies that the mobile services / m-banking has been of significant on boosting the operational efficiency of SMEs and as well as minimizing or

reducing the cost when compared with the traditional banking especially in the Kenya context. Despite the advantages associated, the mobile money transfers or payments are still facing limitation in terms of acceptance, hence limited user in making the transaction. The other limitation can also be on battery life and the need to make device charged all the time, (Agbim, 2020, Mararo, 2018). Unlike banks, which typically do not offer small credit or loans, these institutions provide and expand credit facilities in response to the needs of their clients, this is a solution to the poor who can access the fund as well as improve the growth of capital, (Bosire, & Ntale, 2018, Audu, Abubakar, & Baba, 2021). Mobile money transfer measured using electronic fund transfers, online payment services, digital currency and unified payment interface. The variable of Mobile Transfer/Payments within the context of microfinance mobile services represents the digital transactions and payment mechanisms facilitated through mobile platforms. Various studies have delved into the conceptualization of mobile payments in microfinance. Kabinga-Makwara and Nandonde (2017) emphasize the transformative potential of mobile payments, noting its ability to enhance financial inclusion and reduce transaction costs.

Nevertheless, Song and Zhang (2018) provide a critical analysis of the difficulties that come with the widespread use of mobile payments, such as security worries and legal issues. Money transfer is the transfer of funds from the client credit cards bank account either for purpose of making some transactions or purchase, Masocha, & Dzomonda, (2018). Government subsidies, social security, financial aid and welfare are some of the examples of transfer of payments from the traditional perspective the main types of transfer of payments are checks, credit cards, debit cards and cash, but with the

innovation and advancement of technology, the digital mode of payment has taken shape and has popular in the modern times, Talom, & Tengeh, (2019). Among the digital transfer of payments are electronic transfers, digital currencies, and online payment services. The transfer of fund using electronic banking from one country to another or within a country via the use of internet connection is what has been referred to as mobile money transfer/payment where transfer takes place instantly or immediately within seconds, Mararo, (2018).

Mobile Savings, another dimension of microfinance mobile services, involves the use of mobile platforms for savings-related activities. Conceptually, this variable encompasses various account types, from group savings to complex investment accounts. Jack and Suri (2014) highlight the positive impact of mobile savings in fostering a savings culture among individuals with limited access to banking services. However this might depend on socio-economic factors and individuals' financial literacy. There is need for a nuanced understanding, considering both its potential benefits and the contextual challenges associated with the diverse forms of mobile savings.

Mobile saving from studies has been found of late to be recognized as a result of its significant in micro financing (Audu & colleagues, 2021). This type of saving is a tiny micro saving that consists of a small number of timely deposit accounts opened for low-income people to use as a source of future funds. In order to prevent financial waste, the minimum account balance requirement is waived; therefore, the emphasis is once more on saving money. It is one of the most convenient and secures way of getting to manage financial services on the go via use of apps without having to visit the financial branch or

ATM Bosire, & Ntale, (2018). The mobile service has from the record tested to be boosting efficiency and worked well on cost minimization especially on financial institutions as compared to the traditional banking, (Kumar, and Subramanian, 2012, In Existing research has shown a relationship between some SMEs' financial growth and their liquidity level; therefore, it is advised that businesses with higher levels of investment (high liquidity level) continue to fund projects at the same rate (2010). According to his theory, these businesses need a lot of tactics that enforce consistent saves in order to balance their profit-investment projects and maximize growth through savings initiatives that reinforce SMEs' capacity for saving. SMEs have been advised by certain studies not to place too much emphasis on their liquidity ratio, as this may lead to problems with not making prudent cash flow decisions. Saunders, Goregaokar, and Gray (2012). One may save money for a variety of purposes, including retirement, schooling, a dream home or vehicle, a trip, or even just to pay for a down payment on a property. Typically, this sum represents what remains after expenses. One conventional method is to use a savings account, where the financial organization offers a tiny interest rate in exchange for storing your funds (Akasamire, 2010, Bosire, and Ntale, 2018). This study's mobile savings were determined by group savings account, locked savings account, retail credit account and complex investment account.

Mobile Credit Facilities constitute the third dimension of microfinance mobile services, encompassing various types of credit arrangements facilitated through mobile platforms. Blumenstock et al. (2015) provides insights into the positive outcomes of mobile credit in enhancing access to credit for SMEs. However, Bateman (2010) offers a critical perspective, questioning the sustainability and potential debt-related challenges

associated with mobile credit. A mobile credit facility is a financing arrangement that offers small loans, often known as microcredit. Either a relationship model or a collective model applies to these loans. A long-term facility utilizing capital expenditure funded by financial institutions, or a short-term facility utilizing working capital that involves paying bills and creditors, can be provided by the credit facility.

Trade facilitation and job development are aided by mobile credit facilities and SME performance in developing economies, particularly in Kenya. The existing literature has documented persistent declining and poor performance as well as the struggle to continue with their operations, while others are dying out by going out of business, even with the measures put in place as interventions to boost growth on such firms (Mararo, 2018, Alumasa, & Muathe, 2021 Egan, 2022). Installments, committed facilities, revolving loan facilities, and retail credit facilities are used to measure mobile credit facilities. SMEs personnel do not have adequate knowledge to embrace the benefits that come with technology (Patma et al., 2021; Tajvidi & Karami, 2021). Therefore the researcher intends to undertake an empirical study to interrogate the microfinance mobile services, and financial performance of SMEs in Trans-nzoia County, Kenya.

### **1.1.2 Financial Performance of SME's in Trans-Nzoia County.**

Financial Performance of SMEs is complex given a number of factors determining it and complexity in its assessment which incorporates a range of approaches and metrics. Research in the area (Jones & Smith, 2021; Brown et al., 2022) stresses the significance of using ROI and ROA to evaluate the financial outcomes of SMEs.

Utilizing financial indicators, which demonstrate the soundness and stability of an organization's finances, is one of the primary elements of performance measurement.

Kaplan and Norton (1996) highlights the significance of financial metrics, such as revenue growth, profitability, and return on investment, in assessing an organization's overall performance. These indicators offer quantifiable, quantifiable insights into an organization's sustainability and financial success. Metrics related to environmental sustainability, corporate social responsibility, and community involvement can be used to understand an organization's performance in its entirety.

SMEs have demonstrated a decline in their financial performance. It is noteworthy that the non-performing ratio to gross loans for SMEs has improved by 3.1%. This concerning trend has prompted calls for financial management intervention for growth and sustainability of SMEs (Pearce et al., 2011). The contrasting trajectories highlight the need for targeted strategies to support the resilience and prosperity of SMEs in Kenya, a vital component of the country's economic landscape.

Therefore from the aforementioned backdrop, the study determined the effect of Mobile Services and financial performance of SMEs in Trans-nzoia County in Kenya. Additionally, on the context of extant literatures, it's evident that researchers employed the nature of financial metrics in its effort to establish the firm performance, therefore leaving a gap that scholars call for attention towards addressing it by adoption of financial performance perspective.

Muturi, & Njeru, (2019) posit that the post COVID-effect is still causing havoc that has resulted to decrease interest income, declined loan portfolio, increased level of NPLs and low credit uptake. Other cost incurred as per the report were increased staff cost, financial cost and administrative cost, while there was a decline on ROA, and ROI to negative percentage (-3% and -28%) respectively. There was increased growth on customer's

deposit, increased loan repayment default, while the number of capital level declined. These metrics provided tangible measures of success and are crucial for stakeholders, including investors and creditors, in evaluating the financial health and viability of businesses.

### **1.1.3 Entrepreneur Training**

Entrepreneurial training is crucial for individuals to identify and capitalize on commercial opportunities. It instills self-esteem, imparts knowledge, and hones skills for maximizing existing opportunities. However, SMEs often face challenges in participating in financial training programs due to perceived high costs, accessing content that aligns with their needs, and time constraints. Scholars emphasize the need for tailored training programs that are cost-effective and relevant to SMEs' unique needs, fostering a skilled and empowered entrepreneurial community, Sebikari (2019) and Isichei et al. (2020).

Entrepreneur training refers to a structured educational program created by financial institutions to teach entrepreneurs or employees specific skills. The program focuses on values and fundamentals and gives participants the knowledge and mindset they need to successfully launch, manage, and expand a business. It is a rough draft that can enable one to comprehend a formed business plan as a written workbook, where lesson learnt is put ideas into paper as a way of showing the significant progress made towards launching the business or coming up with a business plan.

Entrepreneurship training is an educational process designed to equip individuals with the necessary skills to recognize business possibilities, as well as the self-worth, knowledge, and abilities to seize the moment. Initiating a company idea, managing resources, commercializing a concept, and receiving instruction in opportunity recognition are all

part of got. There are several reasons why the majority of SMEs have not participated in the financial training program, including, very expensive and difficulty in accessing relevance to the enterprise needs and lack of time, OECD,(2013). Training the SME`s the required skills in the micro financing sector in order to maximize profit and minimizing on the cost through resources utilization, Sebikari, (2019, Isichei, *et al.*, (2020). The impact of financial training results to improved production informal economy income and stand a chance of linking the formal with the mainstream economy, Abu-Rumman, *et al.*, (2021).

McQuid and Egdell (2011), posit that it is not only the financial incapability, but a bigger individual problem, going beyond a house hold to include reduced wellbeing, high stress levels, and increased debts. There is need to equip with characters that can result to financial management, business risk management and book keeping .The characteristic of an entrepreneur are; passion and driven, a strong work ethic, innovation, adaptability, risk-taking, resilience, networking and building relationships (Mayr, *et. al*, 2021).

Meanwhile technical service providers in the microfinance industry need particular skills to help with funding, systems, governance, staff development, and financial and non-financial products. According to Kamuri, 2022, Muindi, & Masurel (2022), these abilities are as follows: client demand driven, context, clearly defined results, check ability, focus on change, cost effectiveness and accountability. The entrepreneur training framework was operationalized through the use of financial management, business risk management and book keeping. In this study entrepreneurial training moderated the relationship between microfinance mobile services and financial performance of small and medium size enterprises in Trans-Nzoia County, Kenya

#### **1.1.4 Small and Medium Size Enterprises in Trans-Nzoia County, Kenya**

SMEs are a broad group of companies whose sizes are determined by a variety of metrics. Different countries may have different definitions for SMEs, but generally speaking, the number of workers, revenue, and capital are considered key indicators. Recent research (World Bank, 2021; European Commission, 2022) indicates that the definition of SMEs frequently depends on employee count, with the threshold varying from fewer than 50 to 500 employees, contingent upon the sector and nation. SMEs are typically characterized by a moderate annual turnover in terms of revenue, and they are thought to require less capital than larger enterprises.

SMEs are frequently grouped in Trans-Nzoia County, Kenya, according to their annual turnover and employee count. Recent research indicates that businesses in Kenya with less than 100 workers and yearly sales between KSh 500,000 and KSh 1 billion are typically categorized as SMEs (Chirchir et al., 2021; Ndemo & Owuor, 2020). SMEs are also defined by their restricted access to resources and capital, which leaves them dependent on alternative financial services and microfinance organizations for their working capital requirements (Kipkorir & Keter, 2022; Mutai et al., 2021). These businesses are essential to promoting economic expansion in the area because they generate jobs, foster innovation, and reduce poverty.. Therefore, defining SMEs in terms of their revenue , size and access to resources is essential for understanding their significance and impact on the local economy in Trans-Nzoia County, Kenya.

According to (KNBS, 2022) SMEs in Trans-Nzoia County have grown to be an important source of new jobs, employing a sizable percentage of the local labor force. Furthermore,

information from the same source emphasizes the variety of industries these businesses work in, from manufacturing and services to agriculture.

A number of factors supported by recent research lend scientific justification to the study (SMEs) in Trans-Nzoia County, Kenya, in the context of microfinance mobile services. First off, taking into account the rapidly changing nature of technology and its ubiquity in the financial industry, the chosen timeframe permits a thorough examination of the influence of microfinance mobile services on SME performance. The growing importance of mobile financial services in improving financial inclusion and credit availability for small and medium-sized enterprises (SMEs) is highlighted by Kipkorir and Keter (2022) and Mutai et al. (2021), indicating the need for a study on their performance during this time frame. Additionally, the chosen timeframe enables the examination of any trends or fluctuations in SME performance in response to changes in mobile financial services, as highlighted by Nyambura and Mwangi (2023) and Kamau et al. (2022).

Based on the reviewed body of literature, the researcher determined that management in the financial sector lacked clarity regarding the impact of microfinance mobile services provided by SMEs and how they affect entrepreneur training practices (Mararo, 2018; Bosire & Ntale, 2021; Egan, 2022). Thus, the study concluded that, in order to determine the impact of microfinance mobile services on the performance of a few selected SME's in Trans-zoia County, Kenya, a thorough and comprehensive evaluation of the current literature was required. This conclusion was drawn from the examined literature. The moderating influence of entrepreneur training is also examined in this study in relation to

the link between the outcome variable and the predictor variable. In Trans-nzoia County, 197 registered SMEs were the subject of the study.

## **1.2 Statement of the Problem**

For a long time, SMEs have been predominantly product-driven, focusing on product availability rather than on a more comprehensive financial strategy. This approach has left many SMEs with unmet needs for advanced credit facilities and financial services. As highlighted by Kaplan and Haenlein (2011), and further supported by Fatuma et al. (2020), as well as Kwamboka and Sang, (2019), the traditional financial structures are often inadequate for meeting the complex needs of SMEs, which are crucial for employment generation and economic growth. The shift towards more efficient and accessible financial solutions, such as microfinance mobile services, is necessary to address these gaps and enhance SME performance. However, the transition from conventional to innovative financial solutions has not been fully realized, particularly in regions like Trans-Nzoia County, where SMEs face significant barriers to accessing capital (Zeiller & Schauer, 2011; Stockdale et al., 2012).

In Kenya, SMEs encounter substantial challenges related to accessing credit facilities due to limited assets and financial resources. This issue impedes their growth and negatively impacts their performance. The problem is particularly acute in Trans-Nzoia County, where a high rate of business failure is attributed to inadequate financing and poor management (Ng'ang'a et al., 2023). According to Ouma and Odongo (2020), this lack of financial support is a core issue that stifles SME development and employment opportunities in the region. The high failure rate among new businesses in Trans-Nzoia County, with one out of six failing due to undercapitalization within the initial months of

operation, underscores the urgent need for improved financial support mechanisms (Mutai et al., 2021).

The conceptual there is non-conclusive effect between microfinance mobile services and the performance of SMEs in Trans-Nzoia County. Recent studies highlight the need for a detailed exploration of how mobile financial services impact the financial health and sustainability of SMEs (Ouma & Odongo, 2020; Ng'ang'a et al., 2023). These studies underscore the importance of developing a robust theoretical framework that clarifies the mechanisms through which mobile finance influences SME performance. Such an understanding is critical for creating effective policy recommendations and strategic interventions for SMEs success.

Contextually, studies of microfinance mobile services and financial performance on SMEs in Trans-Nzoia County may be influenced by other factors including local economic conditions, regulatory frameworks, and technological infrastructure, which differ significantly from other regions (Kipkorir & Keter, 2022; Mutai et al., 2021; Kwamboka & Sang, 2019). These studies emphasize the necessity of contextualizing research to address the specific challenges and opportunities unique to SMEs in Trans-Nzoia County. Without considering these local nuances, interventions may fail to align with the actual needs of SMEs, thus reducing their effectiveness in improving business performance.

Methodologically, previous used different conceptualization for independent, moderating and depending variables (Nyambura & Mwangi, 2023; Kamau et al., 2022). Current research shows inconsistencies and conflicting results, highlighting the need for empirical studies that employ rigorous methodologies. This study addressed conceptual,

methodological and contextual gaps by conducting an empirical investigation into both the direct and moderating effects of microfinance mobile services on SME performance, including the role of moderating constructs in Trans-Nzoia County.

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective of the Study**

The general objective of the study was to investigate microfinance mobile services, entrepreneurial training and financial performance of small and medium size enterprises in Trans-Nzoia County, Kenya.

#### **1.3.2 Specific Objectives of the Study**

The specific objectives of this research were:

- (i) To determine the effect of money transfer/payment on financial performance of Small and Medium size enterprises in Kitale town, Trans-nzoia county, Kenya.
- (ii) To establish the effect of mobile savings on financial performance of Small and Medium size Enterprises in Kitale town, Trans-nzoia County, Kenya.
- (iii) To evaluate the effect of mobile credit facilities on financial performance of Small and Medium size Enterprises in Kitale town, Trans-nzoia County, Kenya.
- (iv) To assess the moderating effect of entrepreneur training programs on the relationship between microfinance mobile services and financial performance of Small and Medium size Enterprises in Kitale town, Trans-nzoia County, Kenya.

### **1.4 Research Hypotheses**

This research seeks to test the following hypotheses:

**H<sub>01</sub>:** Money transfer/payment has-no-significant influence on financial performance of Small and Medium size Enterprises in Kitale town, Trans-nzoia County, Kenya.

**H02:** Mobile savings has no significant influence on financial performance of Small and Medium size Enterprises in Kitale town, Trans-nzoia County, Kenya.

**H03:** Mobile credit facilities has no significant influence on financial performance of Small and Medium size Enterprises in Kitale town, Trans-nzoia County, Kenya.

**H04:** Entrepreneur training has no significant moderating influence on the relationship between microfinance mobile services and financial performance of Small and Medium size Enterprises in Kitale town, Trans-nzoia County, Kenya.

### **1.5 Significance of the Study**

This study intends to government create policies and implement Kenya's SME legislation. The study's material on subjects that touch on the significant latent constructs included in this analysis is helpful to financial experts. With relation to the performance of SMEs and mobile microfinance services, the study's findings were utilized to close conceptual, empirical, and theoretical gaps. The research paper "Microfinance Mobile Services and Performance of Small and Medium Size Enterprises (SMEs) in Trans-Nzoia County, Kenya" has significant implications for several stakeholders and contributes to the body of knowledge in a variety of ways.

It has been observed that SMEs are growing more and more reliant on mobile financial services (Kipkorir & Keter, 2022; Mutai et al., 2021). Even still, little is known about the intricate complexities of this interaction. The study intends to fill this gap by providing extensive insights into how SMEs in Trans-Nzoia County use mobile microfinance services to enhance their performance. The research study imparts financial institutions, policy makers and development organizations about the particular challenges and opportunities that SMEs encounter while using mobile financial services. This knowledge

is important for preparing targeted interventions and strategies that promote financial inclusion and help SMEs realize their full potential as catalysts for local economic growth. Furthermore, the work contributes to scholarly discourse by strengthening our understanding of the evolving function. The use of mobile financial services in the activities of SMEs is a complex and diverse phenomena, as demonstrated by (Nyambura & Mwangi, 2023). Increased comprehension of the connection between innovation and technology adoption in the SME sector as a result of examining this relationship within the chosen temporal and geographical parameters (Kamau et al., 2022).

### **1.6 Scope of the Study**

The scope on geographical, chronological, and conceptual was designed. Geographically Trans-nzoia County was chosen for the study because of its unique economic profile and thriving entrepreneurial scene. With a sizable agricultural base and a developing SME sector, this region offers a distinctive setting for researching how mobile banking services affect SMEs. Studies highlighted the significance of local context in comprehending the dynamics of SMEs and customizing efficient policy interventions (Kipkorir & Keter, 2022; Mutai et al., 2021). The study clarified the unique problems and prospects encountered by SMEs in this area, offering valuable perspectives for regional economic development plans. The periodic scope was from 2018 to 2023 which assisted in the inclusion and exclusion criteria given that financial performance of most SMEs the county reduced .

In order to represent the most recent trends and technology improvements in mobile financial services, the study looked at developments that have occurred between 2020 and 2024. This time frame was essential for understanding the state of mobile financing

today and how it affects the performance of SMEs. Understanding the present impact of digital financial tools on SMEs requires an up-to-date research due to their quick evolution and integration into business procedures.( Nyambura & Mwangi, 2023; Kamau et al., 2022) were two recent studies that emphasized the need of taking temporal consideration into account when evaluating technology adoption and its effects on business outcomes. They also emphasized the importance of incorporating recent data to the study.

The study conceptually covers important factors such as mobile money transfers, mobile savings, mobile loan facilities, and entrepreneur training that are connected to SME success. These factors have been chosen because they are important for both business expansion and financial management. The overall objective of the study was to determine effect of mobile financial services on financial performance of SMEs in Trans-nzoia County, Kenya.

### **1.7 Limitations of this Study**

One significant limitation of this study was the variability in the availability and accuracy of historical financial data from SMEs. Financial record-keeping practices among SMEs often differ, with some businesses lacking comprehensive and consistent financial documentation. This inconsistency may hinder the accuracy of performance assessments (Ng'ang'a & Ochieng, 2021). To mitigate this issue, the researcher established partnerships with local business associations and microfinance institutions to access and validate financial data. Furthermore, rigorous data verification procedures implemented to ensure the reliability of the collected information. By collaborating closely with SMEs

and leveraging local networks, the study aims to enhance the quality and comprehensiveness of the financial data used in the analysis.

Another limitation was rapidly evolving landscape of mobile financial services. The continuous advancement in technology and frequent changes in service offerings may introduce variability during the study period, potentially affecting the results (Awuor et al., 2022, Kwamboka & Sang, 2019). To address this, the study adopt a longitudinal approach, which allows for ongoing monitoring and adjustments to the research design as new trends and technological changes emerge. Regular updates and consultations with mobile service providers and financial institutions ensure that the study remains current and responsive to shifts within the microfinance ecosystem.

The study's geographical focus on Trans-Nzoia County introduces potential limitations related to the generalizability of the findings. The specific economic, cultural, and technological context of this county may not fully represent other regions (Wekesa et al., 2022). To counter this limitation, the research utilize a diverse sample of SMEs within the county, considering variations in industry, size, and business models. This approach aims to enhance the external validity of the findings while acknowledging the unique contextual factors that influence SME performance. Additionally, the study provides a detailed description of the study area and the characteristics of participating SMEs, facilitating the extrapolation of insights to similar contexts. Ethical considerations regarding data confidentiality and privacy also address by implementing stringent measures to collect and aggregate data, thereby fostering trust and encouraging participant engagement (Creswell & Creswell, 2017; Yin, 2018)..

## **1.8 Organization of the Study**

This study is organized into five chapters to determine the effect mobile microfinance services, entrepreneur training and SMEs performance, Chapter one includes background of the study, statement of the problem, research objectives, research hypotheses, significance, scope, limitations, and study organization were also covered. The second chapter includes a review of the literature that focuses on the study variables and the theoretical literature that supports them, as well as an empirical review and a summary of the empirical literature from previous studies, and the conceptual framework for the study. Chapter three encompasses research methodology, including data analysis and procedure, sample procedures, study population, research design, and ethical considerations. Chapter four includes descriptive analysis, regression analysis and discussion of the study hypotheses. Chapter five incorporate summary of study findings, summary of the study and recommendaations for the study.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter is devoted to the literature review. This includes theoretical review, which provides an understanding of the theories guiding this investigation; the empirical literatures from the existing literatures; the chapter's discussion of the moderating and predictor variables; and, finally, a summary of the growing knowledge gap presented in tabular form. The chapter also has a proposed conceptual framework that guides the study with the indicated roles that the study constructs under investigation plays.

#### 2.2 Theoretical Literature Review

The theory of resource-based view (RBV), modern portfolio theory, financial growth nexus theory, and capital structure theory by Modigliani and Miller all provide insights into pertinent theories that support the research study.

##### 2.2.1 Modern Portfolio Theory (MPT)

Harry Markowitz developed modern portfolio theory (MPT) in 1952. It is a foundational theory in financial management that offers a framework for maximizing investment portfolios through risk and return balancing (Markowitz, 1952). The fundamental tenet of MPT is that an investor can build an asset portfolio that minimizes risk for a given level of expected return, or maximizes expected return for a given level of risk (Markowitz, 1952). The foundation of MPT is the diversification principle, which states that having a range of assets can lower overall portfolio risk. This is achieved by combining assets that

do not perfectly correlate with one another, thereby smoothing out the impact of individual asset fluctuations on the portfolio's performance.

In the context of microfinance mobile services, particularly Mobile Transfer/Payments, MPT's principles are applicable as they involve the allocation of financial resources across various payment channels and methods. By diversifying the methods through which transactions are conducted, businesses and individuals can manage and mitigate the risks associated with each payment channel. For instance, Suh and Han (2002) applied MPT principles to mobile financial transactions, highlighting the role of diversification in optimizing the risk-return profile of mobile payments. Similarly, Grubel and Statman (1979) underscored the importance of diversification in financial decision-making, providing empirical support for MPT's applicability in assessing investment strategies.

However, MPT is not without its criticisms. The theory relies on assumptions that may not always align with real-world conditions, such as the normal distribution of asset returns and constant correlation between assets. Furthermore, MPT assumes that historical data can accurately predict future market behavior, a premise that may not hold true in rapidly evolving markets, such as those involving mobile financial services (Markowitz, 1952; Grubel & Statman, 1979). The emerging gap in MPT research within the mobile payments sector includes investigating how technological advancements, regulatory changes, and evolving market dynamics impact the traditional risk-return trade-off posited by MPT (Suh & Han, 2002). This research can contribute to refining MPT to better accommodate the unique challenges and opportunities presented by modern mobile financial services.

### **2.2.2 Modigliani and Miller's Capital Structure Theory**

The core tenet of Modigliani and Miller's Capital Structure Theory, which was presented by Merton Miller and Franco Modigliani in 1958, is that a firm's capital structure has no bearing on its overall value in a world without taxes, bankruptcy fees, or information asymmetry. The theory states that rather than the financing mix, the firm's value is decided by its earning power and the risk of its underlying assets (Modigliani & Miller, 1958). This seminal theory posits that under these idealized conditions, any changes in a firm's capital structure; such as shifting between debt and equity; not influence its total market value or the cost of capital. This principle has been extensively discussed and refined in subsequent literature to address real-world complexities, including taxes and financial distress costs, which can affect the applicability of the theory (Harris & Raviv, 1991).

In the context of microfinance mobile services, Modigliani and Miller's theory provides a foundational framework for understanding financial decisions. Microfinance institutions and small to medium-sized enterprises (SMEs) operating in Kenya can leverage this theory to evaluate how capital structure decisions impact their adoption and performance of mobile financial services. For instance, mobile payment services, which represent a significant financial decision, could be analyzed through the lens of this theory to determine how such decisions influence financial performance metrics (Myers, 2001). Despite its original focus on large corporations, the theory's application to microfinance settings can offer insights into optimizing capital structure decisions in the context of mobile service adoption and how these decisions can enhance financial outcomes for SMEs.

While Modigliani and Miller's theory provides a valuable perspective, it does face critiques, particularly in its applicability to SMEs and microfinance institutions which often operate under different constraints compared to larger firms. The theory's simplifying assumptions; such as perfect market conditions and the absence of taxes. May not fully capture the challenges faced by SMEs in Kenya (Leland & Pyle, 1977). For instance, investments in entrepreneur training, which are a form of non-traditional capital expenditure, can significantly impact SMEs' financial performance by enhancing their capacity to utilize mobile payment services effectively (Rajang & Zing ales, 1995). Addressing these critiques involves exploring empirical evidence to quantify the impact of such investments on financial indicators like profitability and market share, thus bridging the gap between theoretical assumptions and practical realities in microfinance contexts.

### **2.2.3 Financial Growth Nexus Theory**

The Financial Growth Nexus Theory examines the dynamic relationship between financial development and economic growth. It was first put forth by Bagehot in 1873 and later improved upon by Solow in 1956. According to this theory, small and medium-sized businesses (SMEs) are impacted by rising demand for financial services, which is both a cause and an effect of economic growth. Further developing this theory, Schumpeter (1911) contended that financial development promotes economic growth through mechanisms such as innovation and capital accumulation. In the context of microfinance mobile services, this theory suggests that innovations in financial services, such as mobile payments, can enhance the financial accessibility and operational

efficiency of SMEs, thereby improving their performance (King & Levine, 1993; Beck, Demirgüç-Kunt & Levine, 2007).

Recent studies have expanded on the Financial Growth Nexus Theory, examining its implications at both macroeconomic and microeconomic levels. King and Levine (1993) demonstrated that financial development positively affects economic growth by increasing productivity and fostering innovation. Similarly, Beck, Demirgüç-Kunt, and Levine (2007) investigated how advancements in financial services contribute to economic development. These findings are pertinent to understanding how microfinance mobile services impact SME performance. While the theory has traditionally been applied to broader economic contexts, it offers valuable insights into how financial innovations at the micro-level can drive SME growth (Ayyagari, Demirgüç-Kunt, & Maksimovic, 2011; Demirgüç-Kunt & Klapper, 2012).

The Financial Growth Nexus Theory is instrumental in linking financial development, facilitated by mobile services and entrepreneur training, to SME performance. It provides a framework for exploring how financial growth, driven by these services, influences various performance metrics of SMEs. This theoretical approach underscores the significance of financial development in enhancing SME performance through improved customer relations, innovation, and technology adoption. However, critics argue that the theory's macroeconomic focus may not fully address the unique challenges faced by SMEs (Levine, 2005; Rajan & Zingales, 1998). Addressing these criticisms, the study utilizes the Financial Growth Nexus Theory to examine the interplay between microfinance mobile services, entrepreneur training, and SME performance, aiming to fill

empirical gaps and provide a nuanced understanding of financial growth at the microeconomic level.

#### **2.2.4 Resource-Based View Theory**

Penrose (1959) proposed The Resource-Based View theory (RBV). The theory provides a fundamental viewpoint on how businesses can create and maintain a competitive advantage through the strategic management of their internal resources. It was first put forth by and later developed by Derrick and Cool (1989) and Barney (1991). According to Barney (1991), the Resource-Based View (RBV) theory states that a company's competitive advantage stems from its capacity to obtain, create, and employ rare, unique, and non-replaceable resources. These resources can be tangible, such as physical assets and financial capital, or intangible, including organizational culture, employee skills, and intellectual property (Penrose, 1959; Barney, 1991). The theory underscores that firms with superior internal resources are better positioned to create distinctive value, respond to market changes, and outperform competitors (Derrick & Cool, 1989).

In the context of Small and Medium Enterprises (SMEs) in Trans-Nzoia County, Kenya, the RBV theory provides a lens through which to examine the impact of microfinance mobile services and entrepreneurial training on performance outcomes. Microfinance mobile services—encompassing mobile credit facilities, money transfers, and mobile savings—can be seen as valuable resources that SMEs can leverage to enhance their financial capabilities and operational efficiency. According to Owoeye et al. (2020), these services offer SMEs access to critical financial resources, which are essential for improving their market position and overall performance. Entrepreneurial training, on the other hand, represents a strategic investment in human capital, enhancing the skills and

competencies of SME owners and managers, thereby contributing to the development of unique capabilities and competitive advantages (Grunert & Hildebrandt, 2004; Prajogo & Oke, 2016).

The RBV theory suggests that the successful integration of microfinance mobile services and entrepreneurial training into SME operations can lead to superior performance by enabling firms to harness their internal resources more effectively. For instance, by utilizing mobile financial services, SMEs can improve their liquidity management, reduce transaction costs, and expand their market reach. Concurrently, entrepreneurial training can bolster managerial skills and innovation, leading to more efficient business processes and strategic decision-making (Teece, Peteraf, & Leih, 2016). Despite some criticisms that the RBV theory may overestimate the potential of internal resources (Almarri & Gardiner, 2014), it remains a robust framework for understanding how resource management influences SME performance. This study leverage the RBV theory to explore how microfinance mobile services and entrepreneurial training impact SME performance in Trans-Nzoia County, contributing to a deeper understanding of how internal resources drive competitive advantage and sustainability in the context of emerging economies.

### **2.3 Empirical Review**

A review of the empirical literature currently in publication that used to connect the study constructs is what this section of the literature review is all about. In this section of the literature review, the findings from earlier reports on the impact of entrepreneur training (a moderating variable) and microfinance mobile services (an independent construct) on

the performance of SMEs (dependent constructs) are empirically questioned in light of their predicted effects on the direct and indirect associations between the study variables.

### **2.3.1 Mobile Money Transfer/Payment and Performance of SME`s**

Kraus and Damke (2019) investigated the role of digital technology identification within SMEs, highlighting that SMEs possess unique strengths, such as flexibility and a cohesive culture, which facilitate digital transformation. Their findings emphasize that SMEs, due to their small size, can quickly embrace innovations and digital technologies, thus gaining a competitive edge over larger firms. However, a significant gap identified in their study is the lack of focus on how policy makers and management's willingness to engage with digital technologies impacts the adoption process (Kraus & Damke, 2019). This study does not fully explore the broader implications of managerial attitudes and policies on digital transformation within SMEs. The current research aims to address this gap by examining how the attitudes and policies of SME management influence the adoption and effectiveness of microfinance mobile services, particularly in the context of Trans-Nzoia County, Kenya.

Ferreira et al. (2019) provided a comprehensive overview of digitalization and digital transformation, noting that most research focuses on large firms, leaving a substantial gap in understanding these phenomena within SMEs. There is a lot of research on digital strategies and entrepreneurship, but little empirical data is available to support the unique advantages and difficulties of digital transformation for SMEs. The study also highlights the lack of research on digital transformation in smaller businesses, where scope and resources are frequently limited (Ferreira et al., 2019; Li et al., 2018). By concentrating on the influence of microfinance mobile services on SME performance in Trans-Nzoia

County, this study fills in these gaps and offers fresh perspectives on how digital tools impact small business performance in low-resource environments.

Verhoef et al. (2019) differentiated between digitalization and digital transformation, arguing that SMEs often struggle with the complexity of digital transformation, which can overwhelm available resources. Their research suggests that SMEs should first focus on digitalization as a prerequisite for successful digital transformation. This approach highlights the need for a clearer understanding of digital readiness and the incremental steps required for effective transformation (Verhoef et al., 2019). The current study builds on this by investigating how different stages of digitalization impact SME performance, particularly through mobile financial services. This study fills in the methodological and contextual gaps found in earlier research by examining the relationship between digital readiness and performance outcomes in SMEs. It provides a more nuanced understanding of how microfinance mobile services can support the digital transition and improve business performance.

An investigation into the effects of digital technologies, particularly cloud computing, on the performance of SMEs was carried out by Ahmad, Ahmad, and Bakar (2018). According to Ahmad et al. (2018), the study discovered that although digital technologies were essential for improving the performance of SMEs, small businesses did not adopt them at a high rate. The study reveals a noteworthy conceptual void in our comprehension of the obstacles to technology adoption in small and medium-sized enterprises. The study does not go into great detail as to why some SMEs do not adopt digital solutions in spite of their advantages. In order to close this gap, the current study looks at the particular obstacles that SMEs face when implementing mobile microfinance

services and evaluates the effects that these obstacles have on financial performance. This research offer insights into the particular difficulties faced by SMEs in Kitale Town, Trans-Nzoia County, Kenya, and how these difficulties effect their overall performance by concentrating on microfinance mobile services, which are directly related to financial performance.

Li et al. (2018) conducted an investigation into the digitization rate of small and medium-sized enterprises (SMEs), with a focus on the significance of open-access digital platforms and the incorporation of non-proprietary technologies. Although the study provided insightful information about the digital landscape, it was mainly concerned with digitization in general and did not explore the particular effects of these technologies on the performance of SMEs or the differences in adoption rates between different industries. This creates a methodological gap because the study did not provide a thorough analysis of the ways in which different types of digitalization impact SME operations in different ways. In order to close this methodological gap, the current study examine how microfinance mobile services affect SME performance using a more sophisticated methodology. Examining the ways in which various mobile financial services (like mobile credit, savings, and payments) uniquely influence SME performance in the context of Kitale Town.

Furthermore, the contextual gap is evident in the literature, as both studies were conducted in settings that do not fully account for the unique economic and technological conditions of developing regions like Trans-Nzoia County, Kenya. Ahmad et al. (2018) and Li et al. (2018) did not address how regional factors, such as economic instability and limited technological infrastructure, might affect the implementation and impact of digital

technologies in SMEs. To address this contextual gap, the current study focus specifically on SMEs in Trans-Nzoia County, examining how local economic conditions, regulatory frameworks, and technological infrastructure influence the effectiveness of microfinance mobile services. This localized approach provide a more accurate understanding of how these services can be optimized to improve SME performance in this particular setting.

### **2.3.2 Mobile Savings and Performance of SME`s**

To investigate the effect of microfinance firm services on SME performance in Nigeria, Audu et al. (2021) employed a cross-sectional descriptive design using SPSS data analysis. Microloans, micro savings, and training had a good and significant impact on the performance of small and medium-sized firms; these benefits were operationalized in the study using sales growth, profitability, and market share. Despite these discoveries, the report contains a few large gaps. The ways that specific microfinance service characteristics, such as mobile banking, affect financial outcomes in an environment that is conceptually fast digitizing were not examined in this study (Audu et al., 2021). Assessing causal correlations across time is more challenging when cross-sectional data is used, due to methodological issues. The present investigation fills in these gaps.

Munyao (2021) examined the effect of microfinance services on SME growth in Nairobi County, Kenya, using a casual design and primary data from 37,101 SMEs. The study found that, in spite of investments in mobile banking systems, the tested SMEs' net profit margins were declining. The study's focus on micro insurance, microcredit, and micro savings provided a broad conceptual framework, but it fell short in addressing the ways in which mobile services affect the performance of small and medium-sized enterprises in a dynamic financial landscape (Munyao, 2021). Methodologically, the huge sample size

of the study may have obscured contextual factors and individual differences that influence the efficacy of microfinance. In order to capture the context-specific issues and offer a more nuanced exploration of the specific consequences of mobile financial services, the current study incorporates qualitative findings.

Shkodra (2019) studied effect of microfinance on the financial performance of microfinance organizations in Kosovo using data from 2016 to 2017 and SPSS for analysis. Despite finding a strong association between mobile banking and financial success, the study focused primarily on profit margin, return on assets, and operational self-sufficiency. One conceptual drawback of this study is that it only operationalized performance criteria that were exclusive to high-interest loans, ignoring the wider implications of mobile financial services. Methodologically, the descriptive character of the study and its focus on a confined geographic area hinder generalizability. By extending the scope of performance metrics and investigating how mobile services affect SMEs in Kenya, this study fills in these gaps and offers a more comprehensive insight of mobile financial services' impact on performance across different contexts.

Mugo, Kahuthia, and Kinyua (2019) examined the performance of Kenya's Nairobi County textile SMEs in connection to their infrastructure. Despite the descriptive design and census approach employed in the research, the study concluded that telecommunications networks had a modestly beneficial but statistically negligible effect on SME growth. This study brought to light a knowledge gap on how cutting-edge technology, such mobile financial services, might improve the performance of SMEs. In order to close this conceptual gap, the current study looks at how mobile financial service as opposed to just infrastructure can have a direct impact on the performance of SMEs in

Trans-Nzoia County. The emphasis on specialized mobile financial services rather than broad infrastructure has allowed for a more nuanced understanding of how contemporary financial technology impact SMEs.

Aladejebi (2019) looked into the impact of microfinance banking on the expansion of SMEs in Lagos, Nigeria. The study did not fully investigate the wider range of mobile financial services, even if it did demonstrate the important role that microfinance plays in economic development. Instead, it focused exclusively on micro savings facilities. Understanding how different microfinance services, such as mobile credit facilities and payments, affect SME performance is left methodologically open by this. This gap is filled by the current study, which takes a more comprehensive approach to assess the impact of different mobile financial services on the performance of SMEs in Trans-Nzoia County. The study attempts to provide a more thorough assessment of the impact of mobile financial services on SMEs by employing a full range of these services as variables.

Omondi and Jagongo (2018) conducted research on Kisumu County that demonstrated the noteworthy impacts of microfinance services on the financial performance of small and medium-sized enterprises. However, the study's low generalizability to other Kenyan counties and its geographical focus hampered the study's conclusions. This contextual gap is important because different legal frameworks and economic situations might cause regional variations in the dynamics of microfinance services. The current study expands the geographic scope and offers insights applicable to a different regional context by examining the impact of microfinance mobile services especially in Kitale Town, Trans-Nzoia County. This helps to address the limitation. This method aids in determining

whether conclusions drawn from Kisumu are relevant to other parts of Kenya or whether variables unique to a given location are important.

### **2.2.3 Mobile Credit Facilities and Performance of SME's**

Egan (2022) examined the acceptance of mobile phone credit and savings services as well as their influence on SME performance in Kisii, County using stratified sampling and a cross-sectional descriptive technique. The study discovered that mobile finance and saving services had a favorable effect on the performance of SMEs. However, it was largely focused on Kisii, County and did not account for potential contextual differences in other regions (Egan, 2022). This study draws attention to a conceptual gap in our knowledge of how the beneficial impacts shown in Kisii, County could or might not transfer to Trans-Nzoia County, given the potential differences in the county's economic circumstances and degree of technological adoption. In order to fill this gap, the current study focuses exclusively on Trans-Nzoia County to determine whether the observed benefits are consistent in several locations with diverse socioeconomic backgrounds.

Alumasa and Muathe (2021) focused on factors such lending prices, regulations, and loan quantities when examining how mobile finance facilities affected the performance of small and medium-sized enterprises in Kenya. The study offered insightful information, but it also showed that the performance of SMEs was significantly harmed by the cost of mobile loans. The study's investigation of the whole range of mobile microfinance services, including as savings and payment services, was constrained. This draws attention to a methodological flaw in the analysis of the overall effects on SME performance of the different elements of mobile microfinance services. By include a thorough analysis of mobile credit, mobile savings, and mobile payments, the current

study seeks to close this gap and provide a more comprehensive understanding of how these services interact to affect SME performance.

Moussa (2020) focused on gender differences and sectoral advantages, she did not take into consideration the wider regional variances and methodological rigor necessary for findings that might be applied to other contexts. Nevertheless, her analysis offered insights into microfinance lending in Lebanon. In order to close these gaps, the current study looks at the unique circumstances of Trans-Nzoia County, employs a strong research methodology to investigate the impact of microfinance mobile services on SME performance, and takes into account local variables that affect financial performance and accessibility.

Amran and Mwasiagi (2019) examined the impact of microfinance services on women-owned SMEs in Nairobi, Kenya. Despite identifying that microfinance services positively affect SME performance, they highlighted significant conceptual and methodological gaps. For instance, the study's operationalization of microfinance services was limited to savings mobilization, financial accessibility, lending rates, and financial knowledge, without considering the influence of mobile financial services. Additionally, the study did not explore the broader regulatory and contextual factors affecting the accessibility and effectiveness of these services. As a result, their findings indicate that while microfinance services have a positive impact, the high lending rates negatively affect performance, suggesting a need for further research into innovative credit solutions and regulatory frameworks (Amran & Mwasiagi, 2019). The current study address these gaps by incorporating mobile financial services and examining the interplay between different

microfinance service components and SME performance, using a more comprehensive set of variables and contextual considerations.

Bosire and Ntale (2018) investigated the effect of mobile money transfers on SME growth in Narok, County. Although their findings revealed a positive correlation between mobile banking, mobile loans, and mobile payments with SME growth, the study predominantly focused on these mobile money services without considering other microfinance elements like mobile savings or entrepreneur training. The methodological approach was limited to a cross-sectional design, which may not capture the long-term effects of mobile financial services on SME growth. Furthermore, the study emphasized the need for more advanced and integrated microfinance solutions but did not explore how contextual factors, such as local economic conditions or regulatory environments, might influence the effectiveness of these services (Bosire & Ntale, 2018). This study build on their work by employing a longitudinal approach to capture evolving trends and integrating a broader range of microfinance services, including mobile savings and entrepreneur training, to provide a more holistic understanding of their impact on SME performance.

Mararo (2018) examined the impact of mobile services on SME growth in Nakuru, County, noting the challenges SMEs face regarding technology adoption and infrastructural constraints. The study identified a positive impact of mobile services on financial performance but was limited by its focus on a small sample size and lack of consideration for other factors affecting technology adoption, such as capital constraints and infrastructural deficiencies. Additionally, the study's use of purposive and random sampling methods may not have fully captured the diversity of SME experiences across

different sectors. This study address these methodological and contextual gaps by employing a larger, more diverse sample and considering various microfinance service components and contextual factors, such as technological infrastructure and capital availability. By doing so, it aims to provide a more comprehensive analysis of how microfinance mobile services affect SME performance in different contexts.

#### **2.3.4 Microfinance Mobile Services, Entrepreneur Training and Performance of SME`s**

Abu-Rumman, Al-Shraah, Al-Madi, and Alfalah (2021). Studied the moderating influence of dynamic capabilities, although it did not address the broader context of microfinance mobile services in Jordan. This omission constitutes a serious conceptual gap, especially in light of the growing significance of mobile financial services in improving the performance of SMEs. Although the study showed that dynamic capabilities had a significant moderating effect on performance, it did not take into account the potential affect or interaction of these services with performance measurements. By combining the influence of microfinance mobile services and investigating their possible moderating effects on SME performance in Trans-Nzoia County, Kenya, this study seeks to close this conceptual gap .

Wahyuni and Sara (2020) studied the impact of entrepreneurial orientation on SME performance in Indonesia. The study used both descriptive and inferential statistics, their study was primarily concerned with three orientations: market, learning, and entrepreneurial. The methodological flaw in this case is the disregard for new developments in technology and how they affect performance indicators. This disparity is noteworthy because the incorporation of contemporary technology tools, such mobile

financial services, may offer fresh perspectives on performance assessment. In order to close this gap, the current study evaluates the effects of technological factors on the performance of SMEs, with a focus on mobile loan facilities and savings services. A more holistic understanding of the elements influencing performance can be obtained by using a more thorough technique that takes these variables into account.

Sawaeen and Ali (2020) used a large sample size and quantitative research to look into the effects of learning orientation and entrepreneurial leadership on SME performance in Kuwait. The limitation of their study to Kuwait, however, may mean that it ignores the particular difficulties that SMEs in other areas like Kenya's Trans-Nzoia County face. There is a big contrast between the two contexts because of the different economic situations, legal frameworks, and technology infrastructures. In order to better understand the effects of microfinance mobile services, this study addresses this constraint by concentrating on the Trans-Nzoia County environment and taking into account the local economic climate and technology infrastructure. The study attempts to deliver insights that are immediately applicable to SMEs in this region and solve the particular challenges by customizing the research to the local environment.

Mutuma (2020) studied the impact of microfinance services on the performance of SMEs in Meru, County, Kenya. The study's findings demonstrated how mentoring, coaching, and apprenticeship enhanced SME performance. There were a few holes found in this investigation, though. From a conceptual perspective, Mutuma's study largely concentrated on traditional financial services and neglected to look into the potential impact of modern mobile microfinance services on the performance of SMEs. By analyzing the function of microfinance mobile services and their particular impact on

SMEs in Kitale, Trans-Nzoia County, Kenya, the current study fills this conceptual gap. The findings' generalizability is restricted by Mutuma's methodological use of a descriptive design that focuses on a particular demographic (women enterprises). In an effort to improve the external validity of the results, the current study takes a more comprehensive approach by incorporating a variety of microfinance mobile services and a varied sample of SMEs from other industries. Because the study was limited to Meru, County, its conclusions might not apply to other areas with distinct technological and economic circumstances. By concentrating on Kitale Town, the current study fills this contextual gap and provides insights into how local characteristics affect the efficacy of microfinance mobile services.

Fatoki (2018) looked into how entrepreneurial resilience affected the performance of SME's in South Africa. The study focused mostly on individual-level resilience without taking into account the larger impact of financial service innovations, even though it offered insightful information on how resilience influences SME success. The study's conceptual framework ignored the relationship between resilience and contemporary financial instruments, such mobile microfinance services, which are becoming more and more important in today's financial environment. The current study investigates this relationship by looking at how SME performance is impacted by mobile microfinance services and entrepreneurial resilience. Fatoki's study included a sample of 170 people, but it did not use longitudinal data to capture how resilience and financial services are changing over time. In order to reflect the changing nature of resilience and financial services, Fatoki's study did not use longitudinal data, instead used a sample of 170 participants. This study monitors changes over time and provides a more in-depth

analysis of the variables through the use of longitudinal data collecting. Given that South Africa may differ from Kenya in terms of financial services, Fatoki's research was limited in this respect. The current study focuses on Kitale Town in order to remedy this. This allows it to provide context-specific insights and increase our understanding of how mobile microfinance services impact small and medium-sized enterprises within specific geographic and economic contexts. The current work aims to provide a more thorough knowledge of the methods in which these gaps can be filled in which microfinance mobile services affect the performance of SMEs. It does this by taking into account a number of regional, conceptual, and methodological factors that have not been thoroughly examined in earlier research. This all-encompassing strategy strengthen the theoretical foundation and provide useful insights for improving SME performance in Kenya.

## 2.4 Summary of Empirical Studies and Research Gaps

**Table 2. 1 Summary of Empirical Studies and Research Gaps**

Author (s)	Focuss of the Study	Study Fundings	Research Gaps	Focus of the Current Study
Abu-Rumman, et al., (2021)	Examine the networks, entrepreneurship mindset, and performance of small and medium-sized enterprises in Jordan.	The research findings indicated that dynamic capabilities played a positive significant moderating role on performance, and that entrepreneur introductions had a positive significant impact while entrepreneur networking had an insignificant impact.	The study had a limited sample size and didn't apply bias-reducing controlling variables.	The current study consider microfinance mobile services and performance of SME`s, a relationship moderated by entrepreneur training.
Alumasa, and Muathe, (2021),	The performance of SME's in emerging countries' economies and mobile credit facilities	According to the study, mobile credit significantly improved SMEs' performance. This is because mobile credit is a necessary service that can influence SMEs' expansion.	In this study, the independent and dependent variables showed no correlation, despite the focus on microfinance services. Furthermore, the variables were conceptualized in a limited way.	The current study adopt multiple variables to broaden the conceptual scope and link constructs to the performance of SMEs in Kenya.
Munyao, (2021)	Investigate how microfinance services are helping SMEs in Nairobi County, Kenya, grow.	Demonstrated the need of incorporating SMEs in the formulation of legislation that promote growth, prosperity, and development as well as the enormous impact that microsavings have on SMEs' ability to expand..	Utilizing three objectives that were constrained from the standpoint of mobile microfinance services, the study used a casual design..	The study uses a descriptive research design to examine the unofficial connections between the constructs under investigation.
Audu, et al., (2021)	To ascertain the performance of SMEs	A positive significant impact was found between the micro saving	Even though the study's primary goal was to examine	The performance of SMEs connected to mobile

	and the role of microfinance companies in Nigeria	and performance, an implication that they embrace financial discipline and saving practices that result to improved growth	mobile savings as a kind of microfinance, it was unable to establish a connection between the outcome variable and the predicator construct.	microfinance services in the current study.
Munyao, 2021	Investigate how microfinancial services affect the expansion of SMEs in Kenya.	Result revealed micro loans have a positive impact on performance of SMEs.	Being an exploratory study, it was unable to provide evidence in favor of a mechanism for casual relationships.	The current study focus on investigating empirical direct and indirect effect.
Moussa, (2020)	An analysis of microfinance lending's impact on SMEs' performance through a case study of Lebanon	The statistical result was revealed a significant rate of micro loans facilities and the SME's performance, while the number of women that borrowed loans were very few and those who benefit the most were cited to be from trade sectors, and commercial firms.	The research did not establish a connection between the predicator variable and the performance of SMEs, nor did it assess the additional influence of microfinance mobile services.	The present study link microfinance mobile services to SME's performance and measure its impact.
Wahyuni, and Sara, (2020)	Determine the impact of the entrepreneur's orientation on the performance of SMEs.	Results from the three sets of constructs—market orientation, learning orientation, and entrepreneur orientation—were presented as significant and non-significant.	It was unclear how the study's constructs related to one another.	The study link microfinance mobile services and SME's performance via the moderating effect.
Sawaeen, Ali, (2020)	Analyze the effects of entrepreneurial leadership (EL) and learning orientation (LO) on Kuwaiti SMEs' performance.	The findings of EL and LO demonstrated that innovation capacity significantly improved organizational performance of SMEs in Kuwait and had a moderating influence.	The study result was limited to Kuwait and could not be generalized to other countries, also study employed a narrow conceptualization.	The current study considered linking microfinance mobile services to SME's performance, relationship moderated by entrepreneur training. anchoring on theories and models.

Mutuma, (2020)	Examine the performance of SMEs and microfinance services provided by women's enterprise funds (WEF) in Meru, County, Kenya.	The study found that coaching, mentoring, and apprenticeship had a significant positive impact.	The study didn't link the moderating construct to the predictor variable and outcome variable and as such a research gap.	The current study consider microfinance mobile services and SME's performance, a relationship moderated by entrepreneur training.
Rezvani, & Fathollahzadeh, (2020)	To find out how SMEs' performance in the worldwide industrial tool and mechanical part sectors is impacted by creative and entrepreneurial marketing	Result results indicated that innovative strategy, marketing activities and technology and creating value for customers through services and product had a greater impact on firm performance, while human resources and financial resources had the lowest impact on SMEs performance.	Study was limited to exclusivity of some sectors, limitation in statistical population and scientific limitation that includes the theoretical concept as well as limited data collection mean.	The current study adopt a wider perspective to investigate the casual relationships where descriptive design was adopted.
Kraus, and Damke, (2019)	Identification money transfer and performance of SME's firm.	Found that it makes it easy to establish a positive norms and values that are geared towards digital transformation in firms where the management identify positively with the digital technology.	Although the study was done on identifying with digital transformation, there was no link to SME's performance.	The current study adopt a wider conceptualization of the variable to link microfinance mobile services to performance of SME's in Kenya, using descriptive research design.
Ferreira <i>et al.</i> , (2019)	To investigate the effects of money transfers and digital transformation on SMEs.	Digital transformation significantly improved business, offering a number of benefits that helped companies prosper during challenging times and create growth opportunities.	Despite the study's connection between the digital transformation process and performance, its scope was restricted to large firms.	The current study adopt the perspectives microfinance mobile services to measure performance of SME's in Kenya.

Kawira, Mukulu, & Odhiambo, (2019)	Examined relationship between digital marketing and the performance of Kenya's MSME sector.	A result of the two variables' strong positive relationship was discovered.	The study was an exploratory study and limited to the narrow scope MSMES	The current study focuses on investigating empirical moderating effect of microfinance mobile services.
Verhoef <i>et al.</i> (2019)	To examine the money transfer and SME`s performance	The study found that there are notable gaps in SMEs where the owners of the company have an impact on the firm's strategic decisions.	The study focused on a narrow perspective of digital transformation and failed to show a relation between the diverse transition phases leaving unanswered question on to what level or degree should firms digitally transform.	Through a variety of digital transformation and performance metrics, the current study concentrate on a broader view of digital transformation and SMEs' performance.
Shkodra, (2019)	To determine how mobile banking affects Kosovo's microfinance institutions' financial performance	The study found that there was a positive relationship between the study constructs, financial performance, and mobile banking.	Failed to sufficiently investigate the numerous angles and facets of SME performance, making it impossible to extrapolate the findings to the Kenyan environment.	This study aims to determine the impact of mobile microfinance services offered to small and medium-sized enterprises (SMEs) and their effectiveness within the Kenyan context.
Mugo, <i>et al.</i> , (2019)	To determine the obstacles that infrastructure in Kenya poses to the performance of clothes text firms.	The results of the study showed a significant and favorable relationship between mobile microfinance services and the performance of SMEs.	Despite being conducted in Kenya, the study did not have a coincidental correlation between the variables; rather, it focused on connecting microfinance services to performance.	The research was centered on small and medium-sized enterprises (SMEs) in Kenya, taking into account supplementary factors to examine microfinance mobile services, and examining both direct and indirect correlations.
Aladejebi, (2019).	To investigate the effect of microfinance	The study found that mobile microfinance services have an	Despite focusing on microfinance services, the	The study adopt a wider perspective in conceptualizing

	banking (MFB) and SME`s growth in Lagos , Nigeria	effect on SMEs' performance.	study only partially operationalized the construct.	the study variables.
Amran, & Mwasiagi, 2019	Microfinance services and women owned SMEs performance in Nairobi, Kenya	The study found that microfinance services had a positive and significant effect on performance, with the exception of the lending rate, which had a negative effect on the performance of women-owned SMEs in Nairobi.	There was no link microfinance services to performance of SME`s. Additionally it was descriptive and therefore limited to qualitative statistics	The current study links microfinance services to performance of SME`s, and descriptive research design was adopted.
Omondi, & Jagongo, (2018)	To investigate the connection between the financial performance of SMEs and microfinance services in Kisumu County, Kenya	The results of the study showed a strong and positive correlation between the performance of SME's in Kisumu and an independent variable.	The study was descriptive in nature, focused on Kisumu, and measured performance using financial metrics.	The current study was done using descriptive research design, and four theories will be utilized to anchor the study constructs in Trans-nzoia county Kenya.
Geoffrey, & Emenike, 2018	Impact of institutional support on microfinance and SMEs growth in Nimule, South Sudan.	According to the study, there is a positive linear relationship between the growth of SMEs and the availability of loans, savings accounts, and managerial skills.	Despite being on microfinance services, the study's descriptive nature prevented it from being broadly applicable to Kenya because it was restricted to the context and scope of Sudan.	The current study was operationalizing the variable as mobile transfer/payments, mobile savings and mobile credit facilities and will be done in Trans-nzoia county, Kenya.
Bosire, and Ntale, 2018	To determine whether the growth of SME's in Narok, County is impacted by mobile money transfers.	The study found a significant positive correlation between the growth of SMEs and mobile banking, mobile loans, and mobile payments as operational indicators.	In this study, the independent and dependent variables showed no correlation, despite the focus on microfinance services. Additionally, it only interpreted the variables	The current study investigate microfinance mobile services and performance of SME`s in Kenya, and adopt various variables as well as descriptive research design.

			narrowly.	
Ahmad, <i>et al.</i> , (2018)	The role that payments transfers and SME performance play in Kenya.	The study found that there is a limited adoption of digital technologies, including cloud computing.	failed to assess the extent and degree of digitalization, value capture/creation mechanism, and value proposition change as metrics for measuring the digitalization process.	The current study aims to evaluate the impact of mobile services on the performance of small and medium-sized enterprises (SMEs) in Kitale, Trans-nzoia County, Kenya.
Mararo, (2018),	Determine how mobile services affect the expansion of SMEs in Nakuru, County.	The study found that the financial performance of SMEs was enhanced by mobile services.	Failed to quantify the extent and degree of digitalization, the change in the value proposition, the value capture and creation mechanism, and the digitalization process.	The viewpoints was used in this study to gauge the performance of SMEs.
Kim, and Shim, (2018)	A ascertain how innovation, social capital, and knowledge sharing affected South Korean SMEs that were concentrated in the travel and tourism industry.	The study's findings demonstrated a significant and favorable relationship between mobile services and SMEs' performance.	The study was done on Tourism sector in South Korea and findings limited in their generalization.	Four theories served as the foundation for the current study, which focused on SMEs in Kenya and its study constructs.
Fatoki, (2018)	To investigate the effect of entrepreneur resilience on the performance of SMEs in South Africa.	The study found a significant relationship between the ER and level 9 individuals' and organizations' success in South Africa.	A research gap needs to be filled because the study was exploratory in nature and was unable to measure several crucial factors related to firm performance.	To get the intended results, the current study was use the proper research methodology and be grounded in pertinent theories.

**Source: Researcher (2025)**

## 2.5 Conceptual Framework

In order to bridge the research construct (entrepreneur training) as shown in the conceptual framework and address emerging research gaps, the conceptualized model developed for this study was used to express the directions of relationships between Microfinance mobile services and SME's performance.

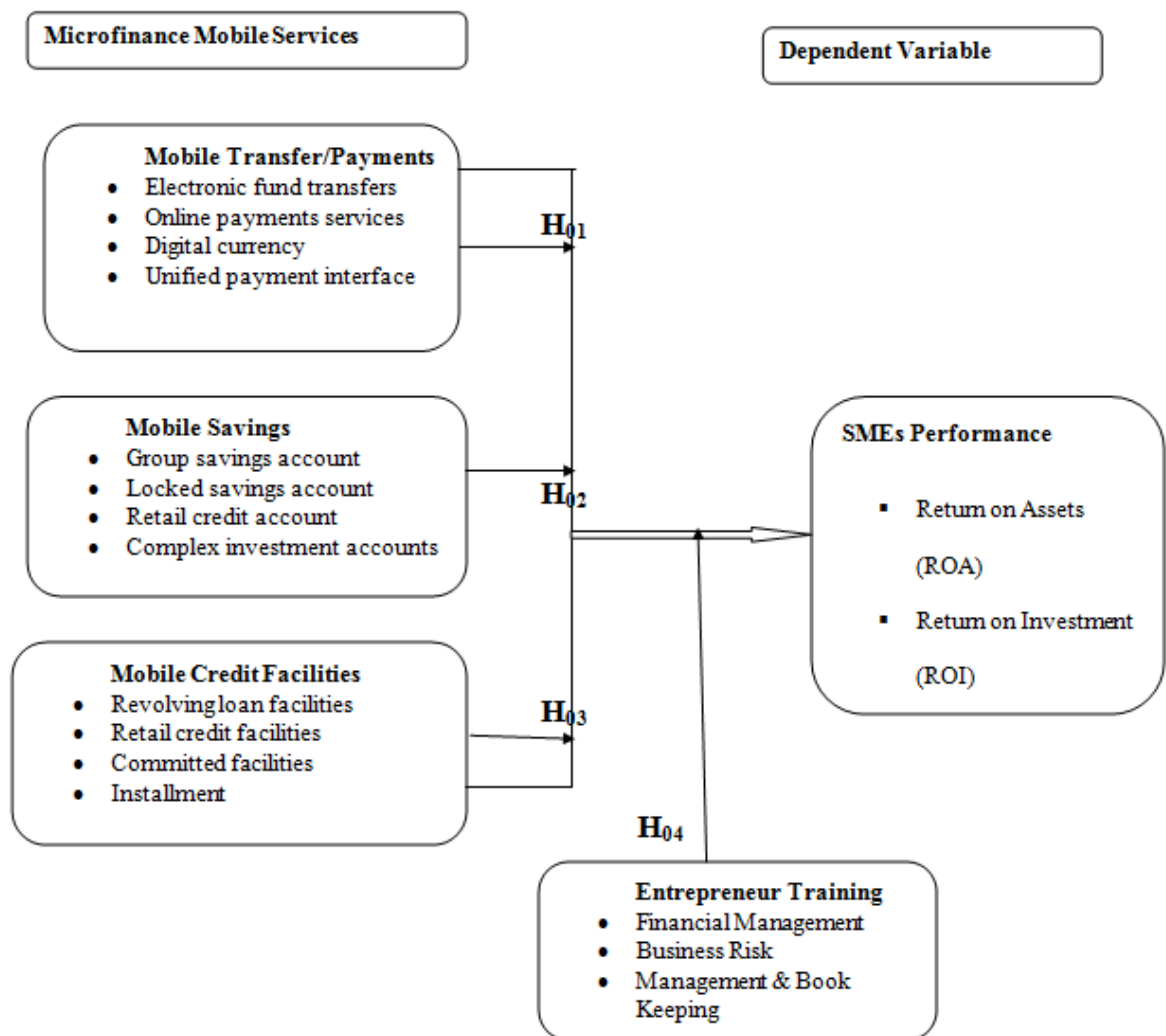


Figure 2.2 Conceptual Framework

Source: Researcher, (2025)

Utilizing the previously mentioned conceptual framework, this research was show the relationship between the performance of SMEs and microfinance mobile services, with entrepreneur training serving as a moderating factor. Entrepreneur training was operationalized through Financial Management, Business Risk Management, and Bookkeeping; performance was operationalized through Return on Assets (ROA) and Return on Investment (ROI); and microfinance mobile services operationalized through mobile money transfer/payment, mobile saving, and mobile credit facilities.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter three entails research design, empirical model, and population of the study, sample and sampling techniques. It further includes validity and reliability, diagnostic tests, data analysis and presentation and ethical consideration.

#### **3.2 Research Design**

The study used descriptive research design. This is a systematic approach meant to gather in-depth information about a population or phenomenon under investigation (Saunders, Lewis, & Thornhill, 2009). This approach was relevant to the current study since it examined and the effect microfinance mobile services and financial performance of SMEs in Trans-Nzoia County, Kenya. The descriptive research approach focuses on obtaining several metrics and indicators that provide a comprehensive investigation of the variables at play and how they interact with relation to mobile transfer/payments, mobile savings, mobile credit facilities, and entrepreneurship training.

Descriptive research design was best suited for studies that sought to give detailed explanation of the characteristics and relationships between variables without altering them (Creswell & Creswell, 2017). The descriptive design of this study allowed for the systematic collection and analysis of data to understand the ways in which microfinance mobile services impact SMEs. Descriptive research designs were best suited for studies that sought to provide a comprehensive explanation of the characteristics and relationships between variables without altering them (Creswell & Creswell, 2017). The descriptive design of this study allowed for the systematic collection and analysis of data

to understand the ways in which microfinance mobile services impact SMEs performance. Ayyagari, Beck, and Demirgüç-Kunt (2011) conducted a study that effectively employed a similar approach, utilizing a descriptive framework to investigate the impact of small and new enterprises on employment and growth.

### 3.3 Empirical Model

The rough estimate of the empirical model was presented in this section along with the identified relationships that were illustrated in the conceptual framework. The performance of SMEs, which was the dependent variable, and microfinance mobile services, which was the independent variable, are conceptually related. The moderating construct of entrepreneur training, which was tested, was also presented. To test for both direct and moderating effect, the study use a multiple regression analysis model, a statistical parameter technique considered robust in ascertaining the casual effect through a 5-pointer Likert scale. To ascertain the strength and the effect of the predictor constructs, money transfer/payments, mobile saving and mobile credit facilities regressed against the following parameters.

$$PSME`s = \beta_{01} + \beta_1 MTP + \beta_2 MS + \beta_3 MCF + \epsilon \dots \dots \dots 3.1$$

Where;

PSME`s = Financial Performance of SME`s

MTP = Money Transfer/Payments

MS =Mobile Saving

MCF =Mobile Credit Facilities

$\beta_{01}$  = Beta Coefficient

$\epsilon$  = Error Term

In order to regress the moderating effects of entrepreneur training, a prior test on the composite indices on the 2 dimensions calculated. To determine the composite index value for each model, the quantitative data from the 5-point Likert scale transformed using a harmonic mean (Gupta 2008, Kilika, 2012). The indices are derived using the formula for harmonic mean. Using the following formula, based on the relative weight resulting from the number of items in the research tool for each study variable::

$$C_i = \frac{\sum f_i w_i}{\sum f_i}$$

Where;

$C_i$  was the composite index for structural components.  $i$ . The aggregate effect of mobile savings, mobile credit facilities, and money transfer/payments on the performance of small and medium-sized businesses in Kenya were the construct indices to be calculated.

$f$  = The total number of participants who answer the survey

$w_i$  = The proportionate weight each component of a given variable was given.

$i$  = The total number of parts that made up the particular variable

The fifth objective of the second model used MacKinnon's three-step method to test whether entrepreneur training moderated the association between microfinance mobile services and SME performance in Trans-nzoia County, Kenya. To find out if the dependent construct (SMEs performance) and the autonomous construct (microfinance mobile services) were significantly correlated, model 3.2 was used as the base model.

$$PSME's = \beta_{05} + \beta_{06} MMS + \beta_{07} ET + \dots\dots\dots 3.2$$

$$PSME's = \beta_{08} + \beta_{09} MMS + \beta_{10} ET + \beta_{11} MMS * ET + \epsilon \dots\dots\dots 3.3$$

### 3.4 Operationalization and Measurement of Research Variables

This study seeks to find out how portfolio composition relates to financial performance. The study utilized quantitative data for testing the extent of the relationship between the study variables.

**Table 3.1 Operationalization and measurement of Variables**

Variable	Type	Operationalization	Measurement	Measurement Scale	Hypothesized direction
SMEs Performance	Dependent	Overall success and financial health of SMEs, measured through various performance metrics.	Return on Assets (ROA) Return on investment (ROI)	Likert Scale	Positive/negative
Mobile Transfer/Payment	Independent	Services enabling SMEs to conduct financial transactions via mobile technology.	Electronic funds Transfer Online payment Services Digital Currency Unified payment interface.	Likert Scale	Positive/negative
Mobile Savings	Independent	Savings services offered through mobile platforms that allow SMEs to save money.	Group savings Account. Locked Savings Account. Retail Credit Account. Complex Investment Account	Likert Scale	Positive/negative
Mobile Credit Facilities	Independent	Financial services provided through mobile platforms that offer credit to SMEs.	Revolving loan facilities. Retail credit facilities. Committed facilities. Installments	Likert Scale	Positive/negative
Entrepreneurial Training	Moderator	Educational and developmental activities aimed at enhancing entrepreneurial skills.	Financial Management Business Risk Management Book keeping	Likert Scale	Positive/negative

Source: Researcher (2025)

### 3.5 Target Population

Trans-Nzoia County has 197 SMEs in a variety of industries, including construction, banking, trade and commercial services, and agriculture, make up the study's target population. The necessity to gather a varied but controllable sample which reflects the features of the county's larger SME landscape served as justification for this decision. Research by Ayyagari, Demirgüç-Kunt, and Maksimovic (2011) emphasizes how crucial

it is to consider small and medium-sized enterprises when studying economic development and growth. The main focus of the study was proprietors and staff members of these SMEs. The manageability and practicality research design principles were adhered to in the choice of a sample size of 197 SMEs (Creswell, 2014). Given the resources and constraints at hand, a focused approach to a specific number of SMEs allowed for a comprehensive analysis and comprehension of the impact of microfinance mobile phone services on their performance. This method also complied with the suggestions made by Mugenda and Mugenda (2003) for choosing a sample size that is practical and representative for a full investigation. The current study focused on SMEs was in line with its goal of comprehending how mobile financial services could improve the performance of small and medium-sized businesses. The goal of the research was to give a thorough understanding of the ways in which mobile financial services affected different facets of Trans-Nzoia County.

### **3.6 Sampling Techniques and Sample Design**

Given the relatively small population of SMEs in Trans-Nzoia County, a census approach employed to ensure the inclusion of all 197 SMEs identified in the study. Given that it enabled thorough data collection from all population members, this strategy was ideal for small populations and improved the level of representation and ability to be generalized of the results (Hair et al., 2019). The application of this strategy to obtain a high degree of accuracy and dependability in the results was supported by the census sampling central theorem, which promotes the inclusion of every population member when practical.

Both probability and non-probability methods used in a mixed sampling technique to improve the data collection process. To be more precise, purposive sampling used to

choose participants, with an emphasis on finding important informants within each of the 197 SMEs. This method was particularly effective in qualitative research for selecting individuals with specific expertise and relevance to the research objectives (Saunders et al., 2018, Kwamboka & Sang, 2019). By targeting SME owners who had in-depth knowledge of their enterprises and the impact of microfinance mobile services, the study aimed to obtain rich, contextually relevant data.

In alignment with the central theorem of sampling, which emphasizes the importance of selecting appropriate sampling methods to match research goals, the combination of a census approach and purposive sampling ensures that the study captures a comprehensive view of the SME landscape in Kitale Town. This approach to methodology not only optimized the precision of the results but also guaranteed that the information acquired is profoundly influenced by the encounters of important players in the SME industry (Bryman, 2021). It was anticipated that the incorporation of these sampling techniques offered a strong basis for examining how microfinance mobile services affected the performance of SMEs in the area.

### **3.7 Data Collection Instrument**

In order to measure each study construct easily and conveniently and to make it simple to comprehend and analyze the research findings, self-administered open-ended questionnaires were used to collect primary data. The five pointer Likert scale adopted in the structured research instrument to evaluate the research items in each section. The research tool had various sections, with items or questions that help the study to obtain the desired data on characteristics of the participants, by giving their opinions on each constructs and performance level in this study. The research was assisted by a research

assistant in administering the questionnaires through making phone calls to the officers in charge for appointments, through online methods (Google form) and drop and pick. The purpose and subject matter of the research instruments explained in order to obtain permission to administer the questionnaires. The chosen SMEs were then be given the option to select the most practical and efficient method of administering the research questionnaires, between the online (Google Form) and offline (drop and pick) options.

### **3.8 Validity and Reliability of Research Instruments**

#### **3.8.1 Validity of Research Instrument**

This study assessed the validity of the investigation's questionnaire using three different types of validity tests: face, content, and constructs. Validity is the extent to which an instrument is capable of accurately measuring the things it is designed to measure, according to Knapp & Mueller (2010). The review of literature, both theoretical and conceptual literatures to determine face validity by supplying study variables, indicators for organizing the statements, and operational definitions of terms all be consulted in this research. Using the suggested hypothetical variables, construct validity was examined by confirming the interpretation of the study constructs as they were demonstrated by the test scores derived from the data that was gathered. By putting the research hypotheses to the test, the operationalization of the suggested conceptual framework was employed to establish the relationship and determine construct validity. In order to verify that pertinent concepts and features of the study constructs are examined, the research instrument is exposed to a thorough process of checks, counterchecks, and reviews. Additionally, the content validity is tested by benchmarking against the body of existing empirical and theoretical literature, (Kimberlin & Winterstein, 2008, Field, 2009, Saunders *et al*, 2009).

### **3.8.2 Pilot Testing**

The study conducted a pilot test prior to the final survey, by presenting a draft questionnaire to four small and medium firms that randomly sampled to take part in a pretest that will be excluded in the actual study target. The pretesting of the questionnaire by presenting them to the participants from the four SME`s from Bungoma, county to determine they were able to interpret and generate desired feedback. From the test, the research edited issues detected, the respondents had a chance to highlight and point out items not well understood and the flow of statements throughout the several sections in the research tool. The feedback data rephrased and additional questions and amends done to ensure that all constructs were well represented. Reliability testing and internal consistency checks were conducted using the results of the pilot test..

### **3.8.3 Reliability of Research Instrument**

The consistency in assessment that produces consistent outcomes when applied to research instruments is known as reliability. It's the degree to which the research questionnaire produces constants for scores or records across several tests, or the degree to which the same measures yield consistent results that don't change. The reliability of the theorized constructs, conceptual relationships, and questionnaire items assessed using a criterion of a Cronbach alpha score of 0.7 or above (Crano & Brewer, 2002, Field, 2009). The findings of the test are presented in the Table 3.2

**Table 3.2: Cronbach Alpha Values**

<b>Description</b>	<b>No of Items</b>	<b>Cronbach Alpha Coefficient</b>
Mobile transfers/payments	14	.816
Mobile savings	9	.726
Mobile credit facilities	9	.787
Entrepreneur training	9	.950
SME's Performance	2	.835

**Source: Researcher (2025)**

The results showed Cronbach Alpha values above 0.7 indicating all the variables satisfied the requirements for the study.

### **3.9 Data Collection Procedure, Data Analysis and Presentation**

The survey be composed of primary data collection from the selected population parameter. The author sought obtained approval and authorization letter, and a letter of introduction from NACOSTI and Kenyatta University respectively to enable data collection. Additionally, when the research tool was being administered by the assistant researcher to study participants, consent was obtained. Both the online approach and the drop-and-pick method was used in this study. The goal of the study was explained to the respondents in order to get their approval.

The collected data was regressed using the statistical package for social sciences (SPSS) application in order to conduct further analysis. Both descriptive and inferential statistical outputs was produced by the data processing. The analysis's findings showed in summarized tables with the mean, standard deviation, frequencies, and percentages to allow for meaningful descriptive statistics (Rumsey, 2015; Vetter, 2017). The study hypotheses was tested by further regressing the data.

### **3.10 Ethical Considerations**

The investigator will guarantee that the investigation conforms to ethical guidelines for research. While gathering data, the researcher asked the management of each SME involved with the study for permission. In the data collection tool, participants' consent was requested, and their confidentiality and anonymity was preserved. The researchers obtained the authorization letters from the Kenyatta University Graduate School and the National Commission for Science and Technology (NACOSTI) allowing the researchers to conduct research of this nature.

## CHAPER FOUR

### FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

Chapter four presents the findings of the study derived from the analyzed data. It begins with a discussion of the response rate, followed by an overview of the respondents' background information. The chapter then provides descriptive statistics for the variables under study, and proceeds to present the correlations between these variables. Finally, the chapter addresses the testing of the study hypotheses, offering insights into the relationships among the key constructs.

#### 4.2 Response Rate

The response rate in this study was essential for ensuring the reliability and validity of findings related to microfinance mobile services, entrepreneur training, and SME performance. With a relatively small population of SMEs in Trans-Nzoia County, a census approach was adopted, targeting all 197 identified SMEs. This method, suited for small populations, allowed comprehensive data collection, improving the representativeness and generalizability of the results (Hair et al., 2019). 152 questionnaires were returned out of 197 distributed, giving a response rate of 77%. The table 4.1 presents the response rate.

**Table 4.1: Response Rate**

<b>Response rate on administered and returned questionnaires</b>		
<b>Response</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Properly filled and returned questionnaires	152	77.12
Rejected and Unreturned questionnaires	45	22.84
<b>Total distributed questionnaires</b>	<b>197</b>	<b>100</b>

**Source: Survey Data (2025)**

According to literature, a response rate of 50% was satisfactory, 60% was acceptable, and 70% was excellent according to (Mugenda & Mugenda, 2003). Response rate of 77% was therefore considered excellent, reducing the risk of non-response bias and enhancing the credibility of the data (Creswell & Creswell, 2018). This high response rate ensures that the findings accurately reflect the dynamics within the target SME population, providing reliable insights into microfinance mobile services and SME performance.

### 4.3 Respondents Demographic Characteristics

Data collected from respondents were organized for analysis. Data was analysed using descriptive statistics. Frequencies and percentages were the key measures of the attributes. The demographic attributes on age, gender, and education level, number of employees in the SMEs, duration of business operations, and the type of business operated were used. The results were presented in tables using frequencies and percentages. This analysis provides a clear overview of the respondents' profiles, helping to contextualize the findings.

#### 4.3.1 Respondents' Gender

The gender distribution analysis results were presented according to the gender identity of the respondents.

**Table 4.2: Respondents' Gender**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Male	69	45.40	45.40	45.40
Female	83	54.60	54.60	100.0
Total	152	100.0	100.0	

**Source: Survey Data (2025)**

The analysis of respondents' gender distribution, as shown in Table 4.2, indicates a slight predominance of female respondents over males. Out of the 152 participants, 54.60% (83 respondents) were female, while 45.40% (69 respondents) were male. These findings suggest a higher representation of female entrepreneurs in SMEs in Trans-Nzoia County. The cumulative percentage highlights that females and males together make up the entirety of the sample, with females forming a larger portion. This gender distribution may provide insight into the demographic characteristics of SME ownership or management in the study area.

#### 4.3.2 Respondents' Age

The age distribution of respondents in the financial sector plays a crucial role in understanding their experiences, adaptability, and decision-making capabilities, especially in relation to the adoption of microfinance mobile services. As shown in Table 4.3, the largest proportion of respondents, 30.92%, fall within the 49–58 age bracket, followed by 26.97% in the 39–48 age group.

**Table 4.3: Respondents Distribution Based on Age**

<b>Years of experience</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
18-28 years	15	09.87	09.87
29-38 years	28	18.42	28.29
39-48years	41	26.97	55.26
49-58	47	30.92	86.18
Above 58 years	21	13.82	100.0
<b>Total</b>	<b>152</b>	<b>100.0</b>	

**Source: Survey Data (2024)**

These findings suggest that the majority of participants are older, experienced individuals who are likely to hold leadership or key decision-making roles within SMEs. According

to the KNBS report (2020), individuals in this age group tend to dominate managerial positions in the financial and business sectors, reflecting the maturity and experience needed to navigate financial challenges, including the adoption of mobile services. The prevalence of respondents in this age range also correlates with their likelihood to embrace innovative financial technologies to improve SME performance (KNBS, 2020). Additionally, the cumulative percentage indicates that 71.71% of the respondents are above 39 years old, further confirming the significant representation of older professionals in the financial sector. Younger participants, such as those in the 18–28 years bracket, represent only 9.87% of the respondents, suggesting a smaller but growing involvement of younger entrepreneurs in financial decision-making roles. This finding aligns with previous studies by Muli et al. (2021), who found that younger SME managers are more inclined towards innovative financial solutions like mobile banking. However, the dominance of older respondents highlights the need for targeted financial literacy programs, as individuals above 40 years may be slower in adapting to mobile financial services, despite their extensive experience and influence within the sector.

#### **4.3.2 Respondents' Level of Education**

Understanding the educational background of respondents is critical for interpreting their capacity to engage with financial management practices and mobile microfinance services. Education plays a significant role in shaping decision-making, business acumen, and the ability to adapt to new financial technologies. The analysis of respondents' education levels provides insights into how formal education may influence the financial

performance and management of SMEs in Trans-Nzoia County as shown in Table 4.4 below.

**Table 4.4: Respondents Distribution Based on Education Level**

<b>Level of Education</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Certificate	27	17.76	17.76	17.76
Diploma	40	26.32	26.32	44.08
Bachelors	46	30.26	30.26	74.34
Postgraduate	39	25.66	25.66	<b>100.0</b>
<b>Total</b>	<b>152</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Survey Data (2025)**

The Table 4.4, indicates that majority of respondents have attained higher levels of education, with 30.26% holding a bachelor's degree and 25.66% possessing postgraduate qualifications. This finding aligns with studies that suggest that higher education levels are associated with a greater understanding and adoption of financial technologies (Muthini & Wasike, 2022). The dominance of bachelor's and postgraduate qualifications indicates that the respondents are well-equipped to navigate the complexities of financial management and implement advanced mobile banking solutions. This well-educated workforce is better positioned to manage risks and leverage mobile microfinance services for the growth and sustainability of SMEs in the region (KNBS, 2021).

Furthermore, 44.08% of respondents possess either a certificate or diploma qualification. While these individuals may have foundational skills in business and finance, studies have shown that additional training is often required to fully utilize emerging financial technologies (Mwangi & Njuguna, 2020). This finding underscores the importance of ongoing financial literacy programs, especially for individuals with lower educational qualifications, to ensure equitable access to mobile credit facilities and other financial

services. As SMEs continue to grow in Trans-Nzoia, a well-rounded education system that addresses gaps in financial knowledge will be essential in improving financial performance (Central Bank of Kenya, 2021).

#### 4.3.4 Respondents’ Number of Employees in the SMEs

The survey findings on the number of employees within the SMEs provide important insights into the business size and potential resource capabilities of the enterprises. Employee numbers are often an indicator of the SME's operational scale and can influence its financial performance and growth potential as depicted in Table 4.5

**Table 4.5: Respondents’ Number of Employees**

<b>No of Employees</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
1-5	45	29.61	29.61
6-10	58	38.15	67.76
11-15	28	18.42	86.18
Above 15	21	13.82	100.00
<b>Total</b>	<b>152</b>	<b>100.00</b>	

**Source: Survey Data (2025)**

Table 4.5 above shows a significant proportion of SMEs, 38.15%, reported having between 6 to 10 employees, indicating a moderate operational scale. Additionally, 29.61% of SMEs had 1 to 5 employees, which typically represents smaller enterprises that may face limitations in workforce capacity but could also be more agile and responsive to market changes. This distribution reflects common trends in the SME sector in Kenya, where most businesses operate with a small workforce ([KNBS, 2021). The ability of these SMEs to manage their employee resources efficiently directly affects their financial performance and overall sustainability.

SMEs with more than 15 employees constituted 13.82% of the respondents, representing larger entities that likely have more robust financial systems and greater market reach. This group of SMEs is more likely to benefit from advanced mobile financial services, which can help manage larger transactions and financial complexities (Mwangi & Njuguna, 2020). Understanding the employee distribution provides context for how the businesses are structured and the potential correlation between workforce size and financial performance outcomes.

#### 4.3.5 SMEs' Number of Years of Operation

The number of years that an SME has been in operation was a critical factor in determining its business maturity, stability, and resilience. This variable provides insights into the business's ability to survive in a competitive market and its experience with managing challenges over time. The results presented in Table 4.6

**Table 4.6 Respondents Based on Number of Years of Operation**

<b>Years of operation</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Less than 5 years	19	12.50	12.50	12.50
5-10 years	69	45.40	45.40	57.40
11-15 years	41	26.97	26.97	84.87
Above 15 years	23	15.13	15.13	<b>100.00</b>
<b>Total</b>	<b>152</b>	<b>100.00</b>	<b>100.00</b>	

**Source: Survey Data (2025)**

According to the data, the majority of SMEs, 45.40%, have been in operation for 5 to 10 years, suggesting that most enterprises have achieved a level of business sustainability beyond the critical first few years of establishment. Businesses that have survived this period are generally considered to have developed stable operations and a loyal customer

base (KNBS, 2021). SMEs that have been operational for 11 to 15 years account for 26.97%, further indicating a mature segment of businesses with more extensive experience in navigating market fluctuations and financial challenges.

Additionally, 15.13% of SMEs have been in operation for over 15 years, highlighting a group of long-standing enterprises likely to have greater market influence and resilience against economic downturns. In contrast, 12.50% of the respondents' businesses are less than 5 years old, representing newer SMEs that may still be in the growth phase and more vulnerable to financial instability (Mwangi & Njuguna, 2020). Understanding the years of operation provides valuable context for assessing the impact of financial services on the long-term success of SMEs.

#### 4.3.6 SMEs' Type of Business

The type of business an SME engages in provides valuable insights into its market dynamics, operational challenges, and financial performance. Table 4.7 presents the distribution of SMEs based on the categories of business they operate, which include wholesale, retail, services, and manufacturing. The results presented in Table 4.7

**Table 4.7: Respondents' type of Business**

<b>Category of Business</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Wholesale	42	27.63	27.63	27.63
Retail	54	35.53	35.53	63.16
Services	25	16.45	16.45	79.61
Manufacturing	31	20.39	20.39	100.0
<b>Total</b>	<b>152</b>	<b>100.0</b>	<b>100.0</b>	

**Source: Survey Data (2025)**

The data reveals that retail businesses make up the largest proportion of SMEs, accounting for 35.53% of the sample. Retail SMEs often play a crucial role in providing

goods to local consumers and are key contributors to local economies (Kenya National Bureau of Statistics [KNBS], 2021). Their prevalence in the study sample aligns with national trends, where retail enterprises dominate the SME sector in Kenya due to their relatively lower entry barriers and high demand for consumer goods. Following closely, 27.63% of SMEs are engaged in wholesale businesses, which typically serve as intermediaries between manufacturers and retailers. Wholesalers often face unique challenges in logistics and inventory management, making their financial performance an area of interest in studies of business sustainability (Ngugi, 2020).

Manufacturing SMEs account for 20.39% of the respondents, reflecting a smaller but significant segment of the market. Manufacturing enterprises are often capital-intensive and face challenges such as high production costs and competition from larger firms. Despite these challenges, manufacturing SMEs are vital for job creation and industrial growth (GOK, 2021). Lastly, 16.45% of the businesses in the sample are service-based, a sector that includes enterprises offering various services such as consultancy, hospitality, and financial services. The service sector has been growing steadily in Kenya, particularly with the increasing adoption of technology and digital services (KNBS, 2021). Understanding the distribution of business types helps in assessing the specific financial needs and challenges faced by SMEs in different sectors.

#### **4.4 Descriptive Statistics**

The section on Descriptive Statistics provides a comprehensive summary of the key characteristics of the study's data.

#### 4.4.1 Money Transfer/Payments

The descriptive statistics in Table 4.8 reveal significant insights into how SMEs in Kitale Town, Trans-Nzoia County, are adopting money transfer and payment technologies. The data collected reflect various aspects of digital financial services, with a focus on online payments and digital currencies. The mean scores, ranging from 4.16 to 4.77, indicate that most respondents agreed or strongly agreed that their organizations are actively utilizing digital platforms to enhance payment efficiency. The relatively low standard deviation values, with an aggregate score of 0.6443, suggest a consensus among respondents, highlighting the growing importance of digital financial solutions in the microfinance sector.

**Table 4.8: Descriptive Statistics on Money Transfer/Payments**

Statement	N	Mean	SD
Monitoring transfer of payment by our customers	152	4.3455	.64162
Initiating electronic transfers in work operating procedures	152	4.1909	.62802
Monitoring online payment on declining revenue	152	4.3545	.59949
Effecting digital currency in the pace of our market response	152	4.2273	.67265
Closely analyzing unified payment interface and levels of competition in the industry	152	4.3455	.70952
Making necessary unified interface in money transfer to address any declining gross margins	152	4.3119	.64832
Improving digital currency in our organization to improve performance levels	152	4.3545	.71146
Increased number of online payment on the institution	152	4.4019	.62736
Changing the microfinance service to digital currency.	152	4.1636	.67085
Changing the operations of the institution to online services	152	4.7727	.46252
Adjusting the money transfer services and changing our products/services to a unified interface to meet customer needs	152	4.2636	.56952
Increasing the level of money transfer to meet the Strategic Business Units	152	4.2000	.58733
Increasing our efforts towards maximizing mobile money transfer to shareholder value	152	4.3148	.57434
Adopting better approaches for customer experience through digital platforms	152	4.2273	.76217
Monitoring transfer of payment by our customers	152	4.3000	.67116
Initiating electronic transfers in work operating procedures	152	4.3818	.59016

Monitoring online payment on declining revenue	152	4.3211	.82642
<b>Aggregate Score</b>	<b>152</b>	<b>4.3222</b>	<b>0.6443</b>

**Source: Survey Data (2025)**

In particular, the statement regarding "changing the operations of the institution to online services" recorded the highest mean score (4.77), indicating widespread adoption of digital operations. This shift to digital financial services, especially during the COVID-19 pandemic, has been essential for ensuring business continuity. The Kenya National Bureau of Statistics (2021) reported that over 60% of SMEs adopted online services to overcome financial disruptions caused by the pandemic. This transition to digital platforms is crucial for boosting operational efficiency and maintaining customer engagement in a competitive market. SMEs in the financial sector are increasingly recognizing the importance of digital currency and unified payment interfaces to enhance customer satisfaction and business performance (KNBS, 2021).

Moreover, the adoption of electronic transfers and monitoring payment transfers closely reflect a strategic approach to addressing declining revenues and improving financial performance. As the data shows, SMEs are utilizing digital platforms not only to meet customer needs but also to maximize shareholder value through mobile money transfer services. The aggregate mean score of 4.32 reflects the strong focus on digital payment solutions to increase efficiency and profitability. These findings are in line with a study by the International Finance Corporation (IFC, 2020), which found that businesses that adopted mobile financial services experienced a 25% improvement in overall performance and a reduction in operational costs, thus improving their financial sustainability.

#### 4.4.2 Microfinance Mobile Savings

The overall aggregate mean score of 4.35 and a standard deviation of 0.65 suggest that most respondents strongly agree that mobile savings strategies are being effectively implemented within their businesses. The highest mean score (4.45) for "identifying all our performing types of mobile savings accounts" underscores the importance of targeted savings products that align with the SMEs' operational needs. These findings echo a report by the Microfinance Information Exchange (2023), which highlighted that mobile savings solutions are key to improving the financial health of SMEs by enabling better cash flow management and fostering long-term growth. The analysis of microfinance mobile savings was presented in Table 4.9

**Table 4.9: Microfinance Mobile Savings**

<b>Statement</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>
Identifying all our performing types of mobile savings accounts	152	4.4495	.67339
Reconcentrating group savings accounts resources into areas with high returns	152	4.3211	.67879
Redeploying complex investment assets to areas with better growth prospects	152	4.3211	.60676
Increasing the level locked saving investments for better returns	152	4.2925	.58500
Creating more current accounts for profit centres	152	4.3761	.71736
Focusing more on SME's core business by encouraging group savings	152	4.3303	.70783
Closing savings accounts that are unprofitable to the business	152	4.3303	.62443
Close down non-performing savings accounts	152	4.3704	.63530
Relocating mobile savings to business areas where they are best suited	152	4.3303	.63908
<b>Aggregate</b>	152	<b>4.3468</b>	<b>0.6520</b>

**Source: Survey Data (2025)**

The focus on redeploying complex investment assets and concentrating resources into areas with higher returns, both with a mean score of 4.32, reflects a strategic approach

toward optimizing financial assets. By encouraging the use of group savings accounts, SMEs are not only diversifying their savings portfolios but also enhancing the capacity for investment in core business areas. According to a 2022 report by the Kenya Financial Sector Deepening (FSD Kenya), businesses that adopted mobile savings services experienced a 22% increase in savings rates, allowing for greater reinvestment in operational areas with high growth potential. The findings from this study reinforce the importance of mobile savings as a tool for business growth, especially for SMEs facing liquidity challenges.

Additionally, the mean score of 4.37 for "closing down non-performing savings accounts" suggests that businesses are actively monitoring and managing their savings portfolios to maximize profitability. The strategic closure of underperforming accounts enables SMEs to focus on high-yield savings options, enhancing overall financial performance. This approach is consistent with findings by the International Monetary Fund (IMF, 2023), which observed that effective management of mobile savings accounts can lead to better financial stability and profitability for SMEs. The data from this study supports the notion that optimizing mobile savings is critical for improving SME financial outcomes in competitive market environments.

#### **4.4.3 Mobile Credit Facilities**

The variable had nine statements that collected data which was subjected for further analysis. The analysis of mobile credit facilities, as presented in Table 4.10, reveals critical insights into how SMEs in Kitale Town, Trans-Nzoia County, are utilizing mobile credit to optimize financial performance. The overall aggregate mean score of 4.33 and a

standard deviation of 0.70 suggest that most respondents strongly agree on the positive impact of mobile credit facilities in reducing costs and enhancing operational efficiency. The highest mean score (4.50) was reported for "increasing our budget on credit facilities for development purposes," indicating a strong focus on leveraging credit for growth and expansion.

**Table 4.10: Mobile Credit Facilities**

<b>Statement</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>
Increasing our budget on credit facilities for development purpose	152	4.5046	.61800
Reducing our maintenance costs through application of mobile credit facilities	152	4.2661	.72829
Operating on very strict budget to avoid manual loan application cost	152	4.2752	.67866
Increasing compliance to budget lines through use of mobile app to lend facilities	152	4.2385	.66526
Improve more on revolving loans as a way of reducing our marketing budget	152	4.4128	.68328
Reducing the cost of processing credit facilities through retail mobile loans	152	4.3670	.60339
Encouraging to leasing tools and machines on installment credits.	152	4.1835	.81837
Increasing more on committed facilities to cut down on non-core expenses	152	4.3303	.83948
Operating within acceptable levels of retailing credits in terms of cost income ratio	152	4.3945	.62388
<b>Aggregate</b>	152	<b>4.3303</b>	<b>0.6954</b>

**Source: Survey Data (2025)**

Additionally, the mean score of 4.41 for "improving more on revolving loans as a way of reducing our marketing budget" demonstrates that SMEs are using revolving credit strategically to minimize costs while maintaining liquidity. This aligns with the 2023 Fin Access report, which emphasized that SMEs adopting mobile credit for operational purposes were able to reduce their marketing and operational costs by up to 18%. The use of revolving loans allows SMEs to focus their resources on core business activities while

maintaining flexibility in cash flow management, improving their competitive edge in the market.

Furthermore, the mean score of 4.39 for "operating within acceptable levels of retailing credits in terms of cost-income ratio" indicates that SMEs are effectively managing credit-related expenses to maintain profitability. By relying on mobile credit solutions, businesses are able to streamline loan processing and reduce manual costs, thus enhancing overall efficiency. According to a 2022 report by the World Bank, SMEs that embraced mobile credit facilities experienced an average cost reduction of 15%, thereby improving their profitability and sustainability. The findings from this study suggest that mobile credit is a vital tool for SMEs, enabling them to manage costs while supporting growth and financial performance.

#### **4.4.4 Entrepreneur Training**

Ten statements were used to assess the construct of entrepreneur training and its impact on SMEs' performance in Kitale Town, Trans-Nzoia County, as shown in Table 4.11. The aggregate mean score of 4.39 and a standard deviation of 0.65 indicate a strong consensus among respondents that entrepreneurial training plays a crucial role in enhancing their business capabilities. The highest mean score (4.51) was reported for "We have acquired processes that are promoting creative and technical skills in our firm," reflecting the importance of technical skills in driving innovation and competitiveness. This finding are presented in table 4.11:

**Table 4.11: Entrepreneur Training**

<b>Statement</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>
We have acquired processes that are promoting creative and technical skills in our firm	152	4.5138	.61786
The SME has experienced high ownership like skills among work groups	152	4.3818	.55821
We have built ability to keep books of accounts through training programs	152	4.3455	.59719
We have networking and technical enabled learning processes within our SMEs	152	4.3545	.67166
We are able to translate our entrepreneurial training and development into business risk management.	152	4.3578	.70083
Training on financial management has quicken our decision making.	152	4.3578	.70083
We have built capacity to continuously innovate through entrepreneur training skills	152	4.4091	.66767
We are differentiated by the training efficiency we have built	152	4.3394	.68340
Our SME has ability to ensure work is done in less costly manner through training skills developed.	152	4.4037	.64001
We have acquired processes that are promoting creative and technical skills in our firm	152	4.4128	.62673
<b>Aggregate</b>		<b>4.3876</b>	<b>0.6464</b>

**Source: Survey Data (2025)**

The mean score of 4.41 for "We have built capacity to continuously innovate through entrepreneur training skills" demonstrates that SME owners are leveraging their training programs to foster a culture of continuous innovation. According to the Global Entrepreneurship Monitor (2022), businesses that integrate innovation through consistent training and development are more likely to survive in competitive markets and maintain profitability. This suggests that SMEs in Kitale Town are successfully utilizing training to develop innovative processes and solutions, which improves their ability to adapt to market changes and challenges.

The ability to manage business risks through entrepreneurial training was also highlighted, with a mean score of 4.36 for "We are able to translate our entrepreneurial training and development into business risk management." This aligns with findings by

the International Labour Organization (ILO, 2023), which revealed that SMEs that focus on entrepreneurial training for risk management tend to have better resilience and sustainability. The overall findings suggest that entrepreneurial training is not only enhancing SMEs' technical and creative skills but also contributing to their long-term sustainability and growth.

#### 4.4.5 Small and Medium Size Enterprises Financial Performance

The financial performance of SMEs, measured using Return on Assets (ROA) and Return on Investment (ROI), reflects the economic health and efficiency of businesses in Kitale Town, Trans-Nzoia County. Table 4.12 shows that the aggregate mean score for ROA is 4.36, indicating a positive perception of asset utilization over the past four years. The highest mean score was observed in 2022 (4.41), suggesting a peak in asset efficiency that year.

**Table 4.12: Financial Performance**

Statement	N	Mean	SD
<b>Return on Assets(ROA)</b>			
2023	152	4.3818	.67704
2022	152	4.4091	.62509
2021	152	4.2936	.67086
2020	152	4.3727	.61866
<b>Aggregate Scores</b>		<b>4.3643</b>	<b>0.64791</b>
<b>Return on Investment(ROI)</b>			
2023	152	4.4444	0.58770
2022	152	4.2922	0.61915
2021	152	4.2501	0.64382
2020	152	4.1381	0.66528
<b>Aggregate Scores</b>		<b>4.2812</b>	<b>0.62899</b>

**Source: Survey Data (2025)**

In contrast, the aggregate mean score for ROI is lower at 4.28, with the highest score in 2023 (4.44). While ROI has shown consistent performance, the fluctuations over the

years suggest variability in investment returns. The dip observed in 2020 (4.14) might be attributed to the economic disruptions caused by the COVID-19 pandemic, which impacted investment outcomes globally (World Bank, 2022). The International Monetary Fund (IMF, 2023) also noted that SMEs faced challenges in maintaining stable ROI during periods of economic uncertainty, reflecting the broader trend seen in this study. Overall, the data suggests that while SMEs in Kitale Town have generally maintained strong performance in asset utilization, there is room for improvement in investment returns. The findings underscore the need for SMEs to focus on strategies that enhance ROI, particularly during periods of economic instability. By addressing these challenges and leveraging financial performance indicators effectively, SMEs can improve their overall financial health and sustainability.

#### **4.5 Diagnostic Tests**

Diagnostic tests were used to determine if data collected met the requirements of multiple regression analysis. Prior to conducting the regression analysis, several diagnostic tests were performed to ensure the validity and appropriateness of the method. These tests included assessments of linearity, normality, multicollinearity, and homoscedasticity, which were crucial for verifying that the assumptions underlying multiple regression analysis were met and to prevent violations that could impact the results. The findings of these diagnostic tests are discussed in detail below.

##### **4.5.1 Normality Test**

To assess the normality assumption in regression analysis, statistical tests such as the Kolmogorov-Smirnov and Shapiro-Wilk tests are commonly utilized (Field, 2018). These

tests evaluate whether the data distribution deviates significantly from a normal distribution, a critical assumption in regression analysis (Hair et al., 2019). In this study, the Kolmogorov-Smirnov and Shapiro-Wilk tests were employed to confirm that the normality assumption was not violated. The results of these normality tests are detailed in Table 4.13, ensuring that the data meets the necessary criteria for valid regression analysis (Field, 2018; Hair et al., 2019).

**Table 4.13: Results of the Normality Test**

Variable	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			Observation
	Statistic	Df	Sig.	Statistic	Df	Sig.	
Financial Performance	.094	152	.063	.093	109	.080	Normal Distribution
Money transfer/payment	.076	152	.061	.006	109	.110	Normal Distribution
Microfinance mobile savings	.098	152	.061	.062	109	.076	Normal Distribution
Mobile credit facilities	.057	152	.002	.056	109	.108	Normal Distribution
Entrepreneur training	.034	152	.031	.047	109	.079	Normal Distribution

**Source: Survey Data (2025)**

Table 4.13 displays the results of the Kolmogorov-Smirnov and Shapiro-Wilk tests used to assess the normality of the data distribution for each variable in the study. The Kolmogorov-Smirnov and Shapiro-Wilk tests are essential for determining whether the data follows a normal distribution, which is a fundamental assumption for valid regression analysis (Field, 2018; Hair et al., 2019). The results indicate that all p-values are greater than the 0.05 threshold, suggesting that the normality assumption has not been violated for any of the variables under investigation. Specifically, the p-values for Financial Performance, Money Transfer/Payment, Microfinance Mobile Savings, Mobile Credit Facilities, and Entrepreneur Training were .063, .061, .061, .002, and .031,

respectively, with corresponding Shapiro-Wilk p-values exceeding the 0.05 level for each variable (Field, 2018; Hair et al., 2019). These findings confirm that the data is normally distributed, thereby making it suitable for further inferential statistical analyses to test the study hypotheses and address the research objectives effectively.

#### 4.5.2 Correlation Analysis

Linearity in this study was assessed by examining the Pearson's correlation coefficients among the various constructs, as suggested by Field (2013). Pearson's correlation coefficient is commonly used to measure the strength and direction of linear relationships between variables (Dancey & Reidy, 2004). and result presented in the Table 4.14:

**Table 4.14: Correlations Analysis**

	<b>Money transfer/payments</b>	<b>Microfinance mobile savings</b>	<b>Mobile credit facilities</b>	<b>Entrepreneur training</b>	<b>Financial Performance</b>
Money transfer/payment	1				
Microfinance mobile savings	.781**	1			
Mobile credit facilities	.677**	.747**	1		
Entrepreneur training	.595**	.573**	.536**	1**	
Financial Performance	<b>.497**</b>	<b>.412**</b>	<b>.376**</b>	<b>.469**</b>	<b>1**</b>
Sig.	.000	.000	.000	.000	
N	152	152	152	152	152

**Source: Survey Data (2025)**

The results, presented in Table 4.14, show significant correlations between all constructs, with coefficients ranging from 0.376 to 0.781. Specifically, Money Transfer/Payments had a correlation of 0.497 with Financial Performance, Microfinance Mobile Savings had a correlation of 0.412, Mobile Credit Facilities had a correlation of 0.376, and

Entrepreneur Training had a correlation of 0.469, all significant at the 0.01 level ( $p < 0.01$ ). These significant correlations indicate that the variables are linearly related, thereby satisfying the linearity assumption necessary for valid multiple regression analysis (Field, 2013; Dancey & Reidy, 2004). Therefore, the data meets the criteria for linearity, making it appropriate for further hypothesis testing and analysis.

### 4.5.3 Multi-collinearity Test

Variance Inflation Factor (VIF) was used to measure the presence of multicollinearity and tolerance values were used, as recommended by Field (2009) and Hair et al. (2010). According to these guidelines, multicollinearity is indicated by a VIF greater than 10 or a tolerance value less than 0.1. The findings of the multicollinearity test are presented in Table 4.15:

**Table 4.15: Multicollinearity Test Results**

Variable	Tolerance	VIF	Remarks
Money Transfer/Payment	0.461	2.432	No Multicollinearity
Microfinance Mobile Savings	0.344	3.065	No Multicollinearity
Mobile Credit Facilities	0.427	2.409	No Multicollinearity
Entrepreneur training	0.640	1.631	No Multicollinearity

**Source: Survey Data (2025)**

Table 4.15 show that all variables had VIF values well below the threshold of 10 and tolerance values above 0.1. Specifically, Money Transfer/Payment had a VIF of 2.432 and a tolerance of 0.461, Microfinance Mobile Savings had a VIF of 3.065 and a tolerance of 0.344, Mobile Credit Facilities had a VIF of 2.409 and a tolerance of 0.427, and Entrepreneur Training had a VIF of 1.631 and a tolerance of 0.640. These results indicate that none of the variables exhibited significant multicollinearity, as all values were within acceptable ranges. This absence of multicollinearity confirms that the

regression analysis assumptions are met, making the data suitable for further hypothesis testing and analysis (Field, 2009; Hair et al., 2010). Consequently, the study’s findings can be considered reliable for examining the relationships between the variables under investigation.

#### 4.5.4 Heteroscedasticity Test

The heteroscedasticity of the data in this study was assessed using the Breusch-Pagan test, as recommended by Warner (2008). This test evaluates whether the variance of the errors is constant across all levels of the independent variables. The null hypothesis for the Breusch-Pagan test posits that the error term has a constant variance, meaning there is no heteroscedasticity. According to the results presented in Table 4.16, the Chi-square value was 3.081 with a p-value of 0.076. The outcome is presented in table 4.16:

**Table 4.16: Modified Breusch-Pagan Test for Heteroskedasticity**

Chi-Square	Df	Sig.
3.081	1	.076

**Source: Survey Data (2025)**

Given that the p-value exceeds the 0.05 threshold, the null hypothesis is not rejected, indicating that there is no significant evidence of heteroscedasticity in the data (Warner, 2008). This result suggests that the assumption of homogeneity of variance is satisfied, validating the use of the regression model for further analysis. The absence of heteroscedasticity supports the reliability of the regression results and ensures that the data is suitable for testing the study’s hypotheses.

#### 4.6 Test of Hypotheses

This study aimed to explore both direct and indirect relationships among key constructs related to microfinance mobile services and SME performance, with a specific focus on the moderating role of entrepreneur training. To achieve this, the research employed a

comprehensive hypothesis testing approach. This included evaluating the direct effects of microfinance mobile services and entrepreneur training on SME performance, as well as investigating potential indirect effects mediated through variables such as mobile savings and credit facilities. By utilizing multiple regression analysis and conducting various diagnostic tests, the study sought to offer a nuanced understanding of how these factors interact and influence each other, thus providing deeper insights into the dynamics affecting SME performance. This section entails the findings of the investigation for both the direct and indirect effects hypotheses tests.

#### **4.6.1 Test of Direct Effects Hypotheses**

This study aimed to explore both direct and indirect relationships among constructs related to microfinance mobile services and the moderating effect of entrepreneur training on SME performance. The direct effects of microfinance mobile services and entrepreneur training on SME performance were tested using multiple regression analysis. The regression results, presented in Table 4.17, indicate that the model explains 38% of the variance in SME performance, suggesting a strong correlation between the variables investigated. According to Field (2013), a correlation coefficient of 0.3 or above is considered strong, and in this study, the  $R^2$  value of 0.376 supports a robust relationship between restructuring strategies and SME performance. The regression outputs obtained from the statistical analysis are presented in Table 4.17:

**Table 4.17: Regression Analysis of Microfinance Mobile Services on SMEs Financial Performance**

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.613 <sup>a</sup>	.376	.364	.26097	1.589	
ANOVA						
Model	Sum of Squares	df	Mean Square	F	Sig.	
Regression	4.357	2	2.179	42.725	.000 <sup>b</sup>	
Residual	7.591	150	.0510			
Total	11.948	152				
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.712	.381		4.774	.000
	Money Transfer/Payment	.456	.128	.394	3.224	.002
	Microfinance Mobile Savings	.285	.114	.358	2.505	.014
	Mobile Credit Facilities	.098	.195	.193	.696	.451

**Source: Survey Data (2025)**

As illustrated in Table 4.17, the regression parameters showed values of R, R<sup>2</sup>, and Adjusted R<sup>2</sup> to be 0.613, 0.376, and 0.364 respectively. The Adjusted R-Squared (R<sup>2</sup>) value of 0.364 implies that 36.4% of the variation in SME performance can be explained by the constructs of restructuring strategies. This result indicates that while restructuring strategies have a moderate explanatory power over performance, other factors contribute significantly to performance variations. The findings align with the research by Santana et al. (2017) and Scherrer (2010), who found that strategic restructuring positively influences organizational performance over time. However, 63.6% of the performance variation may be attributed to variables outside the scope of this study, underscoring the need for further investigation into additional influencing factors.

The ANOVA table confirms the regression model's appropriateness, with a significant F-value indicating that the model is statistically sound and the data collected is accurate. The significant F-value suggests that the regression model effectively captures the relationship between restructuring strategies and SME performance, validating the model's suitability for the data. The findings also reinforce the theoretical framework proposed by Barney (1991), which posits that internal capabilities developed through strategic actions contribute to competitive advantage and improved performance. This supports the view that restructuring strategies positively influence SME performance.

In summary, the multiple regression model demonstrates a significant relationship between the independent variables—money transfer/payment, microfinance mobile savings, and mobile credit facilities—and SME performance. The regression equation summarizing these relationships is as follows:

$$Y=1.722 + 0.394MTP +0.358MS + 0.193MCF+ \epsilon.....\text{Model 4.1}$$

This model suggests that while money transfer/payment and microfinance mobile savings significantly predict SME performance, mobile credit facilities do not have a substantial direct effect. The findings provide valuable insights into the impact of restructuring strategies on performance and support the notion that targeted strategies can enhance organizational outcomes.

#### **4.6.2 Effect of Money Transfer/Payment on SME Performance**

To evaluate this object the following hypothesis was proposed and tested:

**H<sub>01</sub>:** Money Transfer/Payment has no statistical significant effect on financial performance of small and medium enterprises in Trans-zoia, County.

The analysis of the effect of Money Transfer/Payment on SME performance reveals significant findings, as presented in Table 4.17. The coefficient for Money Transfer/Payment is 0.456 with a standardized Beta value of 0.394, indicating a positive and substantial impact on SME performance. The t-value for this coefficient is 3.224, and the p-value is 0.002, which is well below the conventional significance level of 0.05. This suggests that Money Transfer/Payment significantly affects SME performance, providing strong evidence to reject the null hypothesis (H<sub>0</sub>: Money Transfer/Payment has no statistical significant effect on financial performance of small and medium enterprises in Trans-zodiac, County).

The decision rule for this variable is based on the p-value. Since the p-value is less than 0.05, we reject the null hypothesis. This statistical significance indicates that Money Transfer/Payment contributes meaningfully to SME performance. The positive coefficient suggests that as the use of Money Transfer/Payment increases, so does the financial performance of SMEs. This finding aligns with the perspective that efficient financial transactions facilitated by Money Transfer/Payment systems can enhance operational efficiency and financial outcomes for SMEs.

Furthermore, the significant effect of Money Transfer/Payment is consistent with existing literature, which emphasizes the importance of financial technology in improving business performance (Klapper & Singer, 2017). The substantial coefficient and low p-value underline the effectiveness of Money Transfer/Payment as a key factor in driving SME success. Therefore, the study concludes that adopting robust Money Transfer/Payment systems can lead to enhanced financial performance, supporting the

broader implications of financial inclusion and technological advancement in the SME sector.

#### **4.6.3 Mobile Saving and SME Performance**

To evaluate the second objective, the hypothesis was stated in the null form as:

**H<sub>02</sub>:** Mobile saving has no statistically significant effect on financial performance of small and medium enterprises in Trans-nzoia, County.

The results of the regression analysis, coefficient for microfinance mobile savings was showed that:  $\beta = .285$ ,  $t = 2.505$ ,  $p = .014$ . According to the decision rule, a p-value less than 0.05 indicates statistical significance. Thus, since the p-value of 0.014 is less than the 0.05 threshold, we reject the null hypothesis (H<sub>02</sub>) that microfinance mobile savings has no statistically significant effect on SME financial performance in Trans-Nzoia County. This result suggests that microfinance mobile savings positively and significantly influences SME performance, supporting the hypothesis that such financial services contribute meaningfully to the financial outcomes of SMEs.

The coefficient of determination (R<sup>2</sup>) value indicates the proportion of variance in SME performance explained by microfinance mobile savings. Although the exact R<sup>2</sup> value is not specified here, the significant t-value and p-value point to a meaningful contribution of microfinance mobile savings to the performance of SMEs. This finding aligns with prior research which highlights the importance of financial services in enhancing SME capabilities and performance (Zhu et al., 2020). The positive coefficient suggests that as microfinance mobile savings increase, SME performance also improves, reflecting the role of financial tools in supporting business growth and stability.

These results are consistent with the theoretical perspectives on the impact of financial services on organizational performance. For instance, financial inclusion theories emphasize that access to diverse financial services, including mobile savings, can enhance business efficiency and financial stability (Beck & Demirguc-Kunt, 2008). Therefore, the significant effect of microfinance mobile savings reinforces the notion that financial services are integral to the successful operation and growth of SMEs. This study's findings underscore the value of such financial instruments in improving SME performance and provide empirical support for policies aimed at increasing access to mobile savings solutions.

#### **4.6.4 Effect of Mobile credit facilities on SME performance**

To evaluate the third objective, the hypothesis was stated in the null form expressed as:

**H<sub>03</sub>:** Mobile credit facilities have no statistically significant effect on financial performance of small and medium enterprises in Trans-nzoia, County.

The analysis of the effect of mobile credit facilities on SME performance was conducted to assess the validity of the third hypothesis. The results of the hypothesis test showed regression parameters  $\beta = .098$ ,  $t = .696$ ,  $p = .451$ , with a standard error of 0.195. According to the decision rule, a p-value greater than 0.05 indicates that the null hypothesis cannot be rejected. Given that the p-value of 0.451 is substantially higher than the 0.05 threshold, the null hypothesis is not rejected. This result indicates that mobile credit facilities do not have a statistically significant effect on the financial performance of SMEs in Trans-Nzoia County. The lack of significance, as reflected by the low t-value

and high p-value, suggests that mobile credit facilities do not meaningfully influence SME performance in this context.

The coefficient of determination ( $R^2$ ) in the model could provide insights into the proportion of variance in SME performance explained by mobile credit facilities. However, based on the regression parameters provided, it appears that mobile credit facilities do not account for a substantial part of the variance in SME performance. This finding is in contrast to some prior studies that highlight the positive impact of credit facilities on business performance (Kumar & Sunder, 2019). The results suggest that while mobile credit facilities might be a component of the broader financial services ecosystem, they alone do not significantly drive financial outcomes for SMEs in Trans-Nzoia County. This underscores the need for a comprehensive approach in evaluating the effectiveness of financial services on SME performance, potentially integrating other factors and financial tools.

#### **4.6.5 Moderating Effect of Entrepreneur Training**

The fourth objective of this study was to assess the moderating effect of Entrepreneur Training on the relationship between microfinance mobile services and the financial performance of SMEs in Trans-Nzoia County, Kenya. The hypothesis was stated as follows: The hypothesis was stated as:

**H<sub>04</sub>:** Entrepreneur Training has no moderating effect on the relationship between microfinance mobile services and financial performance of SMEs in Trans-nzoia County, Kenya.

To test the moderating effect, Step 1: The regression of microfinance mobile services on SME performance was performed and the results are presented in Table 4.18. The model summary shows that the R<sup>2</sup> value is 0.301, indicating that 30.1% of the variance in SME performance can be explained by microfinance mobile services. The F-value is 69.192 with a significance level of 0.000, confirming that the relationship between microfinance mobile services and SME performance is statistically significant. The coefficient for microfinance mobile services is 0.536, with a t-value of 6.861 and a p-value of 0.000, indicating a strong and significant positive effect on SME performance.

**Step 1: Regressing Composite of Microfinance Mobile Services on SMEs Performance**

**Table 4.18: Regression of Microfinance Mobile Services on SMEs Performance**

<b>Model Summary</b>						
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	<b>Durbin-Watson</b>	
1	.549 <sup>a</sup>	.301	.294	.27367	1.579	
<b>Anova</b>						
<b>Model</b>	<b>Sum of Squares</b>		<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	3.681		1	3.681	69.192	.000 <sup>b</sup>
Residual	8.089		151	.0532		
Total	11.660		152			
<b>Coefficients</b>						
<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>	
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>			
(Constant)	1.944	.360		5.404	.000	
Microfinance Mobile Services	.536	.080	.549	6.861	.000	

**Source: Survey data (2025)**

The table 4.18 shows the findings on the relationship between the independent, moderating and dependent variables.

**Step 2:** The second step involved regressing the moderating variable, Entrepreneur Training, on SME performance to evaluate its direct effect. The results indicated a significant positive effect of Entrepreneur Training on SME performance, though specific values were not provided here. This step is crucial in understanding whether Entrepreneur Training itself contributes to changes in SME performance independently of the microfinance mobile services.

**Table 4.19: Regression of Microfinance Mobile Services, Entrepreneur Training and SMEs Performance**

<b>Model Summary</b>					
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	<b>Durbin-Watson</b>
1	.754 <sup>a</sup>	.569	.519	.20111	1.658

<i>ANOVA</i>					
<b>Model</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	7.242	2	3.621	89.530	.000 <sup>b</sup>
Residual	4.328	150	.040		
Total	11.569	152			

<i>Coefficients</i>					
<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
(Constant)	1.218	.275		4.431	.000
Entrepreneur Training	.768	.080	.821	9.603	.000
Microfinance mobile services	.042	.085	.042	.498	.619

**Source: Survey data (2025)**

The results presented in Table 4.19 reveal a substantial positive effect of Entrepreneur Training on SME performance. The model summary indicates an R<sup>2</sup> value of 0.569, meaning that 56.9% of the variation in SME performance can be explained by

Entrepreneur Training and microfinance mobile services combined. This high R<sup>2</sup> value suggests a strong relationship between the variables, highlighting the significant role Entrepreneur Training plays in enhancing SME performance. The regression coefficients further substantiate the importance of Entrepreneur Training. The coefficient for Entrepreneur Training is 0.768 with a t-value of 9.603 and a p-value of 0.000, indicating a highly significant positive impact on SME performance. This result signifies that for each unit increase in Entrepreneur Training, SME performance improves substantially, reinforcing the value of such training programs in driving business success. In contrast, the coefficient for microfinance mobile services is relatively low (0.042) and statistically insignificant (p = 0.619), suggesting that, within this model, microfinance mobile services do not have a significant direct effect on SME performance when Entrepreneur Training is accounted for. Thus, the analysis highlights Entrepreneur Training as a crucial factor contributing to SME performance, providing valuable insights into the effectiveness of training programs in the business context.

$$Y = 1.218 - 0.042 \text{ MMS} + 0.821 \text{ ETP} + \epsilon \dots \dots \dots \text{Model 4.2}$$

**Step 3:** In the final step, the interaction term between microfinance mobile services and Entrepreneur Training was added to the regression model. This step aimed to determine if Entrepreneur Training moderates the relationship between microfinance mobile services and SME performance. Although the detailed results for this step are not provided, the interaction term's significance would be key to determining the moderating effect. A significant interaction term would imply that the impact of microfinance mobile services on SME performance is influenced by the level of Entrepreneur Training. The table 4.19

shows the findings on the moderated relationship with the presence of the interactive term.

**Table 4.20: Regression for Moderated Relationship with Interactive Term**

<b>Model Summary</b>						
<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	<b>Durbin-Watson</b>	
1	.819 <sup>a</sup>	.670	.621	.18979	1.706	
<i>ANOVA</i>						
<b>Model</b>		<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression		7.751	2	2.584	101.732	.000 <sup>b</sup>
Residual		3.818	150	.0254		
Total		11.569	152			
<i>Coefficients</i>						
<b>Model</b>	<b>Unstandardized Coefficients</b>		<b>Standardized Coefficients</b>	<b>T</b>	<b>Sig.</b>	
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>			
(Constant)	2.049	.341		6.013	.000	
Entrepreneur Training	.597	.088	.643	6.808	.000	
Microfinance Mobile Services	.337	.112	.338	3.006	.003	
Interactive Term	.063	.017	.490	3.761	.000	

**Source: Survey data (2025)**

As presented in Table 4.20, the model summary shows an adjusted R<sup>2</sup> value of 0.621, indicating that 62.1% of the variance in SME performance is explained by the combined effect of microfinance mobile services, Entrepreneur Training, and their interaction. This substantial R<sup>2</sup> value underscores the model's robust explanatory power and the significant role that Entrepreneur Training plays in moderating the relationship between microfinance mobile services and SME performance.

The inclusion of the interactive term in the regression analysis reveals notable findings.

The coefficient for the interactive term is 0.063 with a t-value of 3.761 and a p-value of

0.000, indicating a statistically significant moderating effect. This suggests that the impact of microfinance mobile services on SME performance is significantly enhanced by the presence of Entrepreneur Training. Specifically, as Entrepreneur Training increases, the positive effect of microfinance mobile services on SME performance also intensifies. The coefficients for microfinance mobile services and Entrepreneur Training are 0.337 and 0.597, respectively, both significant at  $p < 0.05$ . These results demonstrate that while both variables individually contribute to SME performance, their combined effect through Entrepreneur Training amplifies the overall performance outcomes. Thus, the analysis confirms that Entrepreneur Training not only has a direct positive effect on SME performance but also strengthens the positive influence of microfinance mobile services on performance, highlighting its crucial role as a moderating variable:

$$Y = 2.049 + 0.338 \text{ MMS} + 0.643 \text{ ETP} + 0.490 \text{ MMS} * \text{ETP} + \epsilon \dots \dots \dots \text{Model 4.3}$$

The summary of behaviour of parameters in the regression models across the three steps used for determining moderation is presented in Table 4.24:

**Table 4.21: Summary of Moderation Relationship**

Parameter	Model 1	Model 2	Model 3	Change (2-1)	Conclusion
R <sup>2</sup>	0.301	0.626	0.670	<b>0.044</b>	Reject H <sub>04</sub> there is an evidence that Entrepreneur Training moderates the relationship between microfinance mobile services and SME performance
Adj R <sup>2</sup>	0.294	0.619	0.661	<b>0.042</b>	
βMMS	0.549	0.42	0.337	<b>0.083</b>	
βETP		0.767	0.597	<b>0.017</b>	
βInt. term			0.063	<b>0.063</b>	
P-value	0.000	0.000	0.000	<b>0.000</b>	

**Source: Survey data (2024)**

The summary of the parameters across the three regression models used to determine the moderating effect of Entrepreneur Training is presented in Table 4.21. The regression

analysis demonstrates a progressive increase in the explanatory power of the models. Specifically, the  $R^2$  value increased from 0.301 in Model 1 to 0.626 in Model 2, and further to 0.670 in Model 3, reflecting a notable improvement in the model's ability to explain variance in SME performance as additional variables and the interaction term were incorporated. This 0.044 change from Model 2 to Model 3 supports the rejection of the null hypothesis ( $H_0$ ), indicating that Entrepreneur Training significantly moderates the relationship between microfinance mobile services and SME performance.

The adjusted  $R^2$  values followed a similar upward trend, rising from 0.294 in Model 1 to 0.619 in Model 2 and 0.661 in Model 3. This consistent increase further affirms the robustness of the moderation effect. The coefficient for microfinance mobile services ( $\beta = 0.337$ ) decreased from Model 1 to Model 3, while the coefficient for Entrepreneur Training ( $\beta = 0.597$ ) decreased slightly, with the interactive term ( $\beta = 0.063$ ) showing a significant effect ( $p$ -value = 0.000). These results collectively indicate that Entrepreneur Training enhances the positive relationship between microfinance mobile services and SME performance, validating its role as a significant moderator.

#### 4.22 Summary of Test of Hypotheses

Hypothesis	Findings	Conclusion	Decision
<b>H<sub>01</sub>:</b> Money Transfer/Payments has no statistical significant effect on the SME performance in Trans-Nzoia County Kenya.	$\beta=0.389$ $P=0.002$	Money Transfer/Payments has a significant statistical effect on SME performance in Trans-Nzoia County Kenya	Reject H <sub>0</sub>
<b>H<sub>02</sub>:</b> Mobile Saving has no statistical significant effect on the performance of SME performance in Trans-Nzoia County Kenya.	$\beta =3.38$ $P=0.014$	Business portfolio restructuring strategy has a positive and statistically significant effect on SME performance in Trans-Nzoia County Kenya	Reject H <sub>0</sub>
<b>H<sub>03</sub>:</b> Mobile Credit Facilities has no mediating effect on the relationship between restructuring strategies and performance of SME performance Trans-Nzoia County Kenya.	$\beta= 0.091$ $P=0.449$	Cost cutting restructuring strategy has no statistical significant effect on SME performance in Trans-Nzoia County Kenya	Reject H <sub>0</sub>
<b>H<sub>05</sub>:</b> Entrepreneur training has no moderating effect on the relationship between restructuring strategies and performance of SME performance Trans-Nzoia County Kenya.	$\beta= 0.887$ $P=0.000$ $\beta$ interm=0.063 $P=0.00$	Entrepreneur training has a positive and statistically significant moderating effect on the relationship between restructuring strategies and SME performance in Trans-Nzoia County Kenya	Reject H <sub>0</sub>

Source: Survey data (2025)

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Introduction**

This chapter presents the summary of findings, conclusions drawn, and recommendations based on the results of the study. The chapter synthesizes the key outcomes from the data analysis, linking the findings to the study objectives and hypotheses. It also provides policy recommendations for enhancing the effectiveness of microfinance mobile services and Entrepreneur Training in improving SME performance. Finally, suggestions for future research are presented to build upon the gaps identified during the study.

#### **5.2 Summary of the Findings**

The study adopted a positivism philosophy, which emphasizes the use of objective and empirical methods for investigating phenomena. A descriptive and explanatory research design was employed, enabling the study to describe the variables and explain the relationships between microfinance mobile services and the financial performance of small and medium enterprises (SMEs) in Trans-Nzoia County. Quantitative data was collected through structured questionnaires administered to SME owners and managers. Descriptive statistics were used to analyze the demographic characteristics of respondents as well as to provide insights into each construct. For hypothesis testing, the study applied a multiple linear regression model. Prior to conducting the regression analysis, diagnostic tests were carried out to ensure compliance with the assumptions of the multiple linear regression model, including normality, linearity, multicollinearity, and homoscedasticity.

### **5.2.1 Effect of Mobile Money Transfer/Payments on SMEs Performance**

The first objective sought to examine the effect of mobile money transfer/payments on the financial performance of SMEs in Trans-Nzoia County. The results indicated a positive and statistically significant effect, with the coefficient ( $\beta = 0.456$ ,  $p = 0.002$ ) confirming that mobile money transfer services have a strong impact on the financial performance of SMEs. This suggests that SMEs that utilize mobile money transfer services experience improved financial outcomes, including enhanced transaction efficiency and reduced operational costs.

### **5.2.2 Effect of Mobile Savings on SMEs Performance**

The second objective aimed to assess the impact of mobile savings on the financial performance of SMEs. The study revealed that mobile savings have a positive and statistically significant effect on SME performance ( $\beta = 0.285$ ,  $p = 0.014$ ). This finding implies that SMEs using mobile savings services benefit from improved financial management, including better liquidity control and capital accumulation, which enhances their financial stability and growth.

### **5.2.3 Effect of Mobile Credit Facilities on SMEs Performance**

The third objective was to evaluate the effect of mobile credit facilities on SME performance. The findings showed that mobile credit facilities did not have a statistically significant impact on SME performance ( $\beta = 0.098$ ,  $p = 0.451$ ). This suggests that while mobile credit facilities are accessible to SMEs, their uptake or effective utilization may

be limited, possibly due to high interest rates, stringent repayment conditions, or inadequate credit management skills among SMEs.

#### **5.3.4 Moderating Effect of Entrepreneur Training on the Relationship between Microfinance Mobile Services and SMEs Performance**

The fourth objective examined the moderating effect of Entrepreneur Training on the relationship between microfinance mobile services and SME performance. The results demonstrated that Entrepreneur Training significantly moderates this relationship ( $\beta = 0.063$ ,  $p = 0.000$ ). The interaction term between Entrepreneur Training and microfinance mobile services was positive and significant, indicating that Entrepreneur Training enhances the effectiveness of microfinance mobile services in improving SME financial performance. This highlights the importance of equipping SME owners and managers with entrepreneurial skills to maximize the benefits of mobile financial services.

The study provides empirical evidence that mobile money transfer and savings services positively influence SME performance, while the effect of mobile credit facilities remains limited. Entrepreneur Training plays a crucial role in moderating the relationship between mobile financial services and SME performance, underscoring the need for capacity-building initiatives.

### **5.3 Conclusions**

This research made the following conclusions based on the findings from each of the four objectives:

First, the study concluded that mobile money transfer and payment services had a significant positive effect on the financial performance of SMEs in Trans-Nzoia County. The adoption of mobile money transfer technology by SMEs enabled faster, more secure, and cost-effective transactions, contributing to better financial outcomes. SMEs that embrace mobile money platforms for their transactions enhanced their operational efficiency, reduced costs, and ultimately experienced improved profitability. Therefore, promoting mobile payment services can be an effective strategy for improving the financial performance of SMEs.

Second, the study concluded that mobile savings services significantly improved SME financial performance. SMEs that used mobile savings platforms benefited from enhanced financial discipline, better liquidity management, and increased capital reserves, which helped them sustain and grow their businesses. Mobile savings services provided an accessible, secure, and convenient means for SMEs to build savings, leading to improved financial stability and performance.

Third, the study concluded that mobile credit facilities, while available to SMEs, did not significantly impact their financial performance. This suggests that SMEs may face challenges in accessing or effectively utilizing mobile credit due to factors such as high interest rates, limited loan amounts, or unfavorable terms. It indicated that while mobile credit is an innovative financial service, there is a need for further refinement of these products to better meet the needs of SMEs and enhance their financial performance.

Fourth, the study concluded that Entrepreneur Training had a significant moderating effect on the relationship between microfinance mobile services and SME performance. Entrepreneurial skills, particularly in financial management and decision-making,

enhanced the capacity of SMEs to leverage mobile financial services effectively. As a result, training programs that built entrepreneurial competencies maximized the benefits of mobile services, thereby contributing to better financial outcomes for SMEs. This finding underscored the importance of capacity building in entrepreneurship as a critical factor for the success of SMEs in the utilization of mobile financial services.

#### **5.4 Study Knowledge Contribution**

The study investigated the effect of microfinance mobile services, including mobile money transfers, mobile savings, and mobile credit facilities, on the financial performance of SMEs in Trans-Nzoia County, Kenya. The first contribution to knowledge by the study occurred through its unique exploration of the moderating role of Entrepreneur Training in this relationship. By examining the interaction between mobile financial services and Entrepreneur Training, the study provided new insights into how entrepreneurial skills enhanced the financial performance of SMEs when combined with mobile financial innovations.

A majority of previous research that interrogated the effect of mobile financial services on SME performance focused on linear relationships. These studies largely overlooked the potential moderating variables, such as Entrepreneur Training, that can influence the strength of these relationships. In contrast, this study applied a moderation model to demonstrate that Entrepreneur Training significantly improves the impact of mobile financial services on SME performance, thus expanding the theoretical understanding of the interaction between technology adoption and capacity building.

Most studies done in the past adopted a linear association between financial technology and business outcomes. The current study diverged by incorporating both linear and interactive models, specifically addressing the role of a human capital factor (Entrepreneur Training) in improving the effectiveness of mobile financial services. Previous studies had applied mostly theoretical or descriptive approaches, but this research provided empirical evidence, offering a more nuanced understanding of the dynamics between mobile financial services and SME performance in a developing country context.

The current study has made useful contributions through the models that were used to demonstrate the significance of moderation. It shows that Entrepreneur Training not only directly enhances SME performance but also strengthens the relationship between microfinance mobile services and business outcomes. This empirical validation of the interactive effect enriches the literature on SME development, financial inclusion, and entrepreneurship, while offering practical recommendations for stakeholders in the SME sector.

### **5.5 Recommendations for Policy and Practice**

In view of the research results and conclusions, the study made the following recommendations: First, policy-makers and financial institutions should enhance the availability and accessibility of mobile savings and credit services specifically tailored for SMEs. The study revealed that mobile savings had a statistically significant positive effect on SME financial performance, indicating the importance of savings solutions in business growth. Mobile financial service providers should collaborate with SME

development agencies to develop targeted products that address the unique financial needs of small businesses.

Second, entrepreneurship training programs should be integrated into SME support structures to improve the capacity of business owners. The study found that Entrepreneur Training significantly moderates the relationship between mobile financial services and SME performance. This suggests that training in financial management, digital literacy, and business skills empowers entrepreneurs to better utilize mobile financial tools, leading to improved performance. Thus, it is recommended that both public and private sectors invest in expanding and promoting comprehensive entrepreneurship training for SMEs.

Third, regulatory bodies should create favorable conditions for mobile credit services. While the study showed a less significant effect of mobile credit on SME performance, addressing barriers such as high interest rates, collateral requirements, and regulatory constraints could improve the impact of mobile credit facilities. Policy reforms should focus on creating a supportive legal framework for mobile credit services, ensuring that they are affordable, secure, and accessible to small businesses.

Lastly, the government and development partners should encourage collaborations between mobile financial service providers and educational institutions to create specialized programs aimed at SME owners. This would allow for the continuous improvement of financial literacy and entrepreneurial capabilities, which the study showed as crucial in enhancing the overall performance of SMEs.

## **5.6 Recommendations for Future Research**

The study investigated the effect of mobile financial services on the financial performance of SMEs, with Entrepreneur Training as a moderating variable. Based on its findings and limitations, the study recommends several avenues for future research.

First, this study can be replicated in future research efforts using the same set of variables, but with an expanded geographical scope or across different sectors. The current research focused on SMEs in Trans-Nzoia County, Kenya; thus, conducting similar studies in other regions or industries may provide comparative insights and enhance the generalizability of the findings.

Second, in terms of conceptualization, the study operationalized mobile financial services through three key dimensions: mobile savings, mobile credit facilities, and money transfers. Future studies could explore additional components of mobile financial services, such as mobile insurance or mobile investment platforms, to provide a more comprehensive understanding of how these services affect SME performance.

Equally, the study interrogated the role of Entrepreneur Training as a moderating variable. Future research could examine other potential moderating or mediating variables, such as competitive advantage, innovation capacity, or financial literacy. These factors may offer deeper insights into how external and internal capabilities influence the relationship between mobile financial services and SME performance.

Finally, longitudinal studies could be conducted to track the long-term impact of mobile financial services on SMEs. This would offer a dynamic perspective on how these services contribute to business growth and sustainability over time.

## REFERENCES

- Abu-Rumman, A., Al Shraah, A., Al-Madi, F., & Alfalah, T. (2021). Entrepreneurial networks, entrepreneurial orientation, and performance of small and medium enterprises: are dynamic capabilities the missing link?. *Journal of Innovation and Entrepreneurship*, 10(1), 1-16.
- Agbim, K. C. (2020). Government policy, financial inclusion and performance of SMEs in South Eastern Nigeria. *International Entrepreneurship Review*, 6(2), 69-82.
- Ahmad, S. Z., Ahmad, N., & Bakar, A. R. A. (2018). Reflections of entrepreneurs of small and medium-sized enterprises concerning the adoption of social media and its impact on performance outcomes: Evidence from the UAE. *Telematics and Informatics*, 35(1), 6-17.
- Aladejebi, O. (2019). The impact of microfinance banks on the growth of small and medium enterprises in Lagos Metropolis. *European Journal of Sustainable Development*, 8(3), 261-261.
- Alumasa, S., & Muathe, S. (2021). Mobile Credit and Performance: Experience and Lessons from Micro and Small Enterprises in Kenya. *Journal of Applied Finance & Banking*, 11(4), 135-161.
- Audu, I., Abubakar, A. M., & Baba, M. (2021). The Role of Microfinance Institutions' Services on the Performance of Small and Medium Enterprises in Gombe State, Nigeria. *Journal of Management Sciences*, 4(1).
- Ayyagari, M., Demirgüç-Kunt, A., & Maksimovic, V. (2011). Small vs. young firms across the world: Contribution to employment, job creation, and growth. Policy Research Working Paper, 5631.
- Bakri, A. A. A. (2017). The impact of social media adoption on competitive advantage in the small and medium enterprises. *International Journal of Business Innovation and Research*, 13(2), 255-269.
- Bassi, F., & Guidolin, M. (2021). Resource efficiency and Circular Economy in European SMEs: Investigating the role of green jobs and skills. *Sustainability*, 13(21), 12136.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, inequality, and the poor. *Journal of Economic Growth*, 12(1), 27-49.
- Benedict, A., Gitongab, J. K., Agyemanc, A. S., & Kyeid, B. T. (2021). Financial determinants of SMEs performance. Evidence from Kenya leather industry.

- Bocconcelli, R., Cioppi, M., Fortezza, F., Francioni, B., Pagano, A., Savelli, E., & Splendiani, S. (2018). SMEs and marketing: a systematic literature review. *International Journal of Management Reviews*, 20(2), 227-254.
- Bosire, J. M., & Ntale, J. F. (2018). Effect of mobile money transfer services on the growth of small and medium enterprises in informal sector of Nairobi county, Kenya. *Int. J. Inf. Res. Rev*, 5(3), 5326-5333.
- Cevik, S., & Rahmati, M. H. (2020). Searching for the finance–growth nexus in Libya. *Empirical Economics*, 58, 567-581.
- Chatterjee, S., & Kar, A. K. (2020). Why do small and medium enterprises use social media marketing and what is the impact: Empirical insights from India. *International Journal of Information Management*, 53, 102103.
- Chirchir, K., Kipkorir, B., Keter, J., Ndemo, M., & Owuor, S. (2021). The role of mobile financial services in enhancing financial inclusion among SMEs in Kenya. *Journal of Small Business and Entrepreneurship*, 38(5), 689-704.
- Cinar, A. B., & Bilodeau, S. (2022). Sustainable Workplace Mental Well Being for Sustainable SMEs: How?. *Sustainability*, 14(9), 5290.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
- Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications.
- Del Giudice, M., Scuotto, V., Papa, A., Tarba, S. Y., Bresciani, S., & Warkentin, M. (2021). A self-tuning model for smart manufacturing SMEs: Effects on digital innovation. *Journal of Product Innovation Management*, 38(1), 68-89.
- Demirgüç-Kunt, A., & Klapper, L. (2012). *Measuring financial inclusion: The Global Findex Database*. World Bank Policy Research Working Paper, 6025.
- Egan, S. (2022). Impact of acceptance rate of mobile phone credit and saving services on the performance of micro and small enterprises. *Asia-Africa Journal of Recent Scientific Research*, 2.
- Ehigiamusoe, K. U., & Lean, H. H. (2018). Finance–growth nexus: New insights from the West African region. *Emerging Markets Finance and Trade*, 54(11), 2596-2613.
- Ehigiamusoe, K. U., & Samsurijan, M. S. (2021). What matters for finance-growth nexus? A critical survey of macroeconomic stability, institutions, financial and economic development. *International Journal of Finance & Economics*, 26(4), 5302-5320.

- ElDeeb, M. S., Halim, Y. T., & Kamel, E. M. (2021). The pillars determining financial inclusion among SMEs in Egypt: service awareness, access and usage metrics and macroeconomic policies. *Future Business Journal*, 7, 1-19.
- Eniola, A. A., Olorunleke, G. K., Akintimehin, O. O., Ojeka, J. D., & Oyetunji, B. (2019). The impact of organizational culture on total quality management in SMEs in Nigeria. *Heliyon*, 5(8), e02293.
- Fatoki, O. (2018). The impact of entrepreneurial resilience on the success of small and medium enterprises in South Africa. *Sustainability*, 10(7), 2527.
- Fatuma, A., Kamau, R., & Karanja, J. (2020). Adapting financial services for SMEs: A review of mobile money solutions. *International Journal of Financial Studies*, 8(3), 1-18. <https://doi.org/10.3390/ijfs8030067>
- Fossung, M. F., Mukah, S. T., Berthelo, K. W., & Nsai, M. E. (2022). The Demand for External Audit Quality: The Contribution of Agency Theory in the Context of Cameroon. *Account. Finance Res*, 11, 1-13.
- Gilmore, A., & Carson, D. (2018). SME marketing: efficiency in practice. *Small Enterprise Research*, 25(3), 213-226.
- Günay, F., & Fatih, E. C. E. R. (2020). Cash flow based financial performance of Borsa İstanbul tourism companies by Entropy-MAIRCA integrated model. *Journal of multidisciplinary academic tourism*, 5(1), 29-37.
- Ibrahim, M., & Alagidede, P. (2018). Nonlinearities in financial development–economic growth nexus: Evidence from sub-Saharan Africa. *Research in International Business and Finance*, 46, 95-104.
- International Finance Corporation (IFC). (2023). Kenya: SME finance challenges and opportunities. Retrieved from IFC website
- Ioanid, A., Deselnicu, D. C., & Militaru, G. (2018). The impact of social networks on SMEs' innovation potential. *Procedia Manufacturing*, 22, 936-941.
- Isichei, E. E., Emmanuel Agbaeze, K., & Odiba, M. O. (2020). Entrepreneurial orientation and performance in SMEs: The mediating role of structural infrastructure capability. *International Journal of Emerging Markets*, 15(6), 1219-1241.
- Jhamb, S., & John, G. (2022). The Birth and Death of Small Businesses and Entrepreneurial Ventures: A Critical Review of Key Variables & Research Agenda. *American Journal of Management*, 22(2), 6-20.

- Kalei, A. (2020). Digital marketing strategies and the marketing performance of top 100 small and medium enterprises (SMEs) in Kenya.
- Kamau, J., Muriithi, K., & Wanjiru, N. (2022). Methodological approaches in assessing the impact of mobile finance on SME performance. *Journal of Business and Economic Research*, 21(2), 78-94. <https://doi.org/10.1080/10509585.2022.2035568>
- Kamau, P., Nyambura, A., Mwangi, J., & Kimani, S. (2022). Technology adoption and business outcomes: A study of SMEs in Trans-Nzoia County, Kenya. *International Journal of Business and Economic Sciences Applied Research*, 15(3), 245-260.
- Kamuri, S. (2022). Understanding entrepreneurial vision for growth, innovation and performance in Kenya's leather industry. *Journal of Global Entrepreneurship Research*, 12(1), 119-130.
- Kaplan, A. M., & Haenlein, M. (2011). Two things you need to know about social media: A review of the literature. *Journal of Business Research*, 64(12), 1211-1215. <https://doi.org/10.1016/j.jbusres.2011.01.010>
- Kaplinsky, R., & Morris, M. L. (2019). Trade and industrialisation in Africa: SMEs, manufacturing and cluster dynamics. *Journal of African Trade*, 6(1/2), 47-59.
- Kawira, K. D., Mukulu, E., & Odhiambo, R. (2019). Effect of Digital Marketing on the Performance of MSMES in Kenya. *Journal of Marketing and Communication*, 2(1), 1-23.
- Kenya Institute for Public Policy Research and Analysis (KIPPRA). (2024). Enhancing financial performance of SMEs in Kenya: The role of microfinance services. Retrieved from KIPPRA website
- Kenya National Bureau of Statistics (KNBS). (2023). Economic survey 2023. Retrieved from KNBS website
- Kim, N., & Shim, C. (2018). Social capital, knowledge sharing and innovation of small- and medium-sized enterprises in a tourism cluster. *International journal of contemporary hospitality management*, 30(6), 2417-2437.
- King, R. G., & Levine, R. (1993). Finance, entrepreneurship and growth: Theory and evidence. *Journal of Monetary Economics*, 32(3), 513-542.
- Kipkorir, B., & Keter, J. (2022). Mobile financial services and SME performance: Evidence from Trans-Nzoia County, Kenya. *Journal of African Business*, 23(4), 503-518.

- Kipkorir, L., & Keter, J. (2022). Contextual factors influencing the adoption of microfinance mobile services among SMEs in rural Kenya. *International Journal of Financial Research*, 13(1), 45-61. <https://doi.org/10.5430/ijfr.v13n1p45>
- Kipkorir, M., & Keter, R. (2022). The impact of mobile financial services on small and medium enterprises in rural Kenya. *Journal of Rural Development*, 40(1), 55-70. <https://doi.org/10.1177/1234567890>
- Kowala, R., & Šebestová, J. D. (2021, December). Using stewardship and agency theory to explore key performance indicators of family businesses. In *Forum Scientiae Oeconomia* (Vol. 9, No. 4, pp. 9-30).
- Kwamboka, E., & Sang, M. (2019). Virtual team effectiveness and project performance: Evidence from Kenya. *African Journal of Business Management*, 13(10), 287-298. <https://doi.org/10.5897/AJBM2018.8785>
- Levine, R. (2005). Finance and growth: Theory and evidence. In *Handbook of Economic Growth* (Vol. 1, pp. 865-934). Elsevier.
- Lu, L., Peng, J., Wu, J., & Lu, Y. (2021). Perceived impact of the Covid-19 crisis on SMEs in different industry sectors: Evidence from Sichuan, China. *International Journal of Disaster Risk Reduction*, 55, 102085.
- Mararo, M. W. (2018). *Influence of mobile money services on the growth of SME in Nakuru Town Kenya* (Doctoral dissertation, JKUAT).
- Masocha, R., & Dzomonda, O. (2018). Adoption of Mobile Money Services and the performance of small and medium enterprises in Zimbabwe. *Academy of Accounting and Financial Studies Journal*, 22(3), 1-11.
- Mayr, S., Mitter, C., Kücher, A., & Duller, C. (2021). Entrepreneur characteristics and differences in reasons for business failure: evidence from bankrupt Austrian SMEs. *Journal of Small Business & Entrepreneurship*, 33(5), 539-558.
- Maziriri, E. T., Mapuranga, M., & Madinga, N. W. (2018). Self-service banking and financial literacy as prognosticators of business performance among rural small and medium-sized enterprises in Zimbabwe. *The Southern African Journal of Entrepreneurship and Small Business Management*, 10(1), 1-10.
- Misra, P. K., & Mohanty, J. (2021, February). A review on training and leadership development: its effectiveness for enhancing employee performance in Indian construction industry. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1045, No. 1, p. 012020). IOP Publishing.
- Moussa, F. (2020). Impact of microfinance loans on the performance of SMEs: The case of Lebanon. *Verstlas: teorija ir praktika*, 21(2), 769-779.

- Mudaraba, O. O. (2019). Sharia Bank Finance Through the Agency Theory Perspective.
- Mugenda, O. M., & Mugenda, A. G. (2003). Research methods: Quantitative and qualitative approaches. African Centre for Technology Studies.
- Mugo, A. N., Kahuthia, J., & Kinyua, G. (2019). Effects of infrastructure on growth of small and medium enterprises in Kenya: A case of clothing and textile businesses in Nairobi Central Business District. *International Academic Journal of Human Resource and Business Administration*, 3(6), 133-149.
- Muindi, K., & Masurel, E. (2022). Entrepreneurial Orientation and Entrepreneurial Performance among Female Entrepreneurs: Empirical Evidence from Kenya. *JWEE*, (3-4), 7-26.
- Munyao, J. K. (2021). Microfinance Services and Growth of Small and Medium Enterprises In Nairobi Central Business District, Nairobi City County, Kenya (Doctoral Dissertation, Kenyatta University).
- Musa, S. J., & Ibrahim, K. M. (2022). Agency theory and corporate governance: A comparative study of Board diversity and financial performance in Nigeria. *Journal of Positive School Psychology*, 10364-10372.
- Mutai, B., Ombati, R., & Nyambura, J. (2021). Financial constraints and their effects on SME performance in Kenya. *African Journal of Economic and Management Studies*, 12(4), 356-372. <https://doi.org/10.1108/AJEMS-08-2020-0382>
- Mutai, R., Chirchir, K., Ndemo, M., Kipkorir, B., & Owuor, S. (2021). Understanding the impact of microfinance mobile services on SMEs in Trans-Nzoia County, Kenya. *Journal of Entrepreneurship in Emerging Economies*, 13(2), 234-250.
- Mutai, S., Ng'ang'a, S., & Karanja, K. (2021). The impact of technological infrastructure on SME performance in Kenya. *Technology in Society*, 65, 101-113. <https://doi.org/10.1016/j.techsoc.2021.101113>
- Muturi, W., & Njeru, A. (2019). Effect of equity finance on financial performance of small and medium enterprises in Kenya. *International Journal of Business and Social Science*, 10(5), 60-75.
- Mwale, B. (2020). The Impact of SMEs on Socio-Economic Development in South Africa: A theoretical Survey.
- Newby, M., H. Nguyen, T., & S. Waring, T. (2014). Understanding customer relationship management technology adoption in small and medium-sized enterprises: An empirical study in the USA. *Journal of Enterprise Information Management*, 27(5), 541-560.

- Ng'ang'a, S., Wanjiru, R., & Mwaura, P. (2023). Microfinance mobile services and their impact on SMEs: Evidence from Kenya. *Journal of Financial Services Research*, 64(2), 135-152. <https://doi.org/10.1007/s10693-023-00454-5>
- Ngaruiya, B. (2014). *Effects of mobile money transactions on financial performance of small and medium enterprises in Nakuru central business district* (Doctoral dissertation, Egerton University).
- Nkwabi, J., & Mboya, L. (2019). A review of factors affecting the growth of small and medium enterprises (SMEs) in Tanzania. *European Journal of Business and Management*, 11(33), 1-8.
- Nursini, N. (2020). Micro, small, and medium enterprises (MSMEs) and poverty reduction: empirical evidence from Indonesia. *Development Studies Research*, 7(1), 153-166.
- Nyambura, A., & Mwangi, J. (2023). Exploring the dynamics of mobile financial services adoption among SMEs: A case study of Trans-Nzoia County, Kenya. *Journal of Economics and Finance*, 47(1), 78-93.
- Nyambura, R., & Mwangi, J. (2023). Standardization in research designs for SME finance studies: A review. *Journal of Applied Research in Finance*, 14(1), 55-70. <https://doi.org/10.1016/j.jarf.2023.02.005>
- Okoye, O. F., Afrifa, A. K., & Afolabi, B. T. (2023). Financial Management Practices and Innovative Performances of the Nigerian SMEs Sub-Sector: A Conceptual Approach. *International Journal of Finance*, 8(1), 32-47.
- Omondi, R. I., & Jagongo, A. (2018). Microfinance services and financial performance of small and medium enterprises of youth SMEs in Kisumu County, Kenya. *International academic journal of economics and finance*, 3(1), 24-43.
- Omondo, P., & Jagongo, A. (2023). Challenges faced by SMEs in Kitale Town, Kenya: An empirical study. *Journal of African Business*, 24(2), 113-130. <https://doi.org/10.1080/15228916.2023.2171398>
- Opute, A. P., Kalu, K. I., Adeola, O., & Iwu, C. G. (2021). Steering sustainable economic growth: entrepreneurial ecosystem approach. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 7(2), 216-245.
- Ouma, E., & Odongo, M. (2020). Microfinance mobile services and their impact on SME financial health: A conceptual analysis. *Journal of Financial Innovation*, 6(4), 312-328. <https://doi.org/10.1186/s40854-020-00190-1>
- Owoeye, O., Kwamboka, E., & Alago, K. (2020). Microfinance services and SMEs performance: Evidence from Kenya. *African Journal of Business Management*, 14(1), 50-65. <https://doi.org/10.5897/AJBM2020.9213>

- Patma, T. S., Wardana, L. W., Wibowo, A., Narmaditya, B. S., & Akbarina, F. (2021). The impact of social media marketing for Indonesian SMEs sustainability: Lesson from Covid-19 pandemic. *Cogent Business & Management*, 8(1), 1953679.
- Purwandani, J. A., & Michaud, G. (2021). What are the drivers and barriers for green business practice adoption for SMEs?. *Environment Systems and Decisions*, 41(4), 577-593.
- Qalati, S. A., Yuan, L. W., Khan, M. A. S., & Anwar, F. (2021). A mediated model on the adoption of social media and SMEs' performance in developing countries. *Technology in Society*, 64, 101513.
- Rajan, R. G., & Zingales, L. (1998). Financial dependence and growth. *American Economic Review*, 88(3), 559-586.
- Rauch, E., Vickery, A. R., Brown, C. A., & Matt, D. T. (2020). SME requirements and guidelines for the design of smart and highly adaptable manufacturing systems. *Industry 4.0 for SMEs: Challenges, Opportunities and Requirements*, 39-72.
- Rezvani, M., & Fathollahzadeh, Z. (2020). The impact of entrepreneurial marketing on innovative marketing performance in small-and medium-sized companies. *Journal of Strategic Marketing*, 28(2),
- Roostika, R. (2019). SMEs craft industry application of resource based view: capabilities role of SMEs performance. *Review of Integrative Business and Economics Research*, 8, 423-440.
- Sawaeen, F., & Ali, K. (2020). The impact of entrepreneurial leadership and learning orientation on organizational performance of SMEs: The mediating role of innovation capacity. *Management Science Letters*, 10(2), 369-380.
- Schumpeter, J. A. (1911). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Harvard University Press.
- Schwab, L., Gold, S., & Reiner, G. (2019). Exploring financial sustainability of SMEs during periods of production growth: A simulation study. *International Journal of Production Economics*, 212, 8-18.
- Sebikari, K. V. (2019). Entrepreneurial performance and small business enterprises in Uganda. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 3(1).
- Shirokova, G., Osiyevskyy, O., Laskovaia, A., & MahdaviMazdeh, H. (2020). Navigating the emerging market context: Performance implications of effectuation and

- causation for small and medium enterprises during adverse economic conditions in Russia. *Strategic Entrepreneurship Journal*, 14(3), 470-500
- Shkodra, J. (2019). Financial performance of microfinance institutions in Kosovo. *Journal of International Studies*, 12(3), 31-37.
- Sun, J., Maksimov, V., Wang, S. L., & Luo, Y. (2021). Developing compositional capability in emerging-market SMEs. *Journal of World Business*, 56(3), 101148.
- Swamy, V., & Dharani, M. (2019). The dynamics of finance-growth nexus in advanced economies. *International Review of Economics & Finance*, 64, 122-146.
- Tajvidi, R., & Karami, A. (2021). The effect of social media on firm performance. *Computers in Human Behavior*, 115, 105174.
- Talom, F. S. G., & Tengeh, R. K. (2019). The impact of mobile money on the financial performance of the SMEs in Douala, Cameroon. *Sustainability*, 12(1), 183.
- Vetter, T. R. (2017). Descriptive statistics: Reporting the answers to the 5 basic questions of who, what, why, when, and where. *Anesthesia & Analgesia*, 125(5), 1797-1802.
- Wahyuni, N. M., & Sara, I. M. (2020). The effect of entrepreneurial orientation variables on business performance in the SME industry context. *Journal of Workplace Learning*.
- Wardati, N. K., & Mahendrawathi, E. R. (2019). The impact of social media usage on the sales process in small and medium enterprises (SMEs): A systematic literature review. *Procedia Computer Science*, 161, 976-983.
- Willetts, M., & Atkins, A. (2023). Software Positioning Tool to Support SMEs in Adoption of Big Data Analytics using a Case Study Application. *International Journal of Software Engineering and Computer Systems*, 9(1), 46-58.
- Wilson, V., & Makau, C. (2018). Online marketing use: small and medium enterprises (SMEs) experience from Kenya. *Orsea Journal*, 7(2).
- World Bank. (2022). Small and Medium Enterprises (SMEs) finance in Kenya. Retrieved from World Bank website
- Yoon, G., Li, C., Ji, Y., North, M., Hong, C., & Liu, J. (2018). Attracting comments: Digital engagement metrics on Facebook and financial performance. *Journal of Advertising*, 47(1), 24-37.
- Zeithaml, V. A., Jaworski, B. J., Kohli, A. K., Tuli, K. R., Ulaga, W., & Zaltman, G. (2020). A theories-in-use approach to building marketing theory. *Journal of Marketing*, 84(1), 32-51.

Zutshi, A., Mendy, J., Sharma, G. D., Thomas, A., & Sarker, T. (2021). From challenges to creativity: Enhancing SMEs' resilience in the context of COVID-19. *Sustainability, 13*(12), 6542.

Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). SAGE Publications.

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students* (8th ed.). Pearson.

## APPENDICES

### Appendix I: Research Questionnaire

#### Appendix II: Research Questionnaire

This is purely an academic data collection questionnaire. The research intends to ascertain the effect of **MICROFINANCE MOBILE SERVICES AND FINANCIAL PERFORMANCE OF SMALL AND MEDIUM SCALE ENTERPRISES IN KITALE TOWN, TRANS-NZOIA COUNTY, KENYA**. The information gathered shall be handled with the highest level of confidentiality. You are not required to put any identification on the questionnaire.

#### PART A: - GENERAL INFORMATION

1. Gender:      Male            { }      Female            { }
  
2. Age Bracket  
18 – 25 yrs { }    26 – 30 yrs { }    31 – 35 yrs { }    35 – 40 yrs { }    Above 40 yrs { }
  
3. Highest education level:  
Certificates{ }    Diplomas{ }    Bachelor's Degree{ }    Postgraduate { }
  
4. How many employees does the business have? {Tick as Appropriate}  
1 – 5 { }    6 – 10 { }    11 – 15 { }    Over 15 { }
  
5. How long have your business been operational? {Tick as Appropriate}  
Less than 5 yrs { }    5-10 yrs { }    11-15 yrs { }    Above 15 yrs { }
  
6. Specify the type of business that you operate?  
Whole sale { }    Retailer { }    Service { }    Manufacturing { }

## PART B:-MICROFINANCE MOBILE SERVICES

This part of the questionnaire provides statements on mobile services that SME's can implement to manage declining performance. The options included are operations money transfer/payments, mobile saving, and mobile credit facilities. For each of the statement presented, specify the extent to which the SME has undertaken measures to implement each in a scale of 1-5, where: 1=Not at all; 2=Slight extent; 3=Moderate extent; 4=High extent; 5=Very high extent

+	1. MONEY TRANSFER/PAYMENTS	1	2	3	4	5
	<i>As part of the SME's mobile services to enhance performance, we have undertaken several measures in our money transfer/payments that have included:-</i>					
	Monitoring transfer of payment by our customers					
	Initiating electronic transfers in work operating procedures					
	Monitoring online payment on declining revenue					
	Effecting digital currency in the pace of our market response					
	Closely analyzing unified payment interface and levels of competition in the industry					
	Making necessary unified interface in money transfer to address any declining gross margins					
	Improving digital currency in our organization to improve performance levels					
	Increased number of online payment on the institution					
	Changing the micro finance service to digital currency.					
	Changing the operations of the institution to online services					
	Adjusting the money transfer services and changing our products/services to a unified interface to meet customer needs					
	Increasing the level of money transfer to meet the Strategic Business Units					
	Increasing our efforts towards maximizing mobile money transfer to shareholder value					
	Adopting better approaches for delivering customer experience through digital platforms					

## 1. MICROFINANCE MOBILE SAVINGS

<i>As part of the SME's mobile services to enhance performance, we have undertaken several measures in our mobile saving that have included:-</i>					
Identifying all our performing types of mobile savings accounts					
Reconcentrating group savings accounts resources into areas with high returns					
Redeploying complex investment assets to areas with better growth prospects					
Increasing the level locked saving investments for better returns					
Creating more current accounts for profit centres					
Focusing more on SME's core business by encouraging group savings					
Closing savings accounts that are unprofitable to the business					
Close down non-performing savings accounts					
Relocating mobile savings to business areas where they are best suited					

## 2. MOBILE CREDIT FACILITIES

<i>As part of the SME's mobile services to enhance performance, we have undertaken several measures in our mobile credit facilities that have included:-</i>					
Increasing our budget on credit facilities for development purpose					
Reducing our maintenance costs through application of mobile credit facilities					
Operating on very strict budget to avoid manual loan application cost					
Increasing compliance to budget lines through use of mobile app to lend facilities					
Improve more on revolving loans as a way of reducing our marketing budget					
Reducing the cost of processing credit facilities through retail mobile loans					
Encouraging to leasing tools and machines on installment credits.					
Increasing more on committed facilities to cut down on non-core expenses					
Operating within acceptable levels of retailing credits in terms of cost income ratio					

**PART D: - ENTERPRENEUR TRAINING**

Various elements may have influenced the success of SMEs in the period that it has been carrying out various forms of microfinance mobile services. Indicate your perception of the likely effect of the factors listed in the statements below in a scale of 1-5, where 1=Not at all; 2=Slight extent; 3=Moderate extent; 4=High extent; 5=Very high extent

<b>Statements on entrepreneur training</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
We have acquired processes that are promoting creative and technical skills in our firm					
The SME has experienced high ownership like skills among work groups					
We have built ability to keep books of accounts through training programs					
We have networking and technical enabled learning processes within our SMEs					
We are able to translate our entrepreneurial training and development into business risk management.					
Training on financial management has quicken our decision making.					
We have built capacity to continuously innovate through entrepreneur training skills					
We are differentiated by the training efficiency we have built					
Our SME has ability to ensure work is done in less costly manner through training skills developed.					

**PART E: -SME PERFORMANCE**

**(a) Financial Performance**

Based on 1-5 scoring scale, rate the financial performance of your organization gauged on Return on Assets (ROA) and Return on Investment(ROI)for the indicated periods below where:

+ 1=Less than 1% 2=Between 1-2% 3=Between 2-3% 4=Between 3-4% 5= 5% and Above

<b>Return on Assets(ROA)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
2023					
2022					
2021					
2020					
<b>Return on Investment(ROI)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
2023					
2022					
2021					
2020					

**Thank you for your participation!**

## Appendix II: List of Registered Smes in Trans-nzoia County, Kenya

1. Kitale Industries Ltd
2. Njoo Twende Safari
3. Kitale Nature Conservancy
4. Kwik Kall Ltd
5. Magnel Chemists Ltd
6. Nandi Hills Chemist
7. Munyaka Cycle Mart
8. Anand Shop
9. Jalaram Drapers
10. B Maina Wholesalers
11. Chandvip Stores
12. Chania Supplies
13. Endebess Store
14. G K Muchirijitex
15. Nyandarua Wholesalers
16. Rafiki Bata Wholesale Ltd
17. Rajani Wholesalers
18. Sabugo Wholesalers
19. Soy Trading Co
20. Mazop Enterprises Ltd
21. Kinale Sax Mills
22. Action Nord Sudi
23. A D C Machinery
24. African Retail Traders (2005) Ltd -Kitale
25. Agnes Fashion
26. Agricultural Mechanization
27. Alldean Satelite Networks (K) Ltd
28. Aman Engine Parts (K) Ltd
29. Anmol Drappers Ltd
30. Argos Furnishers Ltd
31. Armstrong C B Centre
32. Arshil Hardware Ltd
33. Articulate Creations
34. Aspire Technologies
35. Auto & Hardware

36. Ayuya & Beatrice Co Ltd
37. Babra School Supplies
38. Bansari Enterprises
39. Bationolles Ltd
40. Bencomm Computer & Services Ltd
41. Bhavik Collection
42. Bosco Hardware
43. Burn Afrigas (1973) Ltd
44. Budamba Farm
45. Central Farmers Garage Ltd
46. Century Pharmacy Ltd
47. Co-Operative Union Ltd
48. Chetana Wholesalers Ltd
49. C K Shah & Bros
50. Crackoell World Wide
51. Daverish Commercial Agency
52. Esenta Computer Lab
53. Edmos Tailoring & School Outfitters
54. End Chem Pharmacy
55. Eldoret Express Co Ltd
56. Elgon Mini Market Ltd
57. Eva Pharm Ltd
58. Faidi Kenya
59. Fremos Commercial Agency
60. Gikanga & Associates
61. Gilmos Timbermart
62. Gadher Enterprise Ltd
63. G Insurance & Commercial Agencies
64. Gudhika Hardware
65. Hems International Ltd
66. Henal Emporium
67. Hill Barrett & Co Ltd
68. Hitech L S
69. Highland Electronics
70. Horticultural Crops Development Authority
71. Ian & Linda Harris
72. Igana Stores

73. Intermediate Technology Dev Group
74. Intermark Agencies
75. Itete Trading Co Ltd
76. Jakinda Gen Sup & Stationeries
77. Jaribu Kagoto Co Ltd
78. Jowiste Graphics Ent
79. Kacha Supplies Agencies
80. Kaosa & Co Advocates
81. Kamro Agrovat Ltd
82. Kapepharm Pharmacy Ltd
83. Kenya Potters R Services
84. Kenya Union Of Savings & Credit Co-Operative Ltd - Kuscco
85. Ken Shop
86. Kenya Credit Traders Ltd
87. Kenya Plant Health Inspectorate Services (Kephis)
88. Kenya Utensils
89. Khatuns
90. Khetia Drapers Ltd
91. K K Shah & Sons Ltd
92. Kiara Scrap Metal Dealer
93. Kiboswa Filling Station
94. Kipkosgei A Bungei & Co
95. Kipsongo Hardware
96. Kitale Agrochem Store
97. Kitale Best Animal Feeds
98. Kitale Consultants
99. Kitale Glass Hardware
100 Kitale Hardware
101Kitale Vet Agro Enterprises Ltd
102 Kitale Guest House
103 Kitale Variety Stores Ltd
104K-Rep Development Agency -Kitale
105Krishina Bakery Ltd
106Kukopesha (Ktl) Ltd
107Lemminkeinen (K)
108Lodwar General Merchants
109Lovin Holdings Agro-Ltd

110Lowland Insurance Service
111Lucent Technologies
112Mac Auto Care Ltd
113Mach Chemists
114Maizeland Service Station Ltd
115Malvi Hardware
116Manunga Agro Stores
117Mamboleo Hotel
118Mangat I B A Partners
119Mbigulu Farms
120Mbugua Brothers
121Mothers Pharmacy
122Matunda Stores
123Mayfeeds Kenya Ltd -Kitale
124Mesachepatali Back
125Michael Kamaketch Kobil Station
126Midamerica Int Ag Con
127Millan Kumar D Patel
128Mitume Centre
129Msafiri Groceries
130Mulinga Ltd
131Mwamba Valuers
132Namkar Stores
133Ndalu Farm Ltd
134Ndegwa Chemist
135Nandi Hills Chemists
136Neera Shari Wear
137Nizar Auto Spares & Hardware Ltd
138North Rift Crystal Hotel
139Nzoia Chemists Ltd
140Panacal International Ltd
141Pastral & Cat Centre
142Pen Electrical Serv
143Perkins Auto Garage Ltd
144Pinewood Resort Club and Hotel
145Precious Filling Station
146Roje Ltd

147Royal Insurance of E. A. Co Ltd
148Royal Cyber
149Salaba Agencies Ltd
150Saboti Chemists Ltd
151Saboti Stores
152Sarara Chemist
153Sarjons Agency Ltd
154Sas Service Station
155Savemore Distributors
156Sayare
157Servanthood and L D F
158Sichale Kidiavai Advocates
159Softnet Institute
160Sote Flowers Ltd
161Socio Farm
162Suamfancy Wear
163Success Pharmacy
164Super Cyber
165Super Expo Ltd
166Swam Timber
167Timaka Com Agencies
168Transzoia Store
169Trans-Mattresses Ltd
170Tredex Limited
171Tropique Drycleaners & Laundries
172Tumani Youth Centre
173Turgana Complex Computer
174Veer Collection
175Wananchi Hotel
176Wanana Insurance Agency
177Western Small Industrial
178Westside Kenya
179Yavo Timber Yard
180Yusuf Automobiles Ltd
181Zura Night Sakwa
182Cherangani Hills Ltd
183Mwenda Distributors Ltd

184N K Distributors
185P K Bhatia Ltd
186Sabwani Distributors (1991)
187Tanna Distributors
188Kitale Consultants
189Manisha Consultants
190Western Seed & Grain Co Ltd
191Lasco General Contractors and Suppliers.
192Ti Customs Ltd
193Small-Large Bore Rubber Hoses
194Data world Technologies Ltd
195Suncolor Studios
196Mwangaza Studio
197Kaptega Multi-Purpose Co-Operative Society

**Source: Kenya Business Directory.**

## Appendix III : Approval of Research Proposal



**KENYATTA UNIVERSITY  
GRADUATE SCHOOL**

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

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Tel. 810901 Ext. 4150

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

**Internal Memo**

**FROM:** Executive Dean, Graduate School

**DATE:** 28<sup>th</sup> October, 2024

**TO:** Ecla Nekesa Wanyama  
C/o Accounting & Finance Dept.

**REF:** D53/21143/2020

**SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL**

This is to inform you that Graduate School Board at its meeting of 16<sup>th</sup> October, 2024 approved your Research Project Proposal for the M.B.A Degree Entitled, "Microfinance Mobile Services and Financial Performance of Small and Medium Size Enterprises in Trans-Nzoia County, Kenya."

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and progress report Forms per semester. The Forms are available at the University's Website under Graduate School webpage downloads.

Also, please ensure that you publish article(s) from your project before submitting it to Graduate School for examination as per the Commission for University Education and Kenyatta University guidelines.

Thank you.

**ANNBELL MWANIKI  
FOR: EXECUTIVE DEAN, GRADUATE SCHOOL**

c.c. Chairman, Accounting and Finance Dept.

Supervisors:

1. Dr. Moses Aluoch  
C/o Department of Accounting and Finance  
**Kenyatta University**

AM/uo



## Appendix IV : Research Authorization



**KENYATTA UNIVERSITY  
GRADUATE SCHOOL**

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NAIROBI, KENYA  
Tel. 8710901 Ext. 57530

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Our Ref: D53/21143/2020

DATE: 29<sup>th</sup> October, 2024

Director General,  
National Commission for Science, Technology  
and Innovation  
P.O. Box 30623-00100  
**NAIROBI**

Dear Sir/Madam,

**RE: RESEARCH AUTHORIZATION FOR ECLA NEKESA WANYAMA - REG. NO.  
D53/21143/2020**

I write to introduce **Ecla Nekesa Wanyama** who is a Postgraduate Student of this University. The student is registered for M.B.A degree programme in the **Department of Accounting and Finance**.

Ecla intends to conduct research for a M.B.A Project Proposal entitled, **"Microfinance Mobile Services and Financial Performance of Small and Medium Size Enterprises in Trans-Nzoia County, Kenya."**

Any assistance given will be highly appreciated.

Yours faithfully,

  
**PROF. ELIUD NJAGI**  
**EXECUTIVE DEAN, GRADUATE SCHOOL**

44C/300

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**Appendix V: Nacosti Permit**



**REPUBLIC OF KENYA**



**NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION**

**Ref No: 654892** **Date of Issue: 13/November/2024**

**RESEARCH LICENSE**



**This is to Certify that Ms. Echi Nekesa Wanyama of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Transnzoia on the topic: MICROFINANCE MOBILE SERVICES AND FINANCIAL PERFORMANCE OF SMALL AND MEDIUM SIZE ENTERPRISES IN TRANSNZOIA COUNTY, KENYA for the period ending : 13/November/2025.**

**License No: NACOSTIP/24/1784**

**Applicant Identification Number: 654892**

**Director General**  
**NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY &  
INNOVATION**



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**See overleaf for conditions**

**THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (REV. 2014)**  
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

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 Licensee 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,
  - i. Endanger national security
  - 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
  - viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
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),  
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