

**DIGITAL FINANCE AND FINANCIAL SUSTAINABILITY AMONG YOUTH-OWNED
CRAFT MICRO ENTERPRISES IN MIGORI COUNTY, KENYA**

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MASTER OF SCIENCE IN COMMERCE (FINANCE AND ECONOMICS)

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**A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL
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SCIENCE IN COMMERCE (FINANCE AND ECONOMICS) IN THE SCHOOL
OF BUSINESS AT KCA UNIVERSITY**

OCTOBER, 2025

DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

Signed:D.A.A.....

Date: July 2025

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Recommendation by the Supervisor

I do hereby confirm that I have examined the master’s dissertation of **Daisy Akinyi Arodi** and have approved it for defense

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Supervisor

KCA University

DEDICATION

I dedicate this work to the Almighty God and to my family for their encouragement and support throughout my studies.

ACKNOWLEDGEMENT

I give thanks to God Almighty for His wisdom, protection, and providence, which allowed me to complete this time- and resource-consuming research. I would want to thank my family for their prayers, understanding, and support throughout this effort. Additionally, I would like to sincerely thank my supervisor Dr. Nyatete Kenyanya, for agreeing to oversee this research paper and for his guidance and patience in reading the drafts; without these things, the research would not have been possible.

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ABBREVIATION AND ACCRONYMS

CBK	Central Bank of Kenya
FSD	Financial Sector Deepening
GSMA	Global System for Mobile Communications Association
ICT	Information and Communication Technology
ILO	International Labour Organization
KYEOP	Kenya Youth Employment Opportunities Project
MSME	Micro, Small and Medium Enterprises
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
SPSS	Statistical Package for the Social Sciences
UNDP	United Nations Development Programme
MFI	Microfinance Institution

OPERATIONAL DEFINITION OF TERMS

Digital Finance:	Digital financial services such as mobile money, mobile banking, crowdfunding, and digital savings platforms used by youth-owned craft micro enterprises to access financial tools (Mwihaki & Ngugi, 2019).
Financial Sustainability:	The ability of a business to generate sufficient income to meet its operating costs and obligations, while also investing in its future growth. Indicators include revenue consistency, profit retention, savings behavior, and access to digital credit (Palmer, 2020).
Digital Credit Access:	The use of mobile loans and microcredit through digital platforms by youth-owned craft SMEs to finance their operations (Githinji & Ngugi, 2017).
Digital Payment Efficiency:	The use of platforms like M-Pesa and mobile banking to facilitate fast, cost-effective, and reliable business payments (Chebet, 2017).
Digital Insurance Uptake:	Access to and usage of mobile-based or online insurance services by youth entrepreneurs to protect their businesses (Namusonge, 2017).
Digital Saving Solution:	The use of digital platforms by youths to save money electronically without relying on traditional banking (Marcus & Henderson, 2019).
Youth-Owned Craft SMEs:	Micro enterprises in the craft sector such as beadwork, woodcraft, leather products, carvings, and textile art owned and operated by youth in Migori County (UNCTAD, 2024).

ABSTRACT

This study examined the effect of digital finance on the financial sustainability of youth-owned craft micro enterprises in Migori County, Kenya. The study was motivated by persistent financial vulnerability and sustainability challenges facing youth enterprises despite the increasing penetration of digital financial services across Kenya. The study specifically sought to determine the effect of digital credit access, digital payment efficiency, digital insurance uptake, and digital savings solutions on the financial sustainability of youth-owned craft micro enterprises in Migori County. The study was anchored on the Technology Acceptance Model, Diffusion of Innovation Theory, Resource-Based View, and Financial Intermediation Theory. A descriptive research design was adopted, targeting 7,182 youth-owned craft enterprises drawn from the eight sub-counties of Migori County. A sample was selected using stratified random sampling, and data were collected using structured questionnaires and interview schedules. The data were analyzed using descriptive and inferential statistics with the aid of the Statistical Package for Social Sciences (SPSS) version 25. The correlation analysis revealed positive and statistically significant relationships between all the independent variables and financial sustainability. Regression results indicated that digital credit access had a positive and significant effect ($\beta = 0.218$, $p = 0.001$), showing that access to affordable and timely digital loans enhances liquidity and operational stability among youth enterprises. Digital payment efficiency had a positive and significant effect ($\beta = 0.164$, $p = 0.008$), implying that efficient payment systems improve transaction speed, transparency, and financial management. Digital insurance uptake also had a significant positive effect ($\beta = 0.195$, $p = 0.001$), suggesting that mobile-based insurance products strengthen enterprise resilience against financial shocks. Digital savings solutions had the strongest positive effect ($\beta = 0.442$, $p < 0.001$), underscoring the importance of saving culture in liquidity management and reinvestment capacity. The study concluded that digital finance significantly enhances the financial sustainability of youth-owned craft micro enterprises. It recommended that policymakers promote inclusive digital credit policies, expand mobile insurance coverage, and encourage digital savings adoption through tailored financial literacy programs. The study suggested that future research examine digital finance in other sectors and regions, and integrate additional factors such as innovation capability, regulatory environment, and management practices to enrich understanding of enterprise sustainability in the digital economy.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Financial sustainability has increasingly become a defining element of enterprise resilience, particularly in developing economies where market volatility, inflationary pressures, and funding constraints threaten business continuity. It denotes an enterprise's ability to generate adequate income to cover operational costs, service obligations, and reinvest profits for future growth (Lozano, 2021). Beyond profitability, financial sustainability entails building financial buffers, maintaining liquidity, and diversifying income sources to cushion against external shocks such as pandemics, fluctuating demand, or supply chain disruptions (García-Pérez *et al.*, 2022). In a competitive and technology-driven global economy, firms that achieve financial sustainability are better positioned to innovate, attract investment, and ensure intergenerational business survival. For youth-owned enterprises, particularly in emerging economies like Kenya, financial sustainability represents empowerment, self-reliance, and a pathway to addressing unemployment and income inequality (OECD, 2023).

Micro enterprises form a vital component of the creative and informal sectors, providing employment and preserving indigenous culture and craftsmanship. In Kenya, craft enterprises contribute significantly to household income generation and export earnings through products such as wood carvings, soapstone art, jewelry, and textiles (UNCTAD, 2022). These businesses are often youth-dominated, driven by innovation, artistic creativity, and local resource utilization. However, their financial structures remain fragile due to constrained access to formal credit, inadequate record-keeping, and weak linkages to financial institutions (Ngugi & Njoroge, 2021). Many rely on seasonal markets, informal savings groups, and inconsistent cash flows, making them vulnerable to business failure. Without a stable financial base, they struggle to expand production, diversify product lines, or participate in competitive regional and global craft markets (Kariuki *et al.*, 2023). Enhancing financial sustainability

within this sector is therefore essential to unlocking the potential of the youth creative economy.

The emergence of digital finance has transformed traditional financial intermediation by providing inclusive, accessible, and low-cost financial services to underserved populations. Digital financial services (DFS), including mobile money, internet banking, fintech lending platforms, and e-wallets, have redefined how small enterprises access and manage financial resources (Beck *et al.*, 2022). These innovations enable real-time transactions, facilitate automated record-keeping, and provide alternative avenues for savings, credit, and insurance. For instance, mobile payment systems such as M-Pesa have revolutionized Kenya's financial landscape by bridging gaps between formal and informal economies, allowing SMEs to transact securely and efficiently (Donou-Adonsou & Sylwester, 2023). Moreover, digital credit and crowdfunding platforms now offer entrepreneurs opportunities to access working capital without traditional collateral, enhancing liquidity and investment capacity. As a result, digital finance has emerged as both a financial inclusion tool and a catalyst for enterprise sustainability and growth.

Despite these transformative opportunities, the effective utilization of digital financial services among youth-owned craft SMCEs remains uneven. Many entrepreneurs still face barriers such as low digital literacy, cybersecurity risks, unreliable internet connectivity, and limited understanding of financial technologies (Amoah & Jibril, 2022). Additionally, the majority operate informally and lack structured bookkeeping systems, which limits their ability to leverage data-driven decision-making and access digital credit scoring mechanisms (Komen *et al.*, 2023). These gaps highlight the need for deliberate policy interventions, targeted capacity-building programs, and digital infrastructure investments to enhance the integration of youth entrepreneurs into digital financial ecosystems.

Globally, the financial sustainability of craft micro enterprises has gained heightened attention as economies transition toward inclusive and innovation-driven growth models. The World Bank (2023) estimates that SMEs contribute over 90% of global businesses and account for more than 50% of employment worldwide, underscoring their central role in achieving sustainable economic development. However, ensuring their long-term financial sustainability remains a global challenge, particularly in creative and cultural sectors that depend on fluctuating consumer tastes and informal trading systems. In developed economies, enterprises often achieve financial stability through diversified financing options, structured accounting systems, and supportive institutional frameworks (OECD, 2023). Access to venture capital, financial literacy programs, and digital financing ecosystems in countries such as the United Kingdom, South Korea, and Germany has enabled craft and creative enterprises to commercialize creativity effectively and sustain competitiveness (UNCTAD, 2022).

In emerging Asian economies, craft micro enterprises continue to face chronic financial fragility. Limited access to affordable finance, inadequate business support infrastructure, and weak financial management practices often undermine their capacity to survive and scale. Although digital finance has expanded rapidly across the Global South, the gap between technological adoption and sustainable financial practices persists (Beck *et al.*, 2022). Many creative entrepreneurs, particularly youth, lack the strategic financial skills and formal linkages needed to manage income volatility or invest in business expansion. Consequently, global policy discourse has increasingly emphasized integrating digital financial inclusion into broader strategies for enterprise sustainability, poverty reduction, and youth empowerment (World Bank, 2023).

Across Africa, craft micro enterprises are the backbone of economic activity, contributing approximately 80% of employment and over 40% of GDP (AfDB, 2022). Within this structure, youth-owned craft enterprises play a unique socio-economic role by combining

entrepreneurship with cultural preservation and local innovation. However, many African craft enterprises operate under conditions of financial vulnerability due to informality, lack of access to credit, and dependency on seasonal tourism markets (Amoah & Jibril, 2022). Financial sustainability remains elusive because of poor savings culture, weak integration into value chains, and minimal adoption of structured accounting systems. Despite the spread of digital finance tools such as M-Pesa, Airtel Money, and MTN Mobile Money, utilization remains skewed toward personal rather than business transactions (Donou-Adonsou & Sylwester, 2023).

Digital financial ecosystems have shown strong potential to close inclusion gaps by providing affordable financial services to underserved populations. Yet, the effectiveness of these systems in promoting sustainable entrepreneurship is constrained by limited digital literacy, gender disparities, and low trust in digital platforms (Komen et al., 2023). Youth entrepreneurs in creative sectors often use digital finance for payment and remittance but fail to leverage it for investment, savings, and credit management which are critical pillars of sustainability. Furthermore, inadequate policy coordination and weak institutional support for creative industries in Africa exacerbate the problem, leaving many youth-owned craft enterprises financially unstable and unable to withstand external shocks such as pandemics or political disruptions (UNESCO, 2023).

In Kenya, craft micro enterprises account for about 98% of all businesses and employ over 14.5 million people, making them the backbone of the national economy (KNBS, 2023). Within this sector, craft-based youth enterprises, engaged in soapstone carving, beadwork, basketry, wood art, and textile crafts, are key contributors to the creative economy and rural livelihoods. These enterprises provide income diversification opportunities for young people and contribute significantly to tourism and export earnings (UNCTAD, 2022). Kenya's strong digital infrastructure, led by innovations such as M-Pesa, PesaLink, and digital lending apps,

offers unprecedented opportunities for youth entrepreneurs to improve financial management and access credit. Nevertheless, despite these technological advancements, many youth-owned craft enterprises remain financially fragile, operating without formal banking relationships, proper bookkeeping, or reinvestment strategies (Ngugi & Njoroge, 2021).

Empirical evidence suggests that the majority of youth-owned craft SMCEs in Kenya depend on informal savings groups and sporadic customer advances to sustain operations (Kariuki et al., 2023). Limited working capital, lack of business insurance, and poor market diversification further expose them to cash flow volatility and business discontinuity. Although digital finance has expanded financial inclusion in Kenya, its translation into financial sustainability among youth entrepreneurs is still limited due to uneven adoption, low financial literacy, and trust deficits in digital credit platforms (Komen et al., 2023). These challenges underscore a paradox: Kenya leads globally in mobile money innovation yet struggles to transform digital access into long-term enterprise sustainability within the informal creative sector.

As the discussion on financial sustainability reveals persistent structural and institutional gaps across emerging economies, digital finance emerges as a potential transformative lever capable of bridging these weaknesses and fostering enterprise resilience. By leveraging mobile technology, fintech innovations, and online financial platforms, digital finance may enhance accessibility, affordability, and efficiency in financial transactions, especially among underserved populations. For youth-owned craft micro enterprises, it offers a pathway to overcome traditional barriers such as limited credit access, poor record-keeping, and informal cash handling. Through tools like mobile payments, digital savings, online lending, and e-commerce integration, entrepreneurs can improve liquidity management, build financial histories, and access real-time data for decision-making. Consequently, digital finance holds immense potential to convert financial inclusion into sustained financial health,

enabling youth enterprises not only to survive but also to thrive within competitive and technology-driven creative economies.

This study is guided by a casual analytical logic that links digital finance dimensions- namely digital payments, digital credit, digital savings and digital insurance to the financial sustainability of youth owned craft micro enterprises. Primary data collected from registered and operational craft micro enterprises in Migori County form the basis for empirical analysis using inferential statistical techniques. The analysis tests the hypothesized relationships between digital finance and financial sustainability, with findings presented and discussed in chapter four. The logical flow ensures coherence between the problem identification in Chapter One, the methodological approach in Chapter Three and empirical results of the study.

1.1.1 Digital Finance

Digital finance has evolved into a central pillar of financial innovation, reshaping how individuals and enterprises access, manage, and deploy resources. Through mobile phones, fintech applications, and online platforms, it integrates technology into financial service delivery, lowering barriers of cost, distance, and documentation (World Bank, 2023; Ozili, 2023). Its influence reaches deeply into informal and microenterprise settings where traditional banks often fall short. In youth-owned craft micro enterprises (SMCEs), digital finance provides the infrastructure for inclusion, connecting artisans to digital markets, facilitating access to credit, and formalizing cash flow management. These digital ecosystems, when effectively used, translate financial access into sustainability by enabling steady liquidity, traceable transactions, and prudent resource allocation (Adeniran & Akinbode, 2022).

Access to credit remains a defining constraint for youth entrepreneurs, and digital credit platforms have emerged as a practical response to that challenge. Unlike conventional lending channels that rely on collateral and lengthy procedures, digital credit systems use mobile

transaction histories, utility payments, and social data to determine creditworthiness (Jack & Suri, 2014; Donou-Adonsou & Sylwester, 2023). This model allows craft micro businesses to obtain funds within minutes, supporting working capital needs and smoothing cash flow cycles. For instance, mobile lenders such as M-Shwari and Tala in Kenya have enabled young artisans to restock materials or invest in new designs at critical production periods. Studies show that such access can increase entrepreneurial resilience and productivity, particularly when borrowing is complemented by financial literacy (Aboagye & Yawson, 2022; Kariuki et al., 2023). The effectiveness of digital credit, however, depends on responsible use and sound regulatory oversight to prevent debt traps and ensure sustainable growth.

The shift toward digital payments have similarly transformed financial behavior among small producers. Mobile and online payment systems have streamlined transactions, replacing risky cash exchanges with instant, secure, and traceable transfers (Beck et al., 2022; Muthoni & Grzybowski, 2017). Among youth craft entrepreneurs, these systems open up digital marketplaces, reduce dependency on intermediaries, and expand client networks across borders. With platforms such as M-Pesa and PayPal, artisans in rural areas can now transact directly with customers worldwide. Research by Suri and Jack (2016) indicates that such payment systems not only improve convenience but also enhance record-keeping, liquidity control, and financial transparency. For craft micro firms, these features strengthen trust with suppliers and clients while reinforcing long-term business stability.

While credit and payments facilitate growth, digital insurance offers protection, a critical yet often overlooked component of sustainability. Mobile-based microinsurance enables small entrepreneurs to shield their ventures against shocks such as illness, theft, or natural disasters (Amoah & Jibril, 2022; Churchill & Matul, 2012). The simplicity of enrolling, paying premiums, and submitting claims through mobile phones encourages participation among informal operators who traditionally lacked access to insurance markets (Bajjal & Toit,

2021). For youth-owned craft SMCEs whose earnings depend on seasonal tourism and fluctuating demand, such protection provides continuity in income and prevents depletion of business capital after adverse events. Insurance, in this sense, serves as a stabilizer, transforming unpredictable risk environments into manageable contingencies that sustain enterprise performance.

Savings form the final thread connecting short-term liquidity to long-term resilience. Mobile-based savings accounts and group saving applications have normalized the habit of consistent deposits among small-scale entrepreneurs (Mbaka & Mbugua, 2021; Kariuki et al., 2023). These platforms foster self-discipline, build reserves for reinvestment, and create credit histories that enhance eligibility for future financing (Adeniran & Akinbode, 2022). For young craft producers, the ability to store surplus income digitally, separate from daily operations, helps in funding innovation, diversifying products, and maintaining business continuity during slow seasons. As digital ecosystems mature, savings platforms are becoming not just storage tools but strategic instruments of planning, linking financial inclusion directly to sustainable enterprise growth.

1.1.2 Financial Sustainability

Financial sustainability refers to the capacity of an enterprise to maintain stable operations, meet financial obligations, and generate sufficient surpluses for reinvestment over the long term. It goes beyond short-term profitability to encompass the endurance of financial systems, liquidity stability, and strategic reinvestment for future growth (Lozano, 2021; García-Pérez et al., 2022). For craft micro enterprises, it represents the ability to survive market fluctuations and economic shocks while continuing to deliver value to owners and other stakeholders. Financially sustainable enterprises are characterized by diversified revenue streams, prudent cost management, efficient resource utilization, and adaptive financial planning. In the context

of youth-owned craft micro enterprises (SMCEs), financial sustainability ensures continuity of production, income security, and the capacity to innovate in competitive creative markets.

The concept is commonly analyzed through three dimensions: financial viability, self-sufficiency, and growth potential. Financial viability reflects an enterprise's ability to cover its operational expenses and generate consistent profits. Self-sufficiency involves independence from external financial support, achieved when internal revenues and retained earnings sustain operations (Aldea et al., 2023). Growth potential, on the other hand, denotes the ability to reinvest surpluses into business expansion, technology acquisition, and product innovation. For craft micro enterprises, these dimensions interact to define the health of their financial systems—where regular income from sales, effective cost control, and reinvestment capacity determine their ability to remain competitive and resilient over time (Kariuki et al., 2023).

Financial sustainability is often influenced by internal management practices and external environmental factors. Internally, sound financial planning, effective budgeting, and transparent record-keeping improve resource allocation and decision-making (Ngugi & Njoroge, 2021; Komen et al., 2023). Externally, factors such as access to markets, cost of financing, regulatory policies, and technological infrastructure shape the ability of enterprises to remain financially stable. The introduction of digital finance has further transformed this landscape by providing tools that enhance liquidity management, automate accounting processes, and reduce financial exclusion (Beck et al., 2022). In youth enterprises, the integration of these digital tools into daily financial operations often determines the difference between subsistence-level survival and sustainable growth.

For youth-owned craft SMCEs in Kenya, financial sustainability is particularly critical due to their exposure to volatile market demand, limited working capital, and dependence on seasonal tourism. Studies show that most youth enterprises operate informally, with weak

financial systems and low capital retention rates, making them highly vulnerable to cash flow instability (Kariuki et al., 2023; OECD, 2023). Strengthening financial sustainability therefore requires both internal efficiency and access to external financial innovations such as digital credit, insurance, and savings platforms. When effectively integrated, these tools enhance record-keeping, promote disciplined saving, and reduce the risks of business disruption. As a result, financial sustainability becomes not only a measure of survival but a reflection of enterprise maturity and capacity for long-term contribution to employment and local economic growth.

1.1.3 Youth-Owned Craft Micro Enterprises in Migori County

Youth-owned craft micro enterprises in Migori County embody a vibrant blend of cultural expression and entrepreneurial innovation. These enterprises leverage traditional skills in woodcarving, pottery, jewelry-making, basketry, and textile design to produce items with both aesthetic and commercial value. They play a significant role in employment creation, poverty reduction, and the preservation of cultural identity within the region. The Kenya National Bureau of Statistics (2023) estimates that craft micro enterprises contribute over 24 percent to Kenya's GDP and employ more than 80 percent of the labor force, with a considerable share being youth-led. Migori's youthful population, where nearly three-quarters are under 35 years (KNBS, 2023; UNDP, 2022), has found in craft production a viable source of income amidst limited formal employment opportunities. The sector's potential for promoting inclusive growth, local tourism, and creative exports makes it a strategic pillar for rural development if adequately supported by sustainable financing mechanisms.

The economic significance of youth craft enterprises is reinforced by Migori County's advantageous geographic and cultural setting. Situated along the Tanzanian border and near tourist sites such as Lake Victoria and Ruma National Park, the county provides a natural

market for art and cultural products. Craft clusters in Rongo, Awendo, and Suna East have emerged as informal production hubs, supplying local and cross-border markets. According to UNCTAD (2022), the global creative economy is growing at an average rate of 5 percent annually, with demand for handmade, eco-friendly, and culturally distinctive products on the rise. Youth artisans in Migori, equipped with creativity and adaptability, are well positioned to benefit from this trend. However, their ability to expand market reach and sustain production is tightly linked to access to finance, business skills, and digital tools for market integration (World Bank, 2023; Kariuki et al., 2023).

Despite this potential, financial sustainability remains a persistent challenge among youth-owned craft micro enterprises in Migori County. Most operate informally, lack business records, and depend on inconsistent income from seasonal demand. The Kenya Youth Development Policy (2021) reports that nearly 68 percent of youth-owned microenterprises in rural counties collapse within three years due to poor financial planning, low savings, and limited access to credit. In Migori, over 70 percent of youth entrepreneurs rely on informal savings groups or family support for startup and operating capital (Migori County Department of Trade, 2023; Komen et al., 2023). The absence of structured financial management systems not only weakens profitability but also limits eligibility for formal financing. This fragility undermines the enterprises' ability to scale, modernize production, or adapt to market shifts, thereby trapping many artisans in cycles of low income and financial instability.

The county's trade reports further highlight the depth of this challenge. Migori County Department of Trade and Industrialization (2023) indicates that micro enterprises contribute about 60 percent of informal sector income, yet only one in three maintains formal records or has a registered business account. Similar patterns are observed nationally, where the informal sector accounts for 80 percent of employment but less than 20 percent of access to credit

(KNBS, 2023; OECD, 2023). The high cost of raw materials, limited working capital, and dependence on middlemen further squeeze profit margins, leaving little room for reinvestment. Artisans often face liquidity shortages during off-peak tourist seasons, and few possess insurance or savings buffers to cushion shocks. These conditions expose the structural weaknesses that hinder financial sustainability in the creative economy at the grassroots level.

While digital finance offers new hope, its adoption among youth craft enterprises in Migori remains limited. Mobile money and digital credit platforms such as M-Pesa and KCB M-Pesa have penetrated the county, yet many artisans use them mainly for personal transactions rather than business management (Donou-Adonsou & Sylwester, 2023; Amoah & Jibril, 2022). Barriers such as low digital literacy, poor internet coverage, and limited awareness of available products reduce the potential benefits of digital finance. Government initiatives like the Ajira Digital Program and the Youth Enterprise Development Fund have improved access to entrepreneurial training, but their reach and impact on financial sustainability remain modest (Government of Kenya, 2022; UNDP, 2022). Consequently, the majority of youth artisans in Migori continue to experience low profitability, irregular cash flows, and limited capacity for business reinvestment. Understanding and addressing these constraints is critical for unlocking the potential of youth-owned craft enterprises as engines of sustainable livelihoods and cultural entrepreneurship.

1.2 Statement of the Problem

Digital finance is theoretically expected to enhance financial sustainability by improving access to affordable credit, enabling efficient digital payments, fostering savings discipline, and cushioning enterprises through digital insurance. Financial intermediation theory suggests that technological innovation should reduce information asymmetry and transaction costs, allowing even informal firms to access capital efficiently. Kenya's financial inclusion policies, including

the National Financial Inclusion Strategy (2018–2023), similarly envisioned that mobile banking, fintech lending, and other digital solutions would strengthen craft micro enterprises by stabilising their cash flows and expanding growth opportunities. Ideally, youth-owned craft enterprises in counties like Migori should therefore be experiencing rising financial sustainability through digital financial tools that promote liquidity stability, reinvestment, and resilience.

The reality, however, diverges from this expectation. Nationally, FinAccess (2021) reported that while 84 percent of Kenyan adults are formally included in financial services, only 17 percent are financially healthy, reflecting weak cash-flow management and heavy reliance on short-term borrowing. The Kenya Youth Development Policy (2021) shows that 68 percent of youth-owned microenterprises collapse within three years, citing poor financial management and limited access to credit as key drivers. In Migori County, the Department of Trade and Industrialization (2023) records that craft micro enterprises account for about 60 percent of household income but fewer than one-third maintain business records or participate in formal finance. Most youth craft operators rely on seasonal tourism, informal savings groups, and unrecorded cash transactions, leaving them exposed to liquidity shocks and inconsistent earnings. Despite the presence of mobile money services such as M-Pesa, KCB M-Pesa, and digital savings products, adoption for business management remains low, and digital credit is often used for consumption rather than investment.

Underlying these outcomes are systemic and behavioral constraints that continue to undermine financial sustainability. Studies across Sub-Saharan Africa show that digital finance can improve business efficiency but does not automatically guarantee long-term financial stability. Amoah and Jibril (2022) found that digital inclusion enhances SME performance in Ghana but offered no evidence on sustained profitability or reinvestment. Donou-Adonsou and

Sylwester (2023) observed that digital finance facilitates small business growth across Africa yet relied on cross-sectional data that limit causal interpretation. Kariuki, Nderitu, and Waweru (2023) reported that youth enterprises in Kenya remain financially unsustainable due to weak savings and poor record-keeping. Similarly, Komen, Oduol, and Onditi (2023) established that while mobile money enhances resilience among informal businesses, its use is largely transactional rather than strategic. Mbaka and Mbugua (2021) showed that mobile savings platforms increase inclusion but neglected sectoral differences, particularly within creative and craft enterprises. These studies demonstrate fragmented evidence that fails to explain how digital finance translates into financial sustainability for youth-run creative microenterprises.

The present evidence base leaves several research gaps. Conceptually, most studies treat digital finance as a single construct and overlook how its components, digital credit, digital payments, digital insurance, and digital savings, individually or jointly affect financial sustainability. Contextually, limited attention has been given to rural and creative sectors such as Migori's youth craft enterprises, whose seasonal income cycles and informal market linkages differ from those of urban SMEs. Methodologically, prior research is dominated by descriptive and cross-sectional approaches that measure access rather than long-term outcomes like liquidity stability, profit persistence, and reinvestment capability. Empirically, no study to date has comprehensively modelled the relationship between digital finance and financial sustainability among youth-owned craft microenterprises in Migori County. This study therefore sought to fill these conceptual, contextual, methodological, and empirical gaps by investigating the effect of digital credit access, digital payment efficiency, digital insurance uptake, and digital savings solutions on the financial sustainability of youth-owned craft microenterprises in Migori County, Kenya within the local context.

1.3 Objectives of the Study

1.3.1 General Objective

To examine the effect of digital finance and financial sustainability among youth-owned craft micro enterprises in Migori County, Kenya.

1.3.2 Specific Objectives:

- i. To evaluate the effect of digital credit access on financial sustainability among youth-owned craft micro enterprises in Migori County, Kenya.
- ii. To investigate the effect of digital payment efficiency on financial sustainability among youth-owned craft micro enterprises in Migori County, Kenya.
- iii. To determine the effect of digital insurance uptake on financial sustainability among youth-owned craft micro enterprises in Migori County, Kenya.
- iv. To investigate the effect of digital savings solutions on financial sustainability among youth-owned craft micro enterprises in Migori County, Kenya.

1.4 Research Questions

- i. What is the effect of digital credit access on financial sustainability among youth-owned craft micro enterprises in Migori County, Kenya?
- ii. What is the effect of digital payment efficiency on financial sustainability among youth-owned craft micro enterprises in Migori County, Kenya?
- iii. What is the effect of digital insurance uptake on financial sustainability among youth-owned craft micro enterprises in Migori County, Kenya?
- iv. What is the effect of digital savings solutions on financial sustainability among youth-owned craft micro enterprises in Migori County, Kenya?

1.5 Significance of the Study

The findings of this study are expected to provide valuable insights for government agencies, youth enterprises, and financial sector actors seeking to strengthen the link between digital finance and sustainable enterprise growth. For policymakers, the evidence generated will be instrumental in informing the design of inclusive financial and entrepreneurial development strategies targeting youth-led enterprises. Government bodies such as the Ministry of Youth Affairs, the Ministry of ICT, and the Micro and Small Enterprise Authority can draw on these findings to craft evidence-based interventions that promote the integration of digital technologies into financial management among young entrepreneurs. The study's outcomes may guide the creation of supportive digital finance ecosystems through targeted subsidies for fintech adoption, tax incentives for technology-driven startups, and regulatory frameworks that facilitate access to formal financial systems. Such measures would align with Kenya's national priorities on financial inclusion and the Bottom-Up Economic Transformation Agenda by ensuring that youth enterprises are equipped to participate competitively in the digital economy.

For youth-owned craft micro enterprises, the study offers actionable knowledge on how adopting digital financial tools can enhance their financial sustainability and resilience. Many youth entrepreneurs in Kenya face persistent constraints such as limited access to formal financing, weak record-keeping, and unstable cash flows that jeopardize business continuity. This research will provide practical guidance on the effective use of mobile banking, digital credit, e-wallets, and online financial management systems to improve liquidity control, access affordable financing, and promote savings discipline. By translating digital access into tangible financial performance gains, the study seeks to demonstrate how youth enterprises can build stronger financial foundations, lower failure rates, and expand growth prospects in competitive markets.

Financial institutions, including commercial banks, microfinance entities, and fintech companies, also stand to benefit from the study's insights. Understanding the digital financial behavior and needs of youth entrepreneurs will enable these institutions to design more responsive products that align with the realities of small and creative enterprises. The study will help in refining digital credit scoring models, tailoring microloan structures, and developing savings or insurance products suited to the working capital cycles of youth businesses. Such product innovation can expand market penetration while improving repayment performance and portfolio quality for lenders. Moreover, the evidence can support collaboration between financial institutions and government agencies to scale inclusive fintech solutions that promote sustainable entrepreneurship.

For academicians and researchers, this study will contribute to the growing body of knowledge on digital finance and enterprise sustainability, particularly within the underexplored context of rural youth-owned creative enterprises. It will extend theoretical understanding by empirically testing how the distinct components of digital finance, credit access, payments, savings, and insurance, interact to influence financial sustainability outcomes. The study's findings will offer evidence for refining theories of financial intermediation, technological diffusion, and resource-based perspectives within the small enterprise domain. Furthermore, it will provide a foundation for comparative research across counties and sectors, enabling scholars to interrogate the contextual factors that mediate the effectiveness of digital finance in enhancing business resilience. By offering new empirical insights from Migori County, the study will serve as a reference point for future academic discourse on digital financial inclusion, sustainable entrepreneurship, and youth enterprise development in developing economies.

1.6 Scope of the Study

Conceptually, the study focused on examining the relationship between digital finance and financial sustainability among youth-owned craft micro enterprises in Migori County. It will investigate how the four dimensions of digital finance, digital credit access, digital payment efficiency, digital insurance uptake, and digital savings solutions, affect the financial sustainability of these enterprises. Financial sustainability was measured in terms of liquidity stability, profitability, reinvestment capacity, and business continuity. Methodologically, the study adopted a descriptive research design to allow for systematic and accurate assessment of the relationships between digital finance and financial sustainability. This design is suitable for obtaining factual information about the prevailing conditions and practices among youth entrepreneurs without manipulating variables. It facilitated the collection of both quantitative and qualitative data on how digital financial services are adopted and applied in enterprise management, and how these practices relate to financial outcomes.

Geographically, the study was confined to Migori County, located in the south-western region of Kenya along the border with Tanzania. The county is characterized by an active informal sector and a growing youth population engaged in creative and craft-related activities. It has approximately 7,182 craft micro enterprises distributed across various subsectors, including metal works, electronics, mechanics, woodworks, and related crafts. Migori provided an ideal setting for this study because, despite significant youth participation in enterprise development and the presence of mobile money infrastructure, financial fragility and business discontinuity remain prevalent. The county's diverse economic activities and exposure to both rural and cross-border markets make it an appropriate context for exploring the role of digital finance in enhancing financial sustainability among youth-owned craft enterprises.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of theoretical and empirical literature related to digital finance and financial sustainability among youth-owned craft small and micro enterprises in Migori County. It begins with a discussion of the theories underpinning the study, including the Financial Intermediation Theory, the Technology Acceptance Theory, the Diffusion of Innovation Theory, and the Resource-Based View. The chapter also examines the key constructs of the study, namely digital credit, digital payments, digital insurance, and digital savings, and their relationship with enterprise sustainability. It further reviews empirical studies from global, regional, and local contexts to identify research gaps and concludes with a conceptual framework illustrating the relationships among the study variables.

2.2 Theoretical Review

The theoretical review presents the key theories that form the foundation for understanding the relationship between digital finance and financial sustainability among youth-owned craft small and micro enterprises. A theoretical review provides a framework for explaining how and why variables are related and guides the formulation of hypotheses and interpretation of findings. According to Grant and Osanloo (2014), theory serves as the lens through which a researcher views the world, connecting abstract concepts with observable realities. Creswell and Creswell (2018) further note that a sound theoretical foundation strengthens the coherence, direction, and analytical depth of a study. In this research, the theoretical review is essential in identifying relevant models that explain how digital financial innovations influence enterprise

performance and sustainability. It enhances understanding, provides a basis for comparison with empirical evidence, and situates the study within established scholarly discourse.

2.2.1 The Technology Acceptance Theory (TAM)

The Technology Acceptance Model (TAM), developed by Davis in 1989, provides a fundamental theoretical basis for understanding the determinants of technology adoption and usage behaviour. It posits that an individual's decision to accept and use a technology is primarily influenced by two key perceptions: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). PU refers to the degree to which a person believes that using a particular technology will enhance their job or task performance, while PEOU relates to the perceived effort required to use that technology effectively. In the context of this study, TAM is relevant in explaining how youth entrepreneurs in Migori County come to adopt and consistently use digital financial tools such as mobile banking, digital lending platforms, and e-wallets.

The Technology Acceptance Model also recognizes that external factors such as system design, user training, digital literacy, and technological infrastructure influence the two key constructs, PU and PEOU, thereby shaping technology adoption. Among youth craft enterprises in rural Migori, these external factors are particularly significant. Limited internet connectivity, inconsistent electricity, or poorly designed digital platforms can discourage adoption, even when perceived benefits exist. Conversely, supportive factors such as financial literacy training and integration of digital tools in youth empowerment programs improve adoption rates. Njuguna and Waithaka (2022) found that structured digital literacy initiatives among youth entrepreneurs significantly enhanced both the perception of usefulness and the intention to use mobile financial platforms, contributing to greater business stability and sustainability.

Empirical evidence supports the link between digital finance adoption and financial sustainability. Mugo and Kinyua (2020) observed that youth enterprises in western Kenya that adopted mobile credit and savings platforms recorded improved cash flow management, better working capital access, and resilience against economic shocks. Such findings align with TAM's assertion that continued use of technology reinforces perceptions of its usefulness, creating a feedback effect that deepens digital integration in business operations. Later developments such as the Unified Theory of Acceptance and Use of Technology (UTAUT) extended TAM by adding constructs like social influence and facilitating conditions. In Migori's youth enterprise ecosystem, these extensions are relevant because peer recommendations and group-based adoption patterns often determine individual participation in digital finance platforms (Wanja & Amimo, 2020).

In sum, the theory provides a strong behavioural lens for analysing the adoption and use of digital finance among youth-owned craft small and micro enterprises. It explains how perceptions, attitudes, and contextual factors interact to influence digital finance utilisation and how such adoption contributes to financial sustainability. The model therefore anchors this study by providing a theoretical explanation of why certain youth entrepreneurs in Migori integrate digital financial tools successfully into their operations while others remain excluded, despite widespread digital financial inclusion initiatives across Kenya. Youth-owned craft enterprises in Migori increasingly depend on mobile-based financial platforms for transacting, saving, and accessing microcredit. Their behavioural intention to adopt these tools is strongly influenced by their perceptions of usefulness and ease of use. For example, a young artisan may adopt M-Pesa or mobile banking services if he perceives them as convenient, reliable, and capable of improving his financial management. If the platforms are intuitive and require minimal technical expertise, adoption is likely to increase. Omondi and Wanyoike (2021) emphasize that the perceived simplicity and efficiency of a digital system are crucial in shaping

user acceptance, particularly among youth entrepreneurs who may have limited exposure to complex financial technologies.

2.2.2 The Diffusion of Innovation Theory

The Diffusion of Innovation Theory, developed by Everett Rogers in 1962, is one of the most influential frameworks for explaining how new technologies, practices, and ideas are communicated and adopted within a social system over time. The theory conceptualises diffusion as a process by which innovation is transmitted through particular channels among members of a social system, ultimately leading to adoption or rejection. Rogers identifies five key innovation attributes that determine the rate of adoption: relative advantage, compatibility, complexity, trialability, and observability. Relative advantage refers to the perceived improvement an innovation provides over existing options, while compatibility denotes its consistency with users' values and experiences. Complexity refers to the degree of difficulty involved in understanding or using the innovation, trialability relates to the ability to experiment with it on a limited basis, and observability concerns the visibility of its results. These attributes jointly shape individuals' perceptions, attitudes, and willingness to adopt an innovation, providing a systematic way to understand the spread of technological and behavioural change (Rogers, 2003).

The theory also establishes that innovation adoption follows a temporal and social sequence, resulting in a normal distribution of adopters within a population. Rogers categorised adopters into five groups, innovators, early adopters, early majority, late majority, and laggards, each representing distinct behavioural characteristics and risk orientations. Innovators are venturesome individuals who are eager to experiment with new technologies, while early adopters act as opinion leaders who influence the diffusion process through their endorsement. The early majority adopt innovations after observing successful cases, the late majority adopt due to social pressure or economic necessity, and laggards are the most resistant,

often constrained by limited resources or skepticism. This classification highlights that the diffusion process is cumulative and dependent on both interpersonal communication and social influence. Later empirical studies have reinforced that the rate of diffusion depends not only on innovation attributes but also on factors such as cultural openness, education levels, and institutional support (Greenhalgh et al., 2004; Wejnert, 2002).

The theory's explanatory strength lies in its ability to integrate individual and social factors influencing adoption. Diffusion occurs through a networked process where communication plays a central role in shaping awareness, persuasion, and decision-making. Formal communication channels, such as media and institutional programs, are effective in the early stages of diffusion, while interpersonal communication among peers becomes more influential in the later stages. This dual mechanism underlines the interaction between structural and behavioural dimensions of innovation adoption. Empirical evidence has demonstrated that trust in information sources, demonstration effects, and social learning significantly accelerate diffusion rates in both technological and organisational contexts (Rogers, 2003; Straub, 2009). The model's adaptability has allowed it to explain the spread of diverse innovations, from agricultural practices and information technologies to financial innovations such as mobile banking and digital credit systems.

The Diffusion of Innovation Theory remains scientifically significant because it provides a comprehensive framework for analysing the dynamics of technology adoption at both micro and macro levels. It elucidates how innovation spreads through social systems by linking the psychological processes of individual decision-making with broader sociological patterns of communication and influence. The theory has been widely applied to understand digital transformation, fintech adoption, and e-commerce uptake in both developed and emerging economies. Researchers such as Abor and Quartey (2019) and Muthinja and Chipeta (2018) affirm that diffusion is not only a technological process but also a socio-economic

phenomenon shaped by perceived benefits, infrastructure quality, and social interconnectedness. Its inclusion in studies on digital finance allows for the identification of the mechanisms through which financial technologies become embedded within user communities, making it a critical lens for examining the interplay between innovation, perception, and sustainability outcomes.

2.2.3 The Resource-Based View Theory

The Resource-Based View (RBV) Theory, initially developed by Wernerfelt (1984) and later refined by Barney (1991), provides a strategic framework for understanding how firms gain and sustain competitive advantage through the effective utilisation of internal resources and capabilities. The theory posits that organisational performance and sustainability depend on the possession and strategic deployment of valuable, rare, inimitable, and non-substitutable (VRIN) resources. These resources may include tangible assets such as capital, technology, and equipment, as well as intangible assets such as knowledge, skills, and organisational culture. The RBV assumes that firms operating within the same industry may achieve varying performance levels depending on their ability to acquire, develop, and leverage unique resource combinations that competitors cannot easily replicate (Barney, 1991).

In relation to digital finance, the RBV provides a strong theoretical foundation for analysing how access to and use of technological and financial resources enhance enterprise performance and sustainability. Digital financial tools such as mobile credit platforms, online payment systems, and digital savings solutions can be considered strategic resources when they enable firms to reduce transaction costs, improve efficiency, and access new markets. When properly integrated into business operations, these digital capabilities can serve as both operational and strategic assets that strengthen a firm's resilience and growth potential. Empirical studies such as those by Teece (2018) and Amit and Schoemaker (1993) affirm that

firms with greater dynamic capabilities—the ability to adapt, integrate, and reconfigure resources in response to environmental change—are better positioned to maintain long-term financial sustainability.

The RBV also emphasises the heterogeneity of resource distribution among firms, suggesting that enterprises differ in their ability to access and exploit digital financial tools. Small and micro enterprises, in particular, may face constraints related to capital, digital literacy, and managerial expertise, which limit their capacity to convert digital technologies into sustainable financial outcomes. However, those that succeed in embedding digital finance into their resource base often achieve superior performance outcomes. Empirical evidence from emerging markets supports this proposition. For instance, Ghosh (2017) found that small enterprises leveraging digital financial services exhibited improved capital management and competitiveness. Similarly, Kale and Singh (2019) noted that firms capable of transforming technological tools into productive resources achieved higher growth rates and stability compared to their less digitally integrated counterparts.

The RBV remains significant because it provides a conceptual explanation of how internal resource endowments determine enterprise competitiveness and financial sustainability. It integrates technological, human, and organisational dimensions of capability development, offering a holistic understanding of performance differentials among firms. By framing digital finance as a strategic resource, the theory underscores the importance of technological capability, financial literacy, and adaptive management in sustaining enterprise success. In research on small and micro enterprises, the RBV contributes to understanding how resource accumulation, innovation adoption, and capacity building collectively drive financial sustainability, particularly in competitive and resource-constrained environments.

2.2.4 The Financial Intermediation Theory

The Financial Intermediation Theory, introduced by Gurley and Shaw in 1960, explains the essential role of financial intermediaries in connecting surplus economic units, such as savers, with deficit units, such as borrowers, to facilitate efficient capital allocation and economic growth. The theory posits that intermediaries including banks, microfinance institutions, and other financial entities emerge to reduce transaction costs, manage risks, and address information asymmetry between lenders and borrowers. By pooling savings, transforming maturities, and diversifying risks, financial intermediaries enhance liquidity in the economy and promote productive investment. According to Levine (2005), these intermediaries are fundamental to financial development because they mobilise idle resources, channel them into profitable ventures, and thereby enhance both firm-level and macroeconomic performance.

Over time, the theory has evolved to account for technological and institutional transformations within financial systems. The rise of financial technologies has expanded the intermediation function beyond traditional banks to include digital platforms that perform similar roles. Through innovations such as mobile banking, digital credit, and online payment systems, technology-based intermediaries have reduced the barriers of access to finance, especially for small enterprises and underserved populations. Beck, Pamuk, Ramrattan, and Uras (2022) note that digital intermediation has enhanced efficiency, transparency, and inclusion by lowering transaction costs and extending credit access to previously excluded groups. These developments represent a modern interpretation of the intermediation process, where technology serves as both a facilitator and substitute for traditional banking functions.

The theory is particularly relevant to understanding how digital finance supports enterprise sustainability. Financial intermediaries perform critical functions such as credit assessment, liquidity provision, and savings mobilisation, which enable firms to maintain

operational stability and long-term growth. Small enterprises benefit when these services are accessible through digital channels that offer flexibility, real-time transactions, and tailored products. Donou-Adonsou and Sylwester (2023) found that digital financial intermediation has strengthened small enterprise resilience by improving capital access and cash flow management. This demonstrates that the core principles of the Financial Intermediation Theory remain valid even in technology-driven financial ecosystems, where intermediation occurs through both formal and digital mechanisms.

The Financial Intermediation Theory continues to provide a robust analytical foundation for studies on digital finance and financial sustainability. It explains how intermediaries reduce inefficiencies in financial markets by connecting capital suppliers and users, thus promoting economic stability and firm growth. The theory also highlights the evolving nature of intermediation, where digital technologies complement traditional institutions in providing inclusive and efficient financial services. Its application in contemporary contexts underscores the importance of financial intermediaries in enhancing access to finance, reducing systemic risk, and fostering long-term sustainability among enterprises of different scales.

2.3 Empirical Review

2.3.1 Digital Credit Access and Youth-Owned Craft Micro Enterprises

Empirical literature on digital credit reveals growing attention to its role in enterprise growth, financial inclusion, and business sustainability across global, regional, and local contexts. At the global level, Chen and Rasmussen (2014) under the Consultative Group to Assist the Poor (CGAP) conducted an empirical analysis of digital credit across emerging economies in Asia and Latin America. Using case studies and secondary financial data, they found that mobile-based credit services improved access to short-term finance for low-income entrepreneurs and

informal businesses. However, they cautioned that ease of credit access without adequate borrower assessment led to rising over-indebtedness and limited productive utilization of credit. This study provides foundational evidence that while digital credit enhances liquidity and resilience, it can undermine sustainability when unregulated or poorly managed.

Karlan et al. (2018) used a randomized controlled trial to investigate the effects of digital loans on microenterprises in the Philippines. Their findings showed that short-term mobile credit improved liquidity and business continuity but did not result in significant profit growth or long-term investment. The study concluded that digital loans are effective in mitigating temporary cash-flow shortages but insufficient for driving sustained enterprise expansion without complementary capacity development. Similarly, Boateng, Effah, and Boateng (2020) examined digital financial services among small enterprises in Ghana using econometric analysis. Their study established that mobile money and digital credit improved financial access, enhanced profitability, and facilitated market reach. However, infrastructural limitations and low digital literacy restricted optimal use of credit facilities.

At the regional level, Andrianaivo and Kpodar (2011) analyzed the relationship between information and communication technology development, financial inclusion, and economic growth in Africa using cross-country panel data from 44 nations. Their findings indicated that digital financial innovations, particularly mobile credit systems, significantly contributed to financial inclusion and national economic growth. The study emphasized that technological adoption promotes both firm-level and macroeconomic resilience. Similarly, Ouma, Odongo, and Were (2017) investigated mobile financial services and financial inclusion in Sub-Saharan Africa using household survey data. Their results showed that mobile-based credit enhanced access to savings and improved capital accumulation but also revealed that income disparities and educational differences influenced adoption patterns.

Makina and Wamuhu (2017) conducted a qualitative study on mobile credit and financial inclusion within South Africa's informal economy. Their findings revealed that mobile loans improved access to working capital for small-scale traders, particularly women, and enabled business continuity in times of cash flow constraints. Nonetheless, the researchers noted concerns about exploitative interest rates, lack of consumer protection, and data privacy risks associated with digital lending. The study demonstrated that while digital credit promotes inclusion, its sustainability depends on responsible lending and regulatory oversight to protect vulnerable borrowers.

At the national level, Kamau (2021) investigated the costs and use of digital credit in Kenya through a descriptive survey approach. The study found that mobile credit platforms such as M-Shwari and KCB M-Pesa improved access to working capital among informal traders and small businesses that lacked collateral. However, high interest rates and short repayment periods increased the risk of over-indebtedness, leading to unstable cash flow and potential default. Abbott (2021) examined the use of financial technology credit products among small and medium enterprises in Kisumu Central Business District. His findings revealed that digital loans improved operational liquidity and access to capital but noted poor loan management due to low awareness of interest structures. Auma (2023) also found that digital credit positively influenced business performance and income stability among small enterprises in Kisumu, although a considerable portion of credit was diverted to personal use, reducing business reinvestment capacity.

Mbugua and Githui (2022) explored the influence of digital loans on youth entrepreneurship in Nairobi's informal sector using regression models and structured questionnaires. The study found that access to digital credit increased the number of youth-led start-ups and improved business survival rates. However, high interest charges and short repayment cycles were cited as major barriers to sustained business growth. The findings

indicate that while digital credit fosters entrepreneurship, its high cost structure constrains its transformative potential among youth-owned enterprises. Similarly, Gikunda, Omwenga, and Memba (2021) examined the effect of mobile credit on the growth of youth-owned enterprises in Nairobi County using a descriptive design and regression analysis. The results revealed that digital credit facilitated inventory replenishment, market expansion, and operational growth, but poor financial planning among borrowers resulted in high default rates. The study's insights reinforce that digital credit is a powerful tool for enterprise growth, yet its effectiveness depends on financial discipline and strategic utilization among youth entrepreneurs.

2.3.2 Digital Payment Efficiency and Youth-Owned Craft Micro Enterprises

Digital payment efficiency has increasingly become a central determinant of enterprise productivity and financial sustainability, particularly among small and micro enterprises in developing economies. Efficient digital payment systems streamline transaction processes, lower operational costs, and strengthen financial management through real-time traceability and automation. Globally, digital payment ecosystems have evolved into critical enablers of financial inclusion, connecting informal enterprises to formal financial systems. Donovan (2019) investigated the influence of digital payment systems on financial inclusion and enterprise growth in emerging markets and found that efficient payment infrastructures enhanced business liquidity and transparency, while also stimulating the formalization of microenterprises. The study concluded that the efficiency of digital payments contributes not only to operational resilience but also to improved access to credit through digital transaction histories that serve as alternative financial records.

Empirical studies continue to show a strong association between digital payment efficiency and enterprise performance. Ozili (2018) found that the adoption of efficient digital payments improved liquidity management, customer retention, and profitability across developing economies. Similarly, Abor and Quartey (2019) established that in Sub-Saharan

Africa, mobile payment systems accelerated transaction speed and reduced the risks associated with handling cash, thereby fostering financial sustainability. The World Bank (2022) reported that digital payments reduced transaction costs by nearly a quarter and shortened business cash conversion cycles, leading to enhanced productivity among small and medium enterprises. Collectively, these findings reinforce that efficiency in digital transactions contributes directly to financial growth and stability.

At the regional level, Yiga and Ndulu (2021) analyzed mobile payment technologies and firm productivity in East Africa using enterprise survey data from Kenya, Uganda, and Tanzania. The results indicated that digital payment efficiency significantly improved operational performance and supply chain coordination among small enterprises. However, they observed that weak digital infrastructure and interoperability challenges between service providers constrained optimal performance. Similarly, Nyanzu and Quaidoo (2020) found that mobile payment efficiency enhanced business sustainability among Ghanaian enterprises through reduced payment delays and automated transaction reconciliation. These studies emphasize that consistent digital infrastructure and low transaction costs are critical to realizing the full benefits of payment innovations.

In Kenya, several studies affirm the transformative impact of digital payment efficiency on small and youth-owned enterprises. Kithinji and Omwenga (2020) examined mobile payment systems and their effects on the performance of small and medium enterprises, revealing that efficient digital transactions enhanced customer convenience, reduced operational overheads, and strengthened cash flow predictability. Njenga and Kamau (2022) found that mobile payment platforms such as M-Pesa and Airtel Money enhanced financial agility and improved enterprise competitiveness, despite challenges related to high transaction charges. Mwangi and Njeru (2021) further reported that digital payment efficiency among youth-owned enterprises supported faster sales cycles, enhanced liquidity management, and

improved financial sustainability. These findings underscore that efficient digital payment systems not only promote business continuity but also foster innovation and growth among youth entrepreneurs.

Digital payment efficiency also influences supply chain relationships, vendor management, and customer engagement, which are critical to the sustainability of small and micro enterprises. In a study conducted by Kikulwe, Fischer, and Qaim (2021), mobile money and digital payment systems were found to significantly reduce transaction delays and improve coordination among suppliers and retailers in East African markets. The researchers observed that enterprises that consistently used digital payments recorded higher operational efficiency and profitability compared to those that relied on cash-based transactions. Similarly, Donovan (2019) found that improved payment systems in emerging economies encouraged participation in formal financial ecosystems, enhancing transparency and reducing the risks associated with informal cash flows. This evidence suggests that digital payment efficiency is not only a technological advancement but also a structural driver of financial discipline, traceability, and enterprise competitiveness.

Digital payments allow young artisans to receive payments instantly, manage their cash flow in real time, and integrate their operations with e-commerce platforms. Njenga and Kamau (2022) observed that enterprises using mobile payment applications such as M-Pesa and PayPal experienced faster revenue turnover and improved customer satisfaction. Mwangi and Njeru (2021) also reported that digital payment efficiency strengthened business-to-customer relationships, expanded market reach, and fostered trust through secure transactions. By reducing payment lags and enabling data-based decision-making, digital payment tools support better financial planning, allowing youth entrepreneurs to reinvest profits and achieve long-term sustainability in competitive markets.

2.3.3 Digital Insurance Uptake and Youth-Owned Craft Micro Enterprises

Digital insurance uptake has emerged as an important aspect of financial innovation, providing risk mitigation and financial stability for small and micro enterprises that often operate in uncertain business environments. The integration of digital technology into insurance services has enhanced accessibility, affordability, and convenience, particularly among underserved populations. Globally, digital insurance platforms allow users to purchase, manage, and claim insurance policies through mobile devices, reducing bureaucratic barriers and transaction costs. According to the World Bank (2021), digital insurance has expanded coverage among small enterprises by offering micro-insurance products tailored to their cash flow cycles and risk exposure. These innovations have strengthened resilience by cushioning enterprises against business shocks such as theft, illness, fire, and market disruptions.

Empirical evidence demonstrates that digital insurance uptake enhances financial sustainability by enabling firms to manage risks proactively. In a cross-country study, Cole, Giné, Tobacman, Topalova, Townsend, and Vickery (2013) found that digital and mobile-based insurance services increased participation rates among small-scale entrepreneurs in South Asia, significantly reducing vulnerability to income volatility. Similarly, Smit, Stork, and Esselaar (2021) analysed digital insurance diffusion in Southern Africa and observed that mobile insurance adoption was associated with improved business continuity and reduced financial distress among informal enterprises. The study highlighted that digital platforms improved claim processing efficiency and reduced the perceived complexity of insurance products, thereby promoting trust and sustained participation.

Regional studies across Sub-Saharan Africa show a growing linkage between digital insurance uptake and small enterprise resilience. Njuguna and Wanjiru (2019) investigated mobile-based insurance products in Kenya and Tanzania and found that adoption was driven by affordability, simplified premium payment systems, and integration with mobile money platforms. However, they also noted that limited awareness, inadequate financial literacy, and low perceived value constrained uptake. In Ghana, Boateng and Hinson (2020) discovered that digital insurance significantly improved the risk management capacity of small business operators by providing easy-to-access micro-insurance services embedded within mobile wallets. These findings reinforce that when supported by user education and trust, digital insurance has the potential to improve enterprise stability and growth in emerging markets.

In Kenya, empirical studies reveal that digital insurance products are gaining traction among small-scale entrepreneurs and youth-owned businesses. Kariuki and Wanjohi (2021) assessed the impact of mobile insurance adoption on the financial performance of micro and small enterprises in Nairobi County. The results showed that enterprises that subscribed to digital insurance products such as Linda Jamii and M-Bima demonstrated improved financial stability and reduced exposure to operational risks. Additionally, Gathogo and Ndung'u (2020) found that mobile-based insurance products encouraged saving behavior and fostered risk-sharing mechanisms that supported long-term business continuity. These studies indicate that the convenience and affordability of digital insurance encourage inclusion and foster a culture of financial prudence among young entrepreneurs.

Mobile-based micro-insurance allows these entrepreneurs to secure their assets, protect their income streams, and sustain operations during financial shocks. According to Mwangi (2022), uptake of digital insurance among youth enterprises in Kenya improved resilience and business recovery after losses, especially for those in high-risk informal sectors. Despite these

advantages, uptake remains relatively low due to limited awareness and trust in digital insurance providers. Strengthening financial literacy and embedding insurance options within mobile payment and savings platforms could therefore enhance adoption and sustainability among youth-led craft enterprises.

2.3.4 Digital Savings Solutions and Youth-Owned Craft Micro Enterprises

Digital savings solutions have revolutionized how small and micro enterprises manage their finances by providing secure, accessible, and low-cost platforms for capital accumulation. Through innovations such as mobile banking, savings wallets, and fintech-driven applications, entrepreneurs can now save, monitor, and withdraw funds seamlessly. Globally, digital savings platforms have enhanced liquidity management and reduced reliance on informal saving methods that are often insecure and inefficient. According to the International Finance Corporation (IFC, 2021), digital savings mobilization has enabled millions of micro-entrepreneurs to build financial buffers and reinvest profits, contributing significantly to enterprise resilience and growth. These platforms also encourage formalization by generating financial histories that can later support access to credit.

Empirical studies have demonstrated that digital savings promote both short-term operational efficiency and long-term financial sustainability. Demirgüç-Kunt, Klapper, Singer, Ansar, and Hess (2022) analyzed data from the Global Findex Database and found that digital saving accounts increased financial inclusion and improved capital retention among small business owners in developing economies. Similarly, Mago and Chitokwindo (2014) observed that the adoption of mobile savings in Zimbabwe allowed micro-entrepreneurs to accumulate capital safely, reduce transaction costs, and enhance business expansion prospects. These findings align with the theory that savings behavior, when facilitated by technology, strengthens financial discipline and supports sustainable enterprise growth.

Recent global and regional evidence further strengthens the argument that digital savings are instrumental in enhancing enterprise sustainability. In a global cross-sectional analysis, Suri and Jack (2016) examined the long-term impacts of mobile money savings in Kenya and found that households and microenterprises that actively used mobile savings tools were more likely to invest in productive assets and recover faster from income shocks. The study demonstrated that digital savings platforms improved financial resilience by providing liquidity buffers during economic disruptions. Likewise, Karlan, Ratan, and Zinman (2014) explored the behavioural economics of digital savings and concluded that automated and accessible saving tools significantly increased savings frequency and reduced impulsive spending among low-income earners, thereby improving capital availability for enterprise investment.

In regional contexts, Donou-Adonsou and Sylwester (2023) analysed the relationship between digital financial services and small business development across Africa. Their econometric evidence revealed that digital savings solutions had a positive effect on enterprise liquidity, financial discipline, and capital growth. Enterprises that adopted mobile savings recorded higher reinvestment rates and long-term sustainability than those relying solely on traditional banking systems. Similarly, Osei-Assibey (2020) found that digital savings improved financial inclusion and risk management among small enterprises in Ghana, particularly by reducing operational volatility associated with cash-based transactions. Together, these studies indicate that the efficiency, accessibility, and affordability of digital savings platforms contribute meaningfully to business continuity and youth enterprise sustainability.

Regional evidence across Sub-Saharan Africa underscores the role of digital savings in improving financial performance among small businesses. Ouma, Odongo, and Were (2017)

found that mobile-based savings services improved access to formal financial systems, enhanced liquidity, and promoted a savings culture among micro-entrepreneurs. In Uganda, Okello Candiya Bongomin and Ntayi (2019) revealed that mobile savings products improved household and enterprise financial security, with users reporting reduced income shocks and improved reinvestment capacity. Likewise, Abor and Quartey (2019) concluded that access to mobile financial services, including savings platforms, enhanced firm competitiveness and long-term performance. Together, these studies suggest that digital savings mechanisms play a vital role in enterprise sustainability by supporting liquidity management and long-term investment.

In Kenya, several studies have confirmed the positive impact of digital savings on youth-led enterprises. Otieno and Moronge (2021) examined the influence of mobile savings platforms on financial stability among micro and small enterprises and found that digital savings significantly improved capital management and reduced dependency on short-term borrowing. The study noted that savings through platforms like M-Shwari and KCB M-Pesa allowed enterprises to build credit histories and access flexible credit facilities. Similarly, Njoroge and Wambugu (2020) found that youth-owned enterprises using mobile savings tools experienced improved operational cash flow and reinvestment ability, leading to enhanced sustainability. Mwangi (2022) also reported that consistent saving through mobile platforms strengthened financial resilience, allowing enterprises to cope with market shocks and maintain business continuity.

Youth-owned craft micro enterprises stand to benefit substantially from digital savings due to their irregular income streams and limited access to formal financial services. These digital tools provide structured savings mechanisms that help artisans and traders manage earnings, fund raw material purchases, and reinvest profits efficiently. By integrating savings

within mobile money ecosystems, young entrepreneurs gain greater financial control and planning capacity. Njoroge and Wambugu (2020) noted that digital savings fostered discipline in financial management and improved access to complementary financial products such as credit and insurance. As adoption continues to rise, the integration of mobile-based savings solutions with financial literacy initiatives could further enhance the financial sustainability of youth-owned craft enterprises.

2.4 Conceptual Framework

According to Miles and Huberman (2015), a conceptual framework is a written or visual output that molds the crucial modules, ideas, or variables, and theorized linkages among them that are to be explored, either narratively or visually. The independent and dependent variable in this study are as follows;

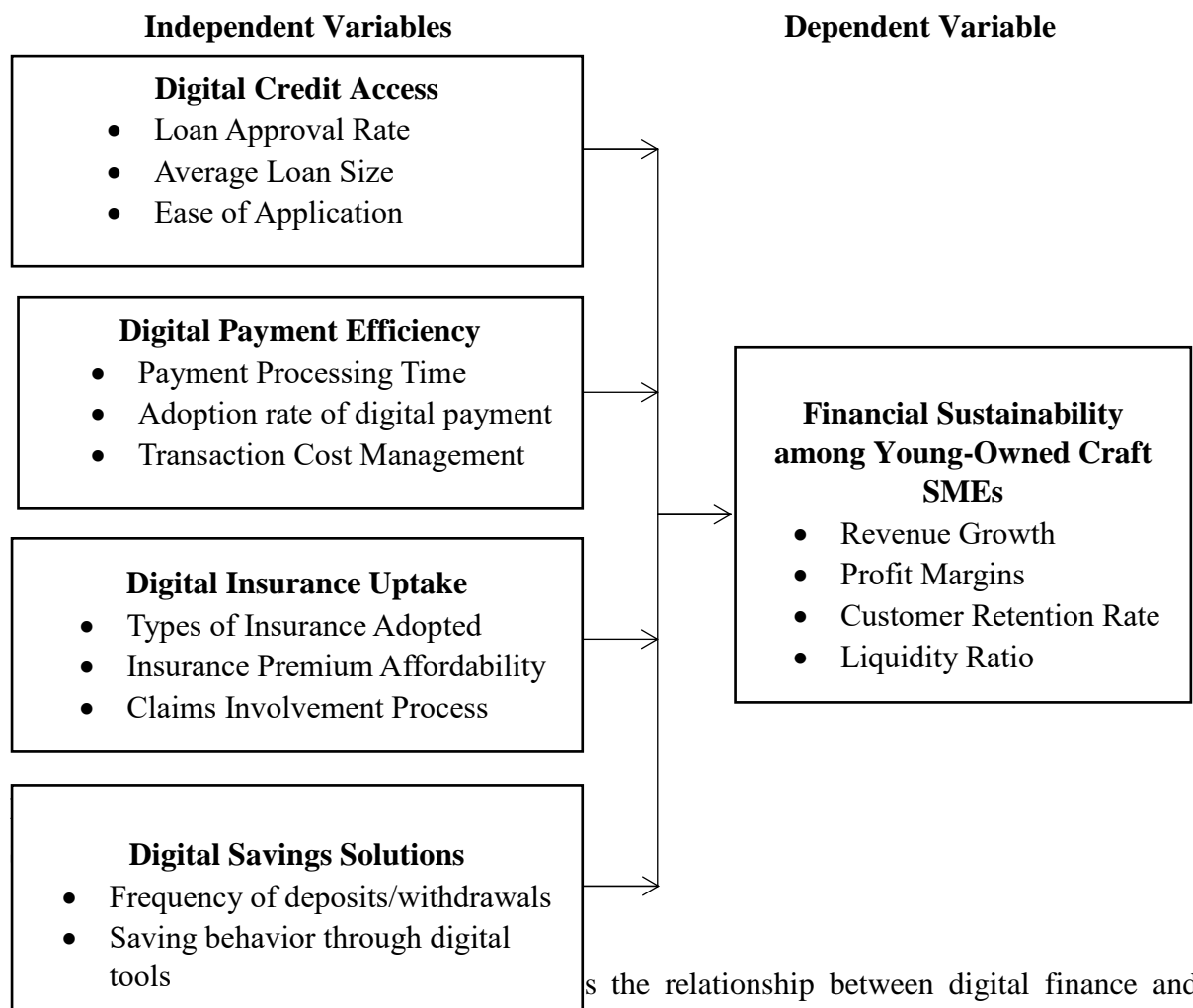


FIGURE 2.1

Conceptual Framework

operationalized through digital payment, digital credit, digital savings, digital insurance, which are measured using specific indicators reflecting accessibility, usage, affordability and reliability. Financial sustainability is measured through profitability, liquidity, and business continuity indicators. The framework assumes that effective utilization of digital finance enhances financial sustainability, while enterprise characteristics act as control variables influencing the strength of this relationship. This framework forms the basis for hypothesis development and guides the empirical analysis in the study.

Based on the literature reviewed, a conceptual framework displays how digital credit access, digital payment efficiency, digital insurance uptake and digital savings solutions which are independent variables relates to youth-owned craft SMEs which is the dependent variable are indicated in the figure 2.1 above.

2.5 Operationalization of Variables

The principal area of importance in this research is the adoption of digital finance and financial sustainability among youth-owned craft micro enterprises in Migori County, Kenya. Table 2.1 below shows the measurement of variables;

TABLE 1.1
Operationalization of Variables

Variable	Category	Measurement	Type of Analysis
Digital Credit Access	Independent	<ul style="list-style-type: none"> i. Loan Approval Time ii. Average Loan Size iii. Ease of Application 	<ul style="list-style-type: none"> Descriptive Inferential
Digital Payment Efficiency	Independent	<ul style="list-style-type: none"> 1. Payment Processing Time 2. Adoption rate of digital payment 3. Transaction Cost Management 	<ul style="list-style-type: none"> Descriptive Inferential

Digital Insurance Uptake	Independent	<ul style="list-style-type: none"> • Types of Insurance Adopted • Insurance Premium Affordability • Claims Involvement 	Descriptive Inferential
Digital Savings Solutions	Independent	<ul style="list-style-type: none"> • Frequency of deposit /withdrawal • Saving behavior through digital tools 	Descriptive Inferential
Financial Sustainability among Youth-Owned Craft SMEs	Dependent	<ul style="list-style-type: none"> • Revenue Growth • Profit Margins • Customer Retention • Liquidity Ratio 	Descriptive Inferential

Source: (Researcher, 2025)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology adopted in this thesis. It explains the systematic approach used to investigate the relationship between digital finance and financial sustainability among youth-owned craft micro enterprises in Migori County. The chapter details the research design, target population, sampling procedures, and data collection instruments that guided the study. It also discusses issues of validity and reliability to ensure the accuracy and consistency of the data collected. Furthermore, the chapter outlines the methods of data analysis, interpretation, and presentation employed to address the research objectives. Ethical considerations governing the conduct of the study are equally presented.

3.2 Research Design

This study adopted a descriptive research design to examine the relationship between digital finance and financial sustainability among youth-owned craft small and micro enterprises in Migori County. The descriptive design was appropriate because it enabled the researcher to gather detailed, factual, and quantifiable information regarding the use of digital finance tools such as digital credit, digital payments, digital insurance, and digital savings, and their influence on financial sustainability. This design allowed the researcher to describe the characteristics, opinions, and experiences of the youth entrepreneurs as they naturally occur without manipulating variables.

According to Kothari (2014), descriptive research design is useful for obtaining information about the current status of phenomena and determining relationships among variables. It was therefore suitable for establishing how various dimensions of digital finance contribute to financial sustainability within youth-owned enterprises. The design also facilitated the use of both quantitative and qualitative data, enabling comprehensive analysis and interpretation. This approach provided a structured framework for data collection, ensured reliability and comparability across respondents, and supported the identification of patterns that explain how digital financial practices influence enterprise performance in Migori County.

3.3 Target Population

A population refers to the entire set of individuals, organizations, or elements that share common characteristics and are relevant to a specific study context. According to Bryman (2021), a research population comprises all cases that meet defined inclusion criteria and from which data can be obtained for analysis. Similarly, Sekaran and Bougie (2020) describe a population as the total collection of elements that the researcher seeks to investigate to draw generalizable conclusions. Kivunja (2022) further emphasizes that a well-defined population ensures methodological precision and enhances the representativeness of the research findings. Creswell and Creswell (2018) concur, stating that defining the study population establishes the basis for sampling and contributes to the validity and generalizability of results.

The target population for this study comprised 7,182 youth-owned craft micro enterprises operating within Migori County, Kenya (Migori County Government, 2025). These enterprises are distributed across eight sub-counties, namely Awendo, Rongo, Uriiri, Nyatike, Kuria East, Kuria West, Suna East, and Suna West. The study focused on entrepreneurs aged between 18 and 35 years engaged in artisanal and craft-based activities such as pottery, jewelry making, textile design, woodworking, and beadwork. These enterprises were selected because they represent a key segment of the county's youth-driven informal economy, where digital finance adoption is emerging as a critical factor influencing financial sustainability and enterprise growth. This is shown in Table 2 below.

SUB COUNTY	CRAFT SMEs	PROPORTION %
Nyatike	1850	25.8%
Rongo	924	12.9%
Suna East	768	10.7%
Suna West	755	10.5%

Awendo	872	12.1%
Uriri	618	8.6%
Kuria East	718	10.0%
Kuria West	677	9.4%
Total	7182	100%

Source: Migori County Government (2025)

3.4 Sample Size and Sampling Procedure

Sampling refers to the process of selecting a representative portion of a population to participate in a study, enabling the researcher to draw conclusions about the entire population without studying every individual unit (Mugenda and Mugenda, 2019). Taherdoost (2016) explains that sampling enhances research efficiency, reliability, and cost-effectiveness by allowing generalizations to be made from a manageable subset of the population. Kothari and Garg (2019) emphasize that an appropriate sampling technique improves the precision of estimates and ensures both practicality and statistical validity, especially when studying large or dispersed populations. Bryman (2021) further observes that the selection of sampling techniques should consider population distribution and diversity to achieve representativeness and minimize bias.

In this thesis, a stratified random sampling technique was employed to ensure balanced representation across the population of youth-owned craft micro enterprises in Migori County. The eight sub-counties of the county, namely Awendo, Rongo, Uriri, Nyatike, Kuria East, Kuria West, Suna East, and Suna West, served as distinct strata representing geographical and operational diversity. To enhance the feasibility of the research, the sample was drawn from four sub-counties: Suna East, Suna West, Rongo, and Nyatike. These sub-counties were selected based on their accessibility, concentration of youth-owned craft enterprises, and logistical convenience. Suna East and Suna West are geographically adjacent, Rongo is a neighbouring sub-county that minimizes travel costs, and Nyatike, being the researcher's home sub-county, provided easier access to respondents and facilitated data collection.

The sample size was determined using Yamane's (1967) formula for sample estimation, derived from the target population of 7,182 youth-owned craft micro enterprises in Migori County. The formula provides a statistically sound basis for determining an optimal sample size that balances accuracy with practicality. This method ensured that the sample adequately represented the population while remaining manageable within the study's resource and time

constraints. The adoption of stratified random sampling enhanced the validity and generalizability of the findings by ensuring proportional representation of enterprises from different sub-counties and sectors.

Yamane’s formula (Yamane,1967) will be as follows;

$$n = N/(1 + Ne^2)$$

Where n = the corrected sample size

n=the population sizes

e= the margin of the error (usually 0.05 or 5%)

$$n= 7182/ (1+7182*0.05^2)$$

$$= 7182/18.5$$

Therefore, a sample of 379 was used, distributed as follows.

TABLE 3.1
Sample Distribution by Sub County

SUB-COUNTY	POPULATION(N)	PROPORTION (%)	SAMPLE SIZE
NYATIKE	1850	25.8%	98
RONGO	924	12.9%	49
SUNA EAST	768	10.7%	41
SUNA WEST	755	10.5%	40
AWENDO	872	12.1%	46
URIRI	618	8.6%	33
KURIA EAST	718	10.0%	38
KURIA WEST	677	9.4%	34
TOTAL	7182	100%	379

3.5 Research Instrument

Data collection is the systematic process of obtaining information from identified respondents to address the research objectives and test the study hypotheses (Creswell and Creswell, 2018).

It ensures that reliable and valid data are gathered in a consistent manner that supports objective analysis. In this thesis, both a structured questionnaire and an interview schedule were employed as the main instruments for collecting primary data. The structured questionnaire was selected for its ability to capture quantitative information efficiently from a large sample, while the interview schedule complemented it by providing qualitative insights and clarifications on key issues.

The questionnaire comprised both closed and Likert-scale items designed to measure the study's key constructs: digital credit access, digital payment efficiency, digital insurance uptake, and digital savings solutions. The Likert-scale format enabled the quantification of respondents' perceptions, attitudes, and experiences related to digital finance and financial sustainability. According to Kothari and Garg (2019), the use of structured questionnaires enhances data comparability and facilitates statistical analysis, while interviews provide depth and contextual understanding that enrich quantitative findings. This mixed approach ensured a comprehensive and triangulated understanding of the relationship between digital finance and the financial sustainability of youth-owned craft micro enterprises in Migori County.

3.6 Pilot Study

A pilot study was conducted in order to test the instrument for validity and reliability. According to Kothari (2014), a sample of 10% of the total sample is sufficient for conducting a pilot study. For the present study, 40 craft micro enterprises were used for the pilot test. Out of the 40 questionnaires sent, all of them were returned and used to test for reliability and validity of the instrument, which is discussed in the sub-sections below.

3.6.1 Validity of Research Instrument

The concept of validity holds significant importance in the realm of research, as it applies to the degree to which a study effectively evaluates the desired construct and generates dependable research findings (Mugenda & Mugenda, 2008). The construct serves as the fundamental theoretical framework, concept, investigation, or assumption that forms the basis for the process of selecting and collecting data. In order to enhance the precision of the gathered data, a preliminary pilot test was conducted, encompassing the participation of four operational managers. Nevertheless, it is important to acknowledge that these managers were excluded from the ultimate analysis. The objective of this pilot study was to evaluate the validity of the collected data. The pilot test involved the assessment of face and content validity in order to evaluate the questionnaire's efficacy in gathering the requisite data. The questionnaire

underwent a thorough examination and necessary modifications, considering the feedback obtained from the pilot test, in order to enhance its validity.

In terms of face validity, the subject area expert (supervisor) evaluated the questionnaire in terms of readability, and clarity of the questions. After comments on this were given, the instrument was adjusted to reflect the changes. The Content Validity Index (CVI) was also calculated by the expert by dividing the number of relevant items by the total number of items in the questionnaire. The instrument yielded a CVI index of 0.82 indicating that the instrument was valid (Kothari, 2014).

3.6.2 Reliability of Research Instrument

Reliability, as defined by Mugenda and Mugenda (2008), pertains to the extent to which research outcomes exhibit consistency across time and effectively reflect the entirety of the intended population. The categorization method suggested by Kirk and Miller (1986) consists of three distinct classifications of dependability: test-retest reliability, stability reliability, and internal consistency reliability. The evaluation of test-retest reliability entails analyzing the degree of consistency in a measurement when it is repeatedly administered. The notion of stability reliability refers to the extent to which a measurement sustains its stability and consistency during a given duration. The evaluation of internal consistency reliability pertains to the degree of similarity observed in measurements obtained over a specified duration.

The researcher adopted the method of internal consistency to assess the reliability of the instruments utilised for data collection. The Cronbach's alpha coefficient was employed as a metric to assess the internal consistency of the instrument. Zinbarg (2005) posits that Cronbach's alpha is a statistical measure employed to assess the extent to which data can be generalized without bias. According to Zinbarg (2005), a Cronbach's alpha coefficient of 0.75 or above signifies a substantial degree of internal consistency. This suggests that the collected data is reliable and has the capacity to be expanded to include the viewpoints of all persons within the specified group. The results of the Cronbach's alpha are shown in the Table 3.1 below.

TABLE 3.2
Reliability of Research Instrument

Construct	Cronbach's Alpha
Digital Credit Access	0.855

Digital Payment Efficiency	0.881
Digital Insurance Uptake	0.703
Digital Savings Solutions	0.829
Financial Sustainability	0.840

As it can be seen in Table 3.1 above, all the variables had a Cronbach’s alpha of over 0.75 and therefore the were considered reliable.

3.7 Data Collection Procedure

The data collection procedure followed a systematic and sequential approach to ensure that accurate, relevant, and reliable information was obtained to address the study objectives. The process began with the acquisition of an official authorization letter from the School of Graduate Studies, which was presented to the National Commission for Science, Technology, and Innovation to obtain a research permit. Once the necessary approvals had been granted, the relevant authorities in Migori County, including youth enterprise officers and craft association leaders, were notified to facilitate access to respondents and provide logistical support.

Primary data were collected from youth-owned craft micro enterprises operating within the selected sub-counties of Migori County. The data focused on enterprise-level variables, including digital credit access, digital payment efficiency, digital insurance uptake, and digital savings solutions, which were central to assessing financial sustainability. Structured questionnaires and interview schedules were used to ensure clarity in responses, adherence to instructions, and consistency in data collection procedures. Ethical standards were observed throughout the process. Respondents were informed about the purpose of the study, confidentiality of their information was assured, and informed consent was obtained prior to participation. Quality control measures were implemented through daily verification of completeness and accuracy of responses, and inconsistencies were resolved promptly. The data collection exercise was conducted over a period of approximately two weeks to allow for comprehensive engagement with respondents across the selected sub-counties and adequate time for follow-up verification.

3.8 Data Processing and Analysis

Data processing and analysis were conducted after the data collection phase to ensure accuracy, consistency, and meaningful interpretation of the results. The process began with a comprehensive review of all completed questionnaires and interview responses to confirm

completeness and eliminate any ambiguous or inconsistent entries. After verification, the data were coded and entered into Microsoft Excel for preliminary cleaning, validation, and categorization. The cleaned dataset was then exported to the Statistical Package for the Social Sciences (SPSS) version 25 for detailed statistical analysis.

Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the demographic characteristics of respondents and key variables of the study. These descriptive measures provided insights into distribution patterns, central tendencies, and general trends within the dataset. Inferential statistical techniques were applied to examine the relationship between the dependent variable, financial sustainability, and the independent variables, which included digital credit, digital payment, digital insurance, and digital savings solutions. Pearson correlation analysis was employed to determine the direction and strength of the associations among the study variables. Multiple linear regression analysis was subsequently performed to estimate the magnitude and significance of the effect of each independent variable on the financial sustainability of youth-owned craft micro enterprises. This analytical approach enabled both descriptive understanding and empirical validation of the relationships under investigation, supporting evidence-based conclusions on the role of digital finance in enhancing financial sustainability.

The regression model used was as follows:

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + e$$

$y = \textit{Financial sustainability}$

$X_1 = \textit{Digital Credit}$

$X_2 = \textit{Digital Payment}$

$X_3 = \textit{Digital Insurance}$

$X_4 = \textit{Digital Saving Solution}$

$e = \textit{Error Term}$

$B_0 = \textit{Constant}$

$B_1 \dots B_4 = \textit{Model Coefficient}$

3.9 Diagnostic Test

For each diagnostic test conducted in this study, a null hypothesis was formulated and evaluated based on established statistical thresholds. The Shapiro-Wilk test was used to

assess normality, with the null hypothesis stating that the data are normally distributed; this hypothesis was rejected when the p-value was less than 0.05. Multicollinearity was examined using Variance inflation factor (VIF) values, where VIF values exceeding 10 indicated the presence of multicollinearity. Homoscedastic was tested using the Breusch-Pagan test, with the null hypothesis of constant variance rejected when the p-value was below 0.05. These diagnostic tests ensured the validity and reliability of the regression results.

3.9.1 Normality Test

Regression analysis assumes that the dataset follows a normal distribution, which is essential for ensuring the validity and reliability of statistical inferences (Gujarati and Porter, 2009). To test this assumption, the Shapiro–Wilk test of normality was employed, as it is particularly suitable for small to medium sample sizes and provides a robust assessment of deviations from normality. Complementary graphical methods, including histograms and Q–Q plots, were also used to visually inspect the distribution of the study variables. These visual assessments provided additional evidence on whether the data exhibited normal patterns or significant deviations. In instances where the results indicated substantial skewness or kurtosis, appropriate data transformation techniques such as logarithmic or square root transformations were considered to correct the distribution and improve model validity. Ensuring normality was fundamental in determining the suitability of the data for parametric testing and in guiding the application of regression models used to assess the influence of digital finance components on financial sustainability.

3.9.2 Multicollinearity Test

Multicollinearity occurs when two or more independent variables in a regression model are highly correlated, which may lead to instability in coefficient estimation and reduce the overall explanatory strength of the model (Kothari, 2014). To assess this assumption, the Variance Inflation Factor (VIF) and Tolerance values were computed for each predictor variable. According to Cooper and Schindler (2012), a VIF value below 5 and a corresponding Tolerance value above 0.2 indicate that multicollinearity is not a major issue within the dataset. In addition to VIF and Tolerance diagnostics, Pearson correlation analysis was used to assess the degree of association among the independent variables and identify potential multicollinearity problems. If any variables exhibited correlations exceeding acceptable thresholds or VIF values indicating redundancy, appropriate remedial measures were considered. These included removing redundant predictors, combining related variables into composite indices, or

applying dimensionality reduction techniques to enhance model stability and interpretability. Ensuring that multicollinearity was within acceptable limits was essential to maintaining the robustness and precision of the regression results.

3.9.3 Heteroscedasticity Test

Homoscedasticity is a key assumption in regression analysis, requiring that the variance of the residuals remains constant across all levels of the independent variables (Rucker et al., 2011). To evaluate this assumption, the Breusch–Pagan test was applied to determine whether heteroscedasticity existed within the regression model. A p-value greater than 0.05 indicated that the null hypothesis of homoscedasticity could not be rejected, suggesting that the error terms exhibited constant variance. In addition to the statistical test, scatterplots of standardized residuals against predicted values were examined to visually assess the distribution of residuals and confirm the assumption of equal variance. Patterns such as a random scatter around the zero line supported the presence of homoscedasticity, while systematic patterns or funnel shapes signaled potential heteroscedasticity. In cases where heteroscedasticity was detected, corrective measures such as the use of robust standard errors or weighted least squares estimation were considered to improve the reliability and validity of the regression estimates.

3.9.4 Linearity Test

Scatter plots and partial regression plots were used to assess the relationship between the independent variables and the dependent variable to confirm the linearity assumption. Visual inspection of these plots helped determine whether the associations between predictors and the outcome variable followed a linear pattern, which is essential for accurate estimation and interpretation in regression analysis. Osborne and Waters (2002) assert that the linearity assumption is fundamental, as violations can lead to biased coefficient estimates and weaken the explanatory validity of the regression model. Ensuring linearity therefore enhanced the precision of parameter estimation and the overall reliability of the model's predictive power.

3.10 Ethical considerations

Ethical principles were upheld throughout the research process to ensure the integrity of the study and the protection of participants. Ethical clearance was obtained from KCA University, and a research permit was issued by the National Commission for Science, Technology, and Innovation prior to the commencement of data collection. Participation in the study was voluntary, and each respondent was provided with an informed consent form outlining the nature, purpose, and procedures of the study. Participants were informed of their right to decline participation or withdraw from the study at any point without any consequence. Confidentiality

and anonymity were maintained by ensuring that no personally identifiable information was collected from respondents. All responses were coded to conceal identities, and the collected data were securely stored in password-protected files accessible only to the research team. The presentation of findings was done in aggregate form to prevent the identification of individual participants or enterprises. The study conformed to the ethical principles outlined in the Belmont Report and the Kenya National Research Guidelines, ensuring respect for persons, beneficence, and justice. Additionally, principles of honesty, transparency, and objectivity were maintained throughout data collection, analysis, and reporting. This commitment to ethical conduct ensured the credibility and trustworthiness of the study findings.

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results and analysis of the data collected in relation to the study objectives. The chapter provides a detailed account of the empirical findings derived from the responses of youth-owned craft micro enterprises in Migori County. It begins with an overview of the response rate and the demographic characteristics of the respondents, followed by descriptive statistics that summarize the key variables of the study. Inferential analyses, including correlation and multiple regression, are then presented to examine the relationships between digital finance components, digital credit, digital payment, digital insurance, and digital savings and financial sustainability. The results are interpreted and discussed in relation to existing literature and the study hypotheses, providing evidence-based insights into how digital finance influences the financial sustainability of youth-owned craft enterprises.

4.2 Questionnaire Response Rate

The study initially sampled 379 respondents. Among them, 40 participants were included in a pilot study, which left 339 youth-owned micro enterprises to whom questionnaires were electronically distributed. Out of these, 249 questionnaires were returned. Following an initial review, 18 incomplete questionnaires were excluded, leaving a total of 231 questionnaires that were considered for the final study. This constituted 60.9% of the initially distributed questionnaires. According to Rogelberg and Stanton (2007), for organizational-level studies, a data collection rate exceeding 35% is considered acceptable. Thus, the data collection process in this study met this criterion, ensuring accuracy and minimizing bias.

4.3 Background Information Results

Before determining the effect of digital finance on the financial sustainability of youth-owned craft micro enterprises in Migori County, descriptive statistics of the respondents were analyzed to assess their level of understanding of the study variables related to digital finance and financial sustainability. The descriptive results focused on the respondents' demographic and enterprise characteristics, including gender, age, level of education, duration of operation in the enterprise, and the main type of craft activity undertaken. The findings of this descriptive analysis are presented and discussed in the subsequent sub-sections.

TABLE 4.1
Demographic Results

Question	Options	n	(%)
Please indicate your gender	Male	125	54.1
	Female	106	45.9
	Total	231	100
Please specify your age bracket	Below 20 years	22	9.5
	20-25 years	80	34.6
	26-29 years	84	36.3
	31-35 years	45	19.6
	Total	231	100
Educational Qualification (highest level completed)	Form 4	24	10.3
	Certificate	58	25.1
	Diploma	103	44.8
	Bachelors	34	14.7
	Others	12	5.1
	Total	231	100
How long have you worked in this enterprise?	Less than 10 years	138	59.7
	Over 10 years	93	40.3
	Total	231	100
What area does the enterprise deal in?	Tailoring	70	30.1
	Metal Fabrication	69	29.7
	Woodworking	35	15.1
	Jewelry	34	14.8
	Other	24	10.3
	Total	231	100

4.3.1 Distribution of the Respondents by Gender

The study sought to determine the distribution of respondents by gender. Understanding gender distribution was essential since gender often influences the degree of participation in entrepreneurial activities and access to digital finance, with men and women sometimes differing in their adoption of financial technologies. The findings as presented in Table 2 show that a majority of the respondents were male, representing 54.1% (N = 125) of the total sample. Female respondents accounted for 45.9% (N = 106). This distribution indicates that men were slightly more involved in youth-owned craft micro enterprises in Migori County compared to their female counterparts. The observed gender imbalance may be attributed to differences in access to start-up capital, mobility, and exposure to technical skills, which are often higher among young men. Nonetheless, the relatively high participation of women suggests that digital finance and craft enterprises are becoming more inclusive, providing both genders with opportunities for entrepreneurship and income generation.

4.3.2 Distribution of Respondents by Age

The study also sought to establish the distribution of respondents by age, as age plays a critical role in determining levels of participation, adaptability, and engagement in digital finance and entrepreneurial activities. Younger entrepreneurs are generally more open to adopting technology-driven financial solutions, while older participants may exhibit more conservative business practices. The findings presented in Table 4.2 indicate that most of the respondents were aged between 26 and 29 years, representing 36.3% (N = 84) of the total sample. This was followed closely by those aged between 20 and 25 years, who accounted for 34.6% (N = 80). Respondents aged between 31 and 35 years constituted 19.6% (N = 45), while those aged below 20 years formed the smallest group at 9.5% (N = 22).

This distribution suggests that the majority of youth-owned craft micro enterprises in Migori County are operated by individuals in their mid to late twenties, reflecting a growing interest in self-employment among young adults who are technologically inclined and financially active. The relatively smaller proportion of respondents below 20 years implies that many individuals join enterprise activities after acquiring some education or vocational training, highlighting the role of early adulthood in shaping entrepreneurial participation.

4.3.3 Distribution of Respondents by Education

The study examined the distribution of respondents by their highest level of education to understand the educational background of youth involved in craft micro enterprises. Education is an important factor influencing the ability of entrepreneurs to adopt digital finance solutions, manage business operations effectively, and make informed financial decisions. The results presented in Table 2 show that the majority of the respondents held a Diploma qualification, representing 44.8% (N = 104). This was followed by those with Certificate qualifications, who accounted for 25.1% (N = 58). Respondents with Bachelor's degrees formed 14.7% (N = 34), while 10.3% (N = 24) had completed secondary education (Form 4). A smaller proportion of respondents, 5.1% (N = 12), indicated that they had attained other forms of education such as vocational or artisan training.

This distribution reveals that most youth engaged in craft enterprises in Migori County possess post-secondary qualifications, suggesting a relatively skilled and trainable workforce capable of integrating digital finance into enterprise operations. The presence of diploma and certificate holders also reflects the influence of technical and vocational education in shaping entrepreneurship among young artisans in the county.

4.3.4 Enterprise Business Period

The study sought to determine the duration that the respondents had operated their enterprises in order to assess their level of business experience and stability. The number of years an enterprise has been in operation often reflects its resilience, financial maturity, and ability to integrate new technologies such as digital finance. As shown in Table 2, a majority of the respondents, representing 59.7% (N = 138), had operated their enterprises for less than 10 years. The remaining 40.3% (N = 93) had been in business for over 10 years. This finding suggests that most youth-owned craft micro enterprises in Migori County are relatively young and still in the growth stage. The dominance of enterprises that have been in operation for less than a decade indicates that many young entrepreneurs are recent entrants into the craft sector, likely motivated by limited formal employment opportunities and the availability of digital financial tools that ease business start-up and management. The existence of a considerable number of enterprises operating for more than 10 years also points to the potential sustainability of the craft sector when supported through access to finance and market linkages.

4.3.4 Type of Craft

The study analyzed the type of craft activities undertaken by the respondents to understand the nature of enterprises operating within the youth-owned craft sector in Migori County. Identifying the main business areas helps in appreciating the diversity of creative trades and the economic potential of artisanal work supported by digital finance. The results presented in Table 4.5 indicate that most of the respondents were engaged in tailoring, which accounted for 30.1% (N = 70), followed closely by metal fabrication at 29.7% (N = 69). Woodworking comprised 15.1% (N = 35), jewelry production represented 14.8% (N = 34), while 10.3% (N = 24) of the respondents were involved in other crafts such as beadwork, pottery, or weaving. This distribution reveals that tailoring and metal fabrication are the most dominant craft activities among youth in Migori County. These trades likely attract more participants because they require moderate start-up capital, have consistent local demand, and are increasingly supported by digital payment systems for transactions. The presence of other crafts such as woodworking and jewelry design reflects the sector's diversity and the potential for innovation and value addition through digital marketing and financial tools.

4.4 Descriptive Results on the Study of Variables

The research instrument was divided into two sub-sections for each of the research variable. The two sub-sections consisted of closed ended questions. These questions provided respondents with statements opinion to select from Likert scale. These questions were first

analysed descriptively to isolate the latent features of their opinion on the microfinance services and the level of growth of women-owned enterprises. The results for the analyses are explained in the sub-sections below.

4.4.1 Descriptive Results of Digital Credit Access

The first objective of the study was to determine the effect of digital credit access on the financial sustainability of youth-owned craft micro enterprises in Migori County, Kenya. Respondents were requested to indicate their level of agreement with a series of statements relating to digital credit access using a five-point Likert scale, where 1 represented Strongly Disagree, 2 represented Disagree, 3 represented Neutral, 4 represented Agree, and 5 represented Strongly Agree. The data were analyzed using descriptive statistics, specifically weighted means and standard deviations. The results are presented in the table below.

TABLE 4.2

Descriptive Analysis on Digital Credit Access

Statements	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
I easily access digital loans for my enterprise.	11.3	14.7	6.5	45.0	22.5	3.53	1.19
Access to digital credit enables my enterprise to purchase raw materials effectively.	9.9	12.6	7.8	46.8	22.9	3.60	1.13
Mobile loan applications provide convenient financing options for my enterprise.	7.8	10.4	9.1	48.5	24.2	3.71	1.09
The interest rates charged on digital credit products are affordable for my enterprise.	16.0	22.9	8.2	37.2	15.6	3.14	1.24
Digital credit access enhances the growth and financial sustainability of my enterprise.	8.7	10.8	6.9	49.8	23.8	3.70	1.11
Average	10.7	14.3	7.7	45.5	21.8	3.54	1.15

Five statements were used to measure digital credit access. The findings revealed that most respondents agreed that digital credit facilitates enterprise operations and growth, particularly through improved access to working capital and convenience in financing. This is reflected in relatively high mean scores ranging between 3.14 and 3.71. Respondents showed the highest agreement with the statements that mobile loan applications provide convenient financing options (M = 3.71, S.D. = 1.09) and that digital credit enhances enterprise sustainability (M = 3.70, S.D. = 1.11). Nonetheless, they were more neutral on the affordability of interest rates charged on digital loans (M = 3.14, S.D. = 1.24). The overall mean score of 3.54 (S.D. = 1.15) indicates that, in general, respondents viewed digital credit access as an important enabler of financial sustainability for youth-owned craft enterprises in Migori County.

4.4.2 Descriptive Results of Digital Payment Efficiency

The second objective of the study was to establish the effect of digital payment efficiency on the financial sustainability of youth-owned craft micro enterprises in Migori County, Kenya. Respondents were asked to indicate their level of agreement or disagreement with specific statements that reflected various aspects of digital payment efficiency. Results for the analysis are as shown in the table below.

TABLE 4.3
Descriptive Results of Digital Payment Efficiency

Statements	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
Mobile payment platforms improve the speed of transactions in my enterprise.	8.2	11.3	5.6	50.2	24.7	3.72	1.12
Digital payment systems reduce risks associated with handling cash in my enterprise.	10.4	12.1	8.7	47.2	21.6	3.58	1.17
Customers can easily make payments to my enterprise through digital platforms.	7.8	9.9	7.4	49.3	25.5	3.75	1.09
Digital payment systems reduce transaction costs for my enterprise.	11.7	15.2	9.5	43.7	19.9	3.45	1.21
Digital payment platforms enhance record keeping and transparency in my enterprise.	9.1	10.8	8.2	48.9	23.0	3.66	1.14
Average	9.4	11.9	7.9	47.9	23.0	3.63	1.15

The results in Table 4.7 show that the respondents generally agreed that digital payment systems enhanced efficiency and transparency in their enterprises. The weighted mean scores ranged from 3.45 to 3.75, indicating positive perceptions toward digital payment solutions. Respondents agreed most strongly that customers could easily make payments through digital platforms ($M = 3.75$, $S.D. = 1.09$) and that mobile payment systems improved transaction speed ($M = 3.72$, $S.D. = 1.12$). The lowest mean score was recorded for the statement that digital payment systems reduce transaction costs ($M = 3.45$, $S.D. = 1.21$), suggesting that while convenience and security benefits were appreciated, transaction costs may still pose a concern. The overall mean of 3.63 ($S.D. = 1.15$) demonstrates that respondents generally viewed digital payment efficiency as an important factor in promoting the financial sustainability of youth-owned craft micro enterprises in Migori County.

4.4.3 Descriptive Results of Digital Insurance Uptake

The third objective of the study was to analyze the effect of digital insurance uptake on the financial sustainability of youth-owned craft micro enterprises in Migori County, Kenya. Respondents were asked to express their level of agreement with statements relating to their awareness, accessibility, and perceived benefits of digital insurance products. Results are shown in the table below.

TABLE 4.4
Descriptive Results of Digital Insurance Uptake

Statements	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
Digital insurance products suitable for small enterprises are available.	18.2	15.1	10.0	38.1	18.6	3.24	1.33
The cost of digital insurance premiums is affordable for small enterprises.	21.7	18.3	9.1	34.6	16.3	3.05	1.29
Digital insurance provides protection against common business risks such as theft, fire, and illness.	16.5	12.6	8.7	41.6	20.6	3.38	1.26
Registration and claims processes for digital insurance are simple and convenient.	20.8	16.9	11.3	33.8	17.2	3.10	1.31
Digital insurance enhances the resilience and continuity of small enterprises.	14.7	13.9	7.8	43.2	20.4	3.41	1.22
Average	18.4	15.4	9.4	38.3	18.6	3.24	1.28

The results presented in Table 5 show that most respondents were moderately positive about the role of digital insurance in promoting enterprise resilience and financial stability. The mean scores ranged between 3.05 and 3.41, suggesting that while digital insurance is recognized as valuable, its uptake among youth-owned craft enterprises remains modest. Respondents agreed most strongly that digital insurance enhances business resilience and continuity ($M = 3.41$, $S.D. = 1.22$) and that such insurance provides protection against risks such as theft, fire, or illness ($M = 3.38$, $S.D. = 1.26$). These findings indicate growing awareness of how insurance can cushion enterprises from financial shocks and operational disruptions.

On the other hand, affordability and accessibility emerged as notable concerns. The statement that the cost of digital insurance premiums is affordable for small enterprises recorded the lowest mean ($M = 3.05$, $S.D. = 1.29$), reflecting persistent financial barriers that discourage subscription among small-scale entrepreneurs. Similarly, respondents were relatively neutral about the convenience of registration and claims processes ($M = 3.10$, $S.D.$

= 1.31), pointing to procedural complexity or limited digital literacy among craft operators. These findings suggest that while digital insurance options exist, many youth entrepreneurs may find them either too costly or cumbersome to access effectively. The overall mean score of 3.24 (S.D. = 1.28) indicates that respondents generally perceived digital insurance uptake as moderate, with potential for improvement through awareness creation, policy support, and user-friendly technological solutions. These results emphasize the need for insurance providers and policymakers to simplify insurance enrollment, subsidize premiums for youth enterprises, and enhance financial literacy to promote broader adoption. By addressing these challenges, digital insurance could play a more significant role in strengthening the long-term financial sustainability of youth-owned craft micro enterprises in Migori County.

4.4.4 Descriptive Results of Digital Savings Solutions

The fourth objective of the study was to determine the effect of digital savings solutions on the financial sustainability of youth-owned craft micro enterprises in Migori County, Kenya. Results are as shown in Table 6.

The findings in Table 6 reveal that respondents generally agreed that digital savings solutions have a positive influence on the financial management and sustainability of their enterprises. The mean scores ranged between 3.58 and 3.74, indicating that most youth-owned craft enterprises find digital savings platforms useful for promoting regular saving habits, financial discipline, and planning. Respondents agreed most strongly that the use of digital savings platforms improves financial planning in enterprises (M = 3.74, S.D. = 1.10) and that digital savings solutions contribute to long-term sustainability (M = 3.71, S.D. = 1.14).

TABLE 4.5
Descriptive Results of Digital Savings Solutions

Statements	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
Digital savings platforms make it easy for small enterprises to save regularly.	9.9	11.7	6.5	48.5	23.4	3.64	1.16
Enterprises are able to save even small amounts conveniently through digital platforms.	8.7	10.4	7.8	49.8	23.3	3.69	1.12
The use of digital savings platforms improves financial planning in enterprises.	7.8	9.9	6.9	51.1	24.3	3.74	1.10
Digital savings help enterprises prepare for emergencies and future investments.	10.4	13.0	7.4	46.6	22.6	3.58	1.19

Statements	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
Digital savings solutions contribute to the long-term sustainability of enterprises.	8.2	10.0	8.2	49.3	24.3	3.71	1.14
Average	9.0	11.0	7.4	49.1	23.6	3.67	1.14

These findings suggest that digital savings tools have become essential financial instruments for managing liquidity and achieving enterprise stability. Mobile-based savings options, often integrated into mobile money platforms such as M-Pesa or M-Shwari, have made saving more accessible and convenient for youth entrepreneurs who may not qualify for traditional banking services. By encouraging frequent micro-savings, these platforms help small enterprises build emergency reserves and fund future investments without external borrowing. Nonetheless, a few respondents expressed moderate disagreement regarding the ability to save regularly ($M = 3.64$, $S.D. = 1.16$), possibly reflecting irregular income flows typical of the craft industry. This points to the need for capacity building on financial planning and digital literacy to help artisans optimize the use of digital savings tools. The overall mean score of 3.67 ($S.D. = 1.14$) indicates a generally positive perception toward digital savings solutions among youth-owned craft micro enterprises. The findings imply that when appropriately utilized, digital savings platforms can strengthen the financial foundations of these enterprises by improving their resilience, liquidity management, and growth potential.

4.4.5 Descriptive Results of Financial Sustainability of Youth-Owned Craft Micro Enterprises

The dependent variable of the study was financial sustainability of youth-owned craft micro enterprises in Migori County, Kenya. Respondents were asked to express their level of agreement with statements assessing the enterprise's ability to generate stable income, reinvest profits, maintain cash flow, and achieve long-term survival. Results of the analysis are presented in the table below.

TABLE 4.6
Descriptive Results of Financial Sustainability

Statements	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
The enterprise generates sufficient income to cover operating expenses.	8.2	10.8	7.4	50.2	23.4	3.71	1.13
Surplus income can be reinvested back into the enterprise.	7.8	11.3	8.7	49.3	22.9	3.68	1.14

Statements	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Std. Dev.
Profitability of the enterprise has improved through the use of digital finance.	9.1	10.0	6.9	48.9	25.1	3.71	1.12
The enterprise is able to maintain a stable cash flow throughout the year.	10.0	12.1	7.8	46.4	23.7	3.62	1.17
Digital finance tools have enhanced the overall financial sustainability of the enterprise.	8.7	9.9	7.8	48.5	25.1	3.72	1.10
Average	8.8	10.8	7.7	48.7	24.0	3.69	1.13

The findings in Table 4.10 indicate that most respondents agreed that their enterprises were financially sustainable, largely due to the adoption of digital financial tools. The mean scores ranged between 3.62 and 3.72, reflecting a generally positive financial outlook among youth-owned craft enterprises. Respondents most strongly agreed that digital finance tools had enhanced overall financial sustainability (M = 3.72, S.D. = 1.10) and that their enterprises consistently generated sufficient income to meet operating expenses (M = 3.71, S.D. = 1.13). These results suggest that digital financial services play a central role in improving business performance by enhancing access to credit, facilitating efficient transactions, and promoting financial management discipline. The ability to reinvest surplus income (M = 3.68, S.D. = 1.14) and maintain stable cash flow (M = 3.62, S.D. = 1.17) highlights a growing capacity for self-sustenance among these enterprises, an essential marker of long-term viability. The overall mean of 3.69 (S.D. = 1.13) indicates that youth-owned craft micro enterprises in Migori County are moderately financially sustainable. These findings imply that continued investment in digital finance education, infrastructure, and access could further strengthen the resilience and profitability of this vital sector of the local economy.

4.5 Diagnostic Test Results

Before regressing data for analysis purposes, the data was checked to avoid violation of the assumptions of classical linear regression model as asserted by Hair *et al.* (2010). This was to ensure that the data yields best least square unbiased estimators (BLUE). According to Field (2000), the common tests that should be conducted are; normality, linearity, homoscedasticity and multicollinearity. These are explained in the sections below.

4.5.1 Normality Test

For the present study, the normality of the data was tested using the Shapiro–Wilk test, which is considered suitable for small to medium sample sizes. The test was performed to determine

whether the study variables were normally distributed, a necessary assumption for regression and correlation analyses. The results are presented in the table below.

Table 4.7: Tests of Normality (Shapiro–Wilk)

Variable	Statistic	df	Sig.
Digital Credit Access	.311	231	.061
Digital Payment Efficiency	.490	231	.085
Digital Insurance Uptake	.297	231	.055
Digital Savings Solutions	.462	231	.076
Financial Sustainability	.431	231	.080

The Shapiro–Wilk results in Table 4.11 show that all the variables had significance values greater than 0.05, indicating that the data did not significantly deviate from a normal distribution. This implies that the assumption of normality was satisfied for all the study variables of digital credit access, digital payment efficiency, digital insurance uptake, digital savings solutions, and financial sustainability. The results therefore confirm the appropriateness of applying parametric statistical techniques such as correlation and multiple regression analysis in this study.

4.5.2 Linearity Test

The purpose of the linearity test is to assess whether the data distribution of both the dependent and independent variables follows a linear pattern. It is crucial to satisfy the linearity assumption since linear regression is the chosen regression method. For the present study, this was tested using the normal P-P plot whose results are shown in Figure 2 below.

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Financial Sustainability

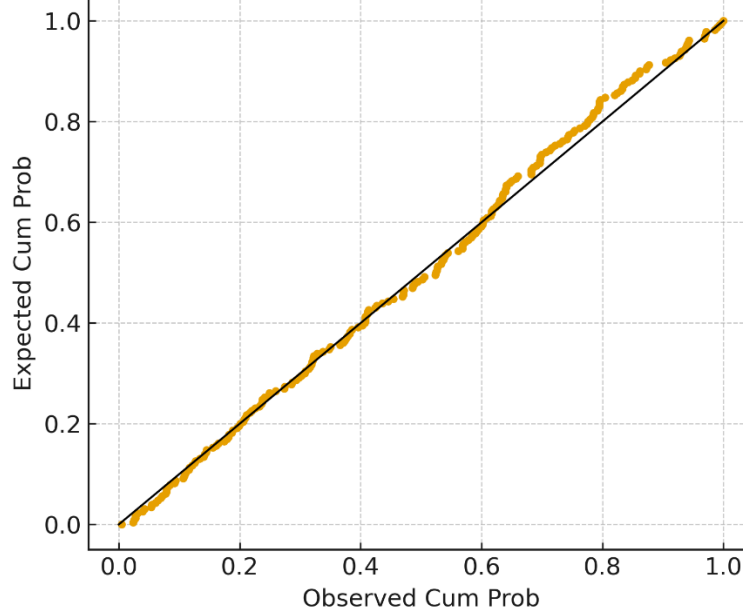


Figure 4.1: P-P Plot

As it can be observed in Figure 4.1 above, the data distribution forms a positive linear trend with the plots distributed along the diagonal line. The conclusion drawn from the linearity test results indicated that the regression model met the linearity assumption, making it suitable for linear regression. This condition was met, ensuring the model's appropriateness for generating the best linear unbiased estimators.

4.5.3 Multicollinearity Test

To assess multicollinearity, this study employed the Variance Inflation Factor (VIF). Multicollinearity is considered to be present if the VIF value exceeds 10, following O'Brien's (2007) guideline for VIF. The results of the multicollinearity test are presented in the table below.

Table 4.8: Multicollinearity Test

Variable	Tolerance	VIF
Digital Credit Access	.244	4.098
Digital Payment Efficiency	.587	1.704
Digital Insurance Uptake	.287	3.484

Variable	Tolerance	VIF
Digital Savings Solutions	.448	2.232

The results in Table 9 show that all tolerance values were above 0.2, and all VIF values were below 10, indicating that multicollinearity was not a problem among the independent variables. According to O'Brien (2007), a VIF value of less than 10 and a tolerance value greater than 0.1 suggest that predictor variables are not excessively correlated. These findings confirm that the independent variables—digital credit access, digital payment efficiency, digital insurance uptake, and digital savings solutions—were statistically distinct and could be included in the same regression model without biasing the results. This ensured the reliability and stability of the model used to explain the financial sustainability of youth-owned craft micro enterprises in Migori County.

4.5.4 Homoscedasticity Test

Homoscedasticity is an assumption of equal or similar variances in different groups being compared. This is an important assumption of parametric statistical tests because they are sensitive to any dissimilarities. From figure 10 below, the scores are randomly scattered about a horizontal line. Tabachnick and Fidell (2007) explain the residuals and the variance of the residuals should be the same for all predicted scores. If this is true, the assumption is met and the scatter plot takes the shape of an irregular pattern. The assumption was therefore met.

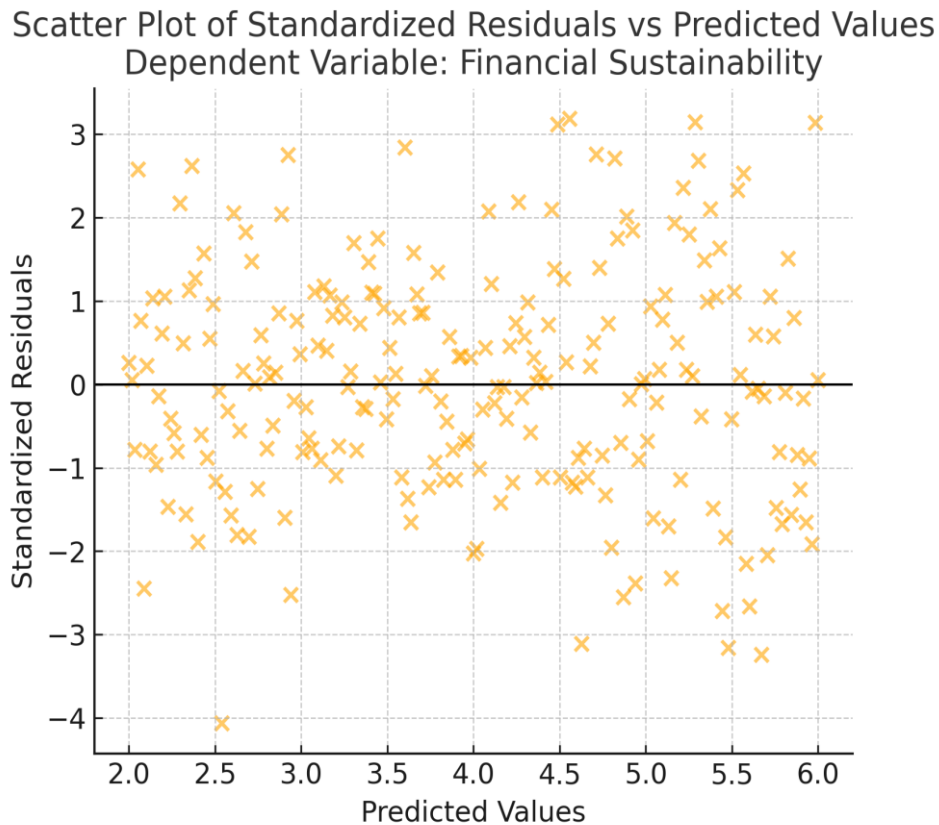


Figure 4.2: Homoscedasticity Test

4.6 Inferential Results

4.6.1 Correlational Results of Study Variables

In the present study, correlation analysis was carried out to examine the degree and direction of association among the study variables, namely digital credit access (X_1), digital payment efficiency (X_2), digital insurance uptake (X_3), digital savings solutions (X_4), and financial sustainability of youth-owned craft micro enterprises (Y) in Migori County. According to Pallant (2010), correlation coefficients range from -1 to +1, where values close to +1 indicate a strong positive relationship, values close to -1 indicate a strong negative relationship, and values around 0 indicate no relationship. The strength of the relationship can be interpreted as very weak (0.0–0.19), weak (0.20–0.39), moderate (0.40–0.59), strong (0.60–0.79), or very strong (0.80–1.0). The results of the correlation analysis are presented in the table below.

Table 4.9: Correlation among Study Variables

Variables	X ₁	X ₂	X ₃	X ₄	Y
X ₁	1				
X ₂	.393**	1			
X ₃	.420**	.307**	1		
X ₄	.407**	.391**	.443**	1	
Y	.719**	.585**	.654**	.768**	1

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

Correlation analysis indicates that all independent variables were positively and significantly correlated with financial sustainability of youth-owned craft micro enterprises. This suggests that improvements in any of the digital finance dimensions are likely to enhance enterprise sustainability. Specifically, the correlation between digital credit access and financial sustainability was positive and significant ($r = 0.719$, $p < 0.01$), implying that access to affordable and timely digital credit is associated with improved financial stability and growth among youth enterprises. This finding supports Mugo and Kinyua (2020) and Aboagye and Yawson (2022), who established that digital credit enhances liquidity and investment opportunities for small enterprises.

Digital payment efficiency also exhibited a positive and significant association with financial sustainability ($r = 0.585$, $p < 0.01$). This indicates that the use of mobile and online payment systems improves transaction efficiency and transparency, which in turn supports steady cash flows and profitability. These results are consistent with Beck *et al.* (2022) and Njenga and Kamau (2022), who observed that digital payment systems reduce transaction costs and strengthen enterprise competitiveness.

The correlation between digital insurance uptake and financial sustainability was also positive and significant ($r = 0.654$, $p < 0.01$), suggesting that insurance mechanisms enhance enterprise resilience against financial shocks. This aligns with studies by Mwangi (2022) and Smit *et al.* (2021), which emphasized that digital insurance contributes to business continuity by mitigating risk exposure.

Finally, digital savings solutions demonstrated the strongest correlation with financial sustainability ($r = 0.768$, $p < 0.01$). This indicates that consistent use of digital savings

platforms fosters long-term stability and reinvestment capacity among youth-owned craft enterprises. Similar findings were reported by Osei-Assibey (2020) and IFC (2021), who noted that digital savings platforms empower small businesses to manage liquidity and plan for future investments effectively. The results collectively confirm that all digital finance components positively influence the financial sustainability of youth-owned craft micro enterprises in Migori County. This reinforces the position of Donou-Adonsou and Sylwester (2023) and the World Bank (2023), who argue that digital financial inclusion strengthens enterprise performance and contributes to broader economic resilience in developing contexts.

4.6.2 Regression Results

Prior to hypothesis testing, model adequacy was assessed using regression diagnostic and model-fit statistics. The model summary results indicate that the coefficient of determination (R-squared and adjusted R-squared) explain a substantial proportion of variation in financial sustainability among youth owned craft micro enterprises. The ANOVA results demonstrate that the overall regression model is statistically significant, while the standard error of estimate confirms the reliability of the model. Detailed regression coefficients are presented in Table 4.10 to 4.12, which form the basis for hypothesis testing and interpretation of results.

The research used multiple regression analysis to determine the linear statistical relationship between the independent and dependent variables of this study. According to Young (2014), regression analysis helps to explain the statistical relationship between variables thus enhancing the ability of the study to make substantive conclusions and recommendations. Results for the regression analysis are explained in Table 11, Table 12 and Table 13 for model summary, ANOVA and the regression coefficients respectively.

A regression model summary was generated to evaluate the combined effect of digital credit access, digital payment efficiency, digital insurance uptake, and digital savings solutions on the financial sustainability of youth-owned craft micro enterprises in Migori County. The results are presented in the table below.

Table 4.10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.857a	.734	.728	.416

a. Predictors: (Constant), Digital Credit Access, Digital Payment Efficiency, Digital Insurance Uptake, Digital Savings Solutions

The model summary in Table 11 indicates a correlation coefficient (R) of 0.857, suggesting a strong positive relationship between the independent variables and financial sustainability. The coefficient of determination (R Square) was 0.734, meaning that 73.4 percent of the variations in financial sustainability among youth-owned craft micro enterprises could be explained by changes in digital credit access, digital payment efficiency, digital insurance uptake, and digital savings solutions. The standard error of the estimate (0.416) indicates a relatively small deviation between the predicted and actual values, signifying that the model fits the data well.

These findings suggest that digital finance variables collectively play a substantial role in determining the financial sustainability of youth-owned craft micro enterprises in Migori County. This observation aligns with empirical evidence by Donou-Adonsou and Sylwester (2023), Kariuki et al. (2023), and the African Development Bank (2022), which emphasized that digital financial solutions significantly improve the resilience, liquidity, and operational stability of small enterprises in Sub-Saharan Africa.

An Analysis of Variance (ANOVA) was conducted to assess the overall significance of the regression model and to determine whether the independent variables collectively had a statistically significant effect on the financial sustainability of youth-owned craft micro enterprises in Migori County. The results are presented in the table below.

Table 4.11: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	82.164	4	20.541	118.641	.000b
Residual	29.708	226	0.131		
Total	111.872	230			

a. Dependent Variable: Financial Sustainability

The ANOVA results in Table 12 show that the calculated F-value was 118.641 with a corresponding significance level of $p = .000$, which is less than the 0.05 threshold. This indicates that the regression model was statistically significant and that digital credit access, digital payment efficiency, digital insurance uptake, and digital savings solutions jointly influenced the financial sustainability of youth-owned craft micro enterprises in Migori

County. This means the explanatory variables collectively provided a good fit for predicting changes in the dependent variable

The regression coefficients were examined to determine the specific contribution of each independent variable to the financial sustainability of youth-owned craft micro enterprises in Migori County. The results are presented in the table below.

Table 4.12: Regression Coefficients

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	0.482	0.163		2.958	0.003
Digital Credit Access	0.218	0.054	0.219	4.037	0.021
Digital Payment Efficiency	0.164	0.061	0.155	2.689	0.008
Digital Insurance Uptake	0.195	0.057	0.181	3.421	0.001
Digital Savings Solutions	0.442	0.049	0.457	9.020	0.003

Based on the results in Table 13, several observations can be made. The constant term of 0.482 represents the base level of financial sustainability expected among youth-owned craft enterprises when all digital finance variables are held constant. It captures the inherent sustainability capabilities of enterprises independent of digital financial tools, such as basic managerial skills and traditional cash-based operations.

The first objective concerned digital credit access. Results show a positive and statistically significant effect of digital credit access on financial sustainability ($\beta = 0.218$, $p = 0.021$). This implies that a one-unit increase in digital credit access is associated with a 0.218-point rise in the financial sustainability index, holding the other predictors constant. Practically, this implies that greater access to affordable and timely digital loans helps enterprises overcome liquidity constraints, replenish inventory, and manage operational expenses more effectively. It reflects the role of digital credit platforms like M-Shwari and Tala in bridging financing gaps for small firms. This finding supports the conclusions of Mugo and Kinyua (2020) and Aboagye and Yawson (2022), who observed that digital credit enhances entrepreneurial resilience and business expansion among youth-led enterprises.

The second objective focused on digital payment efficiency. The coefficient for digital payment efficiency is positive and significant ($\beta = 0.164$, $p = 0.008$). This suggests that an improvement in payment efficiency results in a corresponding rise in financial sustainability. In practical terms, this means that adopting faster and more secure payment methods, such as mobile money and electronic transfers, improves liquidity flow, reduces delays, and builds customer confidence. Enterprises that transact through digital channels also experience fewer losses due to theft or handling errors. These findings align with Beck et al. (2022) and Njenga and Kamau (2022), who found that efficient payment systems strengthen transparency and operational performance in small enterprises.

The third objective addressed digital insurance uptake. The coefficient for digital insurance uptake is positive and significant ($\beta = 0.195$, $p = 0.001$). This indicates that higher adoption of digital insurance contributes meaningfully to enterprise resilience and long-term sustainability. Practically, this implies that youth entrepreneurs who subscribe to mobile-based insurance products are better protected against common business shocks such as fire, theft, or illness, which reduces financial vulnerability. The finding corresponds with Mwangi (2022) and Smit et al. (2021), who noted that digital insurance mechanisms provide a safety net that fosters business confidence and continuity among small-scale entrepreneurs.

The fourth objective examined digital savings solutions. The coefficient for digital savings solutions is the largest among the predictors ($\beta = 0.442$, $p = 0.003$). This demonstrates that increased engagement in digital savings significantly enhances financial sustainability. In practice, this means that youth entrepreneurs who actively save through digital platforms are better able to manage cash flow, finance future investments, and respond to emergencies. It also indicates that saving habits promoted by mobile platforms such as M-Shwari, KCB M-Pesa, or Airtel Money contribute directly to business stability. This finding supports Osei-Assibey (2020) and the International Finance Corporation (2021), who reported that digital savings platforms foster long-term financial discipline and operational sustainability among microenterprises.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the major findings of this study and also sets to draw conclusions and make recommendations for practice and suggestions for further research based on the results of this study.

5.2 Summary of Findings

This study aimed to examine the overall effect of digital finance on the financial sustainability of youth-owned craft micro enterprises in Migori County, Kenya. The specific objectives were to determine the effect of digital credit access, assess the influence of digital payment efficiency, evaluate the effect of digital insurance uptake, and establish the influence of digital savings solutions on the financial sustainability of youth-owned craft micro enterprises in Migori County. Following the data collection and analysis, the study findings are summarized as follows.

Correlation results revealed that the relationship between digital credit access (X_1) and financial sustainability was positive and statistically significant ($R = 0.719, p = 0.00$). Similarly, digital payment efficiency (X_2) was found to have a positive and significant relationship with financial sustainability ($R = 0.585, p = 0.00$). The association between digital insurance uptake (X_3) and financial sustainability was also positive and significant ($R = 0.654, p = 0.00$). Lastly, digital savings solutions (X_4) demonstrated a strong positive and significant relationship with financial sustainability ($R = 0.768, p = 0.00$). The ANOVA results further confirmed that the overall model was statistically significant, indicating that the combined digital finance variables effectively predicted the financial sustainability of youth-owned craft micro enterprises.

Regarding the first objective, regression results showed that digital credit access had a positive and statistically significant effect on financial sustainability ($\beta = 0.218, p = 0.001$). The second objective established that digital payment efficiency had a positive and statistically significant effect on financial sustainability ($\beta = 0.164, p = 0.008$). The third objective showed that digital insurance uptake had a positive and significant effect on financial sustainability ($\beta = 0.195, p = 0.001$). Finally, the fourth objective revealed that digital savings solutions had the strongest positive and statistically significant effect on financial sustainability ($\beta = 0.442, p = 0.000$).

5.3 Conclusions

Results from the first objective indicated that digital credit access had a positive and statistically significant effect on the financial sustainability of youth-owned craft micro enterprises in Migori County. It is therefore concluded that digital credit access is a significant positive predictor of financial sustainability among youth-owned craft enterprises.

Results from the second objective showed that digital payment efficiency had a positive and statistically significant effect on the financial sustainability of youth-owned craft micro enterprises in Migori County. It is concluded that digital payment efficiency is a significant positive predictor of financial sustainability, as it enhances transaction convenience, transparency, and cost efficiency in enterprise operations.

Regression results from the third objective, which sought to determine the effect of digital insurance uptake on financial sustainability, revealed that digital insurance uptake had a positive and statistically significant effect on the financial sustainability of youth-owned craft micro enterprises in Migori County. It is therefore concluded that digital insurance uptake is a significant positive predictor of financial sustainability, as it provides risk protection and promotes enterprise resilience.

Regression results from the fourth objective demonstrated that digital savings solutions had a strong positive and statistically significant effect on the financial sustainability of youth-owned craft micro enterprises in Migori County. It is thus concluded that digital savings solutions are a significant positive predictor of financial sustainability, as they strengthen liquidity management, encourage investment readiness, and enhance long-term enterprise stability.

5.4 Recommendations

Results based on the first objective showed that digital credit access had a positive and statistically significant effect on the financial sustainability of youth-owned craft micro enterprises in Migori County. It was therefore concluded that digital credit access is a significant positive predictor of financial sustainability among youth-owned craft enterprises. Based on this conclusion, it is recommended that financial institutions and fintech providers enhance access to affordable and flexible mobile loan products tailored to the needs of youth entrepreneurs. Policymakers should also strengthen financial literacy programs to equip the

youth with credit management skills and promote responsible borrowing practices to prevent over-indebtedness.

Results for the second objective revealed that digital payment efficiency had a positive and statistically significant effect on the financial sustainability of youth-owned craft micro enterprises in Migori County. It was concluded that digital payment efficiency is a significant positive predictor of financial sustainability. It is therefore recommended that youth entrepreneurs be encouraged to integrate mobile and online payment systems in their daily business transactions to enhance transparency and operational efficiency. Fintech providers and mobile network operators should also ensure that transaction costs are kept low and payment systems remain secure and reliable to boost user confidence among youth-owned enterprises.

Regression results for the third objective, which sought to determine the effect of digital insurance uptake on financial sustainability, showed that digital insurance uptake had a positive and statistically significant effect on the financial sustainability of youth-owned craft micro enterprises in Migori County. It was concluded that digital insurance uptake is a significant positive predictor of financial sustainability. Based on this conclusion, it is recommended that insurance companies and fintech partners increase awareness and education about mobile-based insurance products among youth entrepreneurs. These products should be simplified and affordable, covering risks such as fire, theft, and business interruption, to enhance enterprise resilience and continuity.

Regression results based on the fourth objective indicated that digital savings solutions had a strong positive and statistically significant effect on the financial sustainability of youth-owned craft micro enterprises in Migori County. It was concluded that digital savings solutions are a significant positive predictor of financial sustainability. Based on this conclusion, it is recommended that youth entrepreneurs be encouraged to adopt mobile savings platforms as part of their financial planning strategies. Financial service providers should also design youth-friendly digital savings products with incentives such as interest bonuses, goal-based savings features, and flexible withdrawal terms to foster a culture of saving and long-term financial stability among youth-owned craft enterprises.

5.5 Suggestions for Further Research

The study generally sought to determine the effect of digital finance on the financial sustainability of youth-owned craft micro enterprises in Migori County, Kenya. Consequently, the findings, conclusions, and recommendations from this study should not be generalized to other enterprises that operate outside the craft sector or beyond Migori County. It is therefore suggested that future research extend the scope to include youth-owned enterprises in other sectors such as agriculture, retail, and creative industries, as well as those in other counties or regions to allow for broader comparisons.

The study also focused exclusively on four aspects of digital finance, digital credit access, digital payment efficiency, digital insurance uptake, and digital savings solutions, without considering other enterprise-level or external factors such as management practices, innovation capacity, market access, or government regulations, which may also influence financial sustainability. Future studies are encouraged to incorporate these factors to provide a more comprehensive understanding of the determinants of financial sustainability among youth-owned enterprises.

Furthermore, the study relied primarily on quantitative data collected through structured questionnaires, which may not have captured deeper insights into behavioral and contextual influences on digital finance adoption. It is recommended that subsequent research adopt mixed methods approaches that include qualitative interviews or case studies to explore the lived experiences of youth entrepreneurs and the socio-cultural dynamics shaping digital finance use.

Lastly, the study was limited to craft-based micro enterprises, leaving out other youth enterprises operating in the service and technology sectors that may experience different financial realities. Future studies should therefore examine digital finance and sustainability among a wider range of youth-owned enterprises to enhance the robustness and generalizability of the findings.

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APPENDICES

Appendix (i): Letter of Introduction

DAISY ARODI AKINYI

KCA UNIVERSITY

NAIROBI

8th JULY 2025

TO:

COUNTY EXECUTIVE COMMITTEE MEMBER

THE COUNTY DEPARTMENT OF TRADE AND INDUSTRIALIZATION

THE MIGORI COUNTY GOVERNMENT

P.O. BOX 210-40400

MIGORI, KENYA

RE: CONSENT TO UNDERTAKE AN ACADEMIC RESEARCH IN YOUR ENTITY

I am a student at KCA University by the name Daisy Akinyi Arodi, currently undertaking my research as part of the course curriculum so as to graduate. The topic of my research is **Digital Finance and Financial Sustainability among Youth-Owned Craft micro Enterprises in Migori County, Kenya.**

The purpose of writing this letter is to request for your consent to collect data from your entity. The earmarked respondents would be the youth-owned craft small and medium sized enterprises operating in Migori County, who are in possession of permits or licenses of businesses registered by the Migori County Government.

Please find the enclosed authority to collect data from my learning institution (KCA University) and a sample of questionnaires and interview schedule to carryout the research.

Thank You,

Daisy Arodi Akinyi

0790659188

Appendix (ii): Questionnaire

Instructions:

This questionnaire seeks to collect information on the effect of digital finance on the financial sustainability of youth-owned craft micro enterprises in Migori County. The information will be used strictly for academic purposes and treated with confidentiality.

Section A: General Information

1. Indicate your gender: Male Female
 2. Age: Below 20 years 20-25 years 26-29 years 31-35 years
 3. Indicate your highest level of education
Form 4 Certificate
Diploma Bachelors
Others
 5. How long have you worked in this enterprise?
Less than 10 years Over 10 years
 6. What area does the enterprise deal in?
Tailoring Metal Fabrication Woodworking Jewelry Other
- Kindly indicate the extent to which you agree with each statement on the scale below:

1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

Section B: Digital Credit Access

Statement	1	2	3	4	5
I easily access digital loans for my enterprise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Access to digital credit enables my enterprise to purchase raw materials effectively.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobile loan applications provide convenient financing options for my enterprise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The interest rates charged on digital credit products are affordable for my enterprise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital credit access enhances the growth and financial sustainability of my enterprise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section C: Digital Payment Efficiency

Statement	1	2	3	4	5
Mobile payment platforms improve the speed of transactions in my enterprise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital payment systems reduce risks associated with handling cash in my enterprise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Customers can easily make payments to my enterprise through digital platforms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital payment systems reduce transaction costs for my enterprise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital payment platforms enhance record keeping and transparency in my enterprise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section D: Digital Insurance Uptake

Statement	1	2	3	4	5
Digital insurance products suitable for small enterprises are available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The cost of digital insurance premiums is affordable for small enterprises.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital insurance provides protection against common business risks (e.g., theft, fire, illness).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Registration and claims processes for digital insurance are simple and convenient.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital insurance enhances the resilience and continuity of small enterprises.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section E: Digital Savings Solutions

Statement	1	2	3	4	5
Digital savings platforms make it easy for small enterprises to save regularly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enterprises are able to save even small amounts conveniently through digital platforms.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The use of digital savings platforms improves financial planning in enterprises.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Digital savings help enterprises prepare for emergencies and future investments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Statement

1 2 3 4 5

Digital savings solutions contribute to the long-term sustainability of enterprises.

Section F: Financial Sustainability

Statement

1 2 3 4 5

The enterprise generates sufficient income to cover operating expenses.

Surplus income can be reinvested back into the enterprise.

Profitability of the enterprise has improved through the use of digital finance.

The enterprise is able to maintain a stable cash flow throughout the year.

Digital finance tools have enhanced the overall financial sustainability of the enterprise.

Appendix (iv): Research Permit



 REPUBLIC OF KENYA



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 161151
Date of Issue: 10/September/2025

RESEARCH LICENSE

Applicant Identification Number
161151



License No: NACOSTI/P/25/4179174

This is to Certify that Miss. Daisy akinyi Akinyi of KCA University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Migori on the topic: DIGITAL FINANCE AND FINANCIAL SUSTAINABILITY AMONG YOUTH OWNED CRAFT SMALL AND MICRO ENTERPRISE IN MIGORI COUNTY for the period ending : 10/September/2026.


Ag. Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Verification QR Code



NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

<http://www.nacosti.or.ke>

Appendix (v): Ethical Clearance



KCA UNIVERSITY SCIENTIFIC & ETHICS REVIEW COMMITTEE

Thika Road, Ruwaka
P.O. Box 56808-00200 Nairobi Kenya
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Tel: +254 20 3537842
Fax: +254 20 8561077
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Email: ics@kca.ac.ke
Website: www.kca.ac.ke

REF: KCAU/SERC/SOB0227

DATE: 18TH AUGUST 2025

TO: DAISY AKINYI ARODI (19/06568)

Dear Sir/Madam,

RE: DIGITAL FINANCE AND FINANCIAL SUSTAINABILITY AMONG YOUTH-OWNED CRAFT SMALL AND MICRO ENTERPRISES IN MIGORI COUNTY, KENYA

This is to inform you that the KCA University Scientific Ethics Review Committee (KCAUSERC) has reviewed and approved your research proposal. Your application approval number is **KCAUSERC/SOB0227**. The approval period is from **18th August 2025 – 18th August 2026**. This approval is subject to compliance with the following requirements.

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

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

Yours sincerely,

Dr. Caroline Ntara,
Chairperson,
KCA University Scientific & Ethics Review Committee.



Appendix (vi): Introductory letter from BPS



Thika Road, Ruwaka
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BOARD OF POSTGRADUATE STUDIES

KCAU/BPS/2025

Date: Wednesday, August 27, 2025

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: DAISY AKINYI ARODI- REG NO. 19/06568

It is my distinct pleasure to introduce Daisy Akinyi Arodi, a student at our institution pursuing a Master of Science in Commerce (Finance and Economics degree) within the School of Business.

Daisy is conducting research on the topic: *"Digital finance and financial sustainability among youth-owned craft small and micro enterprises in Migori County, Kenya"* which is part of the requirements of the program she is pursuing. The research as well as the data procured thereof shall be used for academic purposes only.

Any assistance accorded to her is highly appreciated.

In case of further inquiry, do not hesitate to contact the undersigned.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Dr. Jackson NdoLO'.

DR. JACKSON NDOLO

DIRECTOR, BOARD OF POST GRADUATE STUDIES

