

**MODERATING EFFECT OF DIGITAL FINANCE SERVICE ON THE
RELATIONSHIP BETWEEN FINANCIAL MANAGEMENT
PRACTICES AND FINANCIAL PERFORMANCE OF SELECTED
SMEs IN ELDORET CITY, KENYA.**

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**A THESIS SUBMITTED TO THE SCHOOL OF BUSINESS,
ECONOMICS AND MANAGEMENT SCIENCES, DEPARTMENT
OF BUSINESS MANAGEMENT IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF MASTERS IN
BUSINESS MANAGEMENT (FINANCE OPTION),
UNIVERSITY OF ELDORET, KENYA.**

2025

DECLARATION

Declaration by the Candidate

This thesis is my original work and has never been presented for the award of an academic degree in any other university and should not be copied, or reproduced in any format without written authority from the author and/or University of Eldoret.

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DEDICATION

I dedicate this thesis to my dear mother Mrs. Pauline Samoei for financial support and constant inspiration throughout the duration of the study and her desire through prayers and encouragement seen through this work. To my dear son Brian, I thank you for harmony that you grant me for the period of two years to undertake this triumph and being a source of insight to me and always giving me contest and motivation to go on. Not forgetting my brothers Jackson, Ezekiel, Edwin, Abel and my sister Beatrice for their patience, support and love towards achieving my goal.

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ABSTRACT

Financial performance refers to the measure of how well a company is using its assets to generate revenue, profit, firm credibility, and value for shareholders and its ability to pay off debts. Challenges affecting SMEs financial performance include poor financial management, lack of technological skills and enough resources. As a result, it was necessary to investigate the moderating effect of digital finance service on the relationship between financial management practices and financial performance of selected SMES in Eldoret city, Kenya. The specific objectives of the study were to examine the effect of cash flow management, budget planning, investment decision and digital financial services on financial performance of selected SMEs. In addition, the study sought to examine the moderating effect of digital financial services on the relationship between; cash flow management, budget planning, investment decision and financial performance of selected SMEs. The research was guided by the priority-based budgeting theory, modern portfolio theory and resource-based theory. The study utilized explanatory research design. Target population was 1236. Simple random sampling techniques was utilized to collect data from 302 selected SMEs using self-administered questionnaires. Cronbach alpha was applied to test reliability while factor analysis was applied to test construct validity. Hierarchical regression analysis was employed to examine direct and moderating effects, with firm age and firm size controlled as covariates. The findings indicate that firm age has a statistically significant positive effect on financial performance ($\beta=0.282$, $p=0.022$), whereas firm size does not ($\beta=0.070$, $p=0.149$) affirming the need to control these variables. The study revealed that cash flow management ($\beta=0.237$, $p=0.000$), budget planning ($\beta=0.364$, $p=0.000$), and investment decision ($\beta=0.366$, $p=0.000$) positively influence financial performance, collectively accounting for 71% of the variance ($R^2=0.742$, $\Delta R^2=0.713$, $p\leq 0.05$). The study further examined the direct effect of digital finance services on financial performance, with results showing a positive and significant influence ($\beta=0.137$, $p=0.007$), contributing an additional 1% variance ($\Delta R^2=0.007$) to the model. However, digital finance services did not moderate the relationship between cash flow management and financial performance ($\beta=0.002$, $p=0.852$), indicating no significant interaction ($\Delta R^2=0.000$). Conversely, digital finance services significantly moderated the relationship between budget planning and financial performance ($\beta=-0.049$, $p=0.000$, $\Delta R^2=0.016$), and between investment decision and financial performance ($\beta=0.035$, $p=0.042$, $\Delta R^2=0.003$), resulting in a combined explained variance of 80% in financial performance ($R^2=0.798$). The study provides valuable insights for SME managers, policymakers, and financial institutions, emphasizing the importance of targeted digital finance tools to optimize financial management practices and support SME growth. SMEs owners or managers should assess and adopt digital finance solutions that align with their financial management practices.

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ABBREVIATIONS, ACRONYMS AND SYMBOLS

ATM-Automated Teller Machine

CSIS- Center for Strategic & International Studies

DFS- Digital Finance Services

GDP- Gross Domestic Product

KIPPRA -Kenya Institute for Public Policy Research and Analysis

KNBS -Kenya National Bureau of Statistics

MPT- Modern portfolio theory

MSMEs-Micro, Small and Medium Enterprises.

NACOSTI- National Commission for Science and Innovation

OECD-Organization for Co-operation and Development

ROA – Return on Assets

SBA -Small business administration

SME's – Small and Medium Enterprises.

SPSS- Statistical Package for the Social Sciences

USTR- United State Trade Representative

OPERATIONAL DEFINITION OF TERMS

Budget Planning: is the process of creating a detailed financial plan that estimates future revenue and expenditures over a specific period. It involves setting financial goals, allocating resources, and establishing financial targets to guide the organization's operations and strategic decisions (Horngren *et al.*, 2013). Budgetary planning is also process of forecasting future events, and how activities should be handled based on predetermined goals set by an organization (Agbenyo, Danquah & Wang, 2018).

Cash Flow Management: refers to ability of SMEs to monitor, analyze, and optimize the net amount of cash being transferred into and out of business. It also referred as the process of analyzing cash inflow and outflow of business operations (Oyieko, 2018).

Digital financial services: refers to financial services delivered through digital platforms such as online banking, mobile payments, and digital wallets. These services enhance accessibility, convenience, and efficiency by leveraging technology to facilitate financial transactions and management (Arner *et al.*, 2017). It comprises a broad range of financial services accessed and delivered through digital channels, including payments, credit, savings, remittances and insurance.

Financial management practice refers to the strategies and processes employed by an organization to manage its financial resources effectively. This includes planning, organizing, controlling, and monitoring financial activities to ensure the firm's financial stability, profitability, and growth. It involves budgeting, financial analysis, risk management, and capital management (Delkhosh & Mousavi, 2016).

Financial performance refers to the measure of how well a company is using its assets to generate revenue, profit, firm credibility and its ability to pay off debts (Xue *et al.*, 2020).

Investment Decisions: Investment decisions involve evaluating and choosing investments that align with the firm's financial goals and risk tolerance. This includes assessing potential returns, risks, and impacts on the firm's overall financial health. Investment Strategy is a long-term process of selecting best investment alternatives and consider the reasonable and stable return from the investment through capital budgeting techniques (Ojochenemi, Olusegun & Iyeh 2020).

Small and medium enterprises are businesses characterized by their size, typically measured by the number of employees, annual revenue, or total assets. SME's are business that maintain revenues, assets or number of employees below a certain threshold (Liberto, 2022). These are businesses characterized by their small size, limited resources, and typically operating in a specific market niche.

CHAPTER ONE

INTRODUCTION

1.1 Overview

This chapter provides background of the study, statement of the problem, objectives of the study, research hypotheses, significance of the study and scope of the study.

1.2 Background of the Study

Financial performance refers to the measure of how well a company is using its assets to generate revenue, profit, firm credibility, and value for shareholders and its ability to pay off debts (Xue *et al*, 2020). Financial performance refers to the financial outcomes of an organization's operations and is often measured through a range of financial metrics such as return on assets, return on investment, profitability, sales turnover, and liquidity (Fahmi, 2016). Financial performance of SMEs referred to how effectively businesses operate in order to achieve their goals.

Return on investment measures efficiency of an investment. Return on investment indicates that the SMEs is generating significant profits from its investments, which is essential for attracting further investment and funding. Return on investment measures the gain or loss generated relative to the investment cost (Nunes *et al.*,2012). Return on investment can guide SMEs in making informed investment decisions, prioritizing projects that yield the best returns. Hence, helps in resource allocation, improve access to capital and enhances growth prospects.

Return on assets signifies effective management of assets, which is particularly important for SMEs that may have limited resources hence helps owners and investors to evaluate operational efficiency. Return on assets indicates how effectively a

company uses its assets to generate profit (Khan *et al.*, 2017). Return on assets highlights how well an SME utilizes its assets to generate earnings. SMEs can use return on asset to benchmark against industry standards, enabling them to identify areas for improvement and adjust their strategies.

Profitability measures how much profit a company makes relative to its financial performance. Profitability is one of the general components to evaluate the performance of a business unit (Okumu & Buyinza, 2019). Profitability ratios indicate that SMEs can effectively control costs and retain earnings from sales which is essential for reinvestment and long-term sustainability. By analyzing, profitability, SMEs can adjust pricing strategies, control costs and improve operational efficiencies, directly impacting their long-term viability.

Small and medium enterprises are indispensable in all economies, can be describe as a driving force of business growth, innovation, competitiveness and a very important employer. SMEs are business that maintain revenues, assets or number of employees below a certain threshold (Liberto, 2022). SME's play vital part in economies around the world through innovation, flexibility, creativity, efficiency and locally (Liberto, 2022). SME's goals help in generation of revenue and creation of employment, enhanced competency of the country on global scale, attracting international companies to the country through improved inter-counter trade growth and improve social amenities like schools and public space (OECD, 2018).

SMEs are normally recognized in building economic development, job creation, invention and contributor of poverty eradication, social cohesion and increase economic progression all over the world (Endris & Kassegn, 2022). SMEs has been known and prioritized as main growth driver for achievement and development blue

print and improve the living standards for the citizen through financial growth and social capacity for international investors (KIPPRA, 2016). Without SME's there will be high unemployment tendency, GDP will plunge and foreign investors will be scared of making investment.

Despite SMEs contribution to the economy, most SMEs face many challenges that leads to collapse within a few months of their operations (Endris & Kassegn, 2022). The challenges include: poor financial management, inadequate resources, lack of planning, lack of inventory control, insufficient skills in financial management practices, technological issues, unfavorable government policies, marketing problems, inadequate training, and corruption have been cited as the major causes that affect financial performance of SMEs resulting to closure (Kidali, 2020).

Background studies give an understanding of knowledge acquired from global, national and locally. It entails the review of study and analysis done on the topic. SME financial performance can be explained by different country as: In United States, the office of the United State Trade Representative (USTR) (2021), defines Small- and medium sized enterprises (SMEs) as the backbone of the United State economy and are key contributors to economic growth. United State small business administration, (2022) states that small business comprised more than 99% of American business although launching and maintaining of SME is not easy. United State SME faces challenges such as access to capital, complex regulatory compliance, market competition, lack of skilled employees and poor adoption of technology. Bureau of labor statistics states that 20% of new business close within their first year due to issues like employee mismanagement, lack of planning and inability to adapt to market charges.

Asian development bank states that there was 1,076,000 SMEs in the Philippine in (2021), however 20% of new small business fails within their first year of operation due to lack of market research before launching the product similar to existing business. Philippine statistics authority (2021) recorded 1,000,506 business enterprises operating in the country, most of the firms are manufacturing sector producing finished goods for domestic markets that has been in operations for three or less years due to challenges of not transparent and lacks responsive plans for business continuity. However, one in five small business in Philippines falls in the year due to challenges such as lacking capital and financial management, operating without proper market research and planning and poor leadership.

Key small business statistics (2022), SMEs in Canada between 2015 and 2019, states that the number of SME created annually was 101,324 and the average number of businesses that disappeared annually was 90,151 due to changes in consumer behavior, lack of financing and government support programs. According to innovation, science and economic development Canada (2016), the smallest business in Canada with five employees has a 62.5% chance of survival due to lack of capital, lack of knowledge in attaining loans, lack of market demand and poor management.

Organization for Economic Co-operation and Development better policies series (OECD, 2015), Japan SMEs in between 1999- 2014 dropped by 21% as result of retirement from 4.8 million to 3.8 million of ageing workforce and weak entrepreneurial intentions in the Japanese population, access to financing and competition from larger corporation. In China, National Bureau of Statistics (2018), indicates 99.8% of businesses were SMEs. SMEs are the driving force behind the economic growth of China, making up about 97% of all enterprises and contribute 80% of non-government employment (Jess, 2021). Ruchen (2023) studied the role of SMEs in China circular

economy transition, the researcher concluded that the main issue of SME drop is caused by insufficient financing, lack of capital, lack of government support as well as networking.

In Africa, according to center for strategic and international studies (CSIS), (2021), SMEs are backbones of economy where it make up to 90% of the private sector that create more than 50 % of jobs in economies. KIPPRA (2022) notes that in Nigeria indicate that there is 80% of SME mortality rate within the first year of their existence despite having the highest entrepreneurship rate in the world. Acrob (2017), states that five out of seven SME shut down before attaining years of operation. Ajibola (2020) reports that failure rate of SME in Nigeria is 80% within five years of inception due to poor employment practices, inadequate technology, lack of accounting solutions, poor marketing and poor control practices.

Peprah *et al.*, (2016), states that 60% of Ghana SME do not survive beyond five years due to lack of managerial knowledge and skills, technology advancement and lack of research capacity. Olawale and Garwe (2010), SME in South Africa fail at estimate rate between 70% and 80% within first year of operations. Leboea and Muriithi (2017), concur with this finding, that business in South Africa have the highest mortality rate of 50 to 95% depend upon the industry within first five years of operations.

Rwanda Bureau of statistics (2012) and Ministry of trade and industry (2017) explained high rate of SME failure registered in Kigali, Rwanda, the number of SME failure is also high and alarming in such a way that 80% of new SME never attain their first anniversary, 50% never celebrate their fifth year and only 10% can celebrate in their tenth year. Romain (2021), notes that new SMEs do not grow and their failure rate is high as 70%. Ministry of trade, industry and cooperatives Uganda, (2019) notes that

28% of SME do not survive beyond one year and 54% of SME fail to survive beyond five years due to inadequate collateral, lack of professionalism, competition, low level technology and inability to afford long term financing.

In Kenya, SME is defined by number of workers, turnover and capital. SMEs play paramount role in Kenya's economy. KIPPRA, (2010) states that SMEs is a basis of innovation, competitiveness, goods and services plus entrepreneurial skills. SME play significant part in employment, wealth creation, income circulation, accumulation of technological capabilities and supplying the available resources (Njeru, 2015). Jacqueline *et al.*, (2017) and Kenya institute of management (2017), 70% of SME in Kenya fail within first three years of existence attributed by making losses, market saturation and poor investment. One third of SMEs fail within first three years of operation with 80% of those that survive fail to reach the fifth year (Wairimu and Mwilaria, (2017). According to Akaeze (2017) states that failure rate could be attributed by implementation of inadequate strategies.

Eldoret city is a key economic hub in Kenya's Rift Valley region. SMEs in Eldoret city contribute significantly to the local economy by providing employment, generating income, and supporting other sectors like agriculture and services. Research in this area can help understand the economic impact of SMEs and identify ways to support their growth. Researching SMEs in this city can offer insights into local market dynamics, including consumer preferences, competition, and the impact of regional trends on business performance. SMEs in Eldoret city face certain problems that negatively affect their financial performance thus led to diminishing their ability to contribute to economic development.

Financial management practice is process for identification, collection, selection and analysis of financial data for the assistance to a team of management for the strategic decisions and effectiveness of the organizational assessment (Delkhosh & Mousavi, 2016). Financial management practice focuses on good intentions of financial wealth of business owners with a long-term purpose in line with the strategic goals of the firm or enterprise. A financial management practice consists of cash flow management, budget planning and investment decision on financial performances to be taken over a three to five-year period to achieve the company success.

Effective cash flow management ensures that SMEs have enough liquidity to cover operational expenses and invest in growth opportunities. Strategies like optimizing accounts receivable and payable, managing inventory efficiently, and implementing cash flow forecasting tools can enhance financial stability and performance. Cash flow management influences SMEs' ability to innovate and invest in new projects or technologies. Demirgüç-Kunt *et al.*, (2021) demonstrates that SMEs with effective cash flow management were more likely to invest in innovation, leading to higher productivity and competitiveness.

Financial planning and budgeting involve setting goals, allocating resources, and monitoring performance to achieve desired outcomes. Hair *et al.*, (2017) found that SMEs that engage in comprehensive financial planning and budgeting tend to achieve higher levels of financial performance and sustainability. Developing comprehensive financial plans and budgets helps SMEs set realistic goals, allocate resources effectively, and monitor performance against targets. Regular financial monitoring and adjustments are essential to ensure alignment with business objectives and optimize financial performance. Chowdhury *et al.*, (2016) emphasized that SMEs that engage in

proactive financial planning and budgeting are better equipped to achieve their financial goals and improve overall financial performance.

Strategic investment decisions can drive growth and improve financial performance. SMEs need to allocate resources wisely, prioritizing investments that offer the highest return on investment while considering factors such as risk, timing, and market conditions. Majid *et al.*, (2017) indicated that SMEs make strategic investment decisions based on thorough financial analysis and market research tend to achieve higher returns and sustainable growth.

Financial management practices, tedious process of issuing of trade licensing, insufficient funds, lack of planning and inappropriate technology have been identified as a problem affecting SMEs financial performance in Eldoret city resulting from (Chepngetich, 2016; Otieno, 2021; Wesonga *et al.*, 2020). As a result, most SMEs fail to operate in subsequent years after birth. Conducting research on SMEs in Eldoret city is crucial for understanding their role in the local economy, addressing challenges, promoting innovation, and supporting policy development tailored to the unique context of the area.

The dismal of SMEs financial performance yield in job creation, poverty eradication and growth of gross domestic product all this is hampered. As a result, Kenya's vision 2030 will still be a dream (Wesonga *et al.*, 2020). The dismal SMEs financial performance led a researcher to investigate moderating effect of digital finance service on the relationship between financial management practices and financial performance of selected SMES in Eldoret city, Kenya.

Digital finance has become a key tool for reducing social inequality and promoting economic growth (Liu *et al.*, 2022; Ozturk & Ullah 2022). Digital finance services improve accessibility, convenience and affordability to financial services particularly for low-income individuals and SMEs.

Yang & Zhang (2020) point out that promoting digital financial inclusion and restructuring the financial industry can boost SMEs and macro economy. Wang (2016) explained that SMEs perceive access to finance as the most significant obstacle that hinders growth. However, the impact of digital financial services on the ease of doing business is not explored exclusively it still on infancy stage based on the literature the study introduces digital financial services as moderating variable to broaden research perspective on effect of financial management practices on financial performance of SMEs. Thus, the study helps to examines how new digital technologies can be used to empower SMEs financial performance and solve financial constraints faced by SMEs. Therefore, attracts the researcher attention to study the moderating effect of digital finance service on the relationship between financial management practices and financial performance of selected SMES in Eldoret city, Kenya.

1.3 Statement of the Problem

Financial performance refers to degree to which financial objectives has been accomplished. Small and medium enterprises play a crucial role in Kenya's economic development by fostering innovation, creating employment opportunities, and contributing significantly to the gross domestic product (GDP) (Endris & Kassegn, 2022). Despite their importance, many SMEs in Eldoret city continue to experience poor financial performance, often characterized by low profitability, limited growth, and high failure rates within the first few years of operation. These financial challenges are often linked to inadequate financial management practices, poor budgeting, ineffective investment decisions, and limited access to finance. Consequently, many SMEs fail to expand or even close within their first few years of operation.

Small business administration (SBA) (2022), stated that there is a high rate of business startups in Kenya but begin to fail in the first year and by the end of tenth year 33% are still doing well. However, most SMEs are collapsing in short period due to poor financial performance that leads to poor savings culture, financial discipline, lack of budgeting and high taxation rates. Kenya National Bureau of Statistics (KNBS), (2022), figures out that about 400,000 SMEs close annually across Kenya only 10% of SMEs are able to celebrate a float of ten years of their start, 46% of SME folding within the first year of establishment.

SMEs fails within the first three years of operations attributed to losses, market saturations and poor investment (Kenya institute of management (2017) concur with Jacqueline *et al.*, (2017), 70% of SME in Kenya fail within first three years of existence. One third of SMEs fail within first three years of operation with 80% of those that survive fail to reach the fifth year (Wairimu & Mwilaria, 2017). Failure to manage

challenges hampers SMES survival (Odongo& Wang 2016). This situation raises concerns about SMEs effectiveness of their financial management practices and the extent to which these practices influence financial performance.

The problem that this study addressed, is the inconsistent financial performance of SMEs in Eldoret city, which can be attributed to varying financial management practices. Despite the adoption of modern financial performance, many SMEs in Eldoret city continue to struggle with issues such as cash flow problems, inadequate access to finance, high operating costs, lack of financial data and reporting, market competition, economic vulnerability and poor financial planning, leading to business failures or stagnation (Chepngetich, 2016; Otieno, 2021).

Several studies in Kenya and other developing economies have examined the effect of financial management practices on firm performance, limited attention has been given to the moderating role of digital finance services in this relationship, particularly in the context of SMEs in Eldoret city has not been thoroughly examined. However, this study takes into account digital finance services as entry point for research to shed the light on the growth and quality expansion of SMEs. Thus, this study aims were to fill the existing gap by introducing digital finance services as a moderator in relationship between financial management practice and financial performance of selected small and medium enterprise and form the basis for further academic studies.

Therefore, this study seeks to examine the moderating effect of digital finance services on the relationship between financial management practices and the financial performance of selected SMEs in Eldoret City, Kenya to addresses the knowledge gap.

1.4 Study objectives

The following were the study objectives:

1.4.1 General Objective

Main objective of this study was to examine moderating effect of digital finance service on the relationship between financial management practices and financial performance of selected SMES in Eldoret city, Kenya.

1.4.2 Specific Objective

The following are specific objective of the study:

- i. To determine the effect of cash flow management on financial performance of selected SMEs in Eldoret city.
- ii. To establish the effect of budget planning on financial performance of selected SMEs in Eldoret city.
- iii. To examine effect of investment decision on financial performance of selected SMES in Eldoret city.
- iv. To assess the effect of digital finance services on financial performance of SMEs in Eldoret city.
- v. To determine the moderating effect of digital finance services on relationship between:

(a) Cash flow management and financial performance of selected SMEs in Eldoret city.

(b) Budgeting planning and financial performance of selected SMEs in Eldoret city.

(c) Investment decision and financial performance of selected SMEs in Eldoret city.

1.5 Research Hypotheses of the Study

This study purpose was to investigate moderating effect of digital finance services on the relationship between financial management practices and financial performances of selected SMEs in Eldoret city. Here are the hypotheses:

H₀₁: Cash flow management has no significant effect on financial performance of selected SMES.

H₀₂: Budget planning has no significant effect on financial performance of selected SMES.

H₀₃: Investment decision has no significant effect on financial performance of selected SMES.

H₀₄: Digital finance service has no significant effect on financial performance of selected SMEs.

H₀₅: Digital finance service has no moderating effect on the relationship between:

(a) Cash flow management and financial performance of selected SMEs in Eldoret city.

(b) Budget planning and financial performance of selected SMEs in Eldoret city.

(c) Investment decision and financial performance of selected SMEs in Eldoret city

1.6 Significance of the Study

The study outcome helps SME managers, public and sole proprietors to undertake the right path in implementing financial management practice and need to use digital finance services in achieving their objectives. The study also open way for academicians to do further studies on the issue and to add knowledge to existing research. The study could benefit government and policy makers in making future

policies that would be detrimental to SMEs operations and give guidance to understand financial management practices among SMEs to work in efficient and effective manner. Finally, it provides SME's owners, managers and employees in providing new insights and enlightened on implementation of financial management practices and their firm's financial performance by introducing digital finance services on their operations, thus enhancing the firms' profitability.

1.7 Scope of the Study

This study focused on small and medium enterprises within Eldoret city where most SMEs are located. Eldoret city is headquarter of Uasin Gishu county, north rift region in Kenya former rift valley province. Eldoret city is known majorly for commercial services such as wholesale and retail trade, information technology services, auto repair and entertainment centers thus thriving SME's sectors. Eldoret city was selected as a primary focused for the study due to high concentration of registered SMEs and its significance to county administrative and economic hub. The researchers study target population was 1236 SMEs registered in Eldoret city as per county registrar with sample size of 302 using Taro Yamane formula since the total population of the study was known (Chebii, 2017).

The area was selected for this study to generate homogeneity of related business firms in a similar location. Thus, allowed investigation on factors affecting financial performance of SMEs in urban center. The study area was chosen due to high rate of rising number of SME. The study was carried within a period of three months (September, 2024 to November, 2024).

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter comprises theoretical framework which anchored on priority-based budgeting theory, modern portfolio theory and resource-based theory. It also presents the concepts of financial performance, cash flow management, budget planning, investment decision and digital financial services. The chapter also entail empirical review, literature summary, literature gaps, and finally, the conceptual framework.

2.2 Theoretical Framework

Priority based budgeting theory, modern portfolio theory and resource-based theory was used in the study.

2.2.1 Priority-Based Budgeting Theory

Priority-based budgeting theory was introduced by scholars such as John E. Beasley and Kavanagh and Fabian (2011) in the field of public administration and budgeting. Priority-based budgeting theory is a modification of zero-based approach that focused on firm priorities and allocation of resources to enhance savings and growth in budgeting. The theory emphasizes the importance of allocating financial resources based on the relative importance of various programs, projects, or goals based on priorities and objectives rather than simply making incremental adjustments to past budgets and historical spending patterns to enhance financial performance (Pidgeon,2010). It suggests that by aligning budget allocations with strategic priorities, firms can enhance financial performance and achieve their goals more effectively.

Priority-based budgeting theory can be applied on how SMEs in Eldoret city can perform their budget planning and allocate their financial resources to align with their strategic priorities. By prioritizing expenditures based on strategic goals and performance objectives and how digital finance services can enhance the efficiency and effectiveness of priority-based budgeting theory by providing real-time data and analytics, helping SMEs to better align their budget allocations with their priorities. This can improve the accuracy of budgeting processes and financial performance (Ramanathan, 2016). Effective implementation of priority-based budgeting can lead to better financial performance by ensuring that resources are directed towards high-impact areas.

Priority-based budgeting theory argues that resources should be allocated in alignment with strategic priorities and goals, ensuring that limited resources are directed towards areas that will have the greatest impact or address the most critical needs. Priority-based budgeting theory assumes that by carefully evaluating priorities and making strategic resource allocation decisions, organizations can optimize their effectiveness and achieve better outcomes. This theory assumes that firms have clear strategic objectives, effective performance measurement systems, and the ability to reallocate resources dynamically based on changing priorities.

Priority-based budgeting theory is often critical of traditional budgeting approaches, such as incremental budgeting, which it perceives as lacking responsiveness to changing priorities and failing to address emerging needs effectively. Critics argue that priority-based budgeting may be challenging to implement effectively due to organizational inertia, conflicting priorities, and the difficulty of accurately assessing the impact of investments on financial performance.

In the context of small and medium-sized enterprises (SMEs), can benefit from allocating resources based on their most pressing needs and strategic goals, ensuring that limited resources are used efficiently to drive growth and competitiveness. By prioritizing investments and expenditures, SMEs can enhance their overall financial performance and sustainability. SMEs, with limited financial resources flexibility, can optimize their financial performance by aligning budget allocations with strategic goals, thereby maximizing the impact of their investments and expenditures. SMEs, with limited financial flexibility, may benefit from prioritizing investments that directly contribute to their core business objectives and avoiding expenditures that do not align with their strategic priorities. This theory is relevant to the study in explaining how prioritization affects SMEs financial performance.

2.2.2 The Modern Portfolio Theory

Modern portfolio theory (MPT) that was pioneered by Harry Markowitz (1952). In his paper of portfolio selection, it explains the theory as a practical technique used for selecting investments and to construct diversified portfolios, to maximize overall returns in an acceptable level of uncertainties either high level risk that leads to high return or low-level risk resulting to low return. A key component of the MPT theory is diversification. Markowitz argued that investors could achieve their best results by choosing an optimal mix of the two based that is high level risk that leads to high return or low-level risk resulting to low return on an assessment of their individual tolerance to risk. Investor can be able to construct a portfolio of multiple assets resulting to greater returns without a higher risk.

Modern portfolio theory is applicable to the investment decisions and cash flow management of SMEs in Eldoret city by applying diversification strategies to manage

financial risk and enhance returns. By adopting modern portfolio theory principles, SMEs in Eldoret city can manage their investment portfolios to optimize financial performance. This involves using diversification strategies to mitigate risk, enhance returns and improves financial performance.

MPT assumes that investors are risk-averse, that's they prefer a less risky portfolio to a high risky for a given level of benefit. Practically, risk aversion implies mainly on investing in multiple classes. Expected return of portfolio is calculated as weighted sum of returns on individual assets. Criticism of the MPT is that it evaluates portfolios based on variance rather than downside risk. Most investors would prefer frequent small losses easier to endure and may not fully account for factors like market inefficiencies, non-normal distributions of asset returns, and the limitations of historical data in predicting future returns. Modern portfolio theory (MPT) is breakthrough in personal investing that a conservative investor of SME can do better by choosing a mix of low-risk and riskier investments than by going entirely with low-risk choices. More importantly, it suggests more rewarding option does not add additional overall risk its therefore key attribute of portfolio diversification.

SMEs, facing financial constraints and higher risk perception, may benefit from applying principles of diversification and risk management to their investment and financing decisions to improve their financial performance. SMEs, with limited resources and higher risk exposure, may adopt conservative investment strategies and focus on diversification to mitigate risks and enhance their financial performance.

2.2.3 Resource Based Theory

Resource Based theory was first developed by Edith Penrose (1959), states that unused managerial resources are the primary driver for growth and expansion through diversification of any firms that undertake. Penrose who proposes a model as an effective tool for management of resources, firms, diversification strategy and productive opportunity. Penrose gave an insight in the process of resource acquisition, utilization and expansion for competitive advantage (Rugman & Verbeke 2002). The theory suggests that firms possess resources, a subset of which enable them to achieve competitive advantages, and a further subset which leads to sustained competitive advantage.

Resource based theory was the main theory of study since it focuses on firms' financial performance and predicts fundamentals of organization performance and competitive advantage. The theory provides an essential framework to explain and predict the fundamentals of a firm's performance and competitive advantage (Utami & Alamanos, 2023). The theory was later developed and refined by Jay B. Barney (1991), the resource-based theory of the firm was found considerable support in the business literature. The theory argue that a firm's sustained competitive advantage is based on its valuable, inimitable, rare and non-substitutable resources (Barney, 1991).

The assumption of the resource-based theory is that firms' performance and competitive advantages are enhanced by properly utilizing valuable resources and capabilities as the primary sources of its competitive advantage (Shinta *et al.*, 2022). Theory focuses on the effects of resources that firms have and ability to utilize resources on business performance to gain competitive advantage. The theory also assumes that resources and

capabilities are not easily transferable between firms and organizations have different resources and capabilities even within the same industry (Meziyet, 2023).

Resource-based theory has a significant influence on performance and provides a robust framework for understanding how firms can achieve and sustain competitive advantage through effective management and utilization of their unique resources and capabilities. SMEs financial assets through digital finance services would be selected, used, managed, and disposed of strategically given that the firms human resources are financially literate (Agyapong & Attram, 2019). If SMEs has sufficient funds, it will be easier for their management to learn about the latest technological developments in all areas of the firm. If low-cost digital systems like mobile money are enabled, sales will increase. Increased profit from high sales would allow the business to purchase more resources. SMEs highlights the importance of focusing on distinct strengths to navigate competitive challenges and opportunities. SMEs often face significant limitations in financial, human, and technological resources, which can restrict their ability to invest in new opportunities. Maintaining a competitive advantage can be difficult for SMEs due to the dynamic nature of markets and technological advancements.

Resource-based theory can be applied to SMEs in Eldoret city on how to utilize their financial resources, skills and capabilities to manage their finances effectively. Effective financial management practices can leverage unique financial resources and capabilities for competitive advantage with digital finance services enhancing those capabilities and improving overall financial management thus led to better financial performance and competitive advantage. The theory suggests that SMEs with unique financial management capabilities can achieve better financial performance.

2.3 Concept of SMEs Financial Performance

Financial performance refers to the assessment of a company profitability, efficiency and overall financial health over a specific period. SME financial performance are life blood of economics driving force to development and social transformations. Kenya economic survey reports (2017), states that SMEs has been acknowledge and given priority as growth driver for achievement, development blue print and improves the living standards for the citizen through economic and sustainable growth as well as social capacity for international investors. SME' in Kenya function as live blood to the unfortunate, create employment opportunities, income generation and contribute to economic growth (Mukoma & Masin, 2015). SME's financial performances help in generation of revenue and creation of employment, enhance competency of the country on global scale, attracting international companies to the country through improved inter-counter trade growth and improve social amenities like schools and public space. Government has set up ministry of cooperatives and SMEs in effort to try and enhance a sector that is key to Kenyan economy (Juma, 2022). The existence of SME's projects is a step towards achieving country vision 2030 through job creation, use of technology by both skilled and unskilled labors (Mbura, 2018).

SMES financial performance has capability to function competently, profitability, survive, grow and respond to the environmental chances and threats. Financial performance emphasized on the general measurements regarding the current financial position of one SMEs to another SMEs. Ibrahim and Ibrahim, (2015), studied effect of SME cost of capital on financial performance in Nigeria found that SME cost of capital has insignificant outcome on their financial performance (return on asset).

2.4 Concept of Financial Management Practice

Financial management practice refers to the systematic approach and sets of activities employed by organizations to effectively manage their financial resources (Gitman & Zutter, 2019). It involves various processes such as cash flow management, budgeting, and investment decision-making. Cash flow management allows SMEs to allocate resources for innovation and technology adoption, which are critical for staying competitive in today's rapidly evolving business landscape. By setting clear financial targets and priorities, budgeting ensures that resources are directed towards activities that contribute the most to the organization's objectives. Investment decisions enable SMEs to expand their operations, enter new markets, and diversify their product or service offerings. By investing in expansion projects, SMEs can increase their market share, revenue streams, and competitive advantage.

2.4.1 Concept of Cash Flow Management

Cash flow management plays a crucial role in ensuring the viability of a firm's investment choices. Implementing effective cash flow management systems in business offers several benefits to managers, including controlling expenditures within budgetary limits, minimizing need for borrowing and maximizing the opportunity cost of the company's resources (Bari, 2019). Cash flow management are determination and evaluation of company in monitoring, summarizing and utilizing the net cash payment receipts to achieve disbursements and expenditures.

Effective cash flow management ensures that SMEs have sufficient funds to meet their short-term obligations, enhancing liquidity and financial stability. Onaolapo and Ogunmakin (2019) suggests that SMEs with robust cash flow management practices

are better able to weather economic uncertainties and unexpected expenses, thereby improving their financial performance. Effective cash flow management also provides SMEs with valuable insights into their financial position, enabling strategic planning and informed decision making. Izedonmi and Izedonmi (2018), SMEs that actively monitor and forecast cash flows are better equipped to allocate resources efficiently, pursue growth opportunities, and enhance financial performance.

Cash flow constraints restrict SMEs' ability to invest in innovation, expansion, or market development initiatives, limiting their growth potential and long-term performance. Poor cash flow management can lead to working capital constraints, hindering SMEs' ability to fund day-to-day operations or invest in growth opportunities. Olaleye and Ayoade (2019) suggests that inadequate cash reserves or inefficient cash flow processes can result in missed opportunities and reduced profitability, negatively impacting SMEs' performance. Oluoch and Njoroge (2017) suggests that SMEs with poor cash flow management may struggle to compete effectively or adapt to changing market conditions, negatively impacting their performance over time. Poor cash flow management also increases the risk of insolvency or bankruptcy for SMEs, especially during periods of economic downturn or unforeseen financial challenges. Adegbie and Fakile (2018), cash flow problems resulting from ineffective management practices can lead to missed payments, loss of credibility, and ultimately, business failure, negatively impacting SMEs' financial performance.

2.4.2 Concept of Budget Planning

Budget planning involves the use of budgets to develop financial forecasts, which include sales budgets, operational budgets, cash budgets, capital budgets, strategic budgets, and budgeted financial statements (Bedford, 2015). Budgetary planning is defined as the process of forecasting future events, and how activities should be handled based on predetermined goals set by an organization (Agbenyo *et al.*, 2018).

Budget planning facilitates goal setting and achievement by providing SMEs with a roadmap for financial targets. Hassan *et al.*, (2020), SMEs that engage in comprehensive budget planning are more likely to set realistic financial goals and achieve them, leading to improved financial performance. Budget planning instills financial discipline within SMEs, ensuring that resources are allocated efficiently and expenditures are controlled. Al-Najjar (2019) indicates that disciplined budgeting practices positively influence SMEs' financial performance by reducing wasteful spending and improving cash flow management. Effective budget planning enables SMEs to identify and mitigate financial risks. Ngugi and Omolo (2019) suggests that budgeting helps SMEs anticipate potential financial challenges, such as cash flow shortages or unexpected expenses, and implement proactive measures to minimize their impact on financial performance.

Budget planning serves as a benchmark for evaluating SMEs' financial performance. Kipkorir *et al.*, (2018), comparing actual financial outcomes to budgeted figures enables SMEs to assess their performance, identify deviations, and take corrective actions as needed. Effective budget planning helps SMEs gain better control over their finances by providing a structured framework for allocating resources. Ahmad *et al.*, (2020), budgeting enhances financial control and reduces the likelihood of financial

mismanagement, thereby positively impacting SMEs' financial performance. Budget planning helps align SMEs' financial activities with strategic objectives, leading to improved performance. Muriuki and Murungi (2019), SMEs with well-defined budgets are more likely to align their financial plans with organizational goals, resulting in enhanced financial performance. Budget planning enables SMEs to make informed decisions regarding resource allocation and investment priorities. Musa and Mustapha (2018) suggest that budgeting facilitates decision making by providing managers with a clear roadmap of the financial implications of various choices.

2.4.3 The Concept of Investment Decisions

Investment decision refers to allocation of finance resources discerned into short term and long term. Investment strategy is a long-term process of selecting best investment alternatives and consider the reasonable and stable return from the investment through capital budgeting techniques (Ojochenemi *et al.*, 2020). Business will opt on investment opportunities based on uncertainties, objectives and expectation. Turyahebwa *et al.*, (2013) investment decision made by small and medium enterprises ought to lead to their improved performance, growth, reduced risks and high survival rate. SMEs require capital and more capital is required for SME to grow (Chadha, 2016). Investment strategy that SME managers opt for short term investments to enhance liquidity and working capital that will lead to a long-term process of selecting investment for reasonable and stable return from investment by using capital budgeting techniques. Affirm Investment decisions as imperative to achieve goals Turyahebwa *et al.*, (2022).

Investment decisions are a part of strategic decision-making in every enterprise because new investment projects essentially affect future economic results and the enterprise's prosperity (Schwab, 2017). In order to reduce chances of collapse in SMEs, investment decisions become a requirement for individual and overall economy. Investment decisions are among the most important decisions to be made by the SME's as they influence the financial performance of the SMEs (Katabi & Dimoso, 2016). SMEs that make strategic investment decisions based on thorough financial analysis and market research tend to achieve higher returns and sustainable growth (Wan *et al.*, 2017).

Heavy investment in long-term projects or assets may strain cash flow, particularly for SMEs with limited financial reserves, leading to liquidity problems and difficulty in meeting short-term obligations (Beck *et al.*, 2014). External factors such as economic downturns or shifts in consumer preferences can negatively impact the returns on investment, causing SMEs to incur losses or underperform relative to expectations (De Mel *et al.*, 2012). Poorly planned or excessive investments can expose SMEs to financial risk, especially if they are unable to generate sufficient returns to cover investment costs. Muriithi and Otieno (2017) suggests that high levels of debt or capital expenditure without adequate revenue generation can strain SMEs' financial resources and negatively impact their financial performance.

Strategic investments in technology, infrastructure, or human capital can enhance SMEs' productivity and efficiency, leading to improved financial performance. Kehinde and Adediran (2019) suggests that investments aimed at upgrading equipment or workforce skills can result in higher output levels and cost savings, thereby positively impacting SMEs' financial performance. Odhiambo and Mwangi (2018) suggests that cash flow constraints resulting from investment decisions can hinder SMEs' ability to

meet operational expenses or take advantage of growth opportunities, negatively impacting their financial performance.

2.5 Concept of Digital Financial Services

Digital financial services are financial services which rely on digital technology for their delivery and use by consumers. Digital financial services comprise a broad range of financial services accessed and delivered through digital channels, including payments, credit, savings, remittance and insurance (Kambale,2016). Further, refers to a new generation of financial services that combine internet and information technology with traditional financial services (Luo,2023).

Digital financial services also refer to financial products and services, technology and infrastructure that enable individuals and businesses to access payments, savings, credit, and investment facilities online, without having to interact physically with a bank or other financial service provider (Pazarbasioglu *et al.*, 2020). Digital finance services encompass a range of financial products and services delivered through digital channels, such as mobile phones, the internet or cards, and electronic payment systems, (Manyika *et al*, 2016). These services have transformed the way financial transactions are conducted, offering convenience, accessibility, and efficiency. Consumers can use digital finance services to pay bills, transfer funds and pay for products and services without leaving their homes or visiting a market or store (Pazarbasioglu *et al.*, 2020).

Previous studies affirm that digital finance services can be assessed using; access, uptake and usage as indicators in line with customer adoption (Hayworth *et al.*, 2019). Kambale (2016) identified mobile banking, mobile money, ATM, internet banking and point of sale as digital finance services indicators. However, financial inclusion data working group, (2019) argue that the ideal construct of digital finance services are

access, usage and quality as indicators. Therefore, to contribute on knowledge gap, the researcher will adopt access, usage and quality as construct of digital finance services which will be utilize as a moderating variable for the study.

2.6 Concept of Control Variable

A control variable is any variable that's held constant in a research study because it could influence the outcomes. The researcher will use firm size and firm age as control variable. Firm age refers to the number of years a business has been operating since its inception (Crane et al., 2019). Firm size generally refers to the scale or capacity of a business, often measured by metrics such as the number of employees, total sales, or total assets. Firm size is an important factor to determine firm's profitability to improve performance and be competitive in the market (Aduale, 2019). Coad *et al.*, (2016) examined the relationship between innovation and firm growth, particularly focusing on the role of firm age. The study found that younger firms tend to grow faster when they innovate, compared to older firms.

Serrasqueiro and Nunes (2016) explored the relationship between firm growth, profitability, and size in Portuguese firms. Firm size and age were used as control variables to determine their effects on profitability and growth. The study revealed that both firm size and age positively influence profitability. However, the relationship between growth and profitability was more complex, indicating that larger and older firms might achieve profitability differently compared to smaller, younger firms.

López-Pintado, Murcia and Gámez (2017) focused on the determinants of financial performance in small and medium-sized enterprises (SMEs) across the European Union. Firm size and age were controlled to assess their impact on the financial performance of SMEs. The research found that firm size had a positive effect on

financial performance, while firm age had a more nuanced impact, with older firms showing more stable, but not necessarily higher, financial performance compared to younger firms.

Lejarraga & Martínez-Ros (2018) examined the relationship between firm innovation, firm age, and firm size, focusing on how these factors influence the likelihood of a firm introducing new products. Firm size and age were used as control variables to assess their influence on innovation outcomes. The study found that younger firms are more likely to introduce radical innovations, while older and larger firms tend to focus on incremental innovations. This highlights the importance of firm age and size in determining innovation strategies.

2.7 Empirical Review

Empirical review summarizes key studies and their contributions to understanding the independent variables to its outcomes. It also focuses on research findings and data driven insights regarding the financial management practices on financial performance of SMEs.

2.7.1 Empirical Review on Financial Management Practice and Financial Performance of SMEs

There are some of these studies done measuring financial management practice and are presented as under:

Ojochenemi, Olusegun and Iyeh 2020, investigated the effect of financial management strategy on the growth of small-medium enterprises in Nigeria. The study used descriptive survey design and descriptive statistics and multiple linear regression was used to analyze data. The study recommends that SMEs should focus on investment to

generates positive net present value, strengthen their growth through cash management and increase their financial performance through effective cash flow statement.

Mwavu, (2018), examined effect of financial management practices on financial performance of Small and Medium Enterprises in, Kenya. The study focused on the Top 100 SMEs in Kenya. The study found that there was negative dividend policy related to SMEs' return on assets. Rugui and Omagwa (2018) examined effect of financial management practices on performance of selected small and medium enterprises in Limuru town, Kenya. The study used descriptive research design and purposive sampling technique. The study recommends that SMEs needs to partner with financial institutions as their stakeholders.

Shabazali (2017), studied influence of strategic financial management on small and medium enterprise performance. The study used descriptive approach and use Yamane formula. The study found that SME's business owners in Nairobi had not invested in long term projects and investment opportunities. The study showed that very few SMEs planned for their capital and they did not use strategic financial management. The study showed that SME owners did not have a proper vision, lacked careful budgeting, lacked the business management skills, and faced great difficulty in accessing both short-term and long-term loans. The study recommends that SME owners should make a deliberate plan to employ strategic financial management approaches in their organizations.

2.7.1.1 Effects of Cash Flow Management on Financial Performance of SMEs

Smirat, (2016) conducted research on cash management practices and financial performance of small and medium enterprises in Jordan. The research revealed that SMEs owners have insufficient knowledge in cash management practices and did not

kept track of their cash payments and receipts. Research recommends the need for SMEs managers to embrace efficient cash management strategy to improve their performance.

Machingambi *et al.*, (2019) conducted research on the impact of cash flow management on profitability and sustainability of small and medium size enterprises in Zimbabwe. According to the findings of the study cash management practices exercised by SMEs are affecting profitability and sustainability of their business. The study revealed that most SMEs are reluctant in applying cash management practices that leads to failure.

Malm (2020) studied research on the analysis of cash flow management and financial performance of SMEs in Accra, Ghana. The findings of the study revealed that the combined cash flow management practices had a positive and significant effect on financial performance of SMEs. Researcher recommends SMEs to emphasis placed combined cash flow management to enhance financial performance. Kassim *et al* (2015) studied Cash management Practices and financial performance of Small Medium Enterprises (SMEs) in the Northern region of Ghana. Findings revealed that finance managers should embrace efficient cash management practices as a strategy to improve financial performance and survival in uncertain business environment.

Effeeloo (2020) studied cash flow management and financial performance of quoted oil and gas firms in Nigeria. The study findings revealed that cash flow from operating and investing cash flows had negative and insignificant relationship with profitability while cash flow from financing activities had a positive and significant influence of the firm performance in the oil and gas sector. Researcher recommends firms to evaluate cash flow management strategies in order to enable them operate more profitability.

Obote *et al.*, (2020) conducted a research on cash management and its financial performance of business firms in Northern Uganda a case of Lira District. Study findings indicates that aforesaid practices were not bearable with time due to inability in forecasting receipts and payments. Researcher recommends business owners to employ business experts. The study also recommends that business associates to consider training on cash management to existing and new entrepreneurs to support them.

Ndirangu (2017) studied research on effect of cash management on financial performance of the companies listed in Nairobi security exchange. Study revealed that company size has negative and insignificant effect on financial performance. Tirimba *et al* (2015) studied effect of cash management on its financial performance of deposit taking sacco's in Mount Kenya region. Study revealed that cash management is necessary for forecasting receipts and payments to avoid mismatch between payment and availability of cash.

2.7.1.2 Effects of Budgetary Planning on Financial Performance of SMEs

Gupta and Jain (2016) studied capital budgeting practices in small and medium enterprises, a study of selected enterprises in Haryana. The findings of the study revealed that majority of the SMEs did not make much investment in fixed assets after starting the business, other SMEs considered aspects of capital budgeting but did not propose proper capital budgets.

Mulani and yang (2013) studied effects of the budgeting process on SMEs performance. An exploratory study based on selected SMEs in India. The study revealed that performance of SMEs in India is affected by characteristics of the budget goals. The

researcher also found that employee motivation to participate in achieving budgeting objectives improves SMEs performance in India.

Maduekwe and Kamala (2016) studied the use of budget in Cape Metropolis, South Africa. The study revealed that most SMEs reviewed uses of fixed budgeting due to lack of qualified personnel and support from top management that affects usage of effective budgets by SMEs.

Sebastian (2018) investigated effects of budgeting on financial performance, a study of selected manufacturing firms in Kinondoni district, Dar es salaam, Tanzania. The findings show that formalized budgetary control has no significant effect on the growth of sales revenue. The results also revealed that formal budgeting planning has insignificant impact on growth of profit. The study recommends that there is need for adequate sensitization of both employees and public on best financial performance practices to enhanced oversight role. Companies need to adapt a medium-term plan to define priorities for their daily task.

Keng'ara and Makina (2020) studied effect of budgetary processes on organization performance: A case of non-commercial Marine state agencies, Kenya. The results revealed that there is a positive significant relationship between budgetary processes for intense budgetary planning, budgetary control and budgetary implementation, monitoring and evaluation on organization performance. The study recommended that organizations should embrace budgetary process in order to realize superior performance.

Abongo (2017) conducted research on effect of budgeting process on financial performance of top 100 small and medium firms in Kenya. The study concluded that there is a positive relationship between financial performance and budgeting process

which is significant on the top 100 small and medium firms' financial performance. The study recommends that SMEs which have not adopted budgeting process should do so in order to enjoy the benefits incurred. Kiiru *et al.*, (2018) conducted research on effect of budget planning on financial performance of small and medium enterprises in Nakuru town central business district. The study revealed that there is a moderate positive and statistically significant correlation between budget planning and financial performance. The study recommend that budget review should be done as frequently as possible to increase the level of understanding.

Chowdhury *et al.*, (2016) emphasized that SMEs that engage in proactive financial planning and budgeting are better equipped to achieve their financial goals and improve overall performance.

2.7.1.3 Effects of Investment Decision on Financial Performance of SMEs

Tulasombat and Chuchuen (2017) studied financial factors affecting investment decisions of organic agribusiness SMEs in Chiang, Mai province, Thailand. The study revealed that there is insignificant effect between working capital management and investment decision for SME in organic agribusiness. Study recommends that SME in organic agribusiness have to pay more attention on every financial factor which can be useful for investment decision making and more benefit for the organic agribusiness.

Gveroski and Jankuloska (2017) studied determinants of investment decision on small and medium enterprises. The study revealed that funds for new investment could be realized from the sale of equity which is the initially invested assets of the owner and through the raising of fund from a financial institution or external sources.

Gradzewicz (2021) conducted research on what happens after an investment spike—investment events and firm performance. The study revealed that investment decision has improved in favor of organizations, then, the financial performance will also increase, and if the investment decisions are not properly taken, then, financial performance can be affected.

Njoku *et al.*, (2022) evaluated the assessment of investment decisions and financial performance of small and medium enterprises in the Federal Capital Territory, Nigeria. The results show there is a positive correlation between annual return that is financial performance and new property acquisition and a negative correlation existed with new plant and acquisition. Study recommends that Policy should be formulated towards educating and training SMEs owners to have more knowledge about business enterprise operations in order to be able to assess their financial performance, external funding and capital should be provided to SMEs at a lower and affordable interest rate, SMEs owners should be encouraged to be willing to invest more into their business to expand their business for more profit, local policies and local infrastructure to enhance SMEs participation in Federal Capital Territory should be provided.

Naomi (2018) conduct research on influence of herding behavior on investment decision of SMEs in Bomet county, Kenya. The findings showed that herding behavior had a negative impact on investment decision. The study recommends investors that they should not imitate others but to trust themselves in making personal decisions and also the government to implement more policies which boosts the growth of SMEs.

Musau (2016) studied effect of investment decision on financial performance of savings and credit cooperatives in Kitui central sub county, Kenya. Study revealed that only

research and development decision had a significant effect on savings and credit cooperatives financial performance while expansion decision, replacement decision had no significant effect to savings and credit cooperatives financial performance. The study recommends that great attention be given to investment decision when stakeholders are evaluating savings and credit cooperatives performance.

Wambua (2018) conducted research on investment appraisal techniques and financial performance of SME in Nairobi city county, Kenya. The findings revealed that investment appraisal techniques significantly affect financial performance among SMEs in Nairobi County. The study recommends that government and other services provided to focus on the issue of investment decision for SME.

2.7.2 Effects of Digital Financial Services on Financial Performance of SMEs

Digital financial services pertain delivery of financial services via mobile phones, personal computers, the internet, or cards connected to a secure digital payment system (Ozili, 2018). Digital finance services offer numerous benefits for SMEs, it's essential to address potential challenges and risks to ensure their effective utilization and positive impact on performance. Digital finance services refer to the far-reaching technologies available to perform financial services from a widespread range of providers to extensive categories of recipients by using e- money, card payments, electronic fund transfers and mobile money (Asian development bank, 2016).

Luo, (2023) studied coverage breath of digital finance and SMEs financing constraints. The findings shows that development of digital finance can effectively alleviate the financing constraints of SMEs. Development of digital finance complements traditional finance for SMEs. Schonberger (2023) studied digital finance, financial constraints and

SME technology innovation- An empirical study based on SMEs and growth enterprise market data. The sample of the study consists of public financial data of Chinese SMEs board and growth enterprise market listed companies from 2012 to 2018. The findings show that digital finance coverage contribute significantly to technological innovation of SMEs through intermediary channel.

Luu *et al.*, (2023), investigates ‘the impact of digitalization on the financial performance of SMEs: Empirical evidence from an emerging economy’. The study uses a comprehensive firm- level data set of 5000 SMEs in Vietnam during the period from 2005 to 2015. The findings shows that digitalization plays a vital role in facilitating the financial performance of SMEs through improved productivity such as computers, email, e-trading and internet to boosts SMEs.

Christanti (2023), studied digital adoption and financial performance; Evidence from Indonesian SMEs in food and beverage sector. The study used a survey of 520 MSMEs using a purposive sampling method. The results indicates that digital adoption has a significant influence on financial performance of MSMEs. Novak and Schwab (2020) examine the relationship between digital entrepreneurship, including the use of e-commerce platforms, and firm performance among German SMEs. Their panel study provides evidence that SMEs engaged in digital entrepreneurship experience higher growth rates compared to their non-digital counterparts.

Demirgüç-Kunt and Klapper (2019), the adoption of digital finance services such as online banking and digital payments has led to substantial gains in efficiency and productivity for SMEs. By streamlining financial processes and reducing administrative burdens, SMEs can allocate resources more effectively, resulting in improved performance metrics such as profitability and growth.

Lyimo and Mbesigwe (2022) investigate the digital finance services in enhancing financial inclusion in Tanzania. The study adopted descriptive research design and a sample of 60 respondents were selected using simple random sampling. The study findings revealed that digital finance services positively enhance financial inclusion in Tanzania.

Ebong and George (2021) examine 'financial inclusion through digital finance services: A study in Uganda'. The study uses rate of change approach to analyze growth momentum in banking and mobile money channels in Uganda. The findings show that banks must innovate to increase their contribution towards enhancing financial inclusion.

Kambi and Onyiego (2022) studied effects of digital financial inclusion on financial growth of micro, small and medium enterprises in Kenya. The study uses descriptive survey and inferential statistics. The study results revealed that independent variables affect growth of micro, small and medium enterprises in Kenya. Klapper, Lusardi, and Van Oudheusden (2015) discussed the role of digital finance services such as mobile banking, e-commerce platforms, and digital payment systems in enhancing financial inclusion and efficiency for SMEs. The study concluded that digital finance doesn't have any correlation on financial inclusion in banking sector in Kenya. E-commerce platforms and digital marketing tools enable SMEs to reach a broader audience beyond their local markets. By leveraging digital channels, SMEs can expand their customer base, increase sales, and enter new markets, thereby boosting performance.

2.7.3 Concept of Digital Financial Services as Moderator

Masiero and Ganugi (2020), which suggests that digital finance services can moderate the relationship between financial management practices and SME performance, by providing easier access to financial information and enabling more efficient financial transactions. Angeles (2022), investigates the moderating effect of digital and financial literacy on the digital finance services and financial behavior of micro, small and medium enterprises. The study explored causal research design. The results of the study revealed that digital finance services do not stimulate savings, borrowing and investing of the owners.

Yang and shahbaz (2023), investigates the study on boosting regional sustainability under digital economy environment: Exploring the moderating role of digital finance in China. Panel data from 30 Chinese provinces spanning the period 2011 to 2021. The findings revealed a significantly positive impact of the interaction terms of digital economy and digital financial inclusion on sustainable regional development.

Onyia and Okereke (2023), studied the moderating role of digitalization on entrepreneurship, entrepreneurship financing and economic growth, Nexus in Nigeria. The study employs autoregressive distributed lag model covering a period of 1990 to 2021. The findings revealed that the interaction between digitalization and entrepreneurship financing has not impacted significantly on the growth of the Nigerian economy.

Nambie *et al.*, (2023), studied measuring the effect of income inequality, financial inclusion, investment and unemployment on economic growth in Africa. A moderating role of digital finance technology. The study uses secondary data spanning 2001 to 2022 and two-step system generalized method of moments was adopted. The findings

revealed that there is significant negative relationship with economic growth while financial technology has significant relationship with economic growth.

Bakashaba *et al.*, (2024), investigates the mediating role of access to digital finance on the relationship between financial literacy and performance of Uganda SMEs in Mbarara city. The study adopted quantitative technique with cross-sectional methodology. The target population was 4776 registered SMEs in Mbarara city. The study demonstrated a positive correlation between performance of SMEs in Uganda and access to digital finance.

Keter *et al.*, (2023), investigates financial performance and firm value. The moderating role of going digital among companies listed in Nairobi security exchange. The sample of 39 firms with observations of 390 during the period of 2010 to 2019. The findings revealed that going digital at lower levels enhances the relationship between financial performance and firm value.

Digital finance services can help to fill the financial gap by providing access to alternative source of funds and enables new digital products and process automation. Beck *et al.*, (2019) highlighted that digital finance services, including mobile money and online lending platforms, have significantly improved access to finance for SMEs in developing countries. This increased access to capital positively impacts SME performance by enabling investment in productive assets and expansion into new markets.

Digital finance services can expand access to finance for SMEs by providing alternative sources of funding, such as online lending platforms and crowdfunding. This increased access to capital can fuel business growth and investment in innovation. SMEs with limited access to technology or digital literacy may struggle to adopt and effectively

utilize digital finance services. This digital divide can widen disparities in access to finance and market opportunities, disadvantaging certain SMEs and hindering their financial performance.

Based on empirical review results, digital finance services have been used as the moderator. For instance, Masiero and Ganugi (2020), use digital finance services as moderator in relationship between financial management practices and financial performance. Angeles (2022) uses digital and financial literacy as moderator on the digital finance services and financial behavior of micro, small and medium enterprises in Philippines. Yand and Shahbaz (2023) use digital finance as a moderator in investigating the study on boosting regional sustainability under digital economy environment. Nambie *et al.*, (2023), also use digital finance technology as moderator in determining measuring effect of income, inequality, financial inclusion, investment and economic growth in Africa. On the other hand, Keter *et al.*, (2023), use moderating role of going digital among companies listed in Nairobi Security Exchange in relationship between financial performance and firm value. Thus, the research contributes to the knowledge gap by introducing digital finance services as a moderator in examining financial management practice on financial performance of SMEs.

2.8 Literature Review Summary and Research Gaps

Literature review indicates that there have been studies that have been conducted in the field concerning financial management practices. Financial management practices are known to have high efficiency, reliability and effective performance, users may not find the practices useful unless they have the necessary skills to operate. Literature review provided a comprehensive study of existing literature on the influence of financial management practice on SMEs financial performance but most has not included cash flow management, budget planning and investment decision as indicators of financial management practice.

A thorough literature review on cash flow management, budget planning, investment decision and digital finance services in relation to financial performance was performed, leading to the identification of multiple gaps. These gaps in the literature are presented in Table 2.1

Table 2.1 Summary of Literature Review and Gaps

Authors	Topic	Method	Findings	Knowledge gap
Somathilake and Pathirawasm (2020)	Financial management practice of SMEs in Sri Lanka. Evidence from North Central Province	Stratified random sampling method and questionnaire was used to select 245 SMEs in North Central Province	The study revealed that there is a significant difference in the application of financial management practice between SMEs	The study reviewed targeted SMEs in Sri Lanka using Stratified random sampling method. The current study incorporates digital finances services to fill existing gap.
Uwonda and Okello (2015)	Cash flow and sustainability of SMEs in Northern Uganda	Cross sectional study was adopted and sample of 120 SMEs was selected using Stratified sampling.	The study revealed that there is a limited application of cash flow management by SMEs. cash flow control and monitoring had significant influence on sustainability of SMEs	The study used cash flow protection such as tax planning, budget control and interpretation of financial statements. The current study used projection such as planning cash flow monitoring cash flow and controlling cash flow to fill contextual gap
Egwu <i>et al.</i> , (2021)	Exploration of cash flow management for enterprises business performance	Survey research design was used. Data was analyzed using descriptive method and regression analysis	The study revealed showed that cash flow management influences fulfillment of financial obligation.	The study used Survey research design. The current study used explanatory research design to fill methodological gap.

Efeeloo, (2020)	Cash flow management and financial performance of quoted oil and gas firms in Nigeria	Ex post factor research design was employed to obtained data from annual report of 5 selected oil and gas companies. Multi regression model was used to analyze variables	The result obtained that cash flow operating activities & investing activities was insignificant to the study while financing activities had a positive significant to the study.	The study use ex post factor research design and secondary data was used in collecting data. The current study used explanatory research design and primary data were used to collect information thus, fill the contextual gap, methodological gap and conceptual gap.
Agbenyo <i>et al.</i> , (2018)	Budgeting and its effect on the financial performance of listed manufacturing firms: evidence from manufacturing firms listed in Ghana stock exchange.	Cross sectional research design and convenience sampling technique was used to select 51 respondents.	The study discovered that budgeting plays imperative roles in the financial performance of the listed manufacturing firms.	The study revealed was targeting manufacturing firms in Ghana. The current study targets SMEs to fill existing contextual gap.
Adegun <i>et al.</i> , (2022)	Budgeting process and SMEs performance: a goal setting theory and quantitative approach.	Survey research design was used. A purposive sampling technique was used to select 110 SMEs in manufacturing sub-sector.	The findings showed that there is a strong and favorable association between budget planning and budget coordination and performance of SMEs.	The study reviewed was done in Nigeria and focus on budget process criteria of budget planning, budget control, budget coordination, budget communication and budget assessment without any moderator or control variables. The current study will be done in Kenya focusing on additional dimensions such as digital finance services and control variables. Thus, this study will filled contextual gap
Tulasombat and Chuchuen (2017)	Financial factors affecting investment decision of organic agribusiness in Chiang, Mai Province, Thailand.	Multi regression analysis was applied	The study revealed that there is insignificant effect between working capital management and investment decision for SMEs in organic agribusiness.	The study reviewed used multi regression analysis. The current study used hierarchical regression analysis to fill the methodological gap.

Njoku <i>et al.</i> , (2022)	Assessment of investment decision and financial performance of SMEs in federal capital territory, Nigeria.	Survey research design was adopted. Multi stage sampling technique was used to obtain a sample size of 400 SMEs	The study result showed that there was a significant association between investment decision and financial performance among SMEs and willingness to invest more funds into business enterprise.	The study was reviewed in Nigeria and survey research design was utilized. The current study take place in Kenya by using explanatory research design.
Showkat <i>et al.</i> , (2024)	Empowering women in digital age: can digital financial services fulfill the promise of financial autonomy and gender equality in the attainment of sustainable development goal 5?	Partial least square structural equation modeling was used as research approach. Convenience sampling was used to find sample size of 426 respondents.	The findings demonstrated a significant and favorable relationship between the utilization of digital finance services and improvement of women ability to make financial decision.	The study reviewed was done in Kabul, Afghanistan using Partial least square structural equation modeling and Convenience sampling. The reviewed study also uses digital financial services as independent variable. The current study was conducted in Kenya using explanatory research design and digital financial services were used as a moderator to fill the conceptual and methodology gap.
Elhariry, (2021)	The impact of using digital financial to enhancing financial inclusion: The moderator role of financial knowledge. A field study on customers of Egyptian banks.	Random stratified sample method to select sample of 379 respondents and survey data was used	The findings showed that digital financial represented on internet banking, mobile banking services, credit card, debit cards and smart wallet to enhance financial inclusion	The study reviewed was done in Egypt with the role of financial knowledge as a moderating variable. The current study was done in Kenya using digital financial services as a moderating variable.

Most of this literature covers wide areas but generally has not looked at how financial management practice have influenced financial performance of selected SMES. Literature has brought varied results with different scholars not reaching on the influence of financial management practice and financial performance of selected SMES. This study left the gap since there is a lack of empirical studies examining the relationship between financial management practices and financial performance in the context of SMEs in Eldoret city, specifically with digital finance services as a moderating factor. While digital finance services are widely promoted, their actual impact on SME financial performance in Eldoret remains underexplored. This study addresses the gap by analyzing how these services modify the relationship between financial management practices and financial outcomes (Demirguc-Kunt *et al.*, 2018).

2.9 The Conceptual Framework

In summary on the research conducted by other scholars it focused much on the direct effects, that is, financial management practices on financial performance of SMEs, commercial banks and hotels. However, there is limited evidence from the literature that focuses on digital financial services as a moderating variable on the influence of financial management practices and financial performance of selected SMEs. The study filled available gap by developing a conceptual framework shown below. The conceptual framework shows diagrammatic representation on how the variable interact on effect of financial management practices related to the specific measures on financial performance of selected SMEs and digital finance services as moderator.

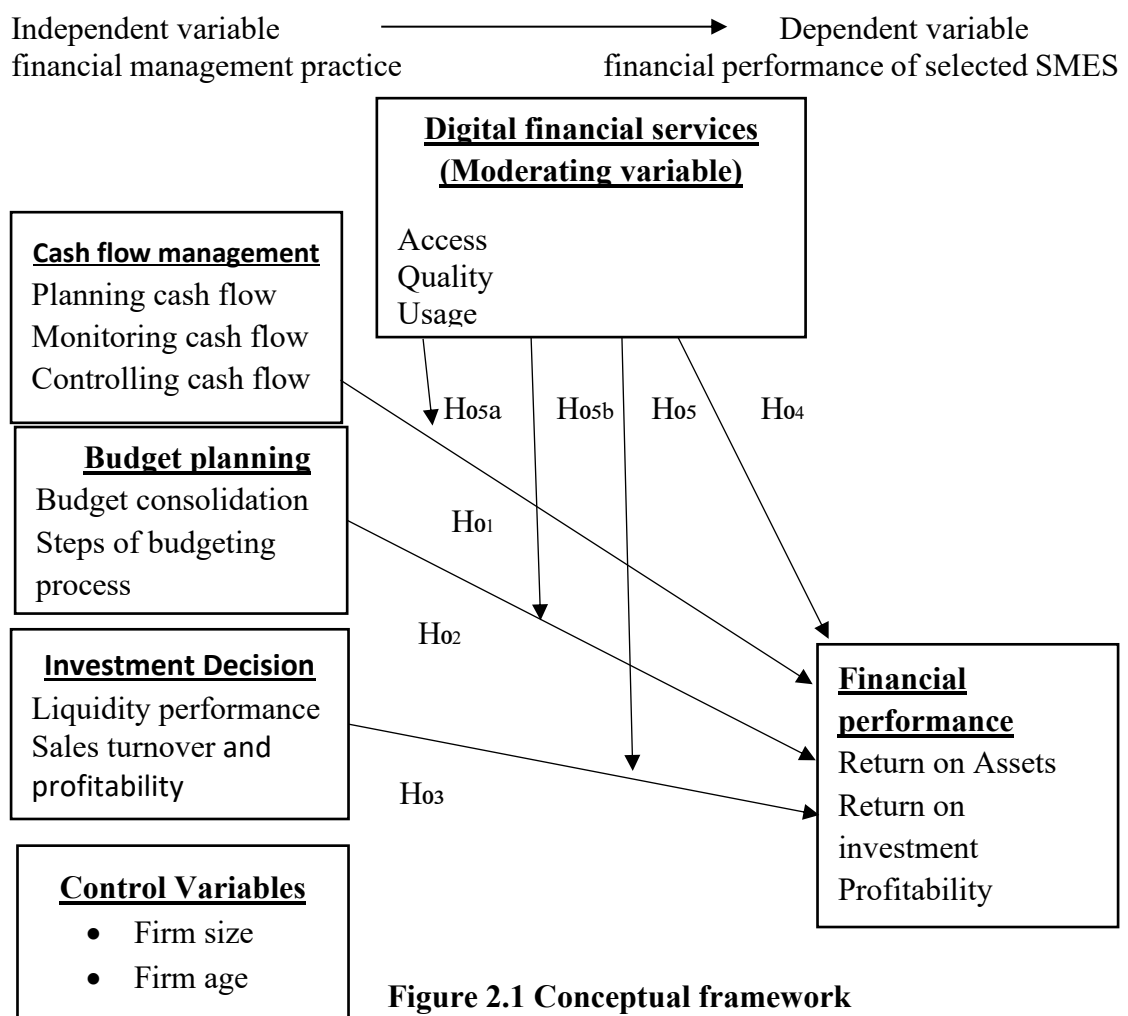


Figure 2.1 Conceptual framework

CHAPTER THREE

METHODOLOGY

3.1 Overview

This chapter entail details employed in research investigation. The aspect was subject to research design, study area, target population, the sampling framework, and sample size and data collection instruments, data collection procedures, reliability and validity of research instruments and data technique analysis.

3.2 Research Design

Research designs are plans and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell, 2009). Research design is a blueprint for fulfilling objectives and answering questions. It constitutes the blueprint for collection, measurement and analysis of data (Cooper & 153 Schindler, 2006).

There are various research design for instance, exploratory, explanatory and descriptive. The study utilized explanatory research design since it gives light on causes and reasons for explanation and predictions of variables given in research problem. Explanatory research design examined causal relationships between variables (Rahi, 2017). Explanatory research design was chosen since it explains the cause, elaborate and predict effect of relationship between independent variable and dependent variable that is based on the study.

3.3 Study Area

This study area focused on small and medium enterprises within Eldoret city where it's a headquarter of Uasin Gishu county, north rift region in Kenya former rift valley province. Eldoret city is known majorly for commercial services such as wholesale and retail trade, information technology services, auto repair and entertainment centers thus thriving SME's sectors. Eldoret city was selected as a primary focus for the study due to high concentration of registered SMEs and its significance to county administrative and economic hub. The area was selected for this study to generate homogeneity of related business firms in a similar location. Thus, allows for investigation of factors affecting financial performance of SMEs in urban center.

3.4 Target Population

Moser and Kalton (2017) explained population as set of people, the service, elements, and events, group of things or households that are being investigated. *Creswell* (2018) described target population as a small percentage of total population, which display similar characteristics related to the study. The total population constitute of 19968 SMEs as per Uasin Gishu County government, department of Trade, Investment, Industrialization and Tourism (2023) and county government of Uasin Gishu integrated development plan 2023-2027 page 134. The researchers study population was 1236 SMEs registered in Eldoret city as per county registrar. The study target population were retail SMEs, service providers, medical services, construction and real estate's, manufacturing and agriculture. Subsequently, the questionnaire was administered to the respondents and data was analyzed. The chosen group had homogenous characteristics and diverse preferences to give a valid result of target population of 1236.

Table 3.1 Target Population

TARGET	NUMBER
Retail SMEs for instance boutiques, electronic shops, grocery stores, supermarkets, m-pesa agents	467
Service providers for instance salon, barbershops, tailoring shops, drycleaners, repair shops	416
Medical services for instance chemists, private clinics, pharmacy	78
Construction and real estates for instance real estate's agencies, hardware's stores	69
Manufacturing for instance clothing, food and beverages, textiles, household items	119
Agriculture for instance agro-vet, cooperatives	87
TOTAL	1236

Source: Department of Trade, Investment and Industrialization, County Government of Uasin Gishu, (2023).

3.5 Sampling Techniques and Sample Size

Sample represents larger population signified to meet specific criteria and characteristics to generalize results of the study. Sampling refers to choosing participants for the research to represent entire population (Simiyu *et al.*, 2020). Simple random sampling method was utilized to collect the data for the study. Stratified random sampling was employed in picking the sample of 302 since it ensures each subgroup within the population receives proper representation within the sample thus reflects the population being studied. The stratified were based with the type of firm. The simple random sampling technique used were to pick a sample from every stratum in order to provide all the sampling units equal chance of being selected (Bacon- Shone, 2015).

The quality of the sample size affects the quality of the inferences made from a sample to the population thus sample size refers to the representative of the population (Chaokromthong & Sintao, 2021). The sample size was determined using Taro Yamane formula since the total population of the study is known as per (Chebii, 2017). Margin of error (e) = 0.05- formula assumes a precision level of 5% and a confidence level of 95% as illustrated:

$$n = \frac{N}{1 + N(e)^2}$$

Where: N = population of the study

n = sample size

e = level of significance or margin of error

1 = unit (a constant)

- Population size (N) = 1236

$$N = \frac{1236}{1 + 1236 \cdot (0.05)^2}$$

$$= \frac{1236}{4.09}$$

$$N = 302$$

If the total population of 1236 = 302 sample size

What about 467 population = ?

$$\text{Therefore } = \frac{467 \cdot 302}{1236}$$

$$1236$$

$$= 114$$

Stratified simple random sampling method was utilized to collect the data from population study of 1236 with a 95% confidence level and 5 % margin of error to obtain sample size of 302 using Taro Yamane formula based on the strata. The sample size for each stratum were determined using Taro Yamane formula. The researcher distributed questionnaires to sample size across the strata, within each stratum the researcher used simple random sampling to select individuals. Gather the necessary data from the selected samples then analyze it with attention to the stratification. Lastly the researcher presents the findings while acknowledging the stratified sampling method used.

Table 3.2 Sample size

Target	Target Population	Sample size
Retail SMEs for instance boutiques, electronic shops, grocery stores, supermarkets, m-pesa agents	467	$467 * 302 / 1236 = 114$
Service providers for instance salon, barbershops, tailoring shops, drycleaners, repair shops	416	$416 * 302 / 1236 = 102$
Medical services for instance chemists, private clinics, pharmacy	78	$78 * 302 / 1236 = 19$
Construction and real estates for instance real estate's agencies, hardware's stores	69	$69 * 302 / 1236 = 17$
Manufacturing for instance clothing, food and beverages, textiles, household items	142	$119 * 302 / 1236 = 29$
Agriculture for instance agro-vet, cooperatives	64	$87 * 302 / 1236 = 21$
TOTAL	1236	302

Source: Department of Trade, Investment and Industrialization, County Government of Uasin Gishu, (2023).

3.6 Data Collection Procedure

Data is a raw fact obtain by researcher and used in the study for maintaining integrity of the respondent information. Creswell *et al.*, (2017) states that data collection means by which information is obtained from selected area of investigation. After authorization of the research proposal by supervisor's and school of business, economics and management sciences panel University of Eldoret, the investigator sought permission to get research permit from National Commission for Science and Innovation (NACOSTI) before conducting the research. After acquiring research permit, the researcher visited county government of Uasin Gishu to seek permission and clarify purpose of research. Data were collected using structured questionnaire by use of drop-and-pick later method on the flexibility of researcher whom visited the locale. Questionnaires were filled up by respondents and returned to the researcher.

3.7 Administration of the Research Instruments

The study used structured questionnaire with seven-point Likert-scale in collecting data since primary data collection method helped in self-administered information. Questionnaire is a written series of enquiry associated to the focused. Dawson (2019) define questionnaire as list of questions that assist researcher in gathering information required. Questionnaires are distributed to respondents who fill up answers then required information extracted (Kothari, 2004).

The questionnaire was carefully designed to cover relevant variables of the study, and this helped researcher to assess the moderating effect of digital financial services on the relationship between financial management practices and financial performance of SMEs in Eldoret city, Uasin Gishu County, Kenya. However, with regards to financial

performance of SMEs the data obtained from three variables were considered as financial management practices that is cash flow management, budget planning and investment decision perceived by owners to be used as proxy for the SMEs financial management practices.

3.8 Measurement of Study Variables

Likert scales are the most fundamental structured way for researchers to gather diverse opinions, motivations and attitudes. Research study adopted seven Likert scale since it provides variety of options to meet reality of respondent. Seven Likert scale is suggested by scholars who argued that it evaluates attitudes, opinions and perceptions of respondents to increase probability of meeting the objective. (Joshi *et al.*, 2015; Altuna & müge, 2016). Likert scale is frequently used psychometric tools in education economy, politics, sociology, psychology, information systems, and market research to quantify qualitative data (Joshi *et al.*, 2015).

3.8.1 Dependent and Independent Variables

Dependent variable, financial performance of SMEs referred to how effectively businesses operate in order to achieve their goals, three construct were used, that is return on assets, return on investment and profitability adopted from (Nunes *et al.*,2012: Khan *et al.*, 2017; Okumu & Buyinza,2019) while independent variable, financial management practice as a predictor variable had three constructs namely; cash flow management, budget planning and investment decision with nine items each, adopted from (Awan *et al.*, 2015: Erambo, 2017; Otoo,2024; Gerber, 2024).

3.8.2 Moderator Variable

Digital financial services comprise a broad range of financial services accessed and delivered through digital channels, including payments, credit, savings, remittance and insurance. Digital finance services, as a moderating variable, had a construct such as access, quality and usage with nine items adopted from (Hayworth *et al.*, 2019; Kambale, 2016; financial inclusion data working group, 2019; Ravikumar, 2020). Access to finance can be measured in terms of access to certain institutions (such as banks, insurance companies, and MFIs) or in terms of access to the functions that such institutions perform, or the services that they provide (such as payments services, savings or loans and credits) (Ravikumar, 2020).

3.8.3 Control Variables

Two control variables, namely firm size and firm age, were held constant in this study as prior studies indicate that they affect financial performance (Yang *et al.*, 2020). Firm size was measured in terms of the number of employees while firm age was measured in terms of years the business has been in operation.

Table 3.3 Description and Measurement of Study Variable

Type	Variable	No. of items	Measurement scale	Sources
Dependent variable	Financial performance selected SMEs	10	7 point Likert scale	Nunes <i>et al.</i> ,2012
Independent variable	Cash flow management	9	7 point Likert scale	Awan <i>et al.</i> , 2015:
Independent variable	Budget planning	9	7 point Likert scale	Erambo, 2017;
Independent variable	Investment Decision	9	7 point Likert scale	Otoo,2024; Gerber, 2024
Moderating variable	Digital finance services	9	7 point Likert scale	Hayworth <i>et al.</i> , 2019; Kambale, 2016; Ravikumar, 2020
Control variables	Firm size Firm age	2	(Scale range) -Number of employees - Period of firms in operation	Yang <i>et al.</i> , 2020; Pervan <i>et al.</i> , 2017

3.9 Reliability and Validity

Reliability is the assessment of degree on consistency of items while validity refers to the degree to study accurate measures of study items.

3.9.1 Reliability

Reliability shows how trustworthy is the score of the test. If the collected data shows the same results after being tested using various methods and sample groups, the information is reliable. Reliability is the assessment of degree which research yield

consistent results after several trials Mugenda (2008). Though every research had some degree of unreliability the dependability assessments were used to reduce amount by identifying potential problems early on. The value of Cronbach's Alpha ranges from 0 to 1. Cronbach's Alpha (> 0.90) might suggest redundancy and greater internal consistency among the items and show that the test length should be shortened (Tavakol & Dennick 2011). The Cronbach's alpha (α) method was used to guarantee data reliability.

3.9.2 Validity

Validity shows how a specific test is suitable for a particular situation. If the results are accurate according to the researcher's situation, explanation and prediction, then the research is valid. Mugenda (2008) states validity as accuracy, meaningfulness and truthfulness of inferences based on facts obtained from tool or scale for the constructed study. The validity technique measures degree of questions items that reflects the specific research areas covered. Saunders *et al.*, (2011) describe a test is valid if it measures the intended purpose. There are three types of validity, namely face validity is the extent to which a measure seems to assess what it is supposed to, criterion-related validity examines the degree to which a measure is correlated with an external criterion and construct validity evaluates how well a test or instrument represents and measures the theoretical concept. Construct validity is generally assessed through convergent and discriminant validity, determining if related constructs correlate while unrelated constructs do not (Flake et al., 2017;). The questionnaires validity was established to cover all aspects under investigation. The supervisors and experts in finance were used to determine the face validity of the research instruments. The researcher utilized factor analysis to determine the construct validity of the study.

3.10 Piloting of the Research Instruments

Piloting research instruments is a critical step in the research process. It served to test the design, distribution method, clarity of questions, and the data entry and analysis stages before the full-scale study begins. It also aimed to evaluate the practicality, resources, time, and cost of the research. Further, a pilot study helped to identify design issues and improve the research methods and procedure. Preliminary data from the pilot study provides insight into potential results (Junyong 2017). The researcher selected 10% of the study sample of 302 in Kapsabet town for pilot study. Kapsabet, town as a smaller town with distinct demographic and economic characteristics, presents a unique market environment. Kapsabet town was chosen to test the study due to homogeneity of business firms in Eldoret city thus allowed researcher to understand and cater to the specific needs, preferences, and behaviors of the local population in order to provide potential results. By doing so, any mistake in the research procedure, ambiguities instructions, or problems with the tasks were identified. This enabled the researcher predict an appropriate sample size, budget, and improve the study design based on pilot study results. The pilot study outcome revealed that the instrument used was reliable and valid, since all the variables meet the coefficient that varies from 0 to 1 as shown in Table 3.1 below. Cronbach's alpha method was used to test consistency of the questionnaires based on feedback to ensure that questionnaires were relevant in collecting desired information. The study further revealed that the overall Cronbach's alpha of 0.978 for the 42 items, were within an acceptable range.

Table 3.4 Pilot study results

Name of variable	Number of Items	Score
Financial Performance	11	0.923
Cash Flow Management	8	0.898
Budget Planning	9	0.925
Investment Decision	8	0.904
Digital Finance Services	6	0.898
Composite Reliability score	42	0.978

3.11 Data Processing, Analysis, and Presentation

This section presented concepts of how the researcher processed, analyzed data and presented data for the study.

3.11.1 Data Processing

Data processing occurs when data is collected and translated into usable information. Data processing starts with raw data and converts it into a more readable format using graphs, documents and can be interpreted by computers by indicating codes, cleaning and screening the collected data and utilized by employees throughout an organization. Coding data refers to transforming raw collected data into a set of meaningful information, cohesive categories (Wicks, 2017). Therefore, each item in the questionnaire were assigned a code and entered into the Statistical Package for the Social Sciences (SPSS) version 23 for analysis. Cleaning and screening data were utilized to ensure no data were missing, then researcher run frequencies to ensure valid data entry. Cleaning and screening data helped researcher to check the accuracy,

completeness, data distribution and enhanced the validity and reliability of measurements.

3.11.2 Data Analysis and Presentation

Data analysis refers to critical analysis and interpretation of figures and numbers and attempts to find a rationale behind the emergence of the main findings (Chebii, 2017).

Data analysis aims to get a deeper understanding of collected data, determine consistent patterns, and summarize the relevant details revealed in the research (Chebii, 2017).

After collection of data, the researcher checked the questionnaires to ensure they are complete and serialized them. Data analysis helped to evaluate the strength of digital finance services on financial management practice and SME's financial performance in order to gain meaningful description through statistics.

The researcher employed descriptive such as mean, medium, standard deviation, and frequency distribution to analyze data and respondent information. Factor analysis was conducted to form real variables, which helped to test hypotheses. Karl Pearson was adopted to determine correlation analysis. Cronbach's Alpha coefficient was used to checked instrument's reliability. Researcher used hierarchical regression analysis through Statistical Package for Social Sciences (SPSS version 23) to test variables and moderation effect. The study findings were presented through tables, percentages, discussion, graphs and descriptions.

3.12 Model Specification

Hierarchical regression model was used to determine linear relationship between the predictor variables (cash flow management, budget planning and investment decision) and the outcome variable (SMEs financial performance). Hierarchical regression analysis was also used to examine the moderating effect of digital financial services on the relationship between: cash flow management and SMEs financial performance, budget planning and SMEs financial performance and investment decision and SMEs financial performance

Conditions for moderation

The difference between resultant R^2 after interaction should be more than R^2 before interaction and must be significant. The resultant coefficient after the interaction term should not be zero and with or without the interaction the overall model should be significant and should not be 0.05%. Therefore, various regression models were built by adding variables and models. The focused were to established whether newly added variable show a significant increase R-square. The model was indicated as:

Model 1: $Y = \beta_0 + \beta_1 \text{firm size} + \beta_2 \text{firm age} + \epsilon \dots \dots \dots R^2$

Model 1 examined effects of two control variable, firm size and firm age, on the dependent variable Y (financial performance of SMEs).

Model 2: $Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \dots \dots \dots \Delta R^2$

In model 2, the three independent variables representing financial management practices was added to the previous model to reflects how much additional variance is explained while holding covariates constant.

Model 3: $Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 M + \varepsilon \dots \Delta R^2$

In model 3, the model incorporates the moderator variable (digital finance services, M) into the regression equation while controlling for firm size, firm age, and financial management practices.

Model 4: $Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 M + \beta_5 * X_{1M} + \varepsilon \dots \Delta R^2$

Model 4 In this model, an interaction term (X1M) is introduced to evaluate whether the relationship between cash flow management (X1) and financial performance is moderated by digital finance services (M) while accounting for control variables, other independent variables (budget planning and investment decision) and moderating variables.

Model 5: $Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 M + \beta_5 * X_{1M} + \beta_6 * X_{2M} + \varepsilon \dots \Delta R^2$

Model 5; This model adds another interaction term (X2M) to investigate the moderating effect of digital finance services on the relationship between budget planning (X2) and financial performance while accounting for control variables, the direct effects of the moderator and other predictor variables (cash flow management and investment decision).

Model 6: $Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 M + \beta_5 * X_{1M} + \beta_6 * X_{2M} + \beta_7 * X_{3M} + \varepsilon \dots \Delta R^2$

Model 6; model includes the last interaction term (X3M) to evaluate the moderating effect of digital finance services on the relationship between investment decisions (X3) and financial performance while controlling for control variables and the direct effects of the moderator, along with other predictor variables (cash flow management and budget planning).

Where: Y=Dependent variable (financial performance of SMEs)

- β_0 = The constant, $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$ are parameters of estimate
- C = Covariates (size and age of the business)
- M= Moderator (digital finance service):
- X1 – cash flow management
- X2 – budget planning
- X3 – investment decision
- ϵ – Is the error term

3.13 Assumptions of Hierarchical Regression Model

Statistical model is a mathematical model that embodies a set of statistical assumptions in generation of sample data. Therefore, hierarchical regression model had variety assumptions that were important to test and assess the reliability of the result before conclusions of the study are made. The researcher tested linearity, normality, homoscedasticity, autocorrelation and multi-collinearity assumptions.

3.13.1 Linearity

This assumption test requires relationship between outcome and the predicted variables to be approximately linear. Linearity test was used to test whether dependent variable and independent variable are related to give linear significant value of <0.05 . Linearity was tested using a P-P scatter plot of scores represented by a straight line.

3.13.2 Normality

Normality test helped to assess sample data that were drawn from a normal distributed population. Data collected were represented by a straight-line using Q-Q plots. Normality is defined by a mean of 0 and a standard deviation of 1 (Hickey et al, 2019). Researcher tested normality using skewness, kurtosis, and histograms with a rule of thumb within +2 to -2.

3.13.3 Homoscedasticity

Homoscedasticity refers to a statistical term having the same scatter from the line. Homoscedasticity refers to the condition where the dispersion of error terms or residuals remains consistent across the full range of values of the independent variables. It denotes assumption that variance of the errors remains constant across all levels of

the independent variables (Hickey *et al.*, 2019). The residuals (errors) should have constant variance at all levels of variables, and violations can result in Type 1 error (Tabachnick, & Fidell, 2019). The researcher employed scatter plot concept to determine the constant variance of the error term. The researcher utilized p-p plots to test homoscedasticity.

3.13.4 Multi-Collinearity

Multi-collinearity in regression analysis occurs when two or more predictor variables are highly correlated to each other. Multi-collinearity was tested using a variance inflation factor which measure the correlation and strength of correlation between the predictor variables in a regression model. Variance inflation factor with value between 1 and 5 indicates moderate correlation between a predictor variable and other variables in the model

3.14 Ethical Consideration

In conducting the research, the primary goal was to ensure that the study is done with standard. Permission to carry out the study were sought from the University of Eldoret and National Commission for Science and Innovation (NACOSTI) and a permit from Uasin Gishu explaining the purpose of the study and adequately communicating to respondents. Degree of confidentiality and privacy on data were enhanced and maintained. Confidentiality of respondents were assured so that the participants will provide necessary information to be used to strengthen financial performance of SMEs through financial management practice. Researcher also ensure no bias. The respondents had right to withdraw from the study if they wish to and will not attract any penalties on withdrawals.

CHAPTER FOUR

RESULTS

4.1 Overview

This chapter involves response rate, demographic information of respondents, descriptive statistics results, reliability test results, factor analysis results, correlation analysis, testing assumptions for regression analysis, hypotheses testing and presentation and interpretation of collected data related to the objective of the study.

4.2 Response Rate

The researcher collected data using questionnaire with aid of five trained research assistance, from upper level, middle level, bottom level and sole proprietors of small and medium enterprises in Eldoret town, Kenya. Researcher administered 302 questionnaires to the respondents; however, 289 questionnaire was collected. The researcher and its assistance cross check questionnaires on the field in order to reduce the missing values, and after screening 281 were correctly filled representing 93% of the total questionnaires administered while 8 questionnaires were dropped from the study since they were not completely filled representing 3% of the total questionnaires administered, as shown in Table 4.1. According to Njeru (2013) considered that a response rate of 50% and above is sufficient for data analysis. The study had 93% response rate. Thus, the response rate was viable hence, proceed for data analysis. However, before data analysis, descriptive statistics with aid of frequency screening was conducted to check if data entry was valid and any missing value was rectified.

Table 4.1 Response Rate

Response	Sample	Percentage %
Effective Returned Questionnaires	281	93
Unreturned Questionnaires	13	4
Returned and Defective Questionnaires	8	3
Total	302	100

4.3 Demographic Information of Respondents

This section provides data concerning the respondents for generalization purposes. Examination of this research demographic characteristics was based on gender, age, education level, firm size measured by number of employees, firm age measured by number of years in operation and annual turnover of the firm as shown in Table 4.2

4.3.1 Gender

The researcher examined the gender of the participants to ensure each gender participates in responding to the required data. The results of the study in Table 4.2 indicated that respondents were equally distributed since there was a minimal percentage difference between both gender, male were 52% (n=146), while female were 48% (n=135). The study revealed that there was fair engagement of the respondents in terms of their gender.

4.3.2 Respondents Age

The researcher used various age categories to ensure the research study gave variety of opinions from different age groups. The study results in Table 4.2 revealed that majority of the respondents were within the age group of 26-35 years representing 44.5% (n=125), followed by those with below 25 years representing 36.7% (n=103), third category were those aged 36-45 years representing 12.5% (n=35) and the least category

were those above 46 years representing 6.4% (n=18). The study outcome indicates that majority of the respondents are youths below 35 years representing 87.5% (n=228) whom are energetic and active group to run businesses.

4.3.3 Level of Education

The researcher examined the level of education to ensure that respondents are able to read and understand the questionnaires. According to Onyango, (2018) states that level of educations indicates that each individual had understandability of different issue. The study results in Table 4.2 revealed that majority of the respondents are those whom had a diploma certificate representing 32.4% (n=91), followed by those held a degree certificate representing 31.7% (n=89), third category are those with certificate representing 21% (n=21), 10.7% (n=30) had other qualifications while the least in running businesses are those whom had Masters certificate representing 4.3% (n=12). The study findings based on education statistics revealed that majority of the SMEs are able to understand the questions highlighted in questionnaires and give a viable choice.

4.3.4 Annual Turnover

The researcher examines business annual turnover in order to understand if the firms are making profit or losses. The study in Table 4.2 revealed that majority of SMEs annual turnover are below Ksh.500,000 representing 66.2% (n=186), followed by Ksh.500,001-5,000,000 and the least are those who are above to obtain annual turnover of above Ksh.5,000,000. The study results revealed that the business might not grow to the next level due to economic factors, financial performance and even the government policies that will hinder the business growth.

4.3.5 Firm Age

The researcher examines how long the businesses has been in operation. The study findings in Table 4.2 shows that majority of the SMEs are between 1- 3 years of its operation accounting for 54.1% (n=152) and the least were above 7 years representing 22.4 (n=63). The findings support research showing that most SMEs tend to be relatively young, with a significant portion falling within the first decade of operation (Beck, 2016). The study indicates that there is mortality rate of SMEs, which could be caused by poor financial management practices, high taxation rates and other factors that could influence SMEs operations.

4.3.6 Firm Size

The study findings in Table 4.2 indicates that majority of SMEs respondents are those with employees below 10 representing 84.7% (n=238) followed by those with 11-49 number of employees representing 11.4% (n=32) and the least are the medium size business that had 50-99 number of employees representing 3.9% (n=11). This result reflects the common small-scale nature of SMEs, as discussed in the study by Ayyagari, *et al* (2017), where micro and small enterprises dominate the SME sector globally. The study outcomes revealed that there is high rate of starting businesses but cannot grow to another level of firm size this might be caused by inadequate financial performance measured by return on investment, return on asset and profitability level of the firms.

4.3.7 Type of Business

The study findings in Table 4.2 indicates that majority of SMEs respondents are retail SMEs representing 37.7% (n=106), followed by service providers 34.9% (n=98), third category manufacturing 9.3%(n=26), forth category agriculture 6.8% (n=19), then

medical services 6% (n=17), and the least was construction and real estate's 5.3%(n=15).

Table 4.2 Demographic Information of the Respondents

Demographic factor		Frequency	Percentages
Gender	Male	146	52
	Female	135	48
Total		281	100
Age	Below 25 years	103	36.7
	26-35 years	125	44.5
	36-45 years	35	12.5
	Above 46 years	18	6.4
Total		281	100
Firm age	Below 1 year	50	17.8
	1-3 years	102	36.3
	4-6 years	66	23.5
	7-9 years	31	11.0
	Above 10 years	32	11.4
Total		281	100
Level of Education	Certificate	59	21
	Diploma	91	32.4
	Degree	89	31.7
	Masters	12	4.3
	Other qualifications	30	10.7
Total		281	100
Firm size	Below 10 employees	238	84.7
	11-49 employees	32	11.4
	50-99 employees	11	3.9
Total		281	100
Annual Turnover	Below Ksh.500,000	186	66.2
	Ksh.500,000-5,000,000	85	30.2
	Above Ksh.5,000,000	10	3.6
Total		281	100
Type of business	Retail SMEs	106	37.7
	Service providers	98	34.9
	Medical services	17	6
	Construction and real estate's	15	5.3
	Manufacturing	26	9.3
	Agriculture	19	6.8
Total		281	100

4.4 Descriptive Statistics for the Study Variables

Descriptive statistics provide a summary of the main characteristics of the study variables, including measures like the mean, standard deviation (Ayyagari *et al*, 2017). Standard deviation is a statistical measure that shows how spread out or dispersed the values in a data set are from the mean (average). Standard deviation helps to understand how consistent the responses or financial results are, for instance if SME financial performance scores have a small standard deviation, it means most firms perform similarly and if it has a large standard deviation suggests wide differences in performance among firms.

4.4.1 Descriptive Statistics for Financial Performance Items

The researcher study focused on financial performance that had three constructs that is return on investment, return on assets and profitability. The study variable had ten items for measurement and presented using a seven Likert scale points. The findings show that most SMEs focused on checking the return on investment of their business which had the highest mean of 5.09 and standard deviation of 1.719. The respondents also agree that business had grown significantly in terms of operating profits which had mean of 5.06 and standard deviation of 1.740. Other measurement items used in the study revealed that they had above average mean, indicating that the respondents agree with items. However, the item “there is low capital expenditure on investments score the least mean of 4.33 and standard deviation of 2.000 and this shows that the business had inadequate capital to venture in new investments as indicated in Table 4.3

Table 4.3 Mean and Standard Deviation for Items on Financial Performance

Measuring Items	Mean	Std. Deviation
We frequently check the return on investment of our business	5.09	1.719
Our business has grown significantly in terms of operating profits	5.06	1.740
The business has acquired enough assets for its operation	4.89	1.728
There is high level of investment in the business	4.86	1.881
Our profitability aligns with our financial goals	4.85	1.873
Return on assets is an indicator of measuring managerial efficiency	4.80	1.671
Our business has registered a turnover growth resulting in an increase in earnings per share	4.73	1.810
Our return on investments has steadily increased over the last three years	4.60	2.063
Return on assets has been increasing in the past year	4.50	1.980
There is low capital expenditure on investments	4.33	2.000

n=281 Scale 1=Strongly Disagree; 7 Strongly Agree

4.4.2 Descriptive Statistics for Cash Flow Management Items

Nine items were used to measure cash flow management with three dimensions; planning cash flow, monitoring cash flow, and controlling cash flow using a seven Likert scale. In Table 4.4 indicates that business grows by keeping profits scoring a mean of 5.75 and standard deviation 1.545, followed by the business maintain stock records which are updated regularly with a mean of 5.41 and standard deviation of 1.549. This was closely followed by the measurement item indicating that business maintain proper records for all payables with a mean of 5.32 and standard deviation of 1.657. All other items used to measure cash flow management had score above average but majority of the respondents disagree that “Our business handle cash flow shortages through informal loans, retained profits, personal financing” had a least score with mean of 4.73 and standard deviation of 1.812. The study revealed that majority of the

respondents can run their business using the retained profits or borrow loans from larger financial institutions rather than using the informal loans or personal financing.

Table 4.4 Mean and Standard Deviation for Items on Cash Flow Management

Measuring Items	Mean	Std. Deviation
Our business grows by keeping profits	5.75	1.545
Our business maintain stock records which are updated regularly	5.41	1.549
Our business maintain proper records for all payables	5.32	1.657
Optimal cash balances are maintained by the business at all times	5.11	1.682
The business keeps cash controlling receipts for erroneous payments	5.07	1.783
Our business ensures there is sufficient cash flow to meet daily needs	5.06	1.734
Our business compares the near in with the cash payment obligations before making payments decisions	5.06	1.708
Our business prepares cash flow forecasts to identify future surplus and deficits	4.83	1.902
Our business handle cash flow shortages through informal loans, retained profits, personal financing	4.73	1.812

n=281 Scale 1=Strongly Disagree; 7 Strongly Agree

4.4.3 Descriptive Statistics for Budget Planning Items

Nine items were used to measure budget planning as explain in Table 4.5 below which indicates that majority of the respondents agree that business has clear goals and objectives representing mean of 5.61 and standard deviation of 1.607 followed by measuring item “Our business prepares a financial plan to follow” representing a mean of 5.36 and standard deviation of 1.617. The study findings revealed that most respondents agree with the items used to measure budget planning since the score were above average. However, measuring item “Our business allows employees to participate in budget plan” had the least score of mean of 4.02 and standard deviation

of 2.147. This study revealed that the business owners are making decisions about mission and vision of their business without involving their employees.

Table 4.5 Mean and Standard Deviation for Items on Budget Planning

Measuring Items	Mean	Std. Deviation
Our business has clear goals and objectives	5.61	1.607
Our business prepares a financial plan to follow	5.36	1.617
Our business has long term and short term budget plan	5.14	1.782
Our business prepares an annual budget for its operations	5.11	1.844
Our business identifies risk and other issues within the set budget	5.11	1.768
Our business follows weekly/monthly/quarterly plans for expenses	5.07	1.744
We review and update our budgeting process regularly	5.02	1.798
We use past data as a starting point for our budget plans	4.85	1.886
Our business allows employees to participate in budget plan	4.02	2.147

n=281 Scale 1=Strongly Disagree; 7 Strongly Agree

4.4.4 Descriptive Statistics for Investment Decision Items

Table 4.6 indicates that majority of the respondents agreed that investment decisions are aimed at increasing profit, representing a mean of 5.55 and standard deviation of 1.605, the respondents also agree that they review investment decisions to ensure they contribute to profit with a mean of 5.36 and standard deviation of 1.607. However, the data revealed that measuring item “Our business market size has increased in a new market leading to more income” scored the lowest with a mean of 4.49 and standard deviation of 2.032; this data indicates that most SMEs cannot venture in other investments due to possibly poor investment decisions and low profits from their businesses.

Table 4.6 Mean and Standard Deviation for Items on Investment Decision

Measuring Items	Mean	Std. Deviation
Our investment decisions are aimed at increasing profit	5.55	1.605
We review investment decisions to ensure they contribute to profit	5.36	1.607
Our business avoids exposure of financial risks	5.06	1.838
Our business maintains strong liquidity position	4.82	1.876
Our business generates sufficient cash through sales	4.70	1.725
Our annual average sales of the business have been increasing over years	4.68	1.808
Our business sales turnover level has grown over the last years	4.67	1.897
Our business earnings per share have increase over the last years	4.61	1.992
Our business market size has increased in a new market leading to more income	4.49	2.032

n=281 Scale 1=Strongly Disagree; 7 Strongly Agree

4.4.5 Descriptive Statistics for Digital Finance Services Items

Table 4.7 shows the measuring items of digital finance services with its mean and standard deviation. The data revealed that measuring item “Our business made purchases of goods and services using a digital payment service to achieve financial goals” had the highest score representing the mean of 5.43 and standard deviation 1.731. The data findings revealed that respondents agree with measuring items “Our business has adopted digital finance services e.g. mobile banking, online payments, E-wallet” representing a mean of 5.37 and standard deviation of 1.916. However, “We have access to finance with flexible terms by use of digital finance services that are needed to make viable investment decisions” had the lowest score with mean of 4.49 and standard deviation of 1.775. The study reveals that respondents had low access to finance with flexible terms by use of digital finance services, thus cannot use the funds to make viable investment decisions due to its inadequate funds.

Table 4.7 Mean and Standard Deviation for Items on Digital Finance Services

Measuring Items	Mean	Std. Deviation
Our business made purchases of goods and services using a digital payment service to achieve financial goals	5.43	1.731
Our business has adopted digital finance services e.g. mobile banking, online payments, E-wallet etc	5.37	1.916
Customers often use digital payment services in our business thus ensures financial performance periodically	5.35	1.803
Digital finance services have made our financial management accurate and efficient	5.28	1.700
Our business performance has improved because of a quality digital finance service	5.15	1.763
Our business often uses digital finance services to raise or borrow funds and calculate interest rates	4.94	1.774
Quick access of finance with minimum cost using digital finance services has helped our business grow	4.83	1.710
Digital finance services have helped to get finances from micro finance institutions	4.81	1.896
We have access to finance with flexible terms by use of DFS that are needed to make viable investment decisions	4.49	1.775

n=281 Scale 1=Strongly Disagree; 7 Strongly Agree

4.5 Descriptive Statistics for the Study Constructs

The researcher posed variety of measuring items to the respondents via a structured questionnaires in analyzing the constructs used in the study that is financial performance, cash flow management, budget planning, investment decision and digital finance services. Mean value of financial performance is 4.7892 elaborated by standard deviation of 1.18953 with skewness and kurtosis of -0.589 and -0.003 respectively. The outcome in Table 4.8 revealed that cash flow management had a mean score of 5.1483 and standard deviation of 1.18947 with skewness of -1.100 and kurtosis of 1.163. The study further indicates that budget planning had a mean of 5.0308, standard deviation of 1.30550, Skewness of -1.029 and kurtosis of 0.668. The study results also indicates

that investment decisions had a mean of 4.8822 and standard deviation of 1.30408 accounting for -0.707 on skewness and -0.185 on kurtosis. Finally, the study data revealed that digital finance services had a mean of 5.0735 with standard deviation of 1.34408 accounting to skewness of -1.060 and kurtosis of 0.644.

Table 4.8 Descriptive Statistics for the Study Constructs

Variables	Mean	Std. Deviation	Skewness	Kurtosis
Financial Performance	4.7892	1.18953	-.589	-.003
Cash Flow Management	5.1483	1.18947	-1.100	1.163
Budget Planning	5.0308	1.30550	-1.029	.668
Investment Decisions	4.8822	1.30408	-.707	-.185
Digital Finance Services	5.0735	1.34408	-1.060	.644

n=281 Scale 1=Strongly Disagree; 7 Strongly Agree

4.6 Reliability Test for the Research Instruments

The researcher exploited measures from the tested constructs. Regardless of its results, it was essential to determine the research instrument to test if all of its measured items attained the quality of its intended purpose. Reliability shows how trustworthy is the score of the test using a research tool. Reliability is the assessment of degree which research will yield consistent results after several trials Mugenda (2008). The researcher used Cronbach's Alpha to examine internal consistency to estimate degree of unreliability. The value of Cronbach's Alpha ranges from 0 to 1. Cronbach's Alpha (> 0.90) might suggest redundancy and greater internal consistency among the items and show that the test length should be shortened (Tavakol and Dennick 2011). The Cronbach's Alpha coefficient equal to 1 and greater than 0.7 was used to test internally consistent of the questionnaire ((Nderitu & Githinji., 2015).

Reliability test was examined on all variables comprising 46 measuring items which helped to enhance degree of consistency shown in Table 4.9. Where all the variables meet the coefficient that varies from 0 to 1, thus the value of each variable gives satisfactory consistency reliability. The study further revealed that the overall Cronbach's alpha for the 46 items of Small and Medium Enterprises as 0.962, which is within an acceptable range. Below is the reliability test for each variable.

Table 4.9 Reliability Test Score

Name of variable	Number of Items	Score
Financial Performance	10	0.857
Cash Flow Management	9	0.866
Budget Planning	9	0.886
Investment Decision	9	0.880
Digital Finance Services	9	0.904
Composite Reliability score	46	0.962

4.7 Factor Analysis

Factor analysis is used to test validity of the construct and to eliminate some problematic items. Validity refers to the accuracy of the measurement. If the results are accurate according to the researcher's situation, explanation and prediction, then the research is valid. Mugenda (2008) states validity as accuracy, meaningfulness and truthfulness of inferences based on facts obtained from tool or scale for the constructed study. Factor analysis is used to belief that measurable variables can be reduced to fewer latent variables. Factor Analysis is a statistical method used to identify underlying relationships between variables. It aims to reduce the number of variables by grouping

them into factors based on their correlations, making it easier to understand complex datasets and identify patterns. Factor analysis has two types that is exploratory factor analysis that is used when the researcher does not have a clear idea of the number or nature of the factors hence helps explore the data to find patterns and relationships among variables and confirmatory factor analysis used when the researcher has a specific hypothesis about the number of factors and their relationships thus tests whether the data fits a predefined factor structure. This study employed exploratory factor analysis.

4.7.1 Assumptions of Factor Analysis

Factor analysis assumes that relationships among variables are linear. The data should ideally be normally distributed and the variance of each variable should be approximately equal across groups. A sufficiently large sample size is essential for factor analysis to ensure stable and reliable results. A common rule of thumb is to have at least 5-10 observations for each variable. A sample size of 100 or more is often recommended. The variables should be measured on an interval or ratio scale. For factor analysis to be recommended suitable for the statistics, the Bartlett's test of Sphericity must be greater than 0.05 (Nderitu & Githinji., 2015).

4.7.2 Factor Analysis for Financial Performance

Table 4.10 explained that ten items measuring financial performance were factor analyzed to determine a number of items that loaded to specific components, which are later conducted to test hypotheses. After analyzing financial performance two dimension emerged from the data. Component one named return on investment and assets after five items loaded on it. Item seven was eliminated from the study because of cross loading. This component had Eigenvalues of 4.575 explaining approximately

46% of the variance in financial performance (Table 4.11). Component two was named profitability after four items loaded on it. This component had an initial Eigenvalues of 1.0 accounting for 10% of the variance in financial performance. In totality the two components (return on investment and asset and profitability) cumulatively explain approximately 56% of the variance in financial performance. In addition, the analysis indicates a Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) of 0.897 with Bartlett's Test of Sphericity (Chi-Square) of 1043.394, df 45 which has significant at $p=0.000$ (Table 4.10). Hence, confirming the appropriateness of factor analysis of the data set.

Table 4.10 Rotated Components Analysis for Retained Items

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.897
Bartlett's Test of Sphericity	Approx. Chi-Square	1043.394
	Df	45
	Sig.	.000
		Component
Dimensions and measurement items		1 2
Component 1- Return on Assets		
The business has acquired enough assets for its operation		.619
Return on Asset is an indicator of measuring managerial efficiency		.775
Return on Asset has been increasing in the past years		.647
Component 1- Return on Investment		
There is low capital expenditure on investments		.649
There is high level of investment in the business		.585
We frequently check the return on investment of our business		.644
Our return on investment has steadily increased over the last three years.		.542 .592
Component 2- Profitability		
Our business has grown significantly in terms of operating profits		.710
Our business has registered a turnover growth resulting in an increase in earnings per share		.695
Our profitability aligns with our financial goals.		.664

Table 4.11 Eigenvalues and Variance of Financial Performance

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
Return on investment and Asset	4.575	45.745	45.745
Profitability	1.003	10.034	55.779

4.7.3 Factor Analysis for Cash Flow Management

Nine items were used to analyze cash flow management as shown on Table 4.12. The results revealed that all nine items emerge only in one dimension from the data after loading on one component. Thus, the component cannot be rotated. Table 4.13 explained that the component had Eigenvalues of 4.446 explaining approximately 49% of the variance in cash flow management. In addition, the analysis indicates a Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) of 0.886 with Bartlett's Test of Sphericity (Chi-Square) of 1001.860, df 36 which has significant at $p=0.000$ (Table 4.12). Hence, confirming the appropriateness of factor analysis of the data set.

Table 4.12 Rotated Components Analysis for Retained Items

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.886
Bartlett's Test of Sphericity	Approx. Chi-Square	1001.860
	Df	36
	Sig.	.000
		Component
Dimensions and measurement items		1
Component 1- Planning Cash flow		
Our business prepares cash flow forecasts to identify future surplus and deficits		.630
Our business ensures there is sufficient cash flow to meet daily needs		.697
Our business handle cash flow shortages through informal loans, retained profits, personal financing		.518
Component 1- Monitoring Cash flow		
Our business maintain proper records for all payables		.800
Our business maintain stock records which are updated regularly		.787
Optimal cash balances are maintained by the business at all times		.792
Component 1- Controlling Cash flow		
Our business compare the near cash in with the cash payment obligations before making payment decisions		.664
The business keeps cash controlling receipts for erroneous payments		.713
Our business grows by keeping profits.		.678

Table 4.13 Eigenvalues and Variance of Cash Flow Management

Component	Total	Initial Eigenvalues	
		% of Variance	Cumulative %
Cash flow management constructs	4.446	49.396	49.396

4.7.4 Factor Analysis for Budget Planning

In Table 4.14 shows that nine items were used to analyze budget planning. The outcome revealed that all nine items loaded in one component, hence emerge only in one dimension from the data set. Thus, the component cannot be dropped or rotated. The component in Table 4.15 had Eigenvalues of 4.818 explaining approximately 54% of the variance in budget planning. In addition, the analysis indicates a Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) of 0.894 with Bartlett's Test of Sphericity (Chi-Square) of 1165.575, df 36 which has significant at $p=0.000$ (Table 4.14). Hence, confirming the appropriateness of factor analysis of the data set were valid.

Table 4.14 Rotated Components Analysis for Retained Items

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.894
Bartlett's Test of Sphericity	Approx. Chi-Square	1165.575
	Df	36
	Sig.	.000
		Component
Dimensions and measurement items		1
Component 1-Budget Consolidation		
Our business allows employees to participate in budget plan		.572
We use past data as a starting point for our budget plans		.785
Our business has long term and short term budget plan		.756
Component 1- Budget Process		
Our business follows weekly/monthly/quarterly plans for expenses		.746
Our business has clear goals and objectives		.793
Our business prepares a financial plan to follow		.795
Our business prepares an annual budget for its operations		.720
Our business identifies risk and other issues within the set budget		.671
We review and update our budgeting process regularly.		.721

Table 4.15 Eigenvalues and Variance of Cash Flow Management

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
Budget Planning Constructs	4.818	53.533	53.533

4.7.5 Factor Analysis for Investment Decision

In Table 4.16 explained that nine items measuring investment decision were analyzed to establish a number of items that loaded in the components. After analyzing investment decision two dimension emerged from the data set. Component one named liquidity performance and sales turnover after six items loaded on it. This component had Eigenvalues of 4.624 explaining approximately 51% of the variance in investment decision (Table 4.17). Item two was loaded in component two thus had same features with profitability construct, though researcher used to measure liquidity performance

construct. Component two was named profitability after three items loaded on it. This component had an initial Eigenvalues of 1.296 accounting for 14% of the variance in investment decision. In totality the two components (liquidity performance and sales turnover and profitability) cumulatively explain approximately 65% of the variance in investment decision. Item seven loaded in component one, though it was used to measure profitability construct, thus has characteristics related to both liquidity performance and sales turnover. In addition, the analysis indicates a Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) of 0.862 with Bartlett's Test of Sphericity (Chi-Square) of 1533.487, df 36 which has significant at $p=0.000$ (Table 4.16). Hence, confirming the appropriateness of factor analysis of the data set.

Table 4.16 Rotated Components Analysis for Retained Items

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.862
Bartlett's Test of Sphericity	Approx. Chi-Square 1533.487
	Df 36
	Sig. .000
Dimensions and measurement items	Component 1 2
Liquidity Performance i.e available cash reserves in the business operations	
Our business maintain strong liquidity position	.577
Our business avoids exposure of financial risks	.560
Our business earnings per shares have increase over the last year	.838
Sales Turnover	
Our business generates sufficient cash through sales	.701
Our annual average sales of the business have been increasing over years	.857
Our business sales turnover level has grown over the last years	.863
Profitability	
Our business market size has increased in a new market leading to more income	.694
Our investment decisions are aimed at increasing profit.	.905
We review investment decisions to ensure they contribute to profit.	.868

Table 4.17 Eigenvalues and Variance of Investment Decision

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
Liquidity performance and sales turnover	4.624	51.375	51.375
Profitability	1.296	14.406	65.780

4.7.6 Factor Analysis for Digital Finance Services

Table 4.18 shows that nine measuring items of digital finance services these factors analyzed and emerged two dimensions from the data set that had respective initial eigenvalues of 5.109 and 1.138, and they are explained by variances of 57% and 13% (Table 4.19). Component one named usage and quality after six items loaded on it, while component two named access after three items loaded on it. In addition, the analysis indicates a Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) of 0.862 with Bartlett's Test of Sphericity (Chi-Square) of 1533.487, df 36 which has significant at $p=0.000$.

Table 4.18 Rotated Components Analysis for Retained Items

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.862
Bartlett's Test of Sphericity	Approx. Chi-Square	1533.487
	Df	36
	Sig.	.000
Dimensions and measurement items		Component
		1 2
Usage		
Our business has adopted digital finance services e.g. mobile banking, online payments, E-wallet etc		.878
Our business made purchases of goods and services using a digital payment service to achieve financial objectives		.839
Customers often use digital payment services in our business thus ensures financial performance periodically		.842
Our business often uses digital finance services to raise or borrow funds and calculate interest rate		.597
Access		
We have access to finance with flexible terms by use of DFS that are needed to make viable investment decisions		.815
Quick access of finance with minimum cost using digital finance services has helped our business grow		.847
Digital finance services has helped to get finances from micro finance institutions		.782
Quality		
Our business performance has improved because of a quality digital finance services		.595
Digital finance services have made our financial management accurate and efficient		.640

Table 4.19 Eigenvalues and Variance of Digital Finance Services

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
Usage and Quality	5.109	56.771	56.771
Access	1.138	12.649	69.420

4.8 Correlation analysis

Correlation analysis refers to a statistical method used to measure the strength of the linear relationship between two variables and compute their association. From research statistics perspective, correlation analysis refers to the investigation of the strength, nature and direction of a predictive relationship related to two variables (Kumar & Gautham, 2020). Correlation coefficient values range between -1 to +1 that implies strong negative relationship and strong positive relationship respectively. Spearman rank correlation coefficient or Karl Pearson's correlation coefficient can be used to determine correlation coefficient. The researcher used Karl Pearson's coefficient to identify the actual relationships among the variables, as demonstrated in Table 4.20.

In Table 4.20, the examined results indicates that cash flow management had a strong positive relationship with financial performance ($r=0.724$, $p=0.000$). The second relationship between budget planning and financial performance had a strong correlation coefficient of $r=0.762$ and p - value of 0.000. Relationship between investment decision and financial performance had a strong correlation coefficient of 0.775 at a significant level of 0.000. Digital Finance Services had also strong correlation coefficient of $r=0.709$ and $p=0.000$ with financial performance.

The test also helped to test multi collinearity in the data or not or between variables. Multi-collinearity means highly correlated and you cannot differentiate between the

two and cut off point must be below 0.8 therefore outcome revealed that there is no multi-collinearity problem since the variables were below 0.80 on their inter-correlations.

Table 4.20 Karl Pearson's Correlation Analysis

Variable (n=281)		Financial Performance	Cash Flow Management	Budget Planning	Investment Decision	Digital Finance Services
Financial Performance	Pearson Correlation	1				
	Sig.(2-tailed)					
Cash Flow Management	Pearson Correlation	.724**	1			
	Sig.(2-tailed)	0.000				
Budget Planning	Pearson Correlation	.762**	.645**	1		
	Sig.(2-tailed)	0.000	0.000			
Investment Decision	Pearson Correlation	.775**	.674**	.661**	1	
	Sig.(2-tailed)	0.000	0.000	0.000		
Digital Finance Services	Pearson Correlation	.709**	.716**	.592**	.744**	1
	Sig.(2-tailed)	0.000	0.000	0.000	0.000	

** Correlation is significant at the 0.01 level (2-tailed)

4.9 Testing Assumption for Regression Analysis

The researcher utilized hierarchical regression model to determine linear relationship between the independent variables (cash flow management, budget planning and investment decision), moderating variable (digital finance services) and the dependent variable (SMEs financial performance). Statistical model is a mathematical model that embodies a set of statistical assumptions in generation of sample data. Therefore, hierarchical regression model had variety assumptions that were important to test and assess the reliability of the result before conclusions of the study were made. The researcher tested linearity, normality, homoscedasticity, autocorrelation and multicollinearity assumptions (Imai & Keele, 2022)

4.9.1 Linearity

The relationship between the independent variables and the dependent variable should be linear. If this assumption is violated, the model may not accurately represent the data, and predictions could be incorrect (Imai & Keele, 2022). The researcher utilized scatter plots that represents the relationship between two variables. Linear relationship shows points that roughly follow a straight line by using p-p plots to compare the observed data distribution to assess linearity. The results on Figure 4.1 indicates points lying along the diagonal line indicate a linear relationship between variables and confirming that the assumption of linearity was satisfied.

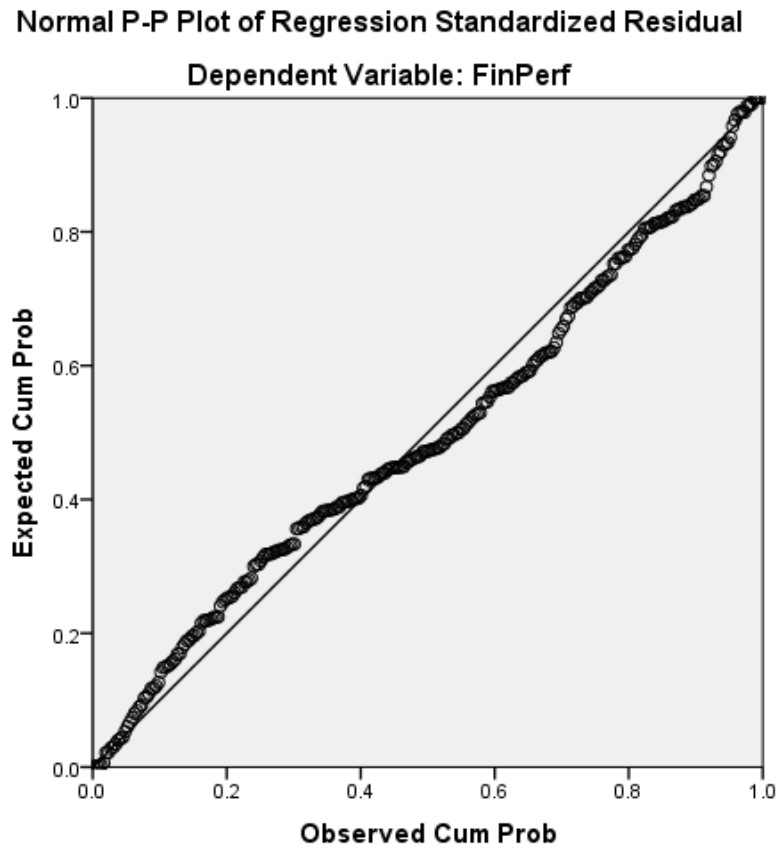


Figure 4.1 Test for Linearity

4.9.2 Normality test

In statistical perspectives, it assumes that observations are normally distributed. This assumption ensures that significance tests for the coefficients are valid (Hair *et al*, 2019). Figure 4.2, test normality by histogram that displays the frequency distribution, Skewness that measures the asymmetry of the distribution, and kurtosis that measures the "tailedness" of the distribution. Figure 4.2 displays bell-shaped curve, skewness close to 0, and kurtosis close to 3 hence, normality assumptions achieved.

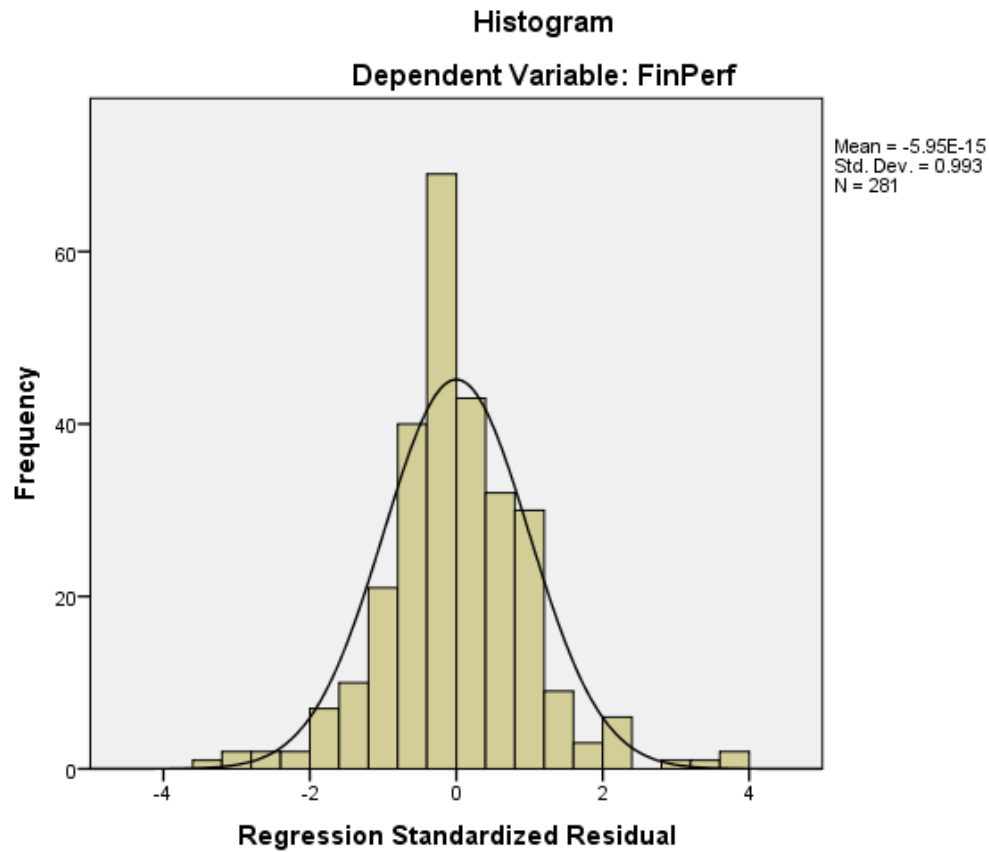


Figure 4.2 Histogram for Normality test

The researcher also utilized skewness and kurtosis to test normality assumptions. In Table 4.21 indicates that skewness values range -0.609 to -1.3031 and kurtosis values ranges from 0.810 to -0.218, thus falls in acceptable margin.

Table 4.21 Normality Test

Variables	Skewness	Kurtosis
Financial Performance	-0.609	.012
Cash Flow Management	-1.031	.810
Budget Planning	-0.794	.229
Investment Decision	-0.700	-0.218
Digital Finance Services	-0.941	.275

4.9.3 Homoscedasticity Test

Homoscedasticity ensures that the model's predictions are equally accurate across all values of the independent variables. The residuals (errors) should have constant variance at all levels of variables, and violations can result in Type 1 error (Tabachnick, & Fidell, 2019). Figure 4.3 indicates that the researcher employed scatter plot concept to determine the constant variance of the error term. Assumption of homoscedasticity is met since standardized residual values against standardized predicted values are scattered around zero.

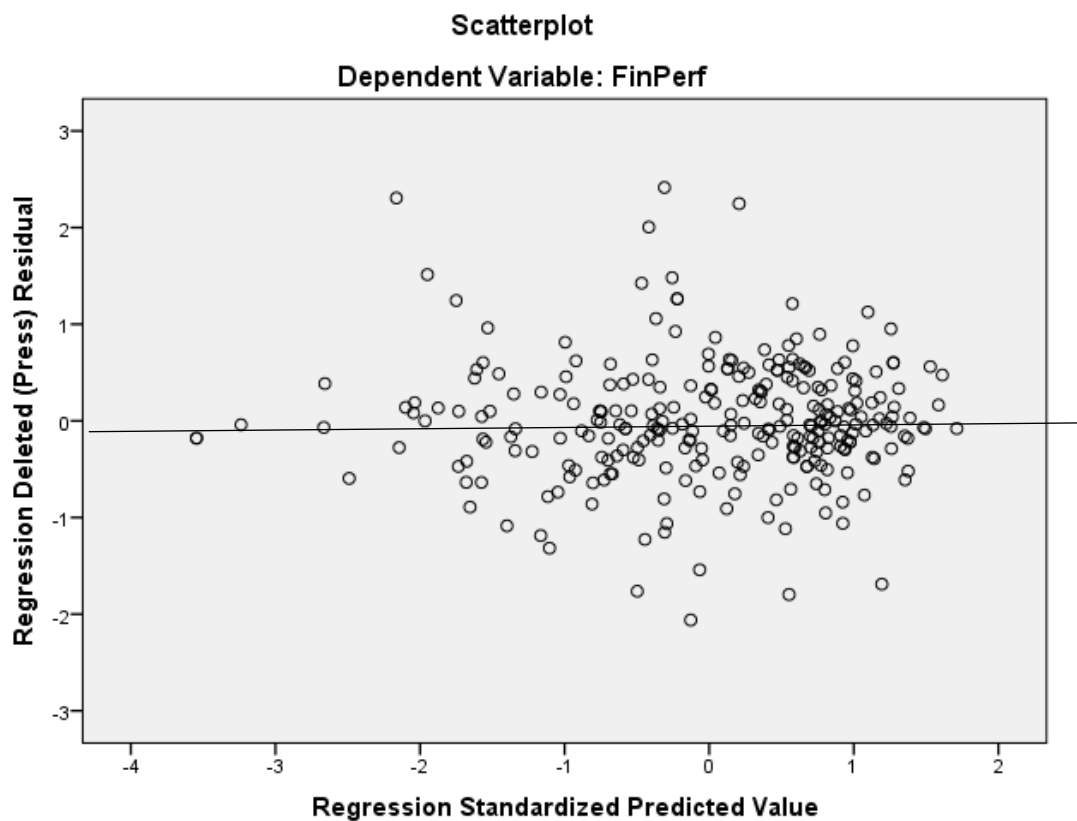


Figure 4.3 Homoscedasticity Test

4.9.4 Multi-collinearity Test

Multi-collinearity in regression analysis occurs when two or more predictor variables are highly correlated to each other. Multi-collinearity can inflate the standard errors of the coefficients and make it difficult to assess the individual contribution of each variable. The primary techniques for detecting the multi-collinearity are correlation coefficient, variance inflation factor, and eigenvalue method (Noora, 2020). The researcher adopted Variance Inflation Factor and tolerance level to test assumptions of multi-collinearity. Variance Inflation Factor was used to measure the correlation and strength of correlation between the predictor variables in a regression model. Table 4.22 shows that no multi-collinearity problems since predictor variables had tolerance values of greater than 0.2 and VIF less than 4.0

Table 4.22 Multi-collinearity Test

Variables	Collinearity Statistics	
	Tolerance	VIF
Cash Flow Management	.400	2.500
Budget Planning	.489	2.045
Investment Decision	.361	2.768
Digital Finance Service	.361	2.767

4.9.5 Autocorrelation Test

Autocorrelation is the measure of the degree of similarity between a given time series and the lagged version of that time series over successive time periods. Autocorrelation violates the assumptions that the residuals should be independent. The researcher

adopted Durbin Watson coefficient to test autocorrelation whose values ranges between 0-4 (Uyanto, 2020). Durbin Watson was used to measure residual differences over time, and values less than one shows positively related with successive error terms while Durbin Watson whose values is greater than three shows negatively correlated with error terms. The study outcome shown in Table 4.23, indicates that Durbin Watson coefficient is within acceptable range of 1.704. Thus, explains that observation of one value had no influenced by observation of another value.

Table 4.23 Autocorrelation Test Assumption

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.863 ^a	.744	.740	.60151	1.704

4.10 Hypotheses Testing

Hypotheses testing is used to determine if the hypotheses is either null or alternative hypotheses. The researcher determined seven formulated hypotheses having a 5% significant level with 95% confidence interval by use of p-value concept to test hypotheses. P-value having equal or less than 0.05 of tested hypotheses is false thus reject and if the value is greater than 0.05 of tested hypotheses is true hence fail to reject. The beta coefficient from the statistical model indicates slope describing the relationship between variables. The researcher analyzed for model fit before testing hypotheses as shown in Table 4.24 which had significant at; $p \leq .01$; $p \leq .05$; $p \leq .001$

4.10.1 Direct Effect Outcome on Control Variables

Effects of control variables on outcome variable was tested using hierarchical regression model. The findings on Table 4.24 that is model 1 indicate that firm size ($\beta = 0.070$ $p = 0.149$) does not affect financial performance. However, firm age ($\beta = 0.282$ $p = 0.022$), statistically significant effect on financial performance. Hence, control variables should be controlled.

4.10.2 Effect of Predictor Variables of Hypotheses (H01, H02, H03) to Financial Performance

Model 2 in Table 4.24 the independent variables was added to the first model in statistical analysis while holding covariates constant (firm age and firm size). Therefore, used to test direct effect of cash flow management, budget planning and investment decision on financial performance as indicated with hypotheses H01, H02 and H03 respectively. The findings in Table 4.24, Model 2 shows significant model fit of $F = 253.034$, $p \leq 0.05$. This indicates that predictor variables added to model 1 affects financial performance significantly with coefficient of determination $R^2 = 0.742$ and $\Delta R^2 = 0.713$. R square change of 0.713 indicates that cash flow management, budget planning and investment decision explains 71% of variance a large improvement in financial performance as compared with Model 1. The outcome further implies that cash flow management ($\beta = .237$, $p = .000$), budget planning ($\beta = .364$, $p = .000$) and investment decision ($\beta = .366$, $p = .000$); is highly significant and positively associated with the dependent variable. Hence, we reject the null hypothesis H01, H02 and H03 since the p value is less than 0.05.

4.10.3 Digital Finance Services to Financial Performance (Hypotheses H04)

The model tested the variance accounted for by the moderator (digital finance services) in the dependent variable while holding predictor variables and covariates constant. In Table 4.24, Model 3 shows a model fit of $F=7.291$, $p=0.007$ with coefficient of determination of $R^2=0.748$ which indicates that all variables account approximately 75% of the variance in financial performance and $\Delta R^2=0.007$ indicates variance of approximately 1% in financial performance is explained by digital finances services and other factors are held constant in the model. The outcome further revealed that digital finance services positively and significantly influence financial performance of SMEs, hence H04 is rejected ($\beta = .137$, $p = .007$) since the p value is less than 0.01.

4.10.4 Moderating Effect of Digital Finance Services on the Relationship between Cash Flow Management and financial performance (Hypotheses H05a)

The findings in Model 4 indicated results of the moderating effect of digital finance on the relationship between cash flow management and financial performance. Results in Table 4.24, revealed that $R^2 = 0.748$, $\Delta R^2 = 0.000$, $F = 0.035$ and $p = 0.852$ indicating that all the variables in this model explains approximately 75% in financial performance. The zero change in R^2 and insignificant F reveals that the moderation term in the model does not add any value in explain financial performance. In addition, findings show that Digital finance does not moderate the relationship between cash flow management and financial performance of SMEs as indicated by $\beta= 0.002$, $p=0.852$. Based on these results hence fail to reject H05a since the p value is greater than 0.1.

4.10.5 Hypotheses (H05b) Moderating Effect of Digital Finance Services on the Relationship between Budget Planning and Financial Performance

Model 5 was used to test moderating effect of digital finance services between budget planning and financial performance. Findings in Table 4.24, Model 5 shows statistical model fit of $F=61.030$ at $p=0.000$ indicating that the model is highly significant. The study results also revealed that all the variables in this model explains 79.4% of the variance in financial performance as shown by $R^2=0.794$. A ΔR^2 of 0.016 implying that the interaction term accounts for 4.6% of the variance in financial performance in SMEs. The interaction between budget planning and digital finance services is significant with financial performance indicates $\beta= -0.049$ which was significant at $p=0.000$, since p value is less than 0.001 Therefore, reject the null hypothesis (H05b). These results are further illustrated in figure 4.4 which revealed that at low level of budget planning, financial performance is high with high level of digital finance services but as budget planning increases, financial performance also increases with high digital finance services. Hence, financial performance increase with high adoption of digital finance services.

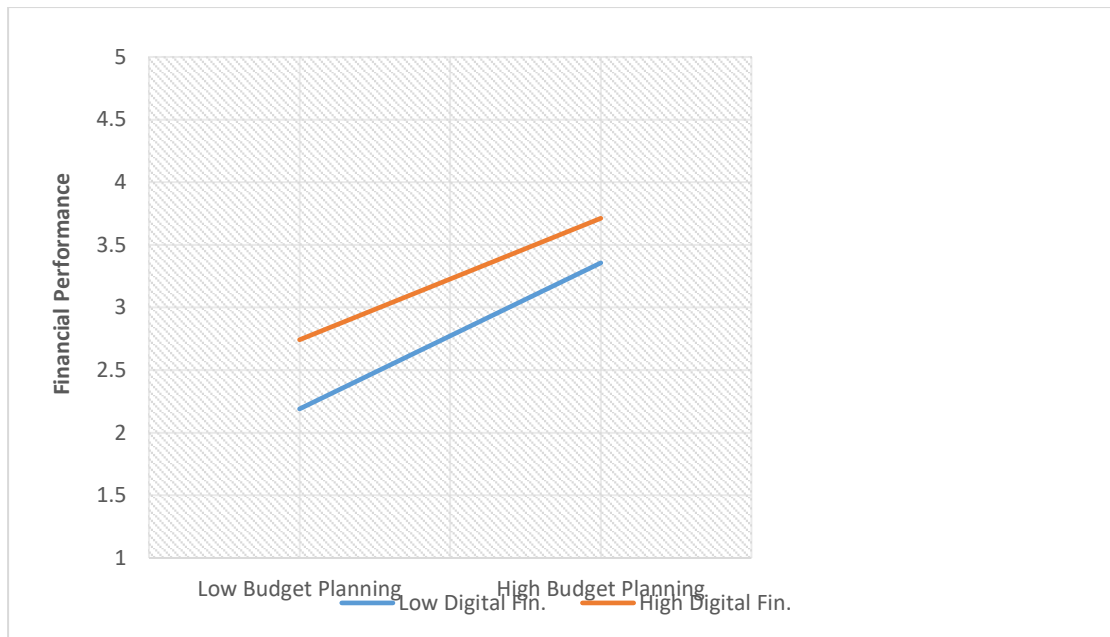


Figure 4.4 Moderating Effect of Digital Finance Services on Budget Planning & Financial Performance

4.10.6 Moderating Effect of Digital Finance Services on the Relationship between Investment Decision and Financial Performance (Hypotheses H05c)

Table 4.24, Model 6 was used to examine the moderating effect of digital finance services on the relationship between investment decision and financial performance. The results on this model fit indicates $F=4.178$, significant at $p=0.042$. The results findings also show slight improvement of $R^2=0.798$ implying the variables contributed to approximately 80% of the variance which is the highest among all models in financial performance. Change in R- square $\Delta R^2=0.003$ shows interaction of approximately 0.3% of the variance in financial performance. The study further revealed that there was a positive and significant moderating effect of digital finance services on the relationship between investment decision and financial performance of SMEs, shown by $\beta= 0.035$ with significant of $p=0.042$, thus, p value is less than 0.05 hence, H05c is

rejected. These results are further illustrated in figure 4.5 which revealed that at low level of investment decision, the financial performance is high with high digital finance services and as investment decision increases, financial performance also increases with high digital finance services, therefore digital finance services act as remedy for low investment decision in an organization.

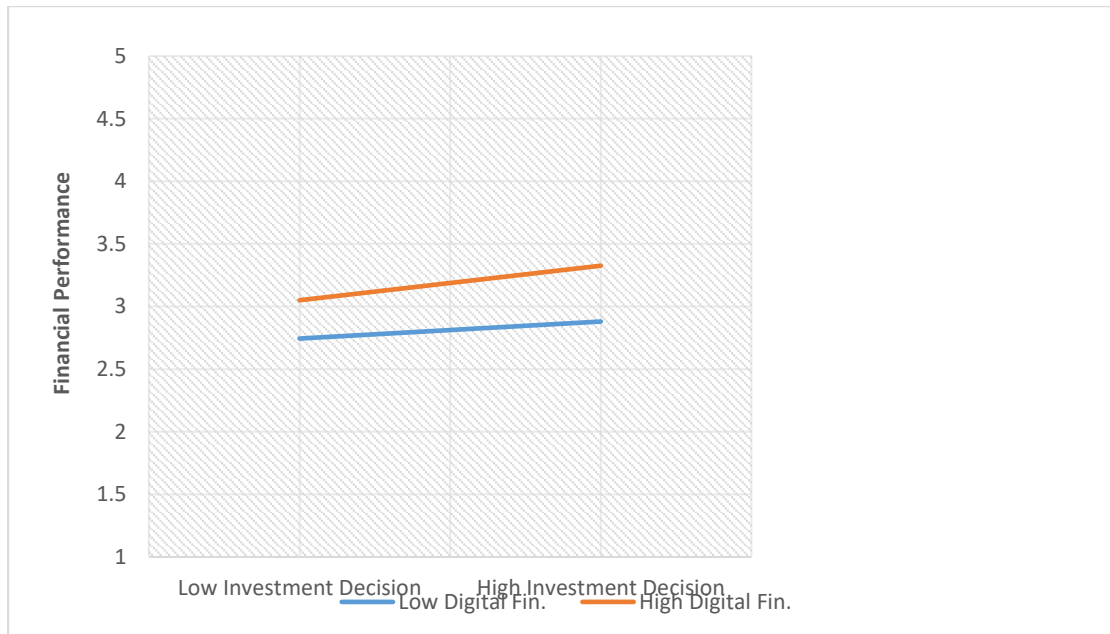


Figure 4.5 Moderating Effect of Digital Finance Services on Investment Decision and Financial Performance

Table 4.24 Hierarchical Regression Summary Results

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	B	P-value	β	P-value	β	P-value	β	P-value	β	P-value	B	P-value
Constant	-.520	.008	-.149	.145	-.158	.117	-.210	.480	.315	.257	.078	.794
Firm Size	.070	.149	.002	.923	-.002	.924	-.002	.924	-.016	.488	-.016	.484
Firm Age	.282	.022	.119	.064	.138	.032	.136	.035	.122	.038	.109	.063
CFM			.237	.000	.187	.000	.176	.021	.054	.444	.179	.055
BP			.364	.000	.358	.000	.358	.000	.534	.000	.551	.000
ID			.366	.000	.301	.000	.301	.000	.332	.000	.103	.395
DFS					.137	.007	.125	.132	.227	.003	.188	.017
CFM_DFS							.002	.852	.032	.002	.010	.526
BP_DFS									-.049	.000	-.052	.000
ID_DFS											.035	.042
R ²	0.028		0.742		0.748		0.748		0.794		0.798	
ΔR^2	0.8		0.713		0.007		0.000		0.046		0.003	
F	4.037*		253.034**		7.291**		0.035		61.030*		4.178*	

Dependent variable: financial performance; $p \leq 0.5$. Note: significant * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$

Note: CFM= cash flow management, BP= budget planning, ID= investment decision DFS= digital finance services

Table 4.25 Summary Results of Hypotheses Tests

	Hypotheses	Beta	P-values	Decision
H ₀₁	Cash flow management has no significant influence on financial performance	.237	.000	Rejected
H ₀₂	Budget planning has no significant influence on financial performance	.364	.000	Rejected
H ₀₃	Investment decision has no significant influence on financial performance	.366	.000	Rejected
H ₀₄	Digital finance services has significant influence on financial performance	.137	.007	Rejected
H _{05a}	Digital finance services has no moderating influence on the relationship between cash flow management and financial performance	.002	.852	Fail to reject
H _{05b}	Digital finance services has no moderating influence on the relationship between budget planning and financial performance	-.049	.000	Rejected
H _{05c}	Digital finance services has no moderating influence on the relationship between investment decision and financial performance	.035	.042	Rejected

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter entailed discussion, conclusion, summary of finding and recommendations for further research.

5.2 Discussion

General objective of the study was to examine the relationship between financial management practice and financial performance of selected small and medium enterprise in Eldoret city, Kenya moderated by digital finance services. Financial management practice had three constructs (cash flow management, budget planning and investment decision) that was linked to its dependent variable (financial performance) and a moderator (digital finance services) was introduced on the study to determined relationship between predictor variables and outcome variables. The researcher analyzed the effect of the covariates on the dependent variable before testing hypotheses. The outcome revealed that control variables (firm size and firm age) had R^2 of 0.028, thus, explains that control variables had 2.8% of the variance in financial performance. Control variable was controlled in this study in order to make the right inferences. The study outcome further revealed that cash flow management (H01) ($\beta=.237$, $p=.000$), budget planning (H02) ($\beta=.364$, $p=.000$) and investment decision (H03) ($\beta=.366$, $p=.000$) had a direct and significant effect on financial performance of SMEs. Digital finance services (H04) had also a positive and significant effect on financial performance of ($\beta=.137$, $p=.007$).

The researcher also examined effect of moderator (digital finance services) on relationship between cash flow management and financial performance, budget planning and financial performance and investment decision and financial performance. The results of the study states that digital finance services moderate relationship between budget planning and financial performance (H05b) $\beta = -0.049$, $p = 0.000$ and investment decision and financial performance (H05a) $\beta = 0.035$, $p = 0.042$ while digital finance services had no moderating effect between cash flow management and financial performance (H05a) ($\beta = .002$, $p = .852$)

5.3 Conclusion of the Study

The primary objective of the study was to investigate the relationship between financial management practices and the financial performance of selected SMEs, with digital finance services acting as a moderator. The study concludes that financial management practices specifically cash flow management, budget planning, and investment decisions are crucial determinants of financial performance for SMEs. However, the integration of digital finance services amplifies the impact of budget planning and investment decisions on financial performance. This implies that SMEs leveraging digital finance tools in these areas can achieve better financial outcomes, through improved financial planning, resource allocation, and strategic decision-making. Despite the positive results in budget planning and investment decisions, the insignificant moderating effect of digital finance services on cash flow management suggests that SMEs may need to better align their digital finance tools with their cash management processes to realize their full potential.

Moreover, the study's incorporation of control variables such as firm size and firm age provided a more nuanced understanding of the factors affecting financial performance.

The results underscore the importance of these control variables in analyzing the direct and indirect effects of financial management practices. Overall, the study contributes valuable insights for SMEs seeking to improve their financial performance through effective financial management practices and the utilization of digital finance services. The findings also provide a foundation for further research in this area, emphasizing the need for ongoing exploration into the evolving dynamics of financial management in the context of digital transformation.

5.3.1 Moderating Effect of Digital Finance Services on the Relationship between Cash Flow Management and Financial Performance

Results on hypothesis (H05a) indicates that digital finance services have insignificant moderating effect on the interaction between cash flow management and financial performance. The study reveal that interaction findings indicate a $\beta=.002$, $p=.852$, the relationship is statistically insignificant. The findings revealed that digital finance services do not stimulate savings but SMEs grows by keeping profits, borrowing through informal loans and investing in order to identify future surplus and deficits of the owners. SMEs with limited access to technology or digital literacy may struggle to adopt and effectively utilize digital finance services, hence, difficult to forecast cash flow in their businesses. This digital divide can widen disparities in access to finance and market opportunities, disadvantaging certain SMEs and hindering their financial performance. Thus, provide new ideas about digital finance services as moderator in relationship between cash flow management and finance performance.

5.3.2 Moderating Effect of Digital Finance Services on the Relationship between Budget Planning and Financial Performance

The study results indicate that digital finance services have no moderating influence between budget planning and financial performance of SMEs. The hypotheses test revealed that digital finance services moderate the relationship between budget planning and financial performance with $\beta = -0.049$, $p = 0.000$. The findings show that SMEs prepare financial plans to follow in order to achieve their objectives. Consequently, SMEs do not allow employees to participate in budget plan.

5.3.3 Moderating Effect of Digital Finance Services on the Relationship between Investment Decision and Financial Performance

The results from Model 6 indicate that digital finance services significantly moderate the relationship between investment decisions and financial performance. The interaction between investment decisions and digital finance services is positive and statistically significant, as indicated by $\beta = 0.035$ and a p-value of 0.042 (which is less than the 0.05 threshold). This confirms that digital finance services enhance the effect of investment decisions on financial performance. SMEs should focus on integrating digital finance tools into their investment processes, upskilling employees, and leveraging digital platforms for better risk management, liquidity, and financial forecasting. These efforts will help SMEs make more informed investment decisions that contribute to long-term financial performance and sustainability.

5.4 Theoretical Implications of the Study

The study contributes to theories of financial management by highlighting the importance of specific financial practices cash flow management, budget planning, and investment decisions in influencing firm performance. Digital finance services offer the tools SMEs need to make more informed, data-driven decisions regarding budget allocations, helping them avoid expenditures that do not align with their strategic priorities. This study aligns with priority-based budgeting (PBB) theory by showing that the integration of digital finance services enables SMEs to dynamically reallocate resources to address changing priorities and market conditions, thereby optimizing financial performance.

The study also explains that digital finance services offer tools for portfolio management, enabling SMEs to diversify their investments more effectively by providing access to a wider range of financial products and markets. This study reinforces the notion from modern portfolio theory that SMEs can reduce risk and improve financial performance by leveraging digital tools to make informed investment decisions. The findings further suggest that digital finance services enhance the impact of financial practices by improving access to information, reducing transaction costs, and enhancing the efficiency of resource allocation. This aligns with resource-based view (RBV) theory, which suggests that access to valuable, rare, and non-substitutable resources (such as digital financial tools) can provide firms with a competitive advantage.

5.5 Summary of the Findings.

This section reassesses the researcher's study findings

5.5.1 Descriptive Findings

Descriptive statistics were used to summarize the responses from the sampled SMEs. The analysis focused on the main study variables; cash flow management, budget planning, investment decisions, digital finance services and financial performance. The results indicated that most SMEs had moderate to high levels of financial management practices. The mean scores for cash flow management ($M = 5.14$, $SD = 1.18$) and budget planning ($M = 5.03$, $SD = 1.30$) were above the midpoint of the 7-point Likert scale, showing that respondents generally agreed with statements reflecting sound financial practices. Investment decisions had a slightly lower mean ($M = 4.89$, $SD = 1.3$), suggesting some inconsistency in applying investment appraisal techniques. The mean score for financial performance ($M = 4.79$, $SD = 1.18$) implied that most SMEs experienced satisfactory profitability, return on investment, and asset utilization. Digital finance services recorded a mean score of ($M = 5.07$, $SD = 1.34$), indicating high adoption and perceived quality of digital platforms among SMEs. Overall, the descriptive results suggest that SMEs in Eldoret City are actively engaging in financial management practices, which are likely to influence their financial outcomes positively.

5.5. 2. Correlation Findings

Correlation analysis was conducted to establish the strength and direction of the relationship between the study variables. Cash flow management showed a strong positive correlation with financial performance ($r = 0.724$, $p < 0.000$), implying that improved management of cash inflows and outflows enhances SME profitability and liquidity. Budget planning was positively correlated with financial performance ($r =$

0.762, $p < 0.000$), suggesting that effective budgeting processes contribute significantly to better financial results. Investment decisions were also positively and significantly correlated with financial performance (**$r = 0.775, p < 0.000$**), indicating that sound investment appraisal and decision-making improve return on investment. The moderating variable, digital finance services, exhibited a positive relationship with financial performance (**$r = 0.709, p < 0.000$**), and further strengthened the associations between financial management practices and performance. These findings demonstrate that all independent variables are positively and significantly associated with the financial performance of SMEs. This supports the premise that strong financial management practices, supported by digital finance adoption, contribute to superior SME performance.

5.6 Policy Implication of the Study

The findings of the study on the relationship between financial management practices and financial performance, with digital finance services as a moderator, have several important policy implications for SMEs and the broader economic environment to minimize mortality rate of SMEs. These implications can guide policymakers, financial institutions, and business development agencies in creating supportive frameworks for SMEs. Governments and financial institutions should promote the adoption of digital finance services among SMEs by providing incentives, subsidies and grants for technology adoption. Develop policies that enhance access to financial resources for SMEs, particularly in adopting digital finance services. The policy makers should implement training and capacity-building initiatives for SMEs to enhance their financial literacy and digital skills to enable them market their products and also be trained on importance of cash flow management on their business. Encourage research and development in innovative financial management practices tailored for SMEs.

Foster collaboration between government agencies, financial institutions, and private sector organizations to support SMEs in implementing digital finance services.

The government is trying to reduce mortality rate of SMEs through subsidies and offering loans. However, the mortality rate of SMEs is still high due to poor cash flow management such as lack of preparing cash flow forecast, how to handle cash flow shortages, poor budget planning techniques, and to compare cash inflow with cash outflow in order to identify the surplus or deficits on their investment decision. This mitigation needs government to establish regulatory, monitoring and evaluation framework to assess best practices and areas for improvement, ensuring that policies are adapted to the evolving needs of SMEs and facilitates the growth of digital finance services while ensuring consumer protection. Thus, no misuse of business funds and enhance them to create financial statements hence reduce issues of poor financial management practices.

5.7 Managerial Implication of the Study

The study revealed that financial management practices influence SMEs financial performance. The researcher study suggests that SMEs owners should embrace skills on cash flow management, budget planning and investment decision to enhance the financial health of individual SMEs and also contribute positively to the broader economic landscape. SMEs owners or managers should assess and adopt digital finance solutions that align with their financial management practices. These services can streamline budgeting processes, improve cash flow forecasting, and provide real-time financial insights, which are crucial for informed decision-making. Managers should also implement budgeting planning that allocate resources based on strategic priorities rather than historical spending patterns. This approach ensures that financial resources

are directed towards initiatives that will drive growth and enhance financial performance. Managers should further develop investment strategies that consider both high-risk and low-risk opportunities, employing diversification to manage overall financial risk.

5.8 Recommendations for Further Studies

The study was conducted on selected SMEs in Eldoret city, Kenya with target population of 1236 and a sample size of 302. The researcher recommends that future studies should consider larger and more diverse samples of SMEs across different regions and sectors. Future researchers should also investigate the relationship in specific industries or sectors to understand how financial management practices and the impact of digital finance services vary across different sectors (e.g., agriculture, manufacturing, retail). The study used structured questionnaire in collecting data. The researcher also suggest that future researchers should utilize qualitative methods, such as interviews or case studies, to gain deeper insights into the experiences and perceptions of SMEs regarding financial management practices and digital finance services. The current study focused on financial management practices and digital finance services as factors influencing financial performance. The future researcher should examine other factors influencing the adoption of digital finance services among SMEs, including technological readiness, training, and support systems. The current study further focused on digital finance services as moderator on the relationship between financial management practices and financial performance. The future scholars can introduce other potential moderating variables such as firm size, age, owner-manager characteristics, or access to finance. They can also examine how specific features of digital finance services (e.g., mobile payments, online accounting tools, financial analytics) influence financial management practices and performance.

REFERENCES

- Abdulsalam, D., Musa, H., & Mustapha, R. (2018). Budgeting Practices and Organizational Performance: Evidence from Nigerian Small and Medium Enterprises. *Journal of Accounting and Financial Management*, 4(1), 52-61.
- Abongo, S. (2017). Effects of budgeting process on financial performance of Top 100 small and medium firms in Kenya.
- Acrob, J. . (2017). *Challenges Faced by SMEs in Early Years of Operation*.
- Adegbie, F. F., & Fakile, A. S. . (2018). Cash Flow Management and Financial Performance of Small and Medium Enterprises (SMEs) in Nigeria. *Journal of Economics and Finance*, 9(4), 10-20.
- Adegun E. A., Olaruntoba O. Fasesin O. O. & Babalola O.A. (2022). Budgeting process and SMEs performance: a goal setting theory and quantitative approach.
- Aduralere Opeyemi, O. (2019). The Impact of Firm Size on Firms Performance in Nigeria: A Comparative Study of Selected Firms in the Building Industry in Nigeria. *Asian Development Policy Review*, 7(1), pp.1-11.
- Agbenyo, W., Danquah, F. O., & Wang, S. . (2018). Budgeting and its effect on the financial performance of listed manufacturing firms: Evidence from manufacturing firms listed on Ghana Stock Exchange. *Research Journal of Finance and Accounting*, 9(8), 12-22.
- Agyapong, D., & Attram, F. (2019). *Financial Literacy and Strategic Management of SMEs' Financial Assets through Digital Finance Services*.
- Ahmad, M., Asim, M., & Aziz, U. (2020). The Impact of Budgeting on the Financial Performance of Small and Medium-Sized Enterprises: Evidence from Pakistan. *International Journal of Accounting & Finance Review*, 5(2), 12-26.
- Ajibola, E. O. (2020). Nigeria small and medium enterprise sustainability strategies.
- Akaze N. S. & Akaze C. (2017). Exploring the survival strategies for small business ownership in Nigeria. *Australian journal of business and management research*, 5(7) 35-48.
- Alita, D., Putra, A. D., & Darwis, D. (2021). Analysis of classic assumption test and multiple linear regression coefficient test for employee structural office recommendation . *IJCCS (Indonesian Journal of Computing and Cybernetics Systems)*, 15(3), 295-306.
- Al-Najjar, B. (2019). The Impact of Budgeting on Financial Performance of Small and Medium-Sized Enterprises: Evidence from Jordan. *International Journal of Business and Management*, 14(11), 133-143.
- Altuna, O. K., & müge A. F. (2016). Impact of the number of scale points on data characteristics and respondents' evaluations: An experimental design approach using 5-point and 7-point Likert-type scales. *İstanbul Üniversitesi Siyasal Bilgiler Fakültesi Dergisi*(55), 1-20.

- Amaglo, J. K. (2019). strategies for sustainability of small and medium sized enterprises in Ghana.
- Aminu, A., & Ahmad, A. . (2020). The Impact of Cash Flow Management on the Financial Performance of Small and Medium Enterprises (SMEs) in Nigeria. . *Journal of Finance and Accounting Research*, 2(2), 12-24.
- Amsi, F., Ngore, P., Imo, P., & Gachie, M. (2017). *Effect of microfinance credit on SME financial performance in Kenya*.
- Angeles I. T. (2022). The moderating effect of digital and financial literacy on the digital finance services and financial behavior of micro, small and medium enterprises. .
- Arner, D. W., Barberis, J., & Buckley, R. P. . (2017). Fintech and the financing of SMEs . *Journal of Financial Regulation*, 3(1), 29-60.
- Asian Development Bank. (2016). Digital finance services .
- Asrial, A., Syahrial, S., Kurniawan, D. A., Alirmansyah, A., Sholeh, M., & Zulkhi, M. D. . (2022). The Influence of Application of Local-wisdom-based Modules toward Peace-loving Characters of Elementary School Students. *Indonesian Journal on Learning and Advanced Education (IJOLAE)*, 4(2), 157-170.
- Awan H. M., Bhatti M. I. & Razaq Z. (2015). *FINANCIAL MANAGEMENT: THE IMPACT OF PERFORMANCE INDICATORS ON THE ORGANIZATIONAL PROFITABILITY*.
- Ayyagari, M., Demirgüç-Kunt, A., & Maksimovic, V. . (2017). Descriptive analysis of SMEs: Financial performance and firm characteristics. *Journal of Financial Economics*, 132(3), 342-358.
- Bacon-Shone P. J. (2015). *Introduction to quantitative research methods*. Hong Kong: Graduate School: The University of Hong Kong.
- Bakashaba R., Musiita B.& Nabachwa S. (2024). The mediating role of access to digital finance on the relationship between financial literacy and performance of Uganda SMEs in Mbarara city. .
- Bari, M. A. (2019, November 3rd). *Effects of Cash Management on Financial Performance of Food and Beverage Retailers in Puntland State of Somali Applied Researchers*, Vol. 6, No. 3. Retrieved from <http://www.ijea.net>
- Beck, T. . (2016). SME growth and survival: Firm age and size dynamics. *Journal of Development Studies*, 52(8), 1029-1049.
- Beck, T., Demirguc-Kunt, A., & Levine, R. (2014). *Finance and the sources of growth*.
- Bedford, ., V. (2015). The impact of inventory management practices on Financial Performance of Sugar Manufacturing firms in Kenya. *International Journal of Business, Humanities and Technology*, 3(5), 75-85.
- CANARE, J. P. (2019). *The challenges to SME market access in the philippines and the roles of business association*.
- CANARE, J. P. (2019). The challenges to SME market access in the philippines and the roles of business association. .

- Center for Strategic & International Studies (CSIS). (2021). *The Role of SMEs in Economic Development*.
- Chadha S. & Sharma, A. K. (2016). *capital structure and firm performance, 19 (4), 295-302*. Vision.
- Chadha, S. (2016). *The role of capital in the growth of small and medium enterprises. .*
- Chebii, P. A. (2017). *Entrepreneurial mentoring and its Outcomes among small and medium Enterprises in Eldoret, Uasin Gishu County, Kenya*. JKUAT-COHRED.
- Chelogoi, K. S. (2020). Intellectual capital, chief executive officer tenure and financial performance of firms listed at the Nairobi securities exchange, Kenya. *Moi University*.
- Chen, Y. (2016). *Spatial autocorrelation approaches to testing residuals from least squares regression*. PloS one, 11(1), e0146865.
- Chepngetich, P. . (2016). Effect of financial literacy and performance SMEs. Evidence from Kenya. . *Evidence from Kenya*.
- Chowdhury, F., Imam, M., Ahsan, S., & Shafiullah, M. . (2016). The impact of financial planning and control on profitability of SMEs: Evidence from Bangladesh. . *International Journal of Business and Management, 11(3), 244*.
- Christanti . (2023). Digital adoption and financial performance; Evidence from Indonesian SMEs in food and beverage sector. .
- Coad, A., Segarra, A., & Teruel, M. . (2016). Innovation and Firm Growth: Does Firm Age Play a Role? *Research Policy, 45(2)*. doi:10.1016/j.respol.2015.10.015, 387-400.
- Crane, A., Matten, D., Glozer, S., & Spence, L. (2019). *Business ethics: Managing corporate citizenship and sustainability in the age of globalization*. Oxford University Press, USA.
- Darja, H., Monika, B., & Libena, K. (2015). *strategic management of small and medium sized enterprises*.
- De Mel, S., McKenzie, D., & Woodruff, C. (2012). *One-time transfers of cash or capital have long-lasting effects on microenterprises in Sri Lanka*.
- Deb, G., Dey, N. B., & Shil, P. . (2015). Cash management practices in Micro and Small Enterprises in Barak Valley. *An analytical study. Sai Om Journal of commerce & Management: A Peer-Reviewed International Journal, 1-10*.
- Delkhosh, M. & Mousavi, H. (2016). Strategic financial management review on the financial success of an organisation. *Mediterranean Journal of Social Sciences, ISSN 2039 2117 (ONLINE) ISSN 2039-9340 (print) MCSER publishing*.
- Demirgüç-Kunt and Klapper. (2019). The adoption of digital finance services such as online banking and digital payments for SMEs.
- Denscombe, M. . (2013). *The Good Research Guide: For Small-Scale Social Research Projects (5th ed.)*. McGraw-Hill Education.
- Ebong & George. (2021). Financial inclusion through digital finance services: A study in Uganda.

- Efeeloo . (2020). Cash flow management and financial performance of quoted oil and gas firms in Nigeria.
- Efeeloo, N. (2020). *Cash flow management and financial performance of quoted oil and gas firms in Nigeria*.
- Egwu E. Orugun F.& Adalakun A. (2021). Exploration of cash flow management for enterprises business performance.
- Elhariry B. (2021). The impact of using digital financial to enhancing financial inclusion: The moderator role of financial knowledge. A field study on customers of Egyptian banks.
- Endris, E., & Kassegn, A. (2022). The role of micro, small and medium enterprises (MSMEs) to the sustainable development of sub-Saharan Africa and its challenges:a systematic review of evidence from Ethiopia. *Journal of Innovation and Entrepreneurship*, 11(1), , 1-18.
- Erambo G. E. (2017). *FINANCIAL MANAGEMENT PRACTICES AND FIRM PERFORMANCE AMONG MICRO AND SMALL ENTERPRISES IN BUSIA TOWN, KENYA*.
- Ernst, A. F., & Albers, C. J. (2017). Regression assumptions in clinical psychology research practice—a systematic review of common misconceptions. *PeerJ*, 5, e3323.
- Fahmi I. (2016). Introduction to Financial Management Theory and Answer Questions. *Bandung: Alfabeta Publisher* .
- Financial Inclusion Data Working Group. (2019). *The ideal construct of digital financial services: Access, usage, and quality as indicators*.
- Flake, J. K., Pek, J., & Hehman, E. (2017). Construct validation in social and personality research: Current practice and recommendations . *Social Psychological and Personality Science*, 8(4), 370–378.
- Games, D., & Rendi, R. P. (2019). The effects of knowledge management and risk taking on SME financial performance in creative industries in an emerging market;the mediating effect of innovation outcomes,. *journal of Global Entrepreneurship research*.
- Gerber B. (2024). *Key Financial Performance Indicators You Should Be Tracking*.
- Gitman, L. J., & Zutter, C. J. (2019). Principles of Managerial Finance" (15th ed.). . Pearson.
- Gradzewicz, M. (2021). What Happens After an Investment Spike—Investment Events and FirmPerformance. . *Journal of Business & Economic Statistics*, 39(3),, 636-651.
- Groski M. & Jankuloska A. R. (2017). Determinants of investment decision on small and medium enterprises.
- Gupta K. P & Jain V. (2016). Capital budgeting practices in small and medium enterprises. A study of selected enterprises in Haryana. *International journal commerce and management research* 2(2), 75-79.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis (8th ed.)*. Cengage Learning.

- Hair, J. F., Wolfinbarger, M., Money, A. H., Samouel, P., & Page, M. J. . (2017). *Essentials of business research methods*. Routledge.
- Hassan, M. K., Rahman, M. H., & Uddin, M. S. . (2020). Budgetary Participation and Its Effect on SMEs' Financial Performance: Evidence from Bangladesh. . *Journal of Economics and Sustainable Development*, 11(2), 63-70.
- Hayworth, M., Johnson, T., & Lee, A. (2019). *Measuring the impact of digital financial services on financial inclusion*.
- He, D., & Zhang, S. (2019). A survey on cybersecurity risks of the Internet of Things. *IEEE Internet of Things Journal*, 6(4), 6670-6684.
- Horngren, C. T., Datar, S. M., & Rajan, M. V. (2013). *Cost Accounting: A Managerial Emphasis (15th ed.)*. Pearson.
- Ibrahim, M., & Ibrahim, A. (2015). Effects of SME cost of capital on their financial performance in Nigeria. *journal of finance and accounting*, vol. 3 No. 1, 8-11.
- Ilaboya, O.J. and Ohiokha, I.F. (2016). Firm age, size and profitability dynamics: a test of learning by doing and structural inertia hypotheses. *Business and Management Research*, 5(1), pp.29-39.
- Imai, K., & Keele, L. . (2022). Diagnostic tests for regression assumptions: Practical guidance and modern approaches. *Annual Review of Statistics and Its Application*, 9(1), 345-369.
- Innovation, Science and Economic Development Canada. (2016). *Key Small Business Statistics*. Retrieved from https://www.ic.gc.ca/eic/site/061.nsf/eng/h_03018.html
- Islam, T., & Erum, T. . (2019). Power comparison of autocorrelation tests in dynamic models. *International Econometric Review*, 11(2) , 58-69.
- Izedonmi, F. I., & Izedonmi, P. F. . (2018). Cash Flow Management and Financial Performance of Small and Medium Scale Enterprises (SMEs) in Nigeria. . *Journal of Accounting, Finance and Auditing Studies*, 4(1), 1-17.
- Jacqueline Douglas, A. D. (2017). An exploratory study of critical success factors for SMEs in Kenya.
- Jamil P. F. & Triston C. (2019). *The challenges to SME market access in the Philipines and the roles of business association*.
- Janse B.,. (2020). Financial Forecasting. <https://www.toolshero.com/financial-management/financial-forecasting>.
- Jensen, M. c., & Meckling, W. H. (1976). Theory of the firm:managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*,3, 305-360.
- Jess M. (2021). *China's SMEs: how important are small firms to the economy, and what challenges are they facing?*
- Jess, R. (2021). *The Role of SMEs in China's Economic Growth*. .
- JKcapital.com. (n.d.). Retrieved from <https://jkcapital.comph>blog>why small business strategy>

- Joshi A., Saket K., Satish C., & Pal. D. K. (2015). Likert Scale: Explored and Explained". <https://doi.org/10.9734/BJAST/2015/14975>. *Current Journal of Applied Science and Technology* 7 (4) , 396-403.
- Juma, A. (2022). *Government Efforts to Enhance the SME Sector in Kenya*.
- Kambale, M. (2016). *The role of digital financial services in enhancing financial inclusion*.
- Kambi E. N. & Onyiego G. (2022). Effects of digital financial inclusion on financial growth of micro, small and medium, enterprises in Kenya. .
- Kasema, R. (2021). Key failure factors of start up women owned SME in service sector in Kigali. A principal component analysis approach. *Villakshan Ximb journal of management. Emerald group publishing limited* , 223-232.
- Kasim, H., Mutula .Z. and Antwi. S.K. (2015). Cash management Practices and financial performance of Small Medium Enterprises (SMEs) in the Northern region of Ghana. *International Journal of Economics, Commerce and Management. Vol.III, Issue 7, July 2015*.
- Katabi, R., & Dimoso, R. . (2016). The Relationship Between Financial Goals of SMES and Investment Decisions. . *Journal of Business Studies Quarterly*, 7(4).
- Kehinde, J. S., & Adediran, O. A. . (2019). Investment Decision and Performance of Small and Medium Enterprises (SMEs) in Nigeria. *Journal of Business and Management*, 21(2), 10-20.
- Keng'ara R. & Makina I. (2020). Effect of budgetary processes on organization performance: A case of non-commercial Marine state agencies, Kenya . *Universal Journal of Accounting and Finance* 8(4), 115-130.
- Kenya Institute of Management. (2017). *Challenges Facing SMEs in Kenya: A Study on Failure Rates*.
- Kenya national bureal of statistics. (2016). *Micro, small & medium establishment survey*. Retrieved from Basic report Retrived from <https://www.knbs.or.ke>
- Kenya National Bureau of Statistics. (2017). *Kenya Economic Survey*.
- Kenya National of Bureau of statistics. (2014). poverty eradication strategy paper report no 10/24.
- Kenya, C. B. (2017). *SME are growing Kenya's economy*. Nairobi: Alain Charles Publishing Ltd.
- Keter C. K. S., Cheboi J. Y., Kosgei D. & Chepsergon A. K. . (2023). Financial performance and firm value. The moderating role of going digital among companies listed in Nairobi security exchange. .
- Key small business statistics . (2022). *SMEs in Canada between 2015 and 2019*.
- Khan, M. K., Nouman, M., Imran, M., Teng, J.-Z., & Jadoon, A. U. (2017). *Determinants of financial performance of financial setors (An assessment through economic value added)*. European academic research vol.5 no7.
- Kidali, F. K. . (2020). Access to Credit and Growth of Micro, Small and Medium-scale Enterprises in Kenya . *University of Nairobi*.
- Kiiru S. M. , Kamau J. G. & Nzioki P. M. (2018). Effect Of Budget Planning On Financial Performance Of Small And Medium Enterprises In Nakuru Town Central Business District. *International*

Journal of Business Management and Processes (IJBMP) Vol 4. Issue No.2., PP 79-88. ISSN 2616-3209.

- Kipkorir, J., Sang, K., & Rutto, K. . (2018). Effects of Budgetary Control on Financial Performance of Small and Medium Enterprises in Uasin Gishu County, Kenya. *International Journal of Academic Research in Business and Social Sciences*, 8(5), 54-69.
- KIPPRA (Kenya Institute for Public Policy Research and Analysis). (2010). *The Role of SMEs in Innovation, Competitiveness, and Entrepreneurial Skills*.
- KIPPRA. (2016). *Characteristics of Kenyan MSMEs Relevant to the Proposed Kenya Credit Guarantee Scheme*.
- Klapper, Lusardi, & Van Oudheusden. (2015). Role of digital finance services such as mobile banking, e-commerce platforms, and digital payment systems in enhancing financial inclusion and efficiency for SMEs.
- Kumar C. & Gautam A. (2020). Correlation. DOI: 10.1007/978-3-319-47829-6_214-1.
- I., G. (2021). SMEs dependency on technology and digital infrastructure for financial operations. .
- Leboela T. S. (2017). The factors influencing SMEs failure in South Africa. University of Cape Town.
- Lejarraga, J., & Martínez-Ros, E. (2018). Size, Age and the Dynamics of Product Innovation. *Small Business Economics*, 50, doi:10.1007/s11187-017-9901-8, 763–774.
- Liberto, D. (2022). *Small and Mid-Size Enterprise (SME) Defined: Types around the World*. Retrieved from <https://www.investopedia.com/terms/s/smallandmidsizeenterprises.asp>
- Liu D, Zhang Y, Hafeez M, Ullah S. (2022). Financial inclusion and its influence on economic-environmental performance: demand and supply perspectives. *Environ Sci Pollut Res* 29(38), 58212–58221.
- López-Pintado, J., Murcia, F. D., & Gámez, L. C. R. (2017). Determinants of Small and Medium-Sized Enterprise Financial Performance: Evidence from the European Union. *Journal of Business Research*, 69(9), doi:10.1016/j.jbusres.2017.02.039, 3749-3755.
- Luo J. (2023). Coverage breath of digital finance and SMEs financing constraints.
- Luu H. N., Le D. D., Nam V. H., & Van P. B. N. (2023). The impact of digitalization on the financial performance of SMEs: .
- Lyimo B. J. & Mbesigwe W. G. (2022). The digital finance services in enhancing financial inclusion in Tanzania.
- Maduekwe C. & Kamala P. (2016). The use of budget in Cape Metropolis, South Africa. . *Problem and perspectives in management* 14(1), 183-191.
- Majid, W. A. W. A., Osman, M. F., Ismail, M. F., & Nawawi, A. H. . (2017). Investment decision making among SMEs: A review on the financial factors. . *Journal of Business and Social Sciences Research*, 2(2), , 214-219.
- Malm, G. S. (2020). *Analysis of cash flow management and financial performance of SMEs in Accra, Ghana*.

- Manyika, J., Lund, S., Singer, M., White, O., & Berry, C. (2016, September). Digital finance for all: Powering inclusive growth in emerging economies. USA: *McKinsey Global Institute*.
- Markowitz, H. (1952). Portfolio selection. *The Journal of Finance*, 7(1), 77-91.
- Marshall C. & Rossman G. B. . (2016). *Designing qualitative research 6th edition Thousand oarks CA*. Sage.
- Marus E., Gilbert U., Fabian M., Benard O. & Dennis O. (2020). *Cash management and financial performance of business firms in Northern Uganda a case of Lira District*.
- Masiero H. & Ganugi K. (2020). Digital finance services can moderate the relationship between financial management practices and SME performance.
- Mbura, S. (2018). *Role of SME Projects in Achieving Country Vision 2030: Job Creation and Technological Use*.
- Mburu, N. P. . (2022). *Cash Flow Management and Financial Performance of Firms Listed Under Manufacturing Sector at the Nairobi Securities Exchange, Kenya*.
- Meziyet U. (2023). Resource-Based View in Marketing Literature.
- MINICOM, m. o. (2017). Small and medium enterprises development in Rwanda. Kigali.
- Ministry of Trade, Industry and Cooperatives Uganda (MTIC). (2019). *Challenges Facing SMEs in Uganda*. .
- Mohammed Ibrahim and Ali Ibrahim. (2015). the effect of SMEs cost of capital on their financial performance in Nigeria. *journal of finance and accounting*, vol 3 no 8-11.
- Mukoma, P., & Masin, J. (2015). *The Role of SMEs in Kenya: Creating Employment Opportunities and Economic Growth*.
- Mulani X. & yang J. (2013). *Effects of the budgeting process on SMEs performance*.
- Muneer, S., Ahmed, I., & Azhar, F. . (2017). *Impact of Financial Management Practices on Small-Medium Enterprises' Profitability: The Moderating Role of Agency Costs*.
- Muriithi, M. S. (2018). African small and medium enterprises contributions, challenges and solutions. *European journal of research and reflection in management sciences*.
- Muriithi, M., & Otieno, P. . (2017). Investment Decisions and Financial Performance of Small and Medium Enterprises in Kenya: A Case of SMEs in Nairobi County. *Muriithi, M., & Otieno, P. (2017). Investment Decisions and Financial Performance of Small and Medium Enterprises in Kenya: A Case of SMEs in Nairobi County. International Journal of Economics, Commerce and Management*, 5(8), 108-125.
- Muriuki, J., & Murungi, A. (2019). Effect of Budgetary Control on Financial Performance of Small and Medium Enterprises in Thika Town, Kiambu County. . *International Journal of Economics, Commerce and Management*, 7(7), 242-254.
- Murkor, A. S., Muturi, W., & Oluoch, O. (2018). Effect of operating Cash flow Management of Financial Performance of Mutual Funds in Kenya. *European Journal of Business, Economics and Accountancy Vol.6 No. 5* .

- Musa, H., & Mustapha, M. (2018). *Budgeting and decision-making in organizations: A roadmap of financial implications*. .
- Musau L. (2016). *Effect of investment decision on financial performance of savings and credit cooperatives in Kitui central sub county, Kenya*.
- MWAVU, V. M. (2018). *THE EFFECTS OF FINANCIAL MANAGEMENT PRACTICES ON THE FINANCIAL PERFORMANCE OF THE TOP 100 SMALL AND MEDIUM*.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187-221.
- Nambie N. B., Dadzie P. & Haywood-dadzie D. O. (2023). Measuring the effect of income inequality, financial inclusion, investment and unemployment on economic growth in Africa. A moderating role of digital finance technology. .
- Naomi, C. (2018). Influence of Herding Behavior on Investment Decision of SMEs in Bomet County, Kenya. *A Publication of East African Scholars Publisher, Kenya*.
- National Bureau of Statistics. (2018). *Annual Report on Small and Medium Enterprises in China*.
- Nderitu, P. G. & Githinji C, K. . (2015). Debt financing and financial performance of small and medium size enterprises; evidence in Kenya. *Journal of Economics, Finance & Accounting JEFA*, vol.2 (3).
- Ndirangu, L. W. (2017). Effect of Cash Management on the Financial Performance of the Companies listed at the Nairobi Securities Exchange . Nairobi: : Nairobi University.
- Ngugi, P. K., & Omolo, J. O. . (2019). Influence of Budgetary Control Practices on Financial Performance of Small and Medium-Sized Enterprises in Nairobi City County, Kenya. *International Journal of Academic Research in Business and Social Sciences*, 9(3).
- Nibbering, D., Paap, R., & van der Wel, M. (2018). What do professional forecasters actually predict? . *International Journal of Forecasting*, 34 (2) 288-311.
- Njeru, A. W. (2013). Determinants of Choice of Source of Entrepreneurial Finance for Small and Medium Size Enterprises. Survey of Thika, District Kenya. *Unpublished Phd thesis Jomo Kenyatta University*.
- Njeru. M. D., Njeru, A., Member, F., and Tirimba O.I. (2015). Effect of Cash Management on Financial performance of deposit taking SACCOs in Mount Kenya Region. . *International Journal of Scientific and Research Publications*, 624.
- Njoku, V. O., Ukaoha, C. A., Anthony, L., Ajibare, D. B., & Oluleye, O. D. (2022). ASSESSMENT OF INVESTMENT DECISIONS AND FINANCIAL PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN FEDERAL CAPITAL TERRITORY, NIGERIA. *International Journal of Small and Medium Enterprises*, 5(1), . <https://doi.org/10.46281/ijsmes.v5i1.1813>, 40-50.
- Noora S. (2020). Detecting Multicollinearity in Regression Analysis . *American Journal of Applied Mathematics and Statistics*, 2020, Vol. 8, No. 2, 39-42 .

- Novak, J., & Schwab, A. (2020). Digital Entrepreneurship and Firm Performance: Evidence from a Panel Study of German SMEs. . *Small Business Economics*, 55(2), 227–250.
- Nunes D.S., Dorion E., Olea P. M., Nodari C. H., Pereira A. A. & Severo E. A. (2012). *The use of performance indicators for small and micro enterprises (SMEs): A Brazilian regional experience.*
- Obote, J., Okaka, O., & Ojok, A. (2020). *Cash management and financial performance of business firms in Northern Uganda: A case of Lira District.*
- Odhiambo, N. M., & Mwangi, P. W. . (2018). Investment Decision and Financial Performance of Small and Medium Enterprises: A Case Study of SMEs in Nairobi County, Kenya. *International Journal of Economics, Commerce and Management*, 6(11), 242-257.
- Odongo N. H. & Wang D. (2016). Constraints in development of micro & small enterprises in the economy of Kenya. *International journal of management. Research and reviews* 6 (pp. 777-785). Retrieved from <http://www.ijmrr.com>.
- OECD. (2015). *OECD Economic Surveys*. Japan: Paris.
- OECD. (2018). *Education at a Glance* .
- Ojochenemi, Olusegun, Iyeh. (2020). The effect of financial management strategy on the growth of small-medium enterprises in Nigeria.
- Okumu I. & Buyinza F. (2019). *Performance of Small and Medium-Sized Enterprises in Uganda: The Role of Innovation.*
- Olaleye, S. A., & Ayoade, E. O. . (2019). Cash Flow Management and Financial Performance of Small and Medium Enterprises (SMEs) in Nigeria. *International Journal of Business and Management Review*, 7(2), 1-12.
- Olawale, F., & Garwe, D. . (2010). Obstacles to the Growth of New SMEs in South Africa: A Principal Component Analysis Approach. *African Journal of Business Management*, 4(5), 729-738.
- Oluoch, P. A., & Njoroge, J. K. . (2017). Cash Flow Management Practices and Financial Performance of Small and Medium Enterprises in Nakuru County, Kenya. *International Journal of Economics, Commerce and Management*, 5(7), 95-109.
- Onaolapo, A. R., & Ogunmakin, A. O. . (2019). Cash Flow Management and Financial Performance of Small and Medium Enterprises (SMEs) in Nigeria: Empirical Evidence. . *Journal of Economics and Sustainable Development*, 10(4), 45-54.
- Onyia C. C. & Okereke S. F. (2023). The moderating role of digitalization on entrepreneurship, entrepreneurship financing and economic growth, Nexus in Nigeria. .
- Otieno, J. (2021). *The Impact of Cash Management Practices on Performance of SMEs: A Survey of SMEs in Eldoret Central Business District.*
- Otieno. A.O., Weda C. & Olweny, T. (2023). Influence of demographic factors on the financial performance of small and medium sized ebterprises in Kajiado County, Kenya. *Reviewed journal international of business management*, , 186-202.

- Otoo, F.N.K. (2024). *Assessing the influence of financial management practices on organizational performance of small- and medium-scale enterprises.*
- Ozili, P. (2018). "Impact of digital finance on financial inclusion and stability". Retrieved from Borsa Istanbul Review 18-4 329e340 : <http://www.elsevier.com/journals/borsa-istanbul-review/2214-8450>.
- Ozturk I, Ullah S. (2022). Does digital financial inclusion matter for economic growth and environmental sustainability in OBRI economies? . *An empirical analysis. Resour, Conserv Recycling 185:106489.*
- Padilla, A. (2002). can agency theory justify the regulation of insider trading? The quarterly. *Journal of Austrian Economics vol.5,No1.*
- Pazarbasioglu, C.; Mora, A.; Uttamchandani, M.; Natarajan, H.; Feyen, E. & Saal, M. . (2020). "Digital Financial Services". World Bank Group. 1-37.
- Peprah J. A, Mensah A.O. & Akosah N. B. (2016). Small & medium enterprises accessibility to public procurement :. In *SME entity perspective in Ghana* (pp. 4 (11) 25-40). Ghana: European journal of business & social sciences.
- Pervan, M., Pervan, I., & Ćurak, M. . (2017). The influence of age on firm performance: evidence from the Croatian food industry . *Journal of Eastern Europe Research in Business and Economics, 2017(1)*, 1-10.
- Philippine Statistics Authority. (2021). *2021 Annual Survey of Philippine Business and Industry (ASPBI) - All Establishments by Employment Grouping: Final Results .*
- Pidgeon, N. (2010). *Allocating Financial Resources Based on Priorities and Objectives.*
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. . *International Journal of Economics & Management Sciences, 6(2)*,, 1-5.
- Ramanathan, R. (2016). *Performance Measurement and Management: A Strategic Approach. .* Routledge.
- Ravikumar, T. . (2020). 'Financial access indicators of financial inclusion: a comparative analysis of SAARC countries', *Int. J. Intelligent Enterprise, Vol. 7, Nos. 1/2/3, pp.28–36. .*
- Romain, A. . (2021). *Challenges and Failure Rates of New SMEs.*
- Rozanski, J., & Bogolebska, J. (2020). *Financial strategy and the process of the internationalization of enterprises.* Financial Sciences,25(4).
- Ruchen, X. (2023). *The Role of SMEs in China's Circular Economy Transition.*
- Rugman, A. M., & Verbeke, A. (2002). *Penrosean insights into resource management, firm diversification strategy, and productive opportunity.*
- Rugui L. & Omagwa J. (2018). Effect of financial management practices on performance of selected small and medium enterprises in Limuru Toen Kenya. *international journal of scientific and education research, 2.05.*

- Rwanda Bureau of Statistics (RBS). (2012). *Annual Report on SME Failure Rates in Kigali*.
- Sara, S., & Zenab, A. (2016). *The impact of financial strategy on various docile of the profitability of listed company on Tehran stock exchange, quintile regression approach*.
- Schonberger C. (2023). Digital finance, financial constraints and SME technology innovation- An empirical study based on SMEs and growth enterprise market data. .
- Schwab, K. ((2017). The Fourth Industrial Revolution. *what it means, how to respond*. *World Economic Forum*.
- Sebastian, A. Y. (2018). Effects of budgeting on financial performance. A study of selected manufacturing firms in Kinondoni district, Dar es salaam, Tanzania.
- Serrasqueiro, Z., & Nunes, P. M. (2016). The Relationship Between Growth, Profitability, and Firm Size in Portuguese Firms. *Investment Analysts Journal*, 45(1), doi:10.1080/10293523.2016.1165478, 25-38.
- Shabazali, A. B. (2017). *The influence of strategic financial management on small and medium enterprise performance*.
- Shinta S., Radhiana R., Juwita j. & Putri M. (2022). Challenges of the Resource-Based View Approach in Improving Business Organizational Performance.
- Showkat M., Nagina R., Nari U., Baba M. A. & Shah M. A. (2024). Empowering women in digital age: can digital financial services fulfill the promise of financial autonomy and gender equality in the attainment of sustainable development goal 5?
- Simiyu, G., Bonuke, R., & Komen, J. (2020). Social media and students' behavioral intentions to enroll in postgraduate studies in Kenya: A moderated mediation model of brand personality and attitude. *Journal of Marketing for Higher Education* 30(1), 66-86.
- Smirat, B. Y. (2016). Cash management practices and financial performance of small and medium enterprises in Jordan.
- Somathilake H. & Pathirawasam C. (2020). Financial management practice of SMEs in Sri Lanka. Evidence from North Central Province.
- Stimac, M., Lych, V., & Yurchenko, Y. (2020). *Financial strategy development process*.
- Sürücü, L., & Maslakçı, A. (2020). Validity and reliability in quantitative research. *Business & Management Studies: . An International Journal*, 8(3), , 2694-2726.
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using Multivariate Statistics (7th ed.)*. Pearson Education.
- Tavakol M, Dennick R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. doi:10.5116/ijme.4dfb.8dfd.
- Tirimba, O. I., Wanjau, K., & Orwa, G. O. (2015). *Effect of cash management on financial performance of deposit taking SACCOs in Mount Kenya region*.
- Tulasombat & Chuchuen. (2017). Financial factors affecting investment decision of organic agribusiness in Chiang, Mai Province, Thailand.

- Turyahebwa, A., Sunday, A., & Byamukama, . (2022). *Investment decisions and their impact on the performance of small and medium enterprises.*
- Turyahebwa, A., Sunday, A., & Byamukama, E. (2013). *Financial performance in the selected microfinance institutions in Uganda.*
- United state small business administration. (2022). *Small Business resource guide: start, grow, expand and recover your business.*
- united state trade representative. (2021). *Advocacy Encourages Small Businesses to Comment on USTR's Request for Information on Proposed Actions in Section 301 Investigations of Digital Services Taxes.*
- US, c. o. (2016). Retrieved from <https://www.uschamber.com/start/strategy>
- Utami, H. & Alamanos, E. (2023). *Resource-Based Theory: A review.* Retrieved from In S.Papagiannidis (Ed), TheoryHub Book: <https://open.ncl.ac.uk/> / ISBN:9781739604400
- Uwonda G. & Okello N. (2015). Cash flow and sustainability of SMEs in Northern Uganda.
- Uyanto, S. S. (2020). Power Comparisons of Five Most Commonly Used Autocorrelation Tests. . *Pakistan Journal of Statistics and Operation Research*, <https://doi.org/10.18187/pjsor.v16i1.2691>, 16(1),119-130.
- Veronika, S. (2017). *Identification of financial strategy in small and medium sized entrepreneurs.*
- Wadesango N., Tinarwo N., Sitchal L. & Machingambi S. (2019). impact of cash flow management on profitability and sustainability of small and medium size enterprises in Zimbabwe.
- Wairimu Z. & Mwilaria S.M. (2017). Microfinance institutes social intermediation and micro and small enterprises survival in Thika town Kenya. *Asian pacific journal of multidisiplinary research* 5(2), 87-93.
- Wairimu, P., & Mwilaria, D. (2017). *Survival Rates and Challenges of SMEs in Kenya.*
- Wambua P. M. (2018). *Investment Appraisal Techniques and Financial Performance of Small and Medium Enterprises in Nairobi City County, Kenya.*
- Wan, J., Li, X., & Chen, Y. (2017). *Strategic investment decisions and SME performance: The role of financial analysis and market research.*
- Wang Y. (2016). What are the biggest obstacles to growth of SMEs in developing countries? *An empirical evidence from an enterprise survey. Borsa Istanb Rev* 16(3), 167–176.
- Wang, H. (2016). *Access to Finance as a Barrier to SME Growth.*
- Wasonga, O., Omillo, F., & Omwenga, M. . (2020). *Effect of financial management practices on the growth of selected small and medium enterprises in Eldoret town 1(1).* 001–015. .
- Xue W., Li H.,Ali R., Rehman R.U. (2020). *Knowledge mapping of corporate financial performance research: A visual analysis using cite space and unicet.* Retrieved from <https://doi.org/10.3390/su12093554>

- Yang L, Zhang Y. (2020). Digital financial inclusion and sustainable growth of small and micro enterprises—evidence based on China's new third board market listed companies. *Sustainability* 12(9):3733.
- Yang Q. & shahbaz P. (2023). Boosting regional sustainability under digital economy environment: Exploring the moderating role of digital finance in China. .
- Yang, C., Singh, P., & Wang, J. (2020). The effects of firm size and firm performance on CEO pay in Canada: A Re-Examination and Extension. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 37(3), 225-242.
- Yang, J., & Zhang, L. (2020). *Promoting Digital Financial Inclusion to Boost SMEs and Macro Economy*.
- Yusufu, S. O. (2020). Financial management strategy on the growth of small-medium enterprises in Nigeria. *Ilorin Journal of Human Resource Management (IJHRM)* , Vol.4, No.2.
- Zhi, T., & Jintong, T. (2016). The impact of competitors firm power divergence on chinese SME environmental and financial performance. *journal of business ethics*, vol. 136, pages 147-165.

APPENDICES

Appendix I: Introduction Letter

26th August 2024

I am a student from University of Eldoret pursuing a Master's degree in business management (Finance option). I am conducting research on the financial management practices, digital financial services, and performance of small and medium enterprises in Eldoret City, Uasin Gishu County, Kenya. Therefore, I humbly seek your permission to collect data that will enable me to address the study's objectives. The information you will provide is specifically for academic purposes, and strict ethical principles will be adhered to.

Thank you for your kind participation.

Kind regards,

Jepleting Gladys.

Appendix II: Questionnaire

Introduction

I am a student from University of Eldoret pursuing a Master's degree in business management (Finance option). I am conducting research on the financial management practices, and performance of selected SMEs in Eldoret city, moderated by digital financial services. Therefore, I humbly seek your time to collect data that will enable me to address the study's objectives. The information you will provide is specifically for academic purposes, and strict ethical principles will be adhered to.

Thank you for your kind participation.

Instructions to respondents

- a) Please take time to fill this questionnaire with appropriate responses in the spaces provided.
- b) **DO NOT** indicate your name anywhere in this questionnaire for confidentiality.
- c) **DO NOT** give more than one answer.
- d) Place a tick (✓) against the most appropriate response.

SECTION A: DEMOGRAPHIC PROFILE

1. Please indicate your gender a) Male [] b) Female []
2. Indicate your age a) below 25years [] b) 26-35 [] c) 36- 45 years [] Above 46 []
3. How long has your business been in operation?
Less than 1 year [] 1-3 years [] 4-6 years [] 7-9 years [] 10 years and above []
4. Highest level of education
Certificate [] Diploma [] Degree [] Masters [] other qualifications []
5. What is the type of business you engage in? Choose on the answers provided
a) Retail SMEs e.g boutiques, electronic shops, grocery, supermarkets, m-pesa []

b) Service providers e.g salon, barbershops, tailoring shops, drycleaners, repair shops, petrol stations []

c) Medical services e.g chemist, pharmacy, private clinic []

d) Construction and real estate's e.g construction companies, real estate's agencies, hardware's stores []

f) Manufacturing []

g) Agriculture []

6. What is the size of your business in terms of the number of employees?

Below 10 [] 11-49 [] 50-99 []

7. What is the annual turnover of your business? Less than KSh 500,000[]

KSh 500,001 - KSh 5,000,000 [] More than KSh 5,000,000 []

SECTION B: RESEARCH SPECIFIC INFORMATION

Kindly rate the extent to which you agree with the following statements on influence of Financial Management Practices on Performance of SMEs using the following scales

(1=Strongly Disagree, 2=Disagree, 3=Slightly Disagree, 4= Neutral, 5=Slightly Agree, 6= Agree, 7=Strongly Agree).

Financial Performance of selected SMEs

NO	STATEMENT	1	2	3	4	5	6	7
	Return on Assets							
1	The business has acquired enough assets for its operation							
2	Return on Asset is an indicator of measuring managerial efficiency							
3	Return on Asset has been increasing in the past years							
	Return on Investment							
4	There is low capital expenditure on investments							
5	There is high level of investment in the business							
6	We frequently check the return on investment of our business							

7	Our return on investment has steadily increased over the last three years.							
	Profitability							
8	Our business has grown significantly in terms of operating profits							
9	Our business has registered a turnover growth resulting in an increase in earnings per share							
10	Our profitability aligns with our financial goals.							

Cash flow Management

NO	STATEMENTS	1	2	3	4	5	6	7
	Planning Cash flow							
1	Our business prepares cash flow forecasts to identify future surplus and deficits							
2	Our business ensures there is sufficient cash flow to meet daily needs							
3	Our business handle cash flow shortages through informal loans, retained profits, personal financing							
	Monitoring Cash flow							
4	Our business maintain proper records for all payables							
5	Our business maintain stock records which are updated regularly							
6	Optimal cash balances are maintained by the business at all times							
	Controlling Cash flow							
7	Our business compare the near cash in with the cash payment obligations before making payment decisions							
8	The business keeps cash controlling receipts for erroneous payments							
9	Our business grows by keeping profits.							

Budget planning

NO	STATEMENT	1	2	3	4	5	6	7
	Budget Consolidation							
1	Our business allows employees to participate in budget plan							
2	We use past data as a starting point for our budget plans							
3	Our business has long term and short term budget plan							
	Budget Process							
4	Our business follows weekly/monthly/quarterly plans for expenses							
5	Our business has clear goals and objectives							
6	Our business prepares a financial plan to follow							
7	Our business prepares an annual budget for its operations							
8	Our business identifies risk and other issues within the set budget							
9	We review and update our budgeting process regularly.							

Investment Decisions

NO	STATEMENT	1	2	3	4	5	6	7
	Liquidity Performance i.e available cash reserves in the business operations							
1	Our business maintain strong liquidity position							
2	Our business avoids exposure of financial risks							
3	Our business earnings per shares have increase over the last year							
	Sales Turnover							
4	Our business generates sufficient cash through sales							
5	Our annual average sales of the business have been increasing over years							
6	Our business sales turnover level has grown over the last years							
	Profitability							
7	Our business market size has increased in a new market leading to more income							
8	Our investment decisions are aimed at increasing profit.							
9	We review investment decisions to ensure they contribute to profit.							

Digital financial services

NO	STATEMENT	1	2	3	4	5	6	7
	Usage							
1	Our business has adopted digital finance services e.g.mobile banking, online payments, E-wallet etc							
2	Our business made purchases of goods and services using a digital payment services to achieve financial objectives							
3	Customers often use digital payment services in our business thus ensures financial performance periodically							
4	Our business often use digital finance services to raise or borrow funds and calculate interest rate							
	Access							
4	We have access to finance with flexible terms by use of DFS that are needed to make viable investment decisions							
6	Quick access of finance with minimum cost using digital finance services has helped our business grow							
7	Digital finance services has helped to get finances from micro finance institutions							
	Quality							
8	Our business performance has improved because of a quality digital finance services							
9	Digital finance services have made our financial management accurate and efficient							

Appendix III SPSS Regression Analysis Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.168 ^a	.028	.021	.98932836	.028	4.037	2	278	.019
2	.861 ^b	.742	.737	.51295692	.713	253.034	3	275	.000
3	.865 ^c	.748	.743	.50718864	.007	7.291	1	274	.007
4	.865 ^d	.748	.742	.50808432	.000	.035	1	273	.852
5	.891 ^e	.794	.788	.46001862	.046	61.030	1	272	.000
6	.893 ^f	.798	.791	.45735484	.003	4.178	1	271	.042

a. Predictors: (Constant), Firm size, Firm Age

b. Predictors: (Constant), Firm size, Firm Age, Zscore(BudgetPL), Zscore(CashFmgt), Zscore(InvestDec)

c. Predictors: (Constant), Firm size, Firm Age, Zscore(BudgetPL), Zscore(CashFmgt), Zscore(InvestDec), Zscore(DigFinServ)

d. Predictors: (Constant), Firm size, Firm Age, Zscore(BudgetPL), Zscore(CashFmgt), Zscore(InvestDec), Zscore(DigFinServ), X1

e. . Predictors: (Constant), Firm size, Firm Age, Zscore(BudgetPL), Zscore(CashFmgt), Zscore(InvestDec), Zscore(DigFinServ), X1, X2

f. Predictors: (Constant), Firm size, Firm Age, Zscore(BudgetPL), Zscore(CashFmgt), Zscore(InvestDec), Zscore(DigFinServ), X1, X2, X3

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.520	.194		-2.684	.008
	Firm Size	.070	.048	.086	1.446	.149
	Firm Age	.282	.123	.137	2.300	.022
2	(Constant)	-.149	.102		-1.463	.145
	Firm Age	.002	.025	.003	.096	.923
	Firm Size	.119	.064	.058	1.857	.064
	Zscore(CashFmgt)	.237	.045	.237	5.311	.000
	Zscore(BudgetPL)	.364	.044	.364	8.300	.000
	Zscore(InvestDec)	.366	.046	.366	8.009	.000
3	(Constant)	-.158	.101		-1.571	.117
	Firm Age	-.002	.025	-.003	-.096	.924
	Firm Size	.138	.064	.067	2.156	.032
	Zscore(CashFmgt)	.187	.048	.187	3.886	.000
	Zscore(BudgetPL)	.358	.043	.358	8.254	.000
	Zscore(InvestDec)	.301	.051	.301	5.889	.000
	Zscore(DigFinServ)	.137	.051	.137	2.700	.007
4	(Constant)	-.210	.297		-.707	.480
	Firm Age	-.002	.025	-.003	-.095	.924
	Firm Size	.136	.065	.066	2.115	.035
	Zscore(CashFmgt)	.176	.076	.176	2.321	.021
	Zscore(BudgetPL)	.358	.043	.358	8.242	.000
	Zscore(InvestDec)	.301	.051	.301	5.880	.000
	Zscore(DigFinServ)	.125	.083	.125	1.510	.132
	X1	.002	.011	.022	.187	.852
5	(Constant)	.315	.277		1.136	.257
	Firm Age	-.016	.023	-.019	-.694	.488
	Firm Size	.122	.058	.059	2.080	.038
	Zscore(CashFmgt)	.054	.070	.054	.766	.444
	Zscore(BudgetPL)	.534	.045	.534	11.781	.000
	Zscore(InvestDec)	.332	.047	.332	7.118	.000
	Zscore(DigFinServ)	.227	.076	.227	2.987	.003
	X1	.032	.010	.351	3.061	.002
X2	-.049	.006	-.520	-7.812	.000	
6	(Constant)	.078	.299		.262	.794
	Firm Age	-.016	.023	-.019	-.700	.484
	Firm Size	.109	.058	.053	1.866	.063
	Zscore(CashFmgt)	.179	.093	.179	1.927	.055
	Zscore(BudgetPL)	.551	.046	.551	12.024	.000
	Zscore(InvestDec)	.103	.121	.103	.852	.395
	Zscore(DigFinServ)	.188	.078	.188	2.402	.017
	X1	.010	.015	.105	.635	.526
	X2	-.052	.006	-.547	-8.103	.000
X3	.035	.017	.396	2.044	.042	

a. Dependent Variable: Zscore(FinPerf)

Appendix IV: Similarity Report