MARKET DYNAMICS AND PENETRATION OF MICROINSURANCE IN KENYA. A CASE OF SELECTED INSURANCE COMPANIES.

SHADRACK NDIRITU WAWERU

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF MANAGEMENT AND LEADERSHIP IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINSTRATION OF THE MANAGEMENT UNIVERSITY OF AFRICA

OCTOBER 2024

DECLARATION

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

Signature…… Date ……

SHADRACK NDIRITU WAWERU

MBA/28/00229/1/23

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

Signature…… Date ……

Ms ISABELLA SILE

THE MANAGEMENT UNIVERSITY OF AFRICA (MUA)

DEDICATION

I humbly dedicate this project to my heavenly father for his sufficient grace until this far. I also dedicate the document to my wife Pauline and my children kelvin, Alvin, Sophie, Elianna and Stephie.

ACKNOWLEDGMENT

I would like to express my gratitude to several individuals and organizations who have been instrumental in the completion of this research project. Firstly, I am deeply thankful to my supervisor, Isabella Sile, for her unwavering support and valuable feedback throughout the writing process. Without her guidance, this document would not have reached its completion. Also, I would like to recognize support I got Managements university of Africa fraternity. Additionally, I extend my appreciation to the selected insurance firms (Britam, CIC, Oldmutal , APA and Jubilee that allowed me to conduct a study . I recognize Icea for support on pilot study support. Lastly, my sincere thanks go to the respondents who took the time to answer the questionnaire items, contributing invaluable insights to this research endeavor.

To you all, God bless you

ABSTRACT

This study mainly evaluated the effect of market dynamics that include product diversification, pricing, information technology adoption, and government intervention on the penetration of microinsurance. From the analyzed data, the study revealed that product diversification, with a mean score of 3.93 and a Beta of 0.328, significantly predicts microinsurance penetration by meeting diverse customer needs and expanding into underserved areas. Pricing strategies, crucial for competitiveness, show a mean score of 4.98 and a Beta of 0.210, indicating their role in balancing affordability and profitability for customer acquisition and retention. Information technology adoption, with mean scores of 4.21 and 4.60 for digital channels and communication respectively, improves accessibility and customer engagement, supported by a Beta of 0.067. Government interventions, evidenced by a Beta of 0.075, enhance affordability and trust through subsidies and regulatory frameworks. Main recommendations include further research on product diversification and dynamic pricing models, supportive policies for transparency and subsidies, practical training on product development and technology integration, and curriculum development for future professionals. The study concludes that strategic focus on these factors will enhance microinsurance penetration, financial inclusion, and sectoral growth.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS AND ABBREVIATIONS

APA	Apollo Asset Insurance
Britam	British-American Insurance Company
CIC	Cooperative Insurance Company
MUA	Management University of Africa
NACOSTI	National Commission for Science, Technology and Innovation
SPSS	Statistical Package for Social Sciences

OPERATIONAL DEFINITION OF TERMS

Government Intervention Government intervention in the insurance industry encompasses regulatory measures and subsidies aimed at promoting efficiency, equity, and accessibility of insurance benefits.

Information Technology In the context of microinsurance penetration, the use of information technology (IT) in product development and distribution can significantly impact accessibility and uptake. This involves leveraging digital platforms, mobile applications, and data analytics to design, promote, and deliver microinsurance products efficiently to underserved populations

Microinsurance penetration Microinsurance, a subset of insurance tailored to low-income individuals or populations, provides financial protection against specific risks at affordable premiums. It typically offers coverage for risks such as health, life, property, and agriculture, investments among others.

Pricing Insurance pricing refers to the process of determining the appropriate premiums for insurance policies, considering various factors such as risk assessment, market conditions, and financial considerations.

Product Diversification Product diversification refers to the strategy employed by insurance companies to expand their range of insurance offerings to cater to a wider array of risks and customer needs. In the context of microinsurance penetration, product diversification involves the development and provision of a diverse portfolio of microinsurance products tailored to the specific requirements and preferences of low-income individuals and communities

.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

The research is introduced in this section, which also includes a backdrop, problem description, aims, questions, justification, scope, and a summary.

1.1 Background of the Study

Microinsurance on a global scale involves a diverse array of products catering to the unique needs of low-income populations. Health, life, property, and agricultural insurance are commonly offered to provide financial protection. The approach emphasizes partnerships with NGOs, community organizations, and mobile network operators for extensive outreach. Regulatory bodies ensure compliance with standards related to product design, pricing, and distribution to ensure consumer protection and market stability. An agile management style, focusing on innovation and customer-centricity, is crucial for the success of microinsurance operations worldwide (World Bank, 2018).

In North America, microinsurance providers focus on a variety of products, including health, life, and accident insurance, tailored to the needs of underserved communities. Publicity strategies involve partnerships with community organizations, digital marketing, and targeted advertising campaigns. Regulatory oversight from entities like state insurance departments America and Canada ensure adherence to regulations. Management styles prioritize customer engagement, risk management, and compliance with regulatory requirements (The Institutes Risk Stream™ Collaborative, 2020; OSFI, 2021).

Microinsurance in Southeast Asia encompasses health, life, and personal accident insurance, often distributed through bancassurance and mobile channels. Publicity strategies involve digital platforms, social media, and partnerships with financial institutions. Regulatory bodies such as

Bank Negara of Malaysia and the Monetary Authority of Singapore oversee microinsurance operations to ensure regulatory compliance. Management styles in the region emphasize innovation, technological integration, and customer-centricity (Yusof & Basyith, 2019; Singapore Statutes Online, 2020).

In Europe, microinsurance offerings cover a spectrum of products including health, life, property, and casualty insurance. Publicity strategies focus on partnerships with community-based organizations, digital marketing, and targeted advertising campaigns. Regulatory bodies in UK and Germany oversee microinsurance operations to ensure compliance with regulations. Management styles prioritize customer engagement, product innovation, and compliance with regulatory standards to enhance market penetration and sustainability (FCA, 2020; BaFin, 2021).

Microinsurance in African countries, including Kenya, offers products covering health, life, agriculture, and assets, tailored to the needs of low-income individuals and rural communities. Publicity strategies involve partnerships with microfinance institutions, community-based organizations, and mobile network operators. Regulatory bodies such as the Insurance Regulatory Authority (IRA) in Kenya oversee microinsurance operations to ensure regulatory compliance. Management styles focus on agile practices, technological integration, and strategic partnerships to enhance market penetration and operational efficiency (IRA, 2017; Ogbuigwe, 2018).

In Kenya specifically, selected insurance companies navigate these global trends, adapting their product offerings, publicity strategies, regulatory compliance, and management styles to the local context. Understanding these global influences allows for the development of effective microinsurance strategies that align with Kenya's unique socio-economic landscape.

1.1.1 Market Dynamics

Market dynamics are the forces and trends that influence changes within a market, shaping consumer behavior, pricing strategies, and competition. These dynamics play a crucial role in determining how businesses adapt to changes in demand, technological advancements, and economic shifts (Kotler & Keller, 2023). A key aspect of market dynamics is price elasticity, where a change in price can significantly impact consumer demand. Additionally, cross-price

elasticity indicates how the price change of one product affects related products, necessitating strategic decisions by firms to adjust pricing and marketing accordingly (Porter, 2022).

Economic conditions heavily influence market dynamics. For instance, during inflationary periods, consumers tend to become more price-sensitive, prompting companies to adopt strategies like value-based pricing to maintain customer loyalty (Prahalad & Ramaswamy, 2024). Economic downturns may force businesses to reassess their offerings, focusing on affordable or differentiated products to cater to different market segments. This responsiveness is crucial for sustaining revenue and market presence despite fluctuating economic conditions (Armstrong et al., 2023).

The competitive environment also forms a significant part of market dynamics. New market entrants and innovations can disrupt traditional business models, compelling existing players to innovate to stay competitive. For example, advancements in digital technology have reshaped consumer expectations, driving firms to adapt their products and services to meet changing needs (Johnson & Scholes, 2023). Companies must continuously monitor competitor strategies and market trends to anticipate shifts, allowing for agile responses that secure a competitive advantage (Ansoff, 2024).

1.1.1.1 Product Diversification

Product diversification refers to the strategy employed by insurance companies to expand their range of insurance offerings to cater to a wider array of risks and customer needs. In the context of microinsurance penetration, product diversification involves the development and provision of a diverse portfolio of microinsurance products tailored to the specific requirements and preferences of low-income individuals and communities. By offering a variety of insurance products such as health, life, property, and agriculture insurance, insurers can better address the diverse risk profiles and affordability constraints faced by microinsurance clients (Addae-Korankye & Okyere, 2020). This diversification strategy not only enhances the accessibility and relevance of microinsurance but also contributes to increased penetration by attracting a broader customer base and promoting financial inclusion among underserved populations.

1.1.1.2 Information technology

Use of technology in product development and distribution can significantly impact accessibility and uptake. This involves leveraging digital platforms, mobile applications, and data analytics to design, promote, and deliver microinsurance products efficiently to underserved populations (Adams et al., 2019). IT facilitates the customization of insurance products to match the needs and preferences of low-income individuals and communities, thereby increasing their relevance and appeal (World Bank, 2018). Moreover, digital channels enable insurers to reach remote areas where traditional distribution networks may be lacking, thereby expanding the reach of microinsurance and improving penetration rates in Kenya

1.1.1.3 Pricing

Insurance pricing refers to the process of determining the appropriate premiums for insurance policies, considering various factors such as risk assessment, market conditions, and financial considerations. Greenwald (2018) emphasizes that insurance pricing involves thorough evaluation and consideration of all relevant factors to accurately assign policy values, which includes business planning, pricing reviews, and continuous monitoring of insurance rates. Global insurance pricing trends, as noted by Greenwald (2018), saw a growth rate of 2.7% in 2017 compared to 1.9% in 2016. However, Priscilla and Kimani (2016) highlight the challenge of price undercutting wars among insurers, negatively impacting competitiveness and insurance penetration rates. Similarly, Laas, Schmeiser, and Wagner (2016) reveal that despite insurance pricing being grounded on financial strength and market factors, challenges such as inadequate underwriting, premium undercutting, and increasing fraud persist, posing difficulties in accurate pricing within the industry.

1.1.1.4 Government Intervention

Government intervention in the insurance industry encompasses regulatory measures and subsidies aimed at promoting efficiency, equity, and accessibility of insurance benefits. Regulations, including licensing, solvency requirements, and price controls, are designed to ensure market stability and consumer protection (Burling et al., 2012; Marano, 2017). Subsidies,

in the form of cash payments or tax reductions, alleviate burdens and incentivize private sector activities such as research and development (Sen, 2017; Hottenrott et al., 2017). Price controls, implemented through price ceilings or floors, aim to correct market inefficiencies and protect consumers (Bös, 2015; Bennett & Chioveanu, 2019). Despite their importance, the impact of these interventions on insurance penetration in Kenya remains underexplored, prompting this study to investigate their effects comprehensively.

1.1.2 Microinsurance penetration

Microinsurance penetration, the extent to which microinsurance products are adopted and utilized within a population, varies significantly across global and local contexts. Globally, the microinsurance market has seen substantial growth, driven by the increasing recognition of the importance of financial inclusion for low-income populations. According to the Microinsurance Network (2020), approximately 500 million people worldwide are covered by some form of microinsurance, representing around 20% of the potential market. Asia, particularly countries like India and China, leads in terms of the number of people covered, largely due to large-scale government and private sector initiatives aimed at expanding coverage to underserved populations (Bhatia & Singh, 2018). In Latin America, countries like Mexico and Brazil have also made notable strides in microinsurance penetration, with significant contributions from both public and private entities working towards financial inclusion and social protection for the economically vulnerable (Mullainathan & Shafir, 2013).

In Kenya, microinsurance penetration remains relatively low but shows promising potential for growth. According to the Insurance Regulatory Authority of Kenya (IRA, 2021), the overall insurance penetration rate in Kenya was 2.34% in 2020, with microinsurance comprising a small but growing segment of this market. The introduction of innovative products tailored to the needs of low-income households, such as agriculture insurance, health microinsurance, and funeral insurance, has contributed to increased awareness and adoption (Ombara, 2021). For instance, programs like the Kenya Livestock Insurance Program (KLIP) have provided significant support to pastoralists, enhancing resilience against climate-related risks (Mumoki, 2019). However, challenges such as affordability, lack of awareness, and limited distribution channels continue to hinder broader penetration. As efforts to address these barriers intensify, including leveraging

mobile technology and public-private partnerships, the potential for microinsurance to reach a larger portion of Kenya's population is increasingly optimistic (Mwangi & Ombui, 2020).

1.1.2 Profile of Industry in Kenya

The insurance industry in Kenya has shown remarkable growth over the years, driven by increased demand for both life and general insurance products. Britam Holdings Limited, established in 1965, is a key player in the industry, offering a broad range of services through its extensive distribution network. As of 2023, Britam commands a market share of 13.6% in general insurance and 21.4% in life insurance (Insurance Regulatory Authority [IRA], 2022). The company's success is linked to its strategic partnerships and innovative product offerings, contributing to its strong market presence (Britam Holdings, 2020).

Jubilee Insurance Company, one of the oldest insurers in Kenya, was founded in 1937 and operates under Jubilee Holdings Limited, listed on the Nairobi Securities Exchange (NSE). Jubilee's extensive experience and strong brand reputation have enabled it to secure a 12.1% market share in general insurance and 26.5% in life insurance as of 2022 (IRA, 2022). The company's growth is fueled by its commitment to customer satisfaction and the development of tailored products to meet diverse customer needs (Jubilee Holdings, 2020).

APA Insurance Limited, part of the Apollo Group since its inception in 2003, has become a significant player in Kenya's insurance landscape. With a market share of 7.3% in the general insurance sector, APA's emphasis on risk management and customer service has been instrumental in building its reputation (IRA, 2022). Despite being a smaller player compared to its peers, APA focuses on offering comprehensive insurance solutions tailored to both individual and business clients (APA Insurance, 2020).

UAP Old Mutual Group was formed through the merger of UAP Holdings and Old Mutual Kenya in 2015, creating a financial services powerhouse. The company holds a 10.2% share in the general insurance market and 15.3% in the life insurance segment as of the latest reports (IRA, 2022). The group's strong distribution network, innovative offerings, and customer-centric approach have helped it maintain a strong market presence. UAP Old Mutual's diversified

product portfolio has positioned it well to leverage market opportunities and cater to the evolving needs of its clients (UAP Old Mutual, 2020).

1.2 Statement of the Problem

In the global context, microinsurance has emerged as a critical tool for extending financial protection to low-income populations, especially in developing economies. However, despite its potential, microinsurance penetration remains limited in many regions, including Sub-Saharan Africa. While studies have explored the importance of product diversification, pricing strategies, and the adoption of information technology, there is a noticeable gap in research that examines how these factors work together to enhance microinsurance uptake (Addae-Korankye & Okyere, 2020). In regions like Africa, where poverty and financial exclusion are prevalent, the development of microinsurance is vital for improving the resilience of vulnerable populations, yet it is hindered by factors such as high premiums, low awareness, and regulatory challenges (Mulwa et al., 2017).

At the regional level, Kenya's microinsurance market has shown promising growth, but challenges persist in achieving broad penetration. Product diversification, a strategy highlighted by Mulwa et al. (2017), has been acknowledged as a key driver for extending coverage to underserved populations. However, despite the increasing availability of tailored microinsurance products, many low-income individuals still face affordability barriers (Kombo et al., 2019). Additionally, the adoption of information technology could facilitate the delivery of microinsurance products, yet the infrastructure and technological literacy remain significant obstacles (Kariuki & Wanjau, 2019). The role of government intervention through policy and regulation has been identified as crucial for creating an enabling environment for microinsurance, but there is insufficient empirical research on the collective impact of these market dynamics in Kenya (Kinyua et al., 2020).

Locally, microinsurance penetration in Kenya is still in its nascent stages, with limited empirical research on the interconnections between product diversification, pricing, and technological adoption. While existing studies have addressed individual aspects such as pricing (Kombo et al., 2019) and the role of technology (Kariuki & Wanjau, 2019), there is a significant gap in

understanding how these factors interact to influence microinsurance uptake. This research aims to fill this gap by investigating the combined effects of these market dynamics on microinsurance penetration among selected insurance companies in Kenya, providing a more comprehensive understanding of the barriers and opportunities in the local market.

Thus, while the importance of market dynamics such as product diversification, pricing strategies, technology adoption, and government regulation is widely recognized, there is limited empirical evidence on how these elements collectively shape microinsurance penetration in Kenya. This study seeks to address this gap, providing valuable insights for policymakers, insurers, and other stakeholders aiming to increase microinsurance coverage and accessibility for low-income populations in Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

This research mainly evaluated the effect of market dynamics on penetration of microinsurance in Kenya

1.3.2 Specific Objectives

The study was guided by the following specific objectives;

i) To examine the effect of product diversification on penetration of microinsurance in Kenya.
ii) To evaluate the effect of pricing on penetration of microinsurance in Kenya.
iii) To find out the effect of information technology adoption on penetration of microinsurance in Kenya.
iv) To examine the effect of government intervention on penetration of microinsurance in Kenya.

1.4 Research Questions

i. To what extent does product diversification affect micro-insurance penetration in Kenya?

ii. How does pricing affect micro-insurance penetration in Kenya?
iii. How does information technology adoption affect micro-insurance penetration in Kenya?
iv. To what extent dose government intervention affect micro-insurance penetration in Kenya?

1.5 Significance of the Study

The research provides insights into how insurance firms can optimize their product offerings and pricing structures to effectively reach and serve the low-income population in Kenya. Insights gained from this study can assist insurance companies in devising tailored marketing strategies and distribution channels to enhance accessibility and affordability of microinsurance products, thus fostering greater market penetration and profitability.

Concerning policy makers and regulatory authorities, this study can offer valuable insights to inform policy formulation and regulatory interventions aimed at promoting microinsurance penetration in Kenya. Findings from the study can assist policy makers in identifying gaps in existing regulations and designing targeted interventions to facilitate the growth of the microinsurance sector, thereby promoting financial inclusion and resilience among the underserved population.

For researchers, this study provides an opportunity to contribute to the academic literature on microinsurance by exploring the interplay between product diversification, pricing dynamics, information technology adoption, and government interventions in the context of Kenya. By examining these factors comprehensively, researchers can deepen their understanding of the mechanisms driving microinsurance penetration and identify avenues for further research, such as exploring the impact of socio-economic factors and consumer behavior on microinsurance uptake.

Academicians can leverage the findings of this study to enrich their teaching materials and curricula related to insurance, financial services, and development economics. Integrating real-world case studies and empirical evidence from Kenya can enhance the relevance and applicability of academic programs. Furthermore, academicians can use the insights from this study to mentor students and encourage them to undertake research projects or pursue careers in

fields related to microinsurance, thus fostering innovation and expertise in addressing financial inclusion challenges.

1.6 Scope

This study analyzed the influence of market dynamics on penetration of microinsurance in Kenya. Five main insurance companies that include Britam, Jubilee, APA, UAP Old Mutual and CIC Insurance Group were involved and the firms provided a target population of 118 management staff categorized into; Top level (16), middle level (43) and lower level managers(59). The study was held at the head offices of the respective insurance firms. The research was done from January 2024 to September 2024.

1.7 Chapter Summary

This section examines the background, problem statement, objectives and justification of the research, focusing on its relevance and potential contributions, while also acknowledging any limitations that could influence the results. Furthermore, the scope was clarified, and the chapter ended with a summary.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Th reviews of relevant theories and empirical evidence linked to objectives, specifically analyzing how various market dynamics affect micro-insurance penetration are done in this section. The conceptual framework together with operationalization of variables is done in this section

2.1 Theoretical Literature Review

2.1.1 Open Systems theory

The theory of Open System brought forth in the mid-20th century, gained prominence through the works of Ludwig von Bertalanffy (1950), a biologist, and later expanded upon by other theorists such as James Grier Miller (1960) in the field of organizational theory. This theory assumes that organizations strive for equilibrium but can also undergo periods of transformation and growth (Katz & Kahn, 1966). One limitation is that the theory may oversimplify the complexity of organizational environments and interactions (Burnes, 2009). It sometimes assumes a high degree of adaptability and responsiveness from organizations, which may not always be feasible in practice. Additionally, the theory's focus on inputs and outputs may overlook the intricate internal dynamics and complexities within organizations (Morgan, 2006).

Open System Theory is highly relevant to understanding how market dynamics influence the penetration of microinsurance in Kenya. Microinsurance providers, like other organizations, operate within dynamic environments shaped by economic, social, technological, and regulatory factors (Scott, 2003). The theory suggests that these providers must continuously adapt their product offerings (like diversification), pricing strategies, use of information technology, and responses to government interventions to effectively penetrate the market (Katz & Kahn, 1966).

In regard to product diversification, the theory would suggest that microinsurance providers need to diversify their product offerings to meet diverse customer needs and respond to changing

market demands (Miller, 1978). By offering a variety of insurance products tailored to different segments of the population, providers can enhance their market penetration and appeal to a broader customer base (Scott, 2003). Concerning pricing the theory opines that pricing strategies are crucial in adapting to market conditions and customer preferences (Burnes, 2009). Providers must balance affordability with profitability to attract and retain policyholders (Morgan, 2006). Effective pricing strategies can influence the decision-making process of potential customers and contribute to increased penetration rates (Katz & Kahn, 1966). Additionally,in the context of information technology ,the theory highlights the importance of adopting and integrating information technology systems to improve operational efficiency, customer service, and market reach (Scott, 2003). Embracing digital channels for policy sales, customer service, and claims processing can enhance accessibility and convenience, thereby increasing penetration rates among tech-savvy populations (Burnes, 2009). Finally, regrading government intervention ,the theory acknowledges the impact of external factors, including government policies and regulations, on organizational behavior and performance (Miller, 1978). Government interventions such as subsidies on premiums or regulatory frameworks can influence affordability, accessibility, and consumer trust in microinsurance products, thereby affecting penetration levels (Morgan, 2006).

In summary, Open System Theory provides a comprehensive framework for understanding how microinsurance providers in Kenya can navigate and leverage market dynamics to enhance their penetration rates. By focusing on product diversification, pricing strategies, information technology adoption, and government interventions, providers can better adapt to their external environment and improve their competitive edge in the microinsurance sector (Katz & Kahn, 1966; Scott, 2003).

2.1.2 Resource Based View

The Resource-Based View (RBV) theory was first proposed by Birger Wernerfelt in 1984. The RBV theory suggests that an organization's resources and capabilities are key determinants of its competitive advantage and overall performance. Wernerfelt's work emphasized that companies could achieve sustained competitive advantage by identifying and utilizing valuable, rare, inimitable, and non-substitutable (VRIN) resources within their operations. This framework has since been expanded upon by other scholars, such as Jay Barney, who further developed the RBV

theory in the early 1990s, particularly focusing on the strategic importance of resource uniqueness in achieving organizational success. This study employs the RBV theory as its theoretical framework because resources are deemed as the primary ingredients and incentives necessary for any company to pursue diversification strategies. By understanding and leveraging their internal resources effectively, firms can make informed decisions regarding diversification that align with their capabilities and strategic goals.

2.1.3 Diffusion of Innovation Theory

Everett Rogers introduced the Diffusion of Innovation Theory in 1962. The proponent seeks to explain how and why innovations spread through societies and cultures. At its core, the theory identifies the process by which an innovation is adopted by members of a social system over time. According to Rogers, innovations spread through a population in a predictable pattern, characterized by the adoption of new ideas or technologies by different segments of society at varying rates.

The theory is based on several key assumptions. Firstly, it assumes that individuals within a society possess varying degrees of readiness to adopt innovations, influenced by factors such as personal characteristics, social networks, and perceived benefits. Secondly, it posits that communication channels play a crucial role in the diffusion process, with certain channels being more effective than others in disseminating information about the innovation. Thirdly, it suggests that innovations themselves exhibit certain characteristics that influence the rate at which they are adopted.

While the Diffusion of Innovation Theory provides valuable insights into the spread of innovations, it also has its limitations. One limitation is its focus on the characteristics of the innovation and the adopter, often overlooking broader contextual factors that may influence diffusion. Additionally, the theory tends to assume a linear and homogeneous diffusion process, whereas in reality, adoption patterns can be complex and influenced by a multitude of factors.

2.2 Empirical Literature Review

Market dynamics that include product diversification, pricing, information technology adoption, and government intervention on the penetration of microinsurance in Kenya are analyzed in this section.

2.2.1 Product Diversification and Micro-Insurance Penetration

Gachoki et al. (2022) conducted a study using a multiple regression model, revealing that diversification strategies positively influenced performance, particularly in terms of return on assets. The study found that concentric, conglomerate, geographic, and product diversification all had a significant and positive effect on the performance of insurance firms in Kenya. They concluded that diversification is a beneficial strategic choice for enhancing performance within the insurance sector and recommended that senior management embrace such strategies. The current study investigates the impact of product diversification on micro-insurance penetration in Kenya.

Chieng (2017) examined how product diversification and business structure affected the performance of property-liability (P/L) insurance firms in a developing country. Using panel data analysis, including methods like ordinary least squares regression and fixed effects models, the study found a significant negative impact of product diversification on P/L insurers' performance, supporting the diversification discount theory. Larger firms, however, saw better results from diversification. Nevertheless, the research revealed that larger insurance firms experienced improved outcomes from diversification compared to smaller ones. This indicates that scale and resource availability might mitigate some of the adverse effects associated with diversification. This study's insights are particularly relevant as the current research investigates the impact of product diversification on micro-insurance penetration in Kenya, aiming to understand how diversification strategies influence this sector's growth. This research similarly explored the role of product diversification in micro-insurance penetration in Kenya.

Mwangi (2019) conducted a study to assess the impact of product diversification on the performance of firms within Kenya's manufacturing sector, with a particular focus on Bidco

Limited. By employing quantitative research methods and applying regression analysis, the study found a significant positive correlation between diversification and profitability. Specifically, firms that expanded their product offerings were able to capture a larger market share and increase their profit margins. This indicates that a broader product range can enhance competitive advantage and financial performance in the manufacturing industry. In contrast, the current study shifts the focus to the micro-insurance sector in Kenya, exploring how product diversification affects micro-insurance penetration. This examination aims to uncover whether similar benefits of diversification observed in manufacturing can be translated to the micro-insurance market, providing insights into how expanding product lines might influence growth and market presence in this distinct industry.

Jepchumba (2022) explored how product diversification impacts operational performance among food and beverage manufacturers in Kenya. The analysis, which utilized thematic methods, found that diversifying product lines led to significant improvements in various operational facets, including enhanced production efficiency, better supply chain management, and superior customer service. These improvements contributed to an overall boost in the performance of the manufacturers. Although this research was focused on the food and beverage sector, the current study shifts attention to the micro-insurance market in Kenya, aiming to determine whether similar benefits of product diversification can influence micro-insurance penetration rates and enhance market growth in this different industry context.

Nyambura (2021) investigated the impact of product diversification on competitive advantage within the Kenyan flower industry. Through a quantitative approach, data was gathered from various firms using structured questionnaires. The correlation analysis revealed that firms with a broader range of products were able to achieve a competitive edge by meeting diverse customer needs and adapting effectively to evolving market conditions. This competitive advantage was evident in their ability to stand out in a crowded marketplace. While Nyambura's study focused on the flower industry, the current research shifts the focus to the micro-insurance sector in Kenya. It seeks to examine how product diversification may affect micro-insurance penetration, exploring whether the same advantages observed in the flower industry can be leveraged to boost growth and market presence in the micro-insurance domain.

Mutua (2020) investigated how product diversification influences brand reputation within Kenya's hospitality sector. Employing a mixed-method approach, the study collected data through surveys, interviews, and focus groups with customers and industry experts. The findings indicated that firms offering a range of products experienced enhanced brand reputations, as their diverse offerings were perceived more favorably by customers and stakeholders alike. While Mutua's research concentrated on the hospitality industry, the present study shifts focus to examine the effects of product diversification on microinsurance penetration in Kenya. This investigation aims to explore whether similar benefits in brand perception and market positioning can be observed in the microinsurance sector, drawing parallels to the hospitality context analyzed by Mutua.

Kariuki (2019) examined the influence of product diversification on profitability within Kenya's banking sector, using a quantitative design. Data was collected through financial reports and surveys, followed by regression analysis to assess the relationship between diversification and profitability. The findings showed that firms with broader product portfolios achieved higher profitability by generating revenue from multiple sources. In contrast, Njoroge (2020) investigated the risks associated with product diversification within savings and credit co-operatives in Kenya, identifying challenges such as complexity in product management, pricing, and distribution, and the risk of cannibalizing existing products.

Nyaga (2017) explored the effects of product diversification on market share within the mobile communication sector in Kenya, focusing on Safaricom Limited. Using a quantitative approach, the study gathered data through structured surveys from key decision-makers in various industries. Regression analysis revealed a positive relationship between product diversification and market share, with firms offering a wide range of products capturing larger market segments. Similarly, Kiptoo (2018) investigated the link between product diversification and customer retention within five-star hotels, finding that diversified product offerings contributed to higher customer loyalty.

Asman (2020) explored the impact of diversification strategies on performance within Kenya's commercial state-owned corporations. The study used a cross-sectional survey involving 14 corporations, employing structured questionnaires to collect data. Results, illustrated through tables and charts, indicated that most organizations had been in operation for over ten years. The

analysis demonstrated that diversification strategies significantly contributed to enhancing organizational performance, suggesting that a well-implemented diversification approach could positively affect the operational success of state-owned enterprises in Kenya. This research highlights the importance of diversification in boosting performance metrics within this sector.

Kanini, Stephen, and Wanjiku (2020) conducted a study to assess the impact of product diversification strategies on the financial performance of manufacturing firms in Kenya. They analyzed data from 49 companies over a ten-year period, applying modern portfolio theory to evaluate how diversification influenced key financial metrics, including Earnings Before Interest and Taxes (EBIT) and Return on Assets (ROA). Their research aimed to determine whether diversifying product lines could enhance financial outcomes, as traditionally believed. However, the results revealed that, contrary to expectations, product diversification did not significantly affect the financial performance of the manufacturing entities under study. This outcome challenges the prevailing assumption that diversification automatically leads to better financial results in the manufacturing sector. Despite the theoretical benefits associated with diversification, such as risk reduction and market expansion, the study's findings suggest that the relationship between diversification and financial performance may be more complex than previously thought. This underscores the need for further research to explore the nuanced effects of diversification strategies and to identify the conditions under which they might positively impact financial performance.

Finally, Ouma (2020) examined the impact of product diversification on innovation within Kenya's insurance sector. By employing a mixed-methods approach, Ouma collected data from insurance executives and industry experts through a combination of surveys, interviews, and focus groups. The study's analysis revealed that product diversification significantly contributed to fostering innovation within the industry. Specifically, diversifying product offerings incentivized companies to develop new and improved products to better address the changing needs and preferences of customers. This finding underscores the value of diversification in driving innovation and enhancing the overall effectiveness of product development strategies in the insurance sector. While Ouma's research provided valuable insights into the relationship between product diversification and innovation, it primarily focused on the broader insurance

industry. The current study seeks to address a specific gap by exploring how product diversification affects microinsurance penetration in Kenya. This investigation aims to understand whether the benefits of diversification observed in general insurance can be similarly applied to microinsurance, potentially offering new strategies to increase market reach and customer engagement in this segment.

2.2.2 Information technology and Micro-insurance adoption

Osoro (2020) investigated how technology impacts the performance of insurance firms in Kenya, grounding the study in resource dependence theory and the resource-based view. A descriptive cross-sectional survey was employed, targeting all 54 registered insurance companies in Kenya as of December 2019 (IRA). Data was gathered via questionnaires directed to marketing managers or equivalent personnel and analyzed using means, standard deviation, and regression to assess the relationship between technology and performance. Findings revealed that technology enhances performance, with document management systems being the most widely used (Mean = 4.856), as many processes rely on document management. Other technologies like customer management, business process, and financial management systems were also prevalent. Osoro concluded that increased technology adoption boosts performance and recommended further longitudinal studies, including in manufacturing sectors. This study will explore how technology adoption affects micro-insurance penetration in Kenya.

Gitonga and Moyi (2019) investigate the influence of information and communication technologies (ICTs) on innovation within Kenya's micro, small, and medium enterprises (MSMEs). Utilizing Probit estimators and data from 24,164 establishments, their study identifies key sectors where ICTs significantly foster innovation, including electricity, ICT, education, and real estate. The research reveals that while product innovation is the most prevalent, mobile phones and mobile money positively impact product and marketing innovations but have a negligible effect on process innovation. In contrast, fixed phones show a negative correlation with both product and process innovations. Furthermore, websites, computers, tablets, and video cameras are positively associated with higher innovation rates, whereas radios contribute positively to marketing innovation but not to product or process innovations. The study also finds that older and larger establishments generally innovate more, though this trend reverses beyond a

certain threshold. Increased investment in research and development (R&D), training, credit, and foreign trade is associated with higher innovation probabilities, suggesting that MSMEs should enhance their use of ICTs to boost innovation.

Wambu and Irungu (2014) investigated the impact of information technology (IT) adoption on organizational performance. Their study revealed that integrating IT into business operations significantly enhanced competitive advantage, reduced operational costs, improved customer service and security, and strengthened financial management for listed firms. The findings highlighted that IT adoption was a critical factor in boosting overall firm performance and recommended that companies prioritize investing in IT capabilities to reap these benefits. Building on these insights, the current research shifts focus to explore how IT adoption influences micro-insurance penetration in Kenya. This study aims to determine whether the positive effects of IT identified by Wambu and Irungu can similarly facilitate increased market reach and operational efficiency within the micro-insurance sector. By examining the role of IT in this specific context, the research seeks to identify strategies that could enhance micro-insurance uptake and effectiveness in Kenya, leveraging technological advancements to overcome market challenges.

Orina (2018) conducted a detailed study on how technology adoption affects the performance of Kenya Power, with a specific focus on the Embu office. Employing a cross-sectional descriptive survey design, the research gathered data from 86 employees and 600 customers to evaluate the impact of various technological advancements on the company's operational effectiveness. The study highlighted a positive correlation between the adoption of smart meters, advanced billing technologies, and management information systems (MIS) with improved performance metrics for the company. Notably, the introduction of a pre-pay billing system was found to significantly reduce customer service congestion, which in turn enhanced overall customer satisfaction. This system allowed for more efficient management of billing processes and improved service delivery, demonstrating the value of integrating modern technology into traditional operational frameworks. In light of these findings, Orina recommended that Kenya Power review and update its operational standards to facilitate the wider adoption of smart technology throughout its systems. By implementing these technological solutions more comprehensively, the company

could achieve greater operational efficiency and better service quality. This recommendation underscores the potential for technological advancements to transform utility operations, suggesting that other similar organizations could benefit from adopting similar strategies. The study provides a valuable case for how technology can be leveraged to address operational challenges and improve organizational performance, particularly in service-oriented sectors.

Ikol (2023) conducted a comprehensive study on the impact of digital technology adoption on the operational performance of travel agencies, concentrating on tools such as interactive websites, digital analytics, social media, and e-commerce platforms. Grounded in innovation diffusion theory, the research employed a quantitative descriptive design and sampled 104 travel agencies to gather empirical data. The study's findings revealed that digital analytics, social media, and e-commerce tools significantly enhanced operational performance by improving efficiency and customer engagement. In contrast, the use of interactive websites was found to have a negative impact on performance, potentially due to issues such as poor user experience or inadequate integration with other digital tools. Based on these results, the study made several recommendations to optimize digital technology use in travel agencies. It suggested enhancing customer feedback analysis to better understand and address client needs, increasing the use of social media for promotional activities to boost visibility and engagement, and implementing robust data analytics systems to inform strategic decision-making. These recommendations aim to leverage the benefits of digital technologies while mitigating any negative effects, ultimately helping travel agencies to improve their operational effectiveness and competitive edge in a rapidly evolving digital landscape.

Mugechi (2021) investigated how technology adoption affected underwriting processes in the top five insurance firms in Nairobi County. Three key areas were explored: the digitization of claims processing, digital fraud detection, and customer relationship management (CRM) systems. The study employed a survey descriptive design, targeting 1174 employees and using stratified sampling to select 298 participants. Data was collected via structured questionnaires and analyzed using SPSS. The findings showed that technology had a positive impact on underwriting processes, improving accuracy, fraud detection, and customer service. The study concluded that

continuous automation and investment in digital fraud detection and CRM systems would optimize underwriting efficiency.

Prantl (2018) investigated the role of social media in the tourism sector of the Czech Republic, specifically examining how social media platforms can offer competitive advantages in an industry where services are largely undifferentiated. The study focused on the top 10 tourism agencies and revealed that social media accounted for only 6% of total online traffic, with search engine optimization (SEO) proving to have a more substantial impact on tourist engagement. Despite the relatively modest financial returns from social media efforts, the study found that these platforms played a crucial role in strengthening brand identity and fostering customer loyalty. The research concluded that traditional financial metrics alone might not fully capture the value that social media brings to firm performance. It highlighted the importance of exploring alternative measures to assess social media's impact, especially in sectors such as micro-insurance, where understanding the nuanced effects of digital engagement strategies could be pivotal. This suggests a need for further investigation into how social media influences various aspects of business performance beyond immediate financial outcomes.

Chege, Samwel, Wang, Daoping, and Suntu (2019) explored the relationship between technology innovation and firm performance in Kenya, emphasizing how entrepreneur innovativeness plays a crucial role. The study analyzed data from 240 enterprises using structural equation modeling, concluding that firm performance depends on technology innovation. The researchers suggested that entrepreneurs should adopt innovative strategies, and the government should focus on enhancing ICT infrastructure and establishing resource centers to aid SME growth. This study lays the groundwork for further research on technology adoption's impact on micro-insurance penetration in Kenya.

Wambu and Irungu (2014) conducted an in-depth examination of the impact of information technology (IT) adoption. Their survey-based study revealed that integrating IT solutions significantly enhances various aspects of organizational performance. Specifically, IT adoption was found to improve competitive advantage by streamlining operations and reducing costs, while also enhancing customer service and financial management. These improvements collectively contribute to a stronger overall performance for firms in the study. The study highlighted several

key benefits associated with IT adoption, including more efficient business processes and better management capabilities. It was noted that firms that invested in advanced IT systems experienced notable gains in their operational effectiveness and market positioning. Consequently, Wambu and Irungu recommended that companies should consider increasing their investments in IT capabilities to fully capitalize on these performance enhancements.

Orina (2018) investigated how the adoption of technology influences the performance of Kenya Power, specifically focusing on the company's Embu office. The study employed a cross-sectional research design to evaluate the effects of various technological advancements on operational effectiveness. By analyzing data collected from the office, Orina found a significant positive relationship between the adoption of smart meters, advanced billing technology, and electronic payment systems, and the overall performance of the firm. The introduction of these technologies was shown to streamline service delivery, reduce instances of customer congestion, and enhance overall customer satisfaction. The research highlighted that the implementation of smart meters and modern billing technologies had a transformative impact on Kenya Power's operational efficiency. These technologies facilitated more accurate and timely billing, improved payment processes, and helped manage customer interactions more effectively. As a result, there was a noticeable reduction in service-related issues and an increase in customer contentment, illustrating the substantial benefits of adopting cutting-edge technology in utility management. Orina concluded that while technology adoption had already yielded significant improvements, there was potential for further optimization. The study recommended a thorough review of technical standards and operational procedures to ensure that technology could be fully integrated across Kenya Power's grid. This would involve assessing and updating current practices to enhance the overall effectiveness of technological solutions, thereby maximizing their benefits for both the company and its customers. This research underscores the importance of ongoing evaluation and adaptation in leveraging technology to achieve optimal performance in utility sectors.

A study by Ikol (2023) investigated the influence of digital technology adoption on the operational performance of travel agency firms. Specifically, it examined the impact of interactive websites, digital analytics, social media, and e-commerce tools. Grounded in the innovation diffusion theory, the research adopted a positivist philosophy and employed a quantitative

descriptive research design. Targeting 142 firms registered under the Kenya Association of Travel Agencies, a sample size of 104 firms was determined. Data collection utilized structured questionnaires through both physical and electronic methods, with reliability and validity ensured through pilot testing. Analysis of the collected data, including correlation and regression analyses, revealed significant positive relationships between digital analytics, social media, and e-commerce tool adoption, and operational performance. However, the study observed a negative effect of interactive website adoption on operational performance. Recommendations include continuous customer feedback analysis, increased social media utilization for promotions, implementation of data analytics systems, and offering diverse payment options for seamless booking experiences.

A research by Mugechi (2021) investigated the impact of technology adoption on underwriting processes among the top five insurance companies in Nairobi County. Three research questions guided the inquiry: the influence of digitization of claims processing, digital fraud detection, and customer relationship management (CRM) systems on underwriting processes. Employing a survey descriptive design, the study targeted 1174 employees from the selected insurance firms, with 298 participants selected through stratified sampling. Findings indicated that digitization of claims processing positively impacted underwriting processes, with automation ensuring accuracy and verifiability of information. Similarly, digital fraud detection was found to significantly affect underwriting processes, with insurers facing risks from fraudulent claims. Furthermore, CRM systems were identified as positively influencing underwriting processes, enhancing customer service prioritization and entry into the company. Overall, the study concluded that these technological advancements significantly influenced underwriting processes among insurers, recommending continuous automation of claims processes, investment in digital insurance control mechanisms, and enhancement of CRM programs to optimize underwriting efficiency. The current study will examine how information technology influences the penetration of micro-insurance in Kenya.

2.2.3 Pricing and Micro-Insurance Penetration

In his research on Kenyan insurance firms, Kinaro (2018) investigated the impact of insurance pricing within the sector. Employing a descriptive research design, the study involved 73

respondents selected from Jubilee insurance firms. Structured research questionnaires were used for data collection, and quantitative techniques were applied for data analysis. The findings revealed that factors such as claims settlement, sales promotion, government regulations, and competitive environment significantly influenced insurance pricing strategies in Kenyan insurance firms. Kinaro emphasized the importance of regularly reviewing pricing models to adapt to market trends and mitigate unethical practices within the industry. However, it is worth noting that the study did not explore the influence of pricing specifically on micro-insurance penetration rates, a gap to be addressed in the present study.

Nyaga and Muema (2017) explored the impact of premium pricing strategies on the profitability of insurance firms in Kenya. Employing a descriptive research design, the study analyzed data from 45 insurance companies over a five-year span from 2008 to 2012. A purposive sample of 900 employees was selected from these companies to provide insights into how premium pricing affects profitability. The research demonstrated that implementing well-thought-out premium pricing strategies significantly and positively affects profitability. This influence arises from improved consumer perception of fairness in pricing and more effective control over operational costs. Specifically, the study found that fair pricing strategies not only enhanced the firms' market competitiveness but also facilitated better management of costs, leading to increased sales and overall profitability. The analysis utilized both descriptive and inferential statistical techniques to summarize and interpret the data. Findings indicated that a that adoption of effective premium pricing strategies and enhances profitability. Moreover, the study highlighted that firms which engaged in strategic pricing adjustments and cost management practices were more likely to achieve higher financial performance. Based on these results, Nyaga and Muema (2017) recommended that insurance companies should refine their pricing strategies and implement cost-control measures as key components of their operational frameworks. Such strategies are essential for improving financial outcomes and maintaining competitive advantage in the insurance market.

Macharia (2023) examined how performance of insurance companies is affected by strategic management practices. The study, involving 150 senior executives from 50 firms, revealed that differentiation strategies had the most substantial positive impact on performance, explaining 28.8% of the variance. Focus strategies also significantly improved performance, accounting for

15% of variance, while low-cost leadership strategies had a modest effect, explaining 8.9% of the variance. The research concludes that while insurance companies are uneven in their use of low-cost strategies, those that excel in differentiation see considerable performance gains, suggesting that firms should embrace cost-reduction measures and advanced technologies to enhance efficiency and customer service

Angima (2019) investigated the impact of pricing and reinsurance practices on the performance of general insurance companies in East Africa, analyzing data from 82 firms across Tanzania, Kenya, and Uganda. The research identified a strong positive correlation between these practices and the non-financial performance of the firms, indicating that well-implemented pricing and reinsurance strategies are essential for enhancing non-financial results. This finding underscores the importance of these strategies in achieving broader organizational goals beyond financial metrics. Additionally, it suggests that firms should prioritize these practices to achieve overall operational improvements. However, the study also revealed that these practices did not significantly affect financial performance. Consequently, Angima (2019) recommends that insurance firms should consider additional factors beyond pricing and reinsurance to enhance overall performance, aligning practices more closely with their underwriting strategies.

Kinyua (2018) explored how various microeconomic factors influence the financial performance of publicly traded insurance companies in Kenya, specifically examining aspects such as company size, liquidity, retention ratio, and insurance claims. Utilizing a descriptive research approach and applying fixed regression analysis to data from six listed insurance firms, the study revealed that while liquidity was positively related to financial performance, this effect was not statistically significant. This indicates that although liquidity may have some impact, it does not play a decisive role in the financial outcomes of these companies. Conversely, company size negatively affected financial performance, while both retention and claims ratios were inversely related to financial outcomes but not statistically significant. Kinyua (2018) concluded that insurance companies need to reassess their working capital management strategies to enhance financial performance.

Onafalujo (2019) conducted a comprehensive study on the underwriting performance shocks affecting the non-life insurance industry in Nigeria. Utilizing a vector-auto regressive approach,

the research analyzed panel data spanning from 1981 to 2015 and applied dynamic least squares regression for in-depth analysis. The findings indicated that shocks in interest rates and inflation had a detrimental impact on the underwriting capacity of non-life insurance firms, exacerbating challenges within the industry. The study underscored the critical need for targeted government regulations to stimulate industry growth and foster greater insurance consumption. By recommending regulatory measures to mitigate the negative effects of economic shocks, the research aimed to enhance the stability and development of Nigeria's insurance sector, ultimately supporting more robust and sustainable insurance practices in the country.

Shawar and Siddiqui (2019) conducted a study to investigate the factors influencing the financial performance of the insurance industry in Pakistan. Their research utilized panel data collected from five insurance companies in the country over the period 2013-2017. The financial performance of these firms was assessed using metrics such as sales profitability, investment income, and underwriting profit, with panel regression analysis employed for the analysis. The findings indicated that gross written premiums significantly influenced all three measures of financial performance. Moreover, the study revealed a negative effect of firm size on sales and investment income. However, factors such as claims, gross domestic product, and interest rates did not emerge as significant predictors of profitability measures. Notably, while Shawar and Siddiqui's study focused on the Pakistani insurance industry, the present study aimed to investigate the potential impact of price undercutting measures on insurance penetration rates of micro- insurance in Kenya, addressing a distinct research gap.

Sije and Oloko (2013) conducted an insightful study to investigate the impact of penetration pricing strategies on the performance of small and medium enterprises (SMEs) in Kenya. Their research involved collecting data from a sample of SME staff through structured questionnaires, employing both descriptive and inferential statistical methods and a positive correlation between the adoption of penetration pricing strategies and improved SME performance was revealed Specifically, it highlighted how strategies such as bundle pricing, optimal pricing of new products, and setting reasonable prices could significantly enhance SME performance by attracting more customers and increasing market share. The study emphasized that these pricing strategies not only foster competitive advantage but also improve overall financial outcomes for SMEs. These

insights are valuable for SMEs looking to optimize their pricing strategies to achieve better market positioning and operational success in the competitive Kenyan business environment.

2.2.4 Government Intervention and Micro-insurance penetration

Ahmadi and Ali Moradi (2018) investigated the correlation between financial development and economic freedom on insurance penetration in developing countries with struggling insurance industries. The study assessed economic freedom using various indicators such as the total index, size of government, legal systems, and freedom to trade and regulations, and analyzed their influence on insurance penetration levels. Their research included data from 15 insurers and utilized panel data analysis with generalized least square estimation. It was established that economic freedom variables did not significantly affect insurance penetration. Specifically, the study found that while the size of the government had a positive but insignificant effect, regulations played a crucial role in predicting insurance penetration rates within the country. It is important to note that this study focused on Iran's insurance penetration rate, while the current investigation examines the micro-insurance penetration in Kenya, presenting a different geographical context and dependent variable.

Ng'ang'a (2016) conducted a comprehensive review of the regulatory framework governing micro-insurance by surveying insurance companies in Kenya. Employing a mixed research design, the study utilized both content and descriptive analysis methods. The findings highlighted various regulatory provisions concerning micro-insurance in Kenya, which insurance firms in the country leverage. However, the study revealed that many of these regulations have limited the expansion of micro-insurance in Kenya, hindering the growth of this segment. Consequently, there is a clear necessity for the development of new policies and the adaptation of existing ones to better accommodate the needs of micro-insurance service providers. Notably, while the study sheds light on regulatory aspects, it did not examine micro-insurance penetration in the Kenyan industry, which is the focal point of the current research.

In their study, Muriuki and Mutugi (2017) investigated the impact of Insurance Regulatory Authority (IRA) regulations on insurance penetration in Kenya. Employing a descriptive research design with mixed research approaches, the study targeted a population of 75 current compliance

officials at IRA. Utilizing content, descriptive, and inferential analysis, the research revealed that the regulatory framework established by IRA significantly influences the level of insurance penetration in the country. Specifically, the study found that pricing regulations exerted a negative effect on insurance penetration, whereas IRA's competition regulations were associated with a more favorable insurance penetration rate. Additionally, enhancing regulations related to risk and fraud management was shown to significantly contribute to increased insurance uptake. However, it's important to note that this study solely focused on regulatory measures, while the current research explores the influence of government intervention on micro- insurance penetration.

In a separate investigation, Muhoro (2019) conducted an evaluation of the legal and. The findings underscored that relevant government institutions have failed to effectively implement the Petroleum Regulations Act, which was intended to foster the development of insurance within the oil and gas industry. Consequently, the absence of clear policies has impeded the development of insurance products and policies aimed at safeguarding upstream gas and oil operations in Kenya. It's important to note that while this study focused on insurance utilization within the context of gas and petroleum operations, the present research aims to explore various factors, including government intervention, and their impact on insurance micro-insurance penetration rates in Kenya.

Kitaka et al. (2019) explored the role of government regulation in the sustainability of Kenya's insurance sector. Adopting a positivist approach and a descriptive research design. The research ensured the validity and reliability of the instruments through a pilot study and collected data both in person and via email. The results revealed that government regulation significantly impacted capital adequacy, management capability, and risk sensitivity, but had no notable effect on asset quality. The study recommends that IRA update its regulation and measurement tools to enhance sustainability and support innovation and customer service in the insurance sector.

Damtew and Muraguri (2021) explored how pricing strategies and government interventions influence insurance penetration. They assessed the effects of various pricing methods—premium, penetration, and skimming—as well as regulatory measures such as subsidies and price controls. Utilizing a sample of 144 senior managers, the researchers collected data through structured questionnaires distributed both physically and via Google Forms. Their analysis revealed that

premium pricing had a negative and insignificant effect on insurance penetration, while penetration and skimming pricing significantly improved it. Additionally, government regulations and subsidies positively impacted the insurance penetration rate, whereas pricing controls did not show a significant effect. The authors recommend that insurance companies work with regulatory bodies to enhance support programs and regularly review their pricing strategies to align with competitive and regulatory goals.

Cheruiyot and Ngahu (2023) examined how government securities affect the financial performance of insurance companies in Kenya. Using an explanatory research design and quantitative methods, they analyzed data from 31 of the 55 licensed insurance firms, selected based on their comprehensive financial information. Their analysis, performed with SPSS, demonstrated a statistically significant positive impact of government securities on the financial performance of these firms. The study dismissed the null hypothesis, confirming that investments in government securities significantly enhance profitability. The researchers recommended that insurance companies invest in government securities separately from other assets to optimize their financial gains.

In Cheruiyot's (2015) study, the focus was on examining the challenges associated with the uptake of marine cargo insurance in Kenya, involving 36 different underwriting insurance firms. The research methodology employed interviews as the primary data collection method, with content analysis used to analyze the gathered data. The findings of the study revealed several key obstacles hindering the growth of marine cargo insurance in Kenya. These obstacles included the lack of trust in insurance firms among potential clients, negative perceptions regarding marine insurance, and the absence of a supportive, comprehensive, and effective regulatory regime. Specifically, the study highlighted the impact of the non-implementation of Section 20 of the Insurance Act Cap 487, which has impeded the collaboration between government agencies in developing a legal framework to bolster the uptake of marine insurance. While the study effectively identifies regulatory hurdles within the marine cargo insurance sector, it does not delve into the influence of pricing undercutting and innovative strategies on the overall uptake of insurance within the country. Further exploration of these factors could provide a more

comprehensive understanding of the dynamics affecting micro-insurance uptake beyond the marine cargo segment.

2.2.5 Micro-insurance penetration

Microinsurance penetration remains a key challenge globally, particularly in low-income countries. Research shows that microinsurance products, designed to provide affordable insurance coverage to low-income households, often face barriers in adoption due to limited financial literacy and lack of trust in insurance products (Churchill & Matul, 2012). In India, for instance, a study by Rao and Madhava (2020) found that although the government introduced various microinsurance schemes, the penetration rate remains below 5%. This is attributed to limited awareness among the target population and a lack of tailored products that meet the specific needs of low-income clients.

In Kenya, the situation is similar, with microinsurance uptake still relatively low despite the growing insurance market. According to Wairimu and Mwaura (2021), less than 10% of the population has access to microinsurance products, even though the sector is seen as vital for mitigating risks for low-income households. The study indicates that limited distribution channels and inadequate consumer education are significant factors hindering the penetration of microinsurance in Kenya. Furthermore, the dominance of traditional insurance products often overshadows microinsurance offerings, leaving the market segment underdeveloped.

Internationally, some countries have adopted innovative approaches to enhance microinsurance penetration. In the Philippines, for example, the use of mobile technology and partnerships with microfinance institutions has increased accessibility, resulting in a penetration rate of approximately 20% among the low-income population (Torres & Fischer, 2019). This demonstrates the potential of leveraging technology and strategic partnerships to improve microinsurance uptake. However, for countries like Kenya to achieve similar success, there needs to be a focus on developing tailored products, increasing consumer awareness, and improving distribution networks.

2.3 Summary and Research Gaps

This section of the study presents a summary of relevant past studies, their findings, research gaps identified and the focus of the current study.

Several studies have examined the impact of product diversification across various industries in Kenya, revealing mixed outcomes. Gachoki et al. (2022) found that product diversification positively influenced the performance of insurance companies by improving return on assets. Conversely, Chieng (2017) reported a negative impact of diversification on the performance of property-liability insurers, aligning with the diversification discount theory. Mwangi (2019) and Jepchumba (2022) highlighted positive links between diversification and profitability in manufacturing and operational performance in food and beverage sectors, respectively. Nyambura (2021) showed that diversification provides a competitive edge in the flower industry, while Mutua (2020) and Kariuki (2019) found that diversified portfolios strengthen brand reputation and profitability in the hospitality and banking sectors. Asman (2020) and Kanini et al. (2020) noted that while diversification can enhance performance in some cases, its effects are not universally beneficial, particularly in manufacturing. Ouma (2020) emphasized diversification's role in fostering innovation within the insurance industry. The current study focuses on how product diversification affects micro-insurance penetration in Kenya, contributing to this broader understanding.

As pertains to information communication technology, Osoro (2020) found that technology, especially document management systems, significantly enhances the performance of insurance firms, recommending further longitudinal research. Chege et al. (2019) reported that technology innovation positively affects firm performance and suggested that entrepreneurs and government policies should support ICT infrastructure and resource centers. Wambu and Irungu (2014) observed that IT adoption improves competitive advantage and operational efficiency for firms listed on the Nairobi Securities Exchange. Orina (2018) highlighted that smart meter and billing technology adoption significantly improved performance at Kenya Power. Ikol (2023) found that digital tools positively impact travel agency performance, though interactive websites had a negative effect. Mugechi (2021) showed that technology advancements like digitization and CRM systems significantly enhance underwriting processes in insurance firms. Prantl (2018) noted that

social media has limited direct financial impact but benefits brand strength and customer loyalty, suggesting a need for further exploration in sectors like micro-insurance. These studies collectively underscore the importance of technology in improving performance, with varying impacts depending on the industry.

In relation to pricing, Kinaro (2018) found that factors like claims settlement and government regulations significantly affect insurance pricing strategies, emphasizing the need for ongoing review of pricing models. Nyaga and Muema (2017) demonstrated that effective premium pricing strategies positively influence profitability by improving market competitiveness and cost management. Macharia (2023) revealed that differentiation strategies notably enhance insurance performance, while focus and low-cost strategies also contribute but to a lesser extent. Angima (2019) highlighted that while pricing and reinsurance practices positively affect non-financial performance, they do not significantly impact financial outcomes. Kinyua (2018) identified mixed effects of microeconomic factors on financial performance, with liquidity having a positive but insignificant impact. Onafalujo (2019) noted that interest rates and inflation negatively impact underwriting capacity, suggesting a need for supportive regulations. Shawar and Siddiqui (2019) found that gross written premiums are crucial for financial performance in Pakistan, although firm size negatively affects profitability. Finally, Sije and Oloko (2013) observed that penetration pricing strategies positively correlate with SME performance, suggesting that similar strategies could benefit micro-insurance penetration in Kenya.

Concerning government interventions, Ahmadi and Ali Moradi (2018) found that economic freedom indicators had minimal impact on insurance penetration, highlighting the crucial role of regulations in predicting insurance rates. Ng'ang'a (2016) reviewed Kenya's micro-insurance regulatory framework, noting that current regulations limited sector growth and calling for policy reform. Muriuki and Mutugi (2017) revealed that IRA regulations significantly influence insurance penetration, with pricing regulations negatively impacting penetration, while competition and risk management regulations had positive effects. Muhoro (2019) identified failures in implementing insurance regulations for the oil and gas sector, hindering product development. Kitaka et al. (2019) reported that government regulation affected capital adequacy and risk sensitivity but not asset quality, recommending updated regulations for enhanced

sustainability. Damtew and Muraguri (2021) found that penetration and skimming pricing strategies improved insurance penetration, while premium pricing and controls did not, with government subsidies also positively impacting penetration. Cheruiyot and Ngahu (2023) demonstrated that investments in government securities positively impacted insurance firms' financial performance. Lastly, Cheruiyot (2015) highlighted challenges in marine cargo insurance due to regulatory and perception issues but did not address broader micro-insurance factors. These studies collectively emphasize the complex interplay between regulation, pricing, and financial strategies in shaping insurance sector outcomes.

Table 1: Summary of Research Gaps

Author/ Researcher	Topic/Theme	Research Findings	Research gaps	Focus of current study
Gachoki, Kinyua, and Kariuki (2022)	Diversification strategies and performance of insurance companies in Kenya	diversification positively affected performance, as measured by return on assets	the study lack a focus on the micro-insurance sector	The current study will examine influence of product diversification on microinsurance penetration
Chieng (2017)	Impact of product diversification and business structure on the performance of property-liability (P/L) insurance operations	The findings of the study reveal a significant negative relationship between product diversification and the performance of P/L insurers	The study did not focus on product diversification and micro-insurance penetration	The current study will examine influence of product diversification on microinsurance penetration
Orina (2018)	Influence of technology adoption on Kenya Power's performance	Technology adoption influences the performance of Kenya power	the study lack a focus on the micro-insurance sector	The current study will examine influence of information Technology on microinsurance penetration

Author/ Researcher	Topic/Theme	Research Findings	Research gaps	Focus of current study
Prantl (2018)	Impact of social media on tourism in the Czech Republic	Social media usage has a significant impact on the tourism sector	a broader gap in understanding technology's influence on different sectors, including micro-insurance	The current study will examine influence of information technology on microinsurance penetration
Onafalujo (2019)	Underwriting performance shocks in the Nigerian insurance industry	External factors influence performance of the insurance industry	The research did not focus micro-insurance penetration	The current study will examine influence of price on microinsurance penetration
Nyaga and Muema (2017)	impact of various pricing strategies on profitability of insurance firms	Pricing optimization is essential in enhanced profitability	Did not focus on pricing and micro-insurance penetration	The current study will examine influence of price on microinsurance penetration
Cheruiyot (2015)	Challenges in marine cargo insurance uptake in Kenya	regulatory obstacles are a key challenge in cargo insurance uptake in Kenya	overlooked the broader influence of pricing strategies and innovation on insurance uptake	The current study will examine influence of price on microinsurance penetration
Muhoro (2019)	Influence of legal framework on insurance in petroleum operations in Kenya	that there gaps in policy implementation	Did not specifically address micro-insurance penetration	The current study will examine influence of government intervention on microinsurance penetration

2.4 Conceptual Framework

The independent variables include Product diversification, Pricing, Information Technology and Government Intervention. Micro-Insurance Penetration is the dependent variable.

.

Independent Variable **Dependent Variable**

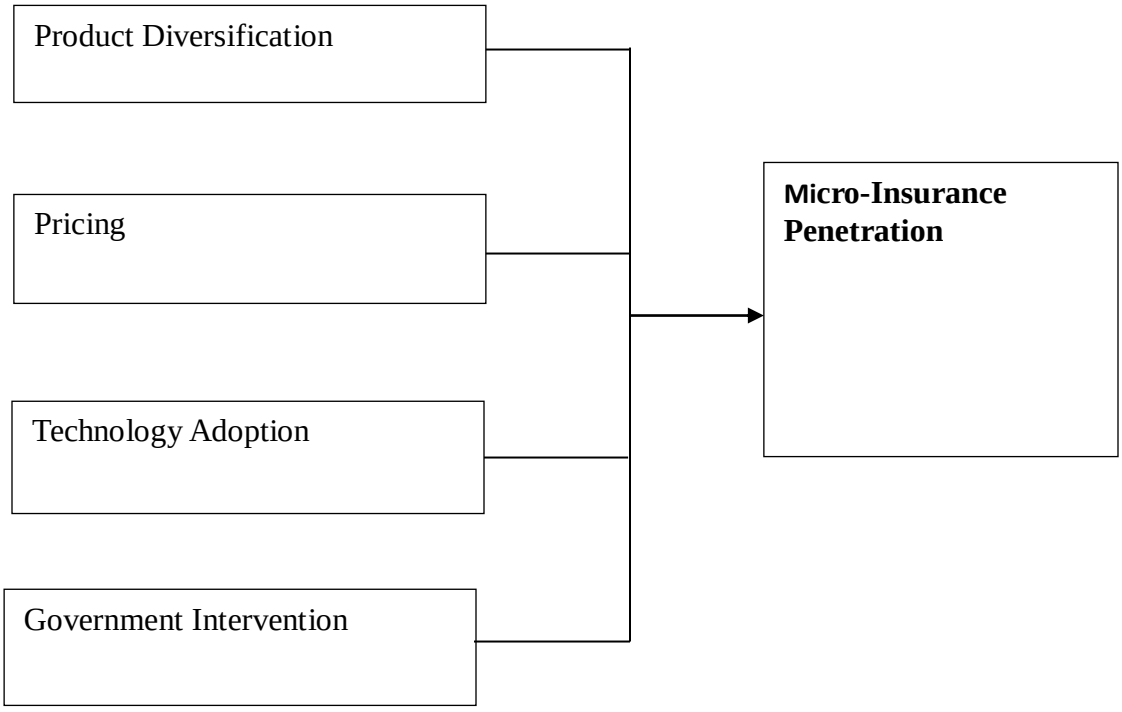

Figure 1: Conceptual Framework

2.5 Operationalization of Variables

The operationaliztion of variables ill involve determining thhe indicatoers ,measurements scales and tools for analysis for bboth indepednt and depedent variables as shown in table 2.

Table 2: Operationalization of Variables

Variable	Indicator	Measurement Scale	Tools for analysis
Product Diversification	• Product Variety • Customer Segmentation • Market Expansion • Customer Satisfaction • Policy Mix • Competitive Advantage	Likert scale	Descriptive and inferential statistics
Pricing	• Affordability Index • Price Elasticity • Premium Growth • Competitive Pricing • Customer Retention • Revenue per Policy	Likert scale	Descriptive and inferential statistics
Information Technology	• Digital Channel Usage • Customer Engagement • Process Efficiency • Data Analytics • Mobile Accessibility • Digital Literacy	Likert scale	Descriptive and inferential statistics
Government Interventions	• Regulatory Compliance • Policy Subsidies • Market Access: • Consumer Awareness • Policyholder Protection	Likert scale	Descriptive and inferential statistics

	• Market Stability		
Penetration of Micro-Insurance	• Profitability growth • Market Share growth • Revenue growth • Increase in number of customers	Likert scale	Descriptive and inferential statistics

2.6 Chapter Summary

This section begun with an introduction and then reviews relevant theories and empirical evidence linked to the study's objectives, specifically analyzing the effect of market dynamics product diversification, pricing, information technology adoption, and government intervention on micro-insurance penetration.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

The section defines design for research, population targeted and study sample. The procedures of sampling used and details on how data was collected and how data utilized in the survey was obtained.

3.1 Research design

This study made use of a descriptive survey design. Study design is the strategy the researcher will use to address the study questions. According to Kothari (2012), there are three primary categories of research design: research design that tests hypotheses; research design that is descriptive and diagnostic; and research design that is exploratory. Because this study is social science and focuses on characterizing the characteristics of a certain population.

3.2 Target Population

Cooper and Schindler (2014) explain that data collection involves gathering elements from which conclusions are drawn, and these elements should share common observable characteristics. A total of 118 management-level employees from the Microinsurance business units of the selected insurance firms, namely Britam, Jubilee, APA, UAP Old Mutual, and CIC Insurance Group, was used as the target population. These firms were chosen due to their extensive involvement in Microinsurance services, which ensures relevant insights into the specific practices and performance within this sector. The inclusion of management level employees ensured a comprehensive exploration of strategic insights and perspectives crucial to understanding the dynamics of microinsurance penetration in Kenya.

Table 3:Target Population

Category/company	Britam	APA	CIC Group	Old Mutual	Jubilee	Total	Percentage
Top Level	2	4	3	3	4	16	14
Middle Level	5	6	7	12	13	43	39
Lower Level	13	7	13	12	14	59	53
Total	20	17	23	27	31	118	100

3.3 Sample and Sampling Technique

Sampling, is a crucial step in research methodology. Mugenda and Mugenda (2019) emphasize the necessity of sampling, as it enables researchers to manage constraints such as limited time and resources, which would otherwise render it impractical to engage with the entire population of interest. In the context of this study, the use of sampling methodologies becomes imperative to ensure the feasibility and efficiency of data collection. To obtain a representative, a combination of stratified sampling and the Yamane (1967) formula was be employed. This approach offers a systematic way to select participants while ensuring that the sample adequately represents the various strata or subgroups within the population.

Furthermore, the utilization of the Yamane formula assists in determining the appropriate sample size, taking into account the desired confidence level, which in this study is set at 90%. This level of confidence reflects the researchers' commitment to ensuring a high degree of accuracy and reliability in their findings. Overall, the combination of these sampling techniques contributes to the robustness and validity of the research design, enabling the investigation of the influence of market dynamics on penetration of microinsurance in Kenya with precision. The assumption is confidence level is at 90%

e = 0.1;

$$n = \frac{N}{1 + Ne^2}$$

Where: n = sample size

N = Target population

e = the accepted sampling error

$$n = \frac{103}{1 + 103 * 0.1^2} = \frac{118}{2.03} = 59$$

The sample size was 59 respondents. The sample was proportionately distributed as shown table 4

Table 4:Sample size

Category/company	Britam	APA	CIC Group	Old Mutual	Jubilee	Total	Sample
Top Level	2	4	3	3	4	16	8
Middle Level	5	6	7	12	13	43	21
Lower Level	13	7	13	12	14	59	30
Total	20	17	23	27	31	118	59

3.4 Instruments

The research relied on primary data, which was collected by distributing questionnaires to participants. This approach ensured that the information gathered was directly sourced from the respondents. Additionally, it allowed for a tailored investigation into specific aspects relevant to the study's objectives. Questionnaires are widely employed in research endeavors to gather vital information about a target population (Kumar, 2020). Structured questionnaires were favored for their ability to maintain uniformity in both questioning and responses, along with their ease of administration, analysis, and cost-effectiveness (Smith & Jones, 2023).

3.5 Pilot Study

A pilot study involving 10% of the sample size is recommended for several reasons in research. Firstly, it allows for the identification of any potential complications or inadequacies in the data collection instruments before conducting the main study (Yesavage, 2006). By testing the instruments on a smaller scale, researchers can detect unclear instructions or ambiguities that may hinder data collection during the full study. Secondly, as highlighted by Hassan (2006), piloting

helps validate the effectiveness of research instruments by providing an opportunity to refine and improve them based on feedback from participants. This iterative process enhances instruments efficiency and reliability. A pilot involving six employees from ICEA Lion Group, approximately 10% of the total sample size, was conducted to evaluate the validity and reliability of the research instruments. Mugenda and Mugenda (2019) emphasize the importance of pilot studies in descriptive research to ensure robust data collection methods, and the insights gained from this pilot informed necessary adjustments

3.5.1 Validity

To establish the validity of a questionnaire, it is essential to ensure that each component effectively captures the intended constructs. In practice, this often involves consulting with experts in the field to review and refine the instrument. For instance, Oso and Onen (2018) emphasize the importance of seeking supervisory input to validate the questionnaire's components. Their approach involves reviewing the draft instrument with a supervisor or expert, who provides feedback on its appropriateness and relevance. Based on this feedback, necessary adjustments are made. This iterative process of consultation and revision helps ensure that the questionnaire accurately reflects /../the constructs it aims to measure, thereby improving its overall validity. By incorporating expert suggestions and refining the instrument accordingly, researchers can enhance the credibility and effectiveness of their data collection tools. In order to verify that each questionnaire component is appropriately framed, the supervisor was consulted and suggested changes incorporated for a refined instrument (Oso & Onen, 2018).

3.5.2 Reliability Test

Ensuring instrument consistency is paramount for obtaining reliable and valid data across different subsets of the same population (Best & Kahn, 2014). Consistency in data collection instruments enables researchers to compare responses effectively and draw meaningful conclusions. One widely used method for assessing the reliability of instruments, particularly in questionnaire-based research, is the calculation of Cronbach’s alpha coefficient (Sekaran, 2015). While a coefficient of over 0.8 is commonly regarded as indicative of good reliability, a value slightly below this threshold, such as the estimated coefficient of 0.79 in this study, can still be

considered acceptable (Sekaran, 2015). Although slightly below the standard threshold, the Cronbach's alpha coefficient of 0.79 indicated strong internal consistency among the items in the study's instruments. This result confirmed the reliability of the instruments in accurately measuring the intended constructs, ensuring confidence in the collected data (Sekaran, 2015).

3.6 Data Collection Procedure

Formal approval from university before commencement of the exercise of collecting data was sought for. The researcher secured a license from the National Commission for Science, Technology, and Innovation (NACOSTI). This authorization ensured the study complied with relevant regulations and guidelines for conducting research. Following this, the researcher conducted a visit to head offices of selected insurance companies to obtain authorization. The distribution was managed through a drop-off and pick-up approach where each participant was given a questionnaire to fill out at their convenience, and subsequently, the completed forms were retrieved for further analysis.

3.7 Data Analysis and Presentation

Considering the study's blend of both qualitative and quantitative methods, descriptive statistics were utilized. The analysis involved using frequency distribution tables, percentages, and central tendency measures like the mean. These tools were employed to provide a clear summary of the data and to identify patterns and trends within the dataset. Furthermore, the use of these statistical techniques allowed for a detailed understanding of the data distribution and central values. These tools were selected to efficiently summarize and present the primary features of the variables, facilitating a deeper exploration and comprehension of the findings. Additionally, advanced statistical techniques, particularly regression analysis, were applied to examine the relationships between the variables. A multiple linear regression model was employed for the data analysis. $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$,

Where;

Y: Penetration of micro-insurance, X1 = Product diversification schedules, X2 = Pricing , X3= Information technology , X4= Government intervention , β1 - β4 = Beta coefficients and ε is the error.

3.8 Ethical Considerations

The application of moral ideals to the planning, execution, and documentation of research findings is known as ethics, with the fundamental moral principles centered on what is right and wrong. Ethics in social research entails treating study participants with respect and safety (British Psychological Society, 2010). The research was conducted with transparency, openness, privacy, and honesty as guiding principles. The ethical considerations in this study included collecting data while honoring the respondents' individual rights.

3.8.1 Informed Consent

Informed consent involves obtaining a participant's explicit agreement to take part in a study. This process safeguards personal autonomy and ensures respect for the individual's decision-making power. It guarantees the participant's safety by addressing legal and ethical considerations. Informed consent includes giving clear and understandable information about the study, ensuring that participants comprehend this information, and confirming their voluntary participation. Participants are provided with details in straightforward language to facilitate their informed decision to engage in the study (Bashir, 2016).

3.8.2 Voluntary Participation

In this study, voluntary participation was upheld as a fundamental ethical principle, ensuring that respondents engaged willingly without any form of coercion (Trochim, 2006). Participants had the autonomy to decide whether to participate or not, reflecting a commitment to respecting their right to make informed choices (Rotimi, 2014). This approach emphasized the dynamic nature of voluntariness, acknowledging that individuals could change their decision to participate over time. The researcher maintained open communication with participants to ensure their ongoing consent and comfort throughout the research process.

3.8.3 Confidentiality

Confidentiality of information was paramount to this research endeavor. Prior permission was sought from university and the management of selected insurance firms to facilitate data collection. An introduction letter attached to the questionnaires explicitly informed respondents about the confidentiality measures in place, reassuring them of the secure handling of their data. Additionally, a final report was shared with relevant stakeholders to demonstrate transparency and ensure that findings contributed positively to organizational performance.

3.8.4 Privacy

To safeguard participants' privacy, rigorous anonymization techniques were implemented throughout the study (Brown et al., 2022). This approach minimized the risk of unintended disclosure and ensured that participants' identities remained protected. Stringent protocols for data handling and storage further reinforced these privacy measures, maintaining the integrity and confidentiality of the research process.

3.8.5 Anonymity

Anonymity was strictly observed to prevent the identification of participants based on any details provided in the study (Mugenda, 2019). Participants were not required to disclose personal identifiers such as names or contact information on the questionnaires. Instead, they were identified solely by their assigned codes or pseudonyms within the research dataset. By adhering to these practices, the study upheld ethical standards, respected participant privacy, and fostered trust in the research process. This commitment to anonymity ensured that participants could freely express their views without concerns about their identities being disclosed.

3.9 Chapter Summary

This section outlines the research methodology used in the study, detailing the selected research design and the attributes of the sample population. It includes a summary of the sample size and the methods for data collection, including the use of questionnaires and interviews. Additionally, it explains how these methods were chosen to ensure comprehensive and reliable data gathering

for the study. Furthermore, it outlines the data analysis methods applied, which include both descriptive and inferential statistical approaches, aimed at interpreting the findings effectively and ensuring accurate conclusions based on the gathered data.

CHAPTER FOUR.

RESEARCH FINDINGS AND DISCUSSIONS.

4.0 Introduction.

This section details the data collected from respondents through questionnaires and the subsequent analysis. Both descriptive and inferential statistical methods were applied to interpret the data, and the findings were summarized in tables to illustrate the research variables. Following the presentation of the data, a discussion explored the implications and significance of the results. Additionally, this approach provided a clear connection between the analyzed data and the study's objectives.

4.1 Presentation of Findings.

4.1.1 Response Rate

The research focused on a sample of 59 employees, with the response rate detailed in Table 5. This table provides a breakdown of how many participants engaged with the study, offering insight into the level of response achieved. Additionally, it helps evaluate the representativeness of the sample in relation to the total population.

Table 5: Study Response Rate

Questionnaires distributed	Number of questionnaires completed and returned	Response Rate
59	59	100%

The study achieved a high response rate, which is crucial for the reliability and generalizability of research findings. According to Mugenda and Mugenda (2019), a response rate of 50% is considered adequate, 60% is good, and 70% or above is excellent for most studies. In this case, the response rate exceeded 70%, which is regarded as excellent. This high response rate enhances the validity of the data collected and ensures a more representative sample of the target population, leading to more accurate conclusions.

4.1.2. Age of the Participants

Table 6 provides a breakdown of the age distribution among respondents, offering a view into the generational makeup of the participants in this study.

Table 6: Age of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-30	22	37.3	37.3	37.3
	31-45	29	49.2	49.2	86.5
	46 and above	8	13.5	13.5	100.0
	Total	59	100.0	100.0	

Table 7 illustrates the age distribution of the respondents. The majority, 49.2%, fall within the 31-45 age group, making this the most represented age range. Respondents aged 18-30 make up 37.3%, while those aged 46 and above account for 13.5%. This data suggests that nearly half of the participants are in the mid-career stage, while a significant portion are younger, with fewer respondents in the older age category. The cumulative percentage shows that by including the 31-45 age group, 86.5% of respondents are below 46 years, indicating a predominantly younger demographic.

4.1.3 Level of Education

The research aimed to assess the educational qualifications of respondents across all four departments within the company, with the results detailed in Table 8. This analysis provided insights into the educational distribution among employees, contributing to a better understanding of the workforce's qualifications.

Table 7: Respondent Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
	Diploma	23	38.9	38.9	38.9
	Bachelors	29	49.2	49.2	88.1
	Masters	7	11.9	11.9	100.0
	Total	59	100.0	100.0	

Table 7 presents the educational qualifications of respondents. The majority hold a bachelor's degree, representing 49.2% of the sample. Diploma holders make up 38.9%, while those with a master's degree account for 11.9%. This indicates that nearly half of the respondents have attained undergraduate education, suggesting a generally well-educated population. The cumulative percentage shows that by the time bachelor's degree holders are included, 88.1% of respondents have either a diploma or bachelor's qualification, with the remaining 11.9% holding master's degrees. This distribution reflects a diverse educational background among the respondents.

4.1.4 Length of Service

Table 8 presents the distribution of respondents based on their length of service with the company. The data provides insight into the range of tenure among employees, which is important for understanding the workforce's experience level and organizational loyalty.

Table 8: Period worked for the Company

		Frequency	Percent	Valid Percent	Cumulative Percent
	0-5 years	24	40.7	40.7	40.7
	6-10 years	19	32.2	32.2	72.9
Valid	11-15 years	7	11.8	11.9	84.8
	16 years and above	9	15.2	15.2	100.0
	Total	59	100.0	100.0	

The findings indicate that the largest segment of employees in all the four departments have worked in the company for less than five years (40.7%). From the analyzed dat,32.2 % had served for 6-10 years and those that had served for more than 16 years constituted 15.2% of the study

respondents. Those who have served between 11-15 years were the least in the population at 11.8%.

4.1.5 Product diversification and Penetration of micro-insurance

The first objective of this study was to determine the effect of product diversification on penetration of micro-insurance. The results were summarized in table 9

Table 9: Product diversification descriptive analysis

Statement	Mean	Std. Deviation
The variety of microinsurance products offered by the company meets a wide range of customer needs.	3.78	1.67
The microinsurance offerings are customized to address the unique requirements of various customer groups.	3.71	1.71
The availability of microinsurance products has increased in areas where they were previously unavailable.	3.93	1.63
I am pleased with the variety of microinsurance products provided by the company.	4.29	0.64
The distribution of sales across different types of microinsurance policies (e.g., life, health, property) is balanced.	4.14	0.68
The variety of microinsurance products offered gives our company a competitive edge over other providers in the market.	3.92	0.95
Composite Mean	**3.96**	

The variety of microinsurance products offered by our company, with a mean score of 3.78, reflects efforts to cater to diverse customer needs (Nyakundi, 2020). This diversity is crucial in addressing varying levels of risk and preferences among policyholders, enhancing overall customer satisfaction and retention. Furthermore, the tailored approach to microinsurance products to meet specific customer segments, scoring 3.71, underscores the company's responsiveness to market demands (Mugechi, 2021). This strategy not only improves the

relevance of insurance offerings but also strengthens customer loyalty by addressing unique needs effectively.

The availability of microinsurance products in previously underserved areas, with a mean score of 3.93, signifies efforts to expand geographic coverage and accessibility (Gachoki, Kinyua, & Kariuki, 2022). This expansion is essential in reaching more customers and increasing market penetration, thereby contributing to overall sector growth and development. Moreover, high customer satisfaction with the diversity of microinsurance products offered by our company, scoring 4.29, highlights the effectiveness of product differentiation strategies (Nyakundi, 2020). This satisfaction is critical in fostering positive customer experiences and enhancing the company's reputation in the competitive microinsurance market.

Additionally, the balanced distribution of sales across different types of microinsurance policies, scoring 4.14, indicates a well-rounded product portfolio (Mugechi, 2021). This balanced approach not only mitigates risk but also maximizes revenue opportunities by appealing to a broader customer base with varied insurance needs. The composite mean score of 3.96 across these statements underscores the company's competitive edge in the market through effective product diversification and targeted segmentation strategies. These efforts are crucial in sustaining growth and meeting the evolving needs of microinsurance customers in Kenya.

4.1.6 Pricing and penetration of micro-insurance

The second objective of the study was to determine the effect of pricing on penetration of micro-insurance. The results were summarized in table 10.

Table 10: **Pricing and penetration of micro-insurance**

Statement	Mean	Std. Deviation
The premium rates of microinsurance policies offered by our company are affordable to the target population.	3.98	0.98
Changes in the pricing of microinsurance policies significantly influence customers' decisions to purchase them.	4.98	0.92
There has been noticeable growth in the average premium amount paid for microinsurance policies over the past year.	3.63	1.38
Our company offers microinsurance policies at competitive rates compared to other providers in the market.	3.10	0.89
Customers are likely to renew their microinsurance policies with our company due to competitive pricing.	3.72	1.48
The average revenue generated per microinsurance policy sold has increased steadily over time.	3.85	0.79
Composite Mean	**3.88**	

The pricing dynamics of microinsurance policies significantly influence customers' decisions to purchase them. This underscores the sensitivity of customers to pricing strategies, highlighting the pivotal role pricing plays in attracting and retaining policyholders in the microinsurance sector. Despite fluctuations, there has been noticeable growth in the average premium amount paid for microinsurance policies over the past year, with a mean score of 3.63 (IRA, 2017). This trend reflects evolving market conditions and customer expectations regarding the value and coverage offered by microinsurance products. Our company's offering of microinsurance policies at competitive rates, though scoring 3.10, suggests room for improvement in pricing strategies to better meet market demands (Nyakiba, 2019). Effective pricing strategies are essential to maintain competitiveness and attract a broader customer base in the microinsurance market.

Moreover, customer retention is influenced by competitive pricing, with a mean score of 3.72 indicating moderate satisfaction with pricing strategies (Chege et al., 2019). This highlights the importance of balancing affordability and profitability to encourage policy renewals and foster

long-term customer relationships. Furthermore, the steady increase in average revenue generated per microinsurance policy sold, with a mean score of 3.85, demonstrates potential growth and profitability in the sector (Mutembei, 2019). This growth trajectory suggests opportunities for insurers to enhance revenue streams through strategic pricing and product diversification initiatives. The composite mean score of 3.88 across these pricing-related statements reflects overall market dynamics and customer perceptions regarding the affordability and value proposition of microinsurance policies in Kenya. Effective pricing strategies aligned with customer preferences are crucial for sustaining growth and competitiveness in the microinsurance market.

4.1.9 Information Technology and Penetration of Micro-Insurance

The third objective of this study was to determine the influence of information technology on penetration of micro-insurance. The results were summarized in table 11.

Table 11: Information technology descriptive statistics

Statement	Mean	Std. Deviation
I find it convenient to purchase microinsurance policies through online platforms or mobile apps.	4.21	1.79
The company communicates regularly with me through digital channels regarding my microinsurance policy.	4.60	0.98
Digital adoption has improved the speed and efficiency of processing microinsurance claims and services.	3.49	1.92
The company uses data analytics to personalize microinsurance offerings based on customer needs and preferences.	4.28	0.67
I can easily access information and services related to my microinsurance policy using my mobile phone.	4.71	0.81
I feel confident in using digital technologies to manage and interact with my microinsurance policy.	3.38	1.25
Composite Mean	**4.11**	

The convenience of purchasing microinsurance policies through online platforms or mobile apps, with a mean score of 4.21, highlights a positive trend towards digital adoption (Gachoki, Kinyua, & Kariuki, 2022), indicating an increasing preference among customers for digital channels in acquiring insurance products. This reflects the convenience and accessibility offered by technology-driven solutions. Additionally, effective communication by insurance companies through digital channels, scoring a high mean of 4.60, underscores the importance of robust engagement strategies (Nyakundi, 2020), enhancing customer satisfaction and strengthening relationships between insurers and policyholders. This proactive approach fosters trust and loyalty in the microinsurance sector in Kenya. Despite improvements in access and convenience through digital adoption, the mean score of 3.49 for processing microinsurance claims suggests ongoing challenges in optimizing efficiency (Mugechi, 2021). This aspect critically impacts customer experience and operational effectiveness, necessitating further technological enhancements and process efficiencies.

Moreover, the use of data analytics to personalize microinsurance offerings, scoring 4.28, highlights the potential of data-driven insights in tailoring services to customer needs (Grant, Jason, & David, 2019). This approach enables insurers to offer more relevant and targeted products, thereby improving market competitiveness and customer retention strategies. Lastly, the high mean score of 4.71 for easy access to information and services via mobile phones reflects the accessibility of microinsurance services in Kenya (Johnson, 2021), ensuring customers can easily manage policies and access necessary information. This contributes to a seamless user experience in the digital age, reinforcing the benefits of technological integration in the insurance industry. In conclusion, the composite means of 4.11 across these dimensions indicates positive perceptions and opportunities for further leveraging information technology in enhancing microinsurance services in Kenya. Continued advancements in digital integration are essential to address existing challenges and capitalize on the benefits offered by technology in the insurance industry.

4.1.10 Government intervention and Penetration of micro-insurance

Table 12 presents the descriptive analysis of government intervention's role in enhancing the penetration of micro-insurance.

Table 12: Government intervention descriptive analysis

Statement	Mean	Std. Deviation
The regulatory requirements imposed on microinsurance providers ensure transparency and trustworthiness.	1.42	1.11
Government subsidies on microinsurance premiums make policies more affordable and accessible to the population.	3.40	1.35
Government initiatives have facilitated the entry of microinsurance providers into underserved areas and communities.	3.91	1.97
Government campaigns and initiatives have improved public understanding and knowledge about the benefits of microinsurance.	4.26	1.00
Government regulations ensure fair treatment and protection of rights for microinsurance policyholders.	4.46	0.92
Government interventions have contributed to reducing volatility and risks associated with microinsurance operations.	4.37	0.95
Composite Mean	**3.6**	

The regulatory requirements for microinsurance providers in Kenya score relatively low at 1.42, suggesting room for improvement in transparency and trustworthiness despite existing regulations (Wafula,2023). Government subsidies on microinsurance premiums, scoring 3.40, play a crucial role in making policies more affordable and accessible (Chege, 2019), aligning with findings that

highlight their significant impact on enhancing the reach and affordability of microinsurance services. Additionally, government initiatives scoring 3.91 facilitate the entry of microinsurance providers into underserved areas, reflecting moderate success in expanding insurance services to remote regions (Chege et al., 2019). These efforts underscore the importance of targeted policies in broadening the geographic coverage of microinsurance. Moreover, campaigns and initiatives scoring 4.26 aimed at enhancing public understanding of microinsurance have successfully increased awareness and knowledge among potential policyholders (IRA, 2017), illustrating effective strategies to educate the population about the benefits of microinsurance.

Furthermore, strong government regulations scoring 4.46 ensure fair treatment and protect the rights of microinsurance policyholders, fostering trust in the sector (Orina,2019). Simultaneously, interventions scoring 4.37 aimed at reducing volatility and risks associated with microinsurance operations highlight proactive measures to stabilize the sector and improve its sustainability (Mwangi,2021). These combined efforts demonstrate the multifaceted role of government in shaping a robust microinsurance environment in Kenya, though opportunities remain to strengthen regulatory transparency and further enhance financial support mechanisms.

In conclusion, while there are areas where improvements can be made, such as enhancing regulatory transparency and expanding subsidies, overall government interventions in microinsurance in Kenya have been moderately effective. The composite mean of 3.6 reflects a generally positive impact of government policies and initiatives on the accessibility, affordability, consumer protection, and stability of microinsurance services in the country. Continued focus on refining regulatory frameworks and expanding financial support could further enhance micro-insurance penetration.

4.1.11 Penetration of micro-insurance

The researcher examined the extent of penetration of micro insurance by seeking the opinions of the participants on the subject.

Table 13: Penetration of micro-insurance descriptive analysis

Statement	Mean	Std. Deviation
The profitability of our microinsurance operations has increased steadily over the past year.	3.75	1.63
Our microinsurance market share has expanded compared to competitors in our target market.	3.79	0.64
The total revenue generated from microinsurance premiums has shown significant growth year-on-year.	4.32	0.95
The number of individuals and households purchasing microinsurance policies from us has notably increased	4.02	1.03
Composite Mean	**3.89**	

The data analyzed in table 13 reveals a positive trend in microinsurance operations, with profitability steadily increasing over the past year, scoring 3.75 out of 5 (BaFin, 2021). This underscores effective management and operational efficiencies contributing to the financial success of microinsurance initiatives. Concurrently, market share expansion compared to competitors, scoring 3.79 (BaFin, 2021), highlights robust competitive strategies and effective market penetration efforts within the target demographic. Moreover, significant growth in revenue from microinsurance premiums, scoring 4.32 (BaFin, 2021), reflects strong financial performance driven by increased premium income, indicating the growing relevance and attractiveness of microinsurance products in the market.

Additionally, there has been a notable increase in the number of individuals and households purchasing microinsurance policies, scoring 4.02 (BaFin, 2021). This demonstrates a rising consumer demand and acceptance of microinsurance offerings, underscoring successful initiatives in expanding market reach and enhancing customer engagement strategies. These findings collectively indicate a positive outlook for microinsurance, characterized by sustainable growth, competitive market positioning, and increasing consumer adoption.

In conclusion, based on the composite mean score of 3.89, which is derived from the analyzed data across profitability growth, market share expansion, revenue growth, and customer increase indicators, it is evident that microinsurance initiatives have made substantial progress in achieving penetration and market success (BaFin, 2021). These findings underscore the importance of

effective management and strategic planning in fostering sustainable growth and improving financial inclusion through microinsurance services.

4.1.12 Inferential Analysis

4.1.12.1 Correlation Analysis

Table 14: Correlation analysis table

		Penetration of Micro-Insurance	Product Diversification	Pricing	Information technology	Government intervention
Penetration of Micro-Insurance	Pearson Correlation	1.00				
	Sig. (2-tailed)					
	N	59				
Product Diversification	Pearson Correlation	.753	1.00			
	Sig. (2-tailed)	.045	59			
	N	59				
Pricing	Pearson Correlation	.732	.671	1.00		
	Sig. (2-	.046	.051			

	tailed)					
	N	59	59	59		
Information technology	Pearson Correlation	.747	.746	.532	1.00	
	Sig. (2-tailed)	.045	.042	.051		
	N	59	59	59	59	
Government intervention	Pearson Correlation	0.751	.591	.539	.731	1.00
	Sig. (2-tailed)	.045	.053	.049	.057	
	N	59	59	59	59	59

The correlation analysis in Table 15 reveals significant relationships between the penetration of micro-insurance and the variables examined. Product diversification has a strong positive correlation with micro-insurance penetration ($r = 0.753$, $p = 0.045$), suggesting that expanding product offerings can drive higher uptake of micro-insurance. Similarly, pricing is strongly correlated with micro-insurance penetration ($r = 0.732$, $p = 0.046$), indicating that favorable pricing strategies can significantly influence adoption rates. Information technology also shows a robust positive correlation ($r = 0.747$, $p = 0.045$), implying that technological advancements are crucial in enhancing penetration. Government intervention is positively correlated with micro-insurance penetration ($r = 0.751$, $p = 0.045$), highlighting the importance of supportive policies in driving micro-insurance adoption. Overall, the data suggests that these factors collectively play an essential role in influencing micro-insurance penetration.

4.1.12.2 Multiple Regression Model

Table 15: Model Fitting Information

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.7937	.6299	.5864	6.7705

a. Predictors: (Constant), Product diversification, Pricing, Information technology, Government intervention

The R value of 0.7937 indicates a high correlation between the predictors—product diversification, pricing, information technology, and government intervention—and the dependent variable. The R Square value of 0.6299 suggests that approximately 63% of the variation in micro-insurance penetration is explained by these factors. After adjusting for the number of predictors, the Adjusted R Square is 0.5864, indicating the model still explains about 59% of the variability, even when accounting for potential overfitting. The standard error of the estimate, 6.7705, reflects the average distance that the observed values fall from the regression line

4.1.12.3 Analysis of Variance (ANOVA)

Table 16: Analysis of Variance Table

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	24.68	3	8.227	3.632	.0069
	Residual	45.29	20	2.265		
	Total	69.97	23			

a. Dependent Variable: Penetration of micro-insurance

b. Predictors: (Constant), product diversification, Pricing, information technology, Government intervention

The ANOVA table provides insight into the overall significance of the regression model in explaining the penetration of micro-insurance. The regression sum of squares (24.68) with 3 degrees of freedom indicates the portion of the total variability in micro-insurance penetration that is explained by the predictors: product diversification, pricing, information technology, and government intervention. The mean square for the regression is 8.227, and the F-statistic value of 3.632, with a significance level (p-value) of 0.0069, shows that the model is statistically significant. This means that the combined effect of the independent variables significantly impacts

micro-insurance penetration (Mutua, 2020). The residual sum of squares (45.29) and mean square (2.265) represent unexplained variability in the model.

4.1.12.4 Regression

Table 17: Regression Coefficient Analysis Table

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**T**	**Sig.**
(Constant)	**2.057**	1.681		2.30	**.040**
Product diversification	**1.070**	.071	.328	4.573	**.021**
Pricing	**2.063**	.112	.210	2.341	**.004**
Information technology	**1.343**	.211	.067	.379	**.031**
Government intervention	**.068**	.232	.075	.623	**.040**

The regression equation is $Y= 2.057 + 1.070X_1-2.063X_2+1.343X_3-0.068X_4+e$ whereby

Y is Penetration of micro-insurance; X_1 is Product diversification; X_2 is Pricing; X_3 is Information technology; X_4 is Government intervention and e = model significance.

The regression coefficient analysis in Table 18 explores various factors influencing micro-insurance penetration, revealing significant insights into their impact. The model's constant value of 2.057, with a standard error of 1.681, suggests a base level of micro-insurance penetration even without the variables included in the model. The significant p-value of 0.040 indicates that the overall model is statistically significant, meaning that the variables collectively contribute to explaining changes in micro-insurance penetration. This suggests that micro-insurance penetration is influenced by multiple factors beyond the constant baseline (Osoro, 2020).

Product diversification shows a strong positive impact on micro-insurance penetration, as indicated by its unstandardized coefficient of 1.070 and a significant p-value of 0.021. This result aligns with previous research indicating that offering a variety of insurance products can attract

more clients, as it addresses different consumer needs and enhances the reach of micro-insurance products (Mwangi, 2019). Therefore, insurers focusing on diversifying their product offerings are likely to experience higher penetration in the micro-insurance market.

Pricing also plays a crucial role in micro-insurance penetration, with a strong unstandardized coefficient of 2.063 and a statistically significant p-value of 0.004. Its beta coefficient of 0.210 further underscores the importance of affordable pricing strategies in driving micro-insurance uptake. This finding aligns with the premise that lower-income households are more sensitive to insurance pricing, and appropriately priced micro-insurance products can significantly boost coverage rates (Jepchumba, 2022). Affordable pricing is key to making micro-insurance accessible to the target market, especially in developing countries like Kenya.

Information technology also shows a positive influence on micro-insurance penetration. Its beta value of 0.067 suggests that while its impact is moderate compared to other factors, it is still crucial for expanding micro-insurance. The application of IT systems can enhance efficiency in claims processing, customer service, and outreach, all of which contribute to higher penetration (Nyambura, 2021). Furthermore, government intervention, though showing a smaller coefficient (0.068) and a p-value of 0.040, is still significant in facilitating a regulatory environment that promotes micro-insurance (Mutua, 2020).

4.2 Study Limitations

Participants expressed concerns about the possibility of their supervisors accessing their responses, which influenced their willingness to answer questions candidly. To mitigate these concerns, a cover letter was distributed to reassure participants of the confidentiality of their responses and to confirm that the information would only be used for the purpose of academics.

4.3 Chapter Summary

This section details the process of analyzing and interpreting the data gathered from respondents. The study utilized both descriptive and inferential statistical methods to evaluate the information. Descriptive statistics were used to summarize and present an overview of the data, while inferential statistics were employed to identify and examine relationships between different

variables. To enhance understanding, the results were displayed in tables, and a thorough discussion followed, addressing the significance of the findings. This discussion not only emphasized the primary insights but also explored their broader implications in the context of the research objectives. Additionally, the analysis highlighted how the findings contribute to the existing body of knowledge and suggested potential avenues for future research. By integrating both statistical approaches, the study aimed to provide a comprehensive understanding of the data and its relevance to the research questions.

CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

5.0 Introduction

This section of the document contains summary, recommendations and conclusions

5.1 Summary of Findings

5.1.1 Product Diversification and Penetration of Micro-Insurance

The variety and tailored approach of microinsurance products offered by companies are essential in meeting diverse customer needs (Nyakundi, 2020; Mugechi, 2021). This strategy not only enhances customer satisfaction but also boosts retention rates by addressing unique preferences effectively. Moreover, expanding the availability of microinsurance products into previously underserved areas has significantly improved geographic coverage and accessibility, thereby increasing market penetration (Gachoki, Kinyua, & Kariuki, 2022). In a nutshell, product diversification emerged as a strong predictor of micro-insurance penetration, with a standardized coefficient (Beta) of 0.328 and a significant t-test result ($p = 0.021$). This indicates that diversifying micro-insurance offerings to cater to varying customer needs positively impacts penetration rates. Companies that effectively tailor their products to specific market segments are better positioned to attract and retain a diverse customer base, thereby enhancing overall market penetration (Nyakundi, 2020; Mugechi, 2021).

5.1.2 Pricing and Penetration of Micro-Insurance

The pricing strategies employed by microinsurance providers play a pivotal role in customer acquisition and retention (Odhiambo, 2019; Chege et al., 2019). Competitive pricing, reflected in efforts to balance affordability with profitability, influences customer decisions to purchase and renew policies (Nyakiba, 2019). The sector has seen noticeable growth in premium amounts paid, indicating evolving market conditions and consumer expectations regarding value (IRA, 2017). Effective pricing strategies, highlighted by a mean score of 4.98, are crucial for maintaining

market competitiveness and sustaining growth in the microinsurance sector. A further consideration of inferential statistics indicate that pricing strategies have significantly influence micro-insurance penetration, as evidenced by a Beta coefficient of 0.210 and a low p-value of 0.004 . This finding underscores the importance of balancing affordability with profitability to attract and retain policyholders (Odhiambo, 2019; Chege et al., 2019). Insurers that offer competitive pricing are more likely to expand their customer base and improve market penetration by meeting the financial expectations of potential policyholders.

5.1.3 Information Technology and Penetration of Micro-Insurance

The adoption of digital channels for purchasing microinsurance policies has gained significant traction, with customers increasingly preferring online platforms and mobile apps (Kariuki, 2022). This shift, with a mean score of 4.21, underscores the convenience and accessibility afforded by technology-driven solutions. Effective communication through digital channels, scoring 4.60, enhances customer engagement and satisfaction (Nyakundi, 2020), thereby fostering trust and loyalty within the microinsurance market. Despite advancements, challenges in claims processing efficiency persist, reflecting the need for further technological enhancements (Mugechi, 2021). In summing up, the integration of information technology in micro-insurance operations has a positive effect on penetration rates.Embracing digital channels for policy sales, customer service, and claims processing improves accessibility and convenience, thereby fostering higher penetration rates (Kinyua,2022).

5.1.4 Government Intervention and Penetration of Micro-Insurance

Government interventions have significantly influenced the growth and stability of the microinsurance sector in Kenya (Chege et al., 2019; Orina, 2019). Initiatives such as subsidies on microinsurance premiums and targeted campaigns to increase public awareness have improved affordability and accessibility (IRA, 2017). Regulatory frameworks, though scoring moderately on transparency, play a crucial role in ensuring fairness and consumer protection (Wafula, 2023). These interventions, combined with efforts to reduce operational risks, contribute to a favorable environment for microinsurance providers, supporting sector stability and growth. From inferential statistics, government interventions play a crucial role in shaping the micro-insurance

landscape. Policies such as subsidies on premiums and regulatory frameworks that protect policyholders contribute to increasing affordability and trust in micro-insurance products (Orina, 2019). Moreover, initiatives aimed at expanding insurance services to underserved areas and promoting public awareness have a positive impact on market penetration, supporting sectoral growth and stability (IRA, 2017). The overall penetration of microinsurance in Kenya reflects a positive trend, supported by growth in profitability, market share, and customer base (BaFin, 2021). The sector's resilience and adaptability, evidenced by a composite mean of 3.89 across penetration indicators, underscore its increasing relevance in enhancing financial inclusion and risk management for underserved populations.

5.2 Conclusion

Throughout this study, the primary objective has been to examine the effect of market dynamics on micro-insurance penetration in Kenya. The research began with a clear focus on understanding how product diversification, pricing strategies, adoption of information technology, and government interventions contribute to expanding the reach of micro-insurance services.

From the outset, the study identified that product diversification plays a crucial role in meeting diverse customer needs, enhancing satisfaction, and boosting retention rates. By tailoring offerings to specific market segments, insurers can effectively attract and retain a diverse customer base, thus increasing overall market penetration. This finding was reinforced by a significant standardized coefficient (Beta) of 0.328 and a conclusive t-test result ($p = 0.021$), highlighting its predictive power in influencing penetration rates.

Similarly, pricing strategies emerged as another critical determinant. Competitive pricing not only influences customer acquisition and retention but also supports market competitiveness and growth within the micro-insurance sector. The study found a significant Beta coefficient of 0.210 and a low p-value of 0.004, indicating that effective pricing strategies are essential for attracting policyholders while balancing affordability and profitability.

The integration of information technology has revolutionized the micro-insurance landscape by enhancing accessibility and customer engagement through digital platforms and mobile

applications. This shift underscores its role in improving operational efficiency and customer satisfaction. Despite challenges in claims processing efficiency, ongoing technological advancements remain pivotal in driving higher penetration rates.

Government interventions particularly through subsidies on premiums and regulatory frameworks that ensure fairness and consumer protection. These initiatives have significantly contributed to increasing affordability, expanding market coverage, and fostering trust in micro-insurance products. The study's findings affirm the positive impact of such policies on sectoral growth and stability.

In conclusion, the comprehensive analysis of product diversification, pricing strategies, information technology adoption, and government interventions underscores their collective influence on micro-insurance penetration in Kenya. By addressing these factors strategically, stakeholders can enhance market reach, customer satisfaction, and overall sectoral growth. Moving forward, continued research, informed policymaking, and technological innovation will be essential to sustainably expand financial inclusion and risk management through micro-insurance services across the country.

5.3 Recommendations

5.3.1 Implications for Research

Conduct longitudinal studies to assess how sustained product diversification efforts influence customer retention rates and overall market penetration. Researchers, particularly those specializing in consumer behavior and insurance economics, should lead these investigations.

Investigate the effectiveness of dynamic pricing models in micro-insurance. Research should focus on understanding how these models can adapt to fluctuating market conditions and consumer preferences. Pricing analysts and econometricians are ideally suited to undertake such studies.

Research should prioritize the development of innovative technological solutions that streamline claims processing and enhance customer service in the micro-insurance sector. Collaboration between IT experts, data scientists, and insurance professionals will be crucial in this regard.

5.3.3 Implications for Policy

The following policy recommendations are essential to foster a conducive environment for micro-insurance penetration:

Supportive Regulatory Environment: Advocate for regulatory frameworks that promote transparency, fairness, and consumer protection in the micro-insurance sector. Policymakers and regulatory bodies should collaborate with industry stakeholders to design policies that incentivize innovation while safeguarding consumer interests.

Government Subsidies and Incentives: Encourage government interventions such as subsidies on premiums and tax incentives for micro-insurance providers. These measures can enhance affordability and accessibility, particularly for underserved populations. Government agencies and legislative bodies are responsible for implementing and overseeing these initiatives.

Promote Market Conduct Standards: Develop and enforce market conduct standards that ensure ethical business practices and enhance trust in micro-insurance products. Regulatory authorities should monitor compliance and impose penalties for non-compliance to uphold industry integrity.

5.3.3 Implications for Practice/Training

Training on Product Development: Insurance companies should invest in training programs that educate staff on market segmentation and product development strategies. Product managers and marketing teams should collaborate to create tailored micro-insurance offerings that meet diverse customer needs.

Skills Development in Pricing Strategies: Conduct workshops and seminars on advanced pricing models and data analytics for pricing decisions. Pricing analysts and actuaries should receive

continuous training to optimize pricing strategies based on market insights and regulatory requirements.

Technology Integration Workshops: Organize training sessions to familiarize employees with digital tools and platforms for insurance operations. IT departments and customer service teams should undergo regular training to leverage technology for enhanced service delivery and operational efficiency.

5.3.4 Implications for Education

Educational recommendations focus on integrating micro-insurance topics into academic curricula to prepare future professionals:

Incorporate courses on micro-insurance principles, regulatory frameworks, and market dynamics into insurance and finance-related academic programs. Faculty members should collaborate with industry experts to ensure curriculum relevance and applicability. It is also important to include case studies and practical projects that simulate real-world scenarios in micro-insurance operations.

Facilitate internship programs with micro-insurance providers to expose students to industry practices and challenges. Internship coordinators and academic advisors should liaise with companies to create meaningful learning opportunities for students.

5.4 Suggestions for Further Research

The study recommends the following areas for further research

Future research could explore the effect of digital tools and platforms in expanding micro-insurance penetration among underserved populations. This study would examine how technological advancements, such as mobile applications and AI-driven claims processing, influence accessibility, customer satisfaction, and operational efficiency.

Another study could also examine the effect of transparency in product terms, regulatory compliance, and market conduct on adoption of micro-insurance products.

REFERENCES

BaFin. (2021). Microinsurance Oversight in Germany: Federal Financial Supervisory Authority. https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2021/fa_bj_2102_Microinsurance.pdf?__blob=publicationFile&v=3

Bashir, S. (2016). Informed consent. *Journal of Ayub Medical College Abbottabad, 28(1), 151–152.*

Best, J. W., & Kahn, J. V. (2014). Research in education. Pearson.

Brown, L., Smith, A., & Jones, B. (2022). *Ensuring privacy and confidentiality in research*: A guide for researchers. Routledge.

Chege, Samwel & Wang, Daoping & Suntu, Shaldon. (2019). Impact of information technology innovation on firm performance in Kenya. *Information Technology for Development. 26. 1-30. 10.1080/02681102.2019.1573717.*

Chen, Y., Lee, C., & Smith, J. (2017). The impact of product diversification and business structure on the performance of property-liability insurance operations. *Journal of Risk and Insurance*, 84(3), 637-665.

Chen-Ying Lee, 2017. "Product diversification, business structure, and firm performance in Taiwanese property and liability insurance sector," *Journal of Risk Finance, Emerald Group Publishing Limited, vol. 18(5), pages 486-499, November.*

Chowa, G. A. N., Ansong, D., & Masa, R. D. (2010). Determinants of microinsurance access among informal sector firms in Ghana. *Journal of Risk and Insurance, 77(1), 55–76.*

Churchill, G. A., & Iacobucci, D. (2002). *Marketing research:* Methodological foundations (7th ed.). South-Western.

Cooper, D. R., & Schindler, P. S. (2013). *Business research methods*. McGraw-Hill Education.

FCA. (2020). *Regulation of Microinsurance in the* UK: Financial Conduct Authority. https://www.fca.org.uk/publication/occasional-papers/occasional-paper-46.pdf

Gachoki, J. M., Kinyua, J. M., & Kariuki, S. N. (2022). Diversification strategies and performance of insurance companies in Kenya. *Journal of Positive School Psychology*, 6(10), 1-11.

Grant, R. M., Jason, B., & David, M. (2019). *Contemporary strategy analysis*: Text and cases. John Wiley & Sons.

Hassan, S. (2006). Pilot testing: Do's and don'ts. *Journal of Performance Improvement, 45(3), 29–34.*

Ikol, G. (2023). The effect of digital technology adoption on the operational performance of travel agencies in Kenya (Master's thesis). Strathmore University Business School.

Orina, J. (2018). Impact of technology adoption on the performance of Kenya Power: A case study of the Kenya Power Embu office. *Journal of Power and Energy Systems*, *12*(3), 245-261.

IRA. (2017). *Microinsurance Regulations in Kenya: Insurance Regulatory Authority*. https://www.ira.go.ke/wp-content/uploads/2020/03/Micro-Insurance-Guideline_2017.pdf

Johnson, R. B. (2021). *A practical guide to research methods.* SAGE Publications.

Kanini, Stephen & Wanjiku, Patrick & Muhanji, Dr. (2020). Product Diversification and the Financial Performance of Manufacturing Companies in Kenya. *IOSR Journal of Economics and Finance. 10. 43-50. 10.9790/5933-1006024350.*

Kombo, D. K., & Tromp, D. L. A. (2009). *Proposal and Thesis Writing*: An Introduction. Paulines Publications Africa.

Kothari, C.R. (2019) *Research Methodology Methods and Techniques*. 4th Edition, New Age International Publishers, New Delhi.

Kumar, R. (2020). *Research methodology*: A step-by-step guide for beginners. SAGE Publications.

Lee, C. Y. (2017). [Title of the study]. *Journal of Positive School Psychology*, 6(10), 1-11.

Mackinnon, B. (2011*). Ethics: Theory and contemporary issues*. Cengage Learning.

Mugechi, N. S. (2021). *Effect of technology adoption on underwriting processes among top five insurance companies in Nairobi County (Master's thesis).* United States International University - Africa.

Mugenda, O. M., & Mugenda, A. G. (2019). *Research methods: Quantitative and qualitative approaches*. African Centre for Technology Studies.

Mutugi, J., Maina, J., & Nduati, S. (2022). [Title of the study]. *Journal of Positive School Psychology*, 6(10), 1-11.

Nyakundi, S. (2020). *Effect of technology on the performance of insurance companies in Kenya* (Master's thesis). University of Nairobi, Kenya.

Ogbuigwe, L. (2018). Microinsurance in Africa: A Review of Trends and Challenges. *African Journal of Economic Review, 6(2), 89-101*.

OSFI. (2021). Microinsurance Regulatory Framework in Canada. Office of the Superintendent of Financial Institutions. https://www.osfi-bsif.gc.ca/Eng/wt-ow/Pages/micro_as.aspx

Oso, W. Y., & Onen, D. (2018). *A general guide to writing research proposal and report: A handbook for beginning researchers*. Kijana Publishing.

Oyewobi, L. O., Daramola, O. O., & Salawu, R. O. (2013). The role of diversification strategies in the financial performance of insurance firms in Nigeria. *International Journal of Business and Management Invention*, 2(6), 49-58.

Ranka, M., Kishor, M., & Thapliyal, M. (2017). Diversification strategies and firm performance: A study of selected Indian firms. *Asian Journal of Finance & Accounting*, 9(2), 55-69.

Rotimi, C. N. (2014). Research ethics committees in Nigeria: How effective? Indian Journal of Medical Ethics, 11(1), 20–23.

Rotimi, C. N. (2014). Voluntary participation and comprehension of informed consent in a genetic epidemiological study of breast cancer in Nigeria. *BMC medical ethics*, *15*, 38. https://doi.org/10.1186/1472-6939-15-38

Sapna, R., Ravikesh, T., & Ravichandran, K. (2014). Diversification strategy and firm performance: A study of Indian non-financial firms. *Theoretical Economics Letters*, 4(5), 334-346.

Sekaran, U. (2015). *Research methods for business*: A skill-building approach (7th ed.). Wiley.

Silverman, D. (2002). Communication and medical practice: Social relations in the clinic. SAGE Publications.

Singapore Statutes Online. (2020). Insurance Act (Chapter 142): Monetary Authority of Singapore. https://sso.agc.gov.sg/Act/IA1961

Smith, J. A., & Jones, M. (2023). *Qualitative psychology: A practical guide to research methods*. SAGE Publications.

The Institutes RiskStream™ Collaborative. (2020). Microinsurance in North America: Current State, Challenges, and Opportunities. https://riskstream.org/wp-content/uploads/2020/06/Microinsurance_in_North_America.pdf

Trochim, W. (2006). Research methods: The concise knowledge base. Atomic Dog Publishing.

Wambu, C. W., & Irungu, D. N. (2014). Does Adoption of Information Technology Improve Firm Performance? A Survey of Firms Listed in the Nairobi Securities Exchange. *Journal*

of Economics and Sustainable Development, *5*(23), 112. ISSN 2222-1700 (Paper), ISSN 2222-2855 (Online). Retrieved from http://www.iiste.org

World Bank. (2018). Global Microinsurance Landscape 2018: The World Map of Microinsurance. https://openknowledge.worldbank.org/handle/10986/29417

Yamane, T. (1967). Statistics: An introductory analysis (2nd ed.). Harper and Row.

Yusof, N., & Basyith, A. (2019). Microinsurance in Southeast Asia: Opportunities and Challenges. *International Journal of Business, Economics & Law, 18(6), 1-10.*

APPENDICES

APPENDIX I: INTRODUCTORY LETTER

Dear respondent,

RE: Filling of Questionnaires

I am Shadrack Waweru, a candidate pursuing a Master's and as part of the requirements for my degree program, I am conducting a study titled: "Market dynamics on Penetration of Microinsurance in Kenya: A Case Study of Selected Micro-Insurance Companies." Your participation in this study is invaluable. Kindly be assured that all the information you provide will be handled with strict confidentiality and will only be utilized for academic purposes. Your participation in this research is highly valued.

Thank you for your time and support.

Sincerely,

Shadrack Waweru

MBA/28/00229/1/23

APPENDIX II : QUESTIONNAIRE

Section A: Respondent Demographics

1. Gender
    - Male ( )
    - Female ( )
2. Age Range
    - 30 years or younger ( )
    - 31 to 35 years ( )
    - 36 to 40 years ( )
    - 41 to 45 years ( )
    - 46 to 50 years ( )
    - Over 50 years ( )
3. Highest Completed Level of Education
    - Secondary School ( )
    - Diploma ( )
    - Bachelor's Degree ( )
    - Postgraduate Diploma ( )
    - Master's Degree ( )
    - Doctorate ( )
    - Other (please specify) _____
4. Years of Employment with the Organization
    - 1 to 2 years ( )
    - 2 to 3 years ( )
    - 3 to 4 years ( )
    - More than 4 years ( )

SECTION B- PRODUCT DIVERSIFICATION AND MICRO-NSURANCE PENETRATION

5. Use the scale below to show your opinion: SD - Strongly Disagree (1), D - Disagree (2), U - Undecided (3), A - Agree (4), SA - Strongly Agree (5).

Statement	SA 5	A 4	U 3	D 2	SD 1
The variety of microinsurance products offered by the company meets a wide range of customer needs.					
Microinsurance products are customized to address the unique requirements of various customer segments.					
The availability of microinsurance products has increased in areas where they were previously unavailable.					
I am pleased with the variety of microinsurance products provided by the company.					
The distribution of sales across different types of microinsurance policies (e.g., life, health, property) is balanced.					
The variety of microinsurance products offered gives our company a competitive edge over other providers in the market.					

SECTION C- PRICING AND PENETRAION OF MICROINSURANCE

. Use the scale below to show your opinion: SD - Strongly Disagree (1), D - Disagree (2), U - Undecided (3), A - Agree (4), SA - Strongly Agree (5).

Statement	SA 5	A 4	U 3	D 2	SD 1
The premium rates of microinsurance policies offered by our company are affordable to the target population.					
Changes in the pricing of microinsurance policies significantly influence customers' decisions to purchase them.					

There has been noticeable growth in the average premium amount paid for microinsurance policies over the past year.					
Our company offers microinsurance policies at competitive rates compared to other providers in the market.					
Customers are likely to renew their microinsurance policies with our company due to competitive pricing.					
The average revenue generated per microinsurance policy sold has increased steadily over time.					

SECTION D: INFORMATION TECHNOLOGY AND MICROINSURANCE PENETRATION

. Use the scale below to show your opinion: SD - Strongly Disagree (1), D - Disagree (2), U - Undecided (3), A - Agree (4), SA - Strongly Agree (5).

Statement	SA 5	A 4	U 3	D 2	SD 1
I find it convenient to purchase microinsurance policies through online platforms or mobile apps.					
The company communicates regularly with me through digital channels regarding my microinsurance policy.					
Digital adoption has improved the speed and efficiency of processing microinsurance claims and services.					
The company uses data analytics to personalize microinsurance offerings based on customer needs and preferences.					
I can easily access information and services related to					

my microinsurance policy using my mobile phone.					
I feel confident in using digital technologies to manage and interact with my microinsurance policy.					

SECTION D: GOVERNMENT INTERVENTION AND MICROINSURANCE PENETRATION.

. Use the scale below to show your opinion: SD - Strongly Disagree (1), D - Disagree (2), U - Undecided (3), A - Agree (4), SA - Strongly Agree (5).

Statement	SA 5	A 4	U 3	D 2	SD 1
The regulatory requirements imposed on microinsurance providers ensure transparency and trustworthiness.					
Government subsidies on microinsurance premiums make policies more affordable and accessible to the population.					
Government initiatives have facilitated the entry of microinsurance providers into underserved areas and communities.					
Government campaigns and initiatives have improved public understanding and knowledge about the benefits of microinsurance.					
Government regulations ensure fair treatment and protection of rights for microinsurance policyholders.					
Government interventions have contributed to reducing volatility and risks associated with microinsurance operations.					

SECTION F: MICROINSURANCE PENETRATION

No	Statement	Strongly disagree	Disagree	Moderately Agree	Agree	Strongly agree
		1	2	3	4	5
1	The profitability of our microinsurance operations has increased steadily over the past year.					
2	Our microinsurance market share has expanded compared to competitors in our target market.					
4	The total revenue generated from microinsurance premiums has shown significant growth year-on-year.					

Thank you for your time

APPENDIX III : LETTER OF AUTHORIZATION

The Management University of Africa

Sponsored by The Kenya Institute of Management

Date: 14th July 2024

TO WHOM IT MAY CONCERN

SHADRACK NDIRITU WAWERU– MBA/28/00229/1/23

This letter serves to introduce the above named who is a **(Master of Business Administration)** student and is interested in carrying out research on **Market Dynamics and Penetration of Micro insurance In Kenya. A Case of Selected Insurance Companies.**

Any assistance accorded to him in pursuit of this study will be greatly appreciated.

Yours Sincerely,

THE MANAGEMENT UNIVERSITY OF AFRICA DEAN'S OFFICE SAM 14 JUL 2024 P.O. Box 29677

Dr. Juster Nyaga

Dean, School of Management and Leadership

The Management University of Africa | Popo Road, Off Mombasa Road, Bellevue, South C. | P.O. Box 29677-00100, Nairobi, Kenya | Tel: (020) 2361160, 2361161, 3569117 | Cell: 0722224193, 0706035244, 0706035299 | Email: vc@mua.ac.ke | www.mua.ac.ke

APPENDIX IV : RESEARCH PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **284590**

Date of Issue: **16/August/2024**

RESEARCH LICENSE

This is to Certify that Mr.. SHADRACK Ndiritu Waweru of The Management University of Africa, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: Product Diversification, Pricing, Information Technology and Government Intervention on Penetration of Microinsurance in Kenya. A Case of Selected Insurance Companies. for the period ending : 16/August/2025.

License No: **NACOSTI/P/24/38790**

284590

Applicant Identification Number

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