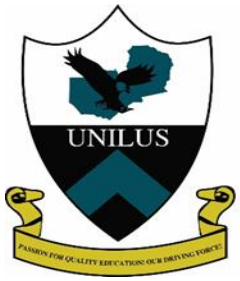

UNIVERSITY OF LUSAKA

SCHOOL OF POSTGRADUATE STUDIES

ENHANCING RISK MANAGEMENT PRACTICES IN ZAMBIA'S INSURANCE SECTOR: A COMPREHENSIVE REVIEW

A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, UNIVERSITY OF LUSAKA IN PARTIAL FULFILLMENT OF THE AWARD OF THE MASTER OF SCIENCE IN RISK MANAGEMENT.

BY

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DECLARATION

I, Melvin Choongo, do hereby, declare that this work is verily my own and a product of my resolute and indomitable efforts. It has not been presented in any University or anywhere else possible. Other people's thoughts and ideas used anywhere in this piece have been duly recognized.

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DEDICATIONS

I am delighted to dedicate this research to all the people that assisted me in my academic journey. To my family and friend you have continually supported and encourage me to further my education. This is appreciated and more so to my dad Levy Choongo and my Mum Ruth Choongo.

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Contents

ABBREVIATIONS

COSO-stands for Committee of Sponsoring Organizations of the Treadway Commission

BOZ- Bank of Zambia

ERM – Enterprise Risk Management

IMF – International Monetary Fund

NHIMA – National Health Insurance Management Authority

RMG – Risk Management Governance

ZIA – Zambia Insurance Association

ZISC – Zambia State Insurance Corporation

ICT – Information and Communication Technology

ISO- International Organization for Standardization

OECD – Organisation for Economic Co-operation and Development

PwC – PricewaterhouseCoopers

UNZA – University of Zambia

RM- Risk Management

Abstract

The study seeks to investigate the effectiveness of risk management in the Zambia's insurance sector. This was done by looking at regulatory support, technological adoption, stakeholder engagement and market conditions. The study also used two control variables, company size and organizational culture. The research majorly engaged explanatory analysis and correction analysis to establish the relationship between the variable and significance associations. Structured questionnaires were developed and circulated using google forms. The key finding indicate that Zambia has not reached a fully-fledged Enterprise-Wide Risk Management (ERM) as of 2024. Key challenges noted are the recoverability of premium debtors, Competition and resultant erosion of premium rates, impact on the amended insurance act and proposed solvency requirements as well as the new accounting system IFRS 17. The study further established that a sound regulatory framework is necessarily, coupled with swift adoption of technology, and concluded with recommending for stakeholder involvement in the implementation of ERM.

CHAPTER 1: INTRODUCTION

The idea of risk has existed since ancient times and has continued to evolve over time, particularly financial risk. Borrowing from the words of Benjamin Franklin he states that the only things certain in life are death and taxes." Early forms of risk management can be traced back to ancient civilizations, where people developed basic methods to manage uncertainty and protect their assets from potential loss. No one can consistently predict the interest rates, or exchange rates or any adverse changes in the environment yet risks that arise from uncertainty can be managed. The word risk is derived from the Latin word "risicare", which means "to dare" [1]risk is now considered as a chance (or probability) of a deviation from an anticipated outcome the effect of uncertainty on objectives.' (ISO 31000, 2018)

In this century, risk management has expanded to cover not only financial risks but also operational, strategic, and reputational risks under the framework of Enterprise Risk Management (ERM). The industrial revolution further formalized risk management, especially with the rise of property and casualty insurance following major events like the Great Fire of London (Dorfman, 2007). Actuarial science, developed in the 19th century, allowed insurers to quantify and manage risk more precisely (Bernstein, 1996; Aven, 2011). Modern risk management frameworks, such as Enterprise Risk Management (ERM) as highlighted above, now take a comprehensive approach to risks, integrating operational, financial, and strategic risks (Aven, 2011)

Risk is a necessary part of doing business, stemming from the principle of reward expected from calculable risk taken and risk management. We live in a world now that has enormous amounts of data are being processed at increasingly rapid rates, identifying and mitigating risks is a challenge for any company compared to when the idea of risk management started as highlighted in the introductory paragraph. It is no wonder then that many contracts and insurance agreements require solid evidence of good risk management practice. ISO 31000 provides direction on how companies can integrate risk-based decision making into an organization's governance, planning, management, reporting, policies, values and culture. This is an open principles-based

[1] Bernstein, P.L. (1996). Against the Gods: The Remarkable Story of Risk. John Wiley & Sons.

system which enables organizations to apply the principles according to the organizational context while maintaining the standard.

This study has incorporated theories underpinning the discussion and findings. These are Enterprise Risk Management (ERM), Stakeholder Theory, and Contingency Theory. There is urgent need to move away from silo-based risk management to ERM hence a consideration of this theory. Stakeholder requires a collaborated effort is the formulation and operations of the risk management framework and finally contingency theory allows for adoption of the best suited practices given Zambia's insurance industry size and the market it operates in as it indicates that the best course of action depends on the situation

Background of the Study

Globally the insurance industry plays a vital role in promoting economic stability and mitigating risks for individuals, businesses, and governments. By offering financial protection against unexpected events, the sector significantly contributes to economic development and resilience (Rejda & McNamara, 2020). However, insurance companies must navigate an environment filled with uncertainties, necessitating robust risk management practices to stay competitive and financially sound. Globally, frameworks like ISO 31000 of 2009 (Njagi & Njuguna, 2017), Committee of Sponsoring Organisation (COSO) which established standard policies, rules and risk regulations to help organisations achieve their established objectives (COSO, 2004) and the Basel guidelines provide comprehensive strategies for managing risks, improving operational efficiency, and ensuring financial stability. These frameworks stress the importance of systematic risk identification, assessment, mitigation, and monitoring to address the ever-evolving challenges faced by the insurance sector (ISO, 2018; Basel Committee on Banking Supervision, 2017).

In Africa, the insurance sector is evolving, but it faces unique challenges including low penetration rates, regulatory inconsistencies, and capacity constraints. According to Doe (2018), these issues hamper the industry's growth and effectiveness. Despite these obstacles, there is a growing acknowledgment of the necessity to adopt international best practices, such as the risk management principles outlined in ISO 31000 and the financial stability measures established by Basel.

The Basel committee from the foundation has stressed the need for best industry practice in order to foster resilience, transparency and accountability in risk management in the financial sector, banks and non-bank financial institutions and the insurance sector is not exempt. This is needed for building trust among stakeholders and ensuring long-term sustainability (ISO, 2018; Basel Committee on Banking Supervision, 2017). Jones and Brown (2018) emphasize that these frameworks are essential for enhancing risk management practices across the continent, enabling insurance firms to navigate emerging risks like climate change, market volatility, and technological disruptions. The use of industry best practice as guided by ISO 31000 and the basel committee bring about improvement of the insurance industry and also bring about resilience and efficiency in the operations of the sector this is according to the research carried out by Asongu and Nwachukwu (2017). These guidelines according to ISO 31000 and Basel committee provide for structured process for risk identification, assessment, and mitigation, an important area to addressing the ever changing dynamics of the insurance industry.

Further Mwansa (2020) and the International monetary Fund (IMF) studies on Zambia's insurance industry, highlighted that Zambia has archived a significant milestones in reducing the gap of industry best practices has where risk management is concerned in the insurance industry. However, the is still some deficiencies roaming with full adoption and alignment of risk management best industry practices just like many other developing countries in the sub-Sahara region and across the African continent and later on to align to global standards.

According to their reports the major challenges that have affected best industry practice and alignment of international best standards are as follows; limited expertise in the area, limited resources, and lagged adoption of technology, this has prevented implementation of an effective management of risks. Emerging risks, including cyber threats and economic fluctuations, further complicate the landscape, highlighting the need for enhanced stakeholder collaboration and capacity building (Mwansa, 2020; IMF, 2020).

Among the any challenges faced by the industry is very low penetration. According to Zambia Statistics Agency, the government agency charged with collecting and summarizing statistics in Zambia, they indicated that Insurance penetration in Zambia

insurance industry was estimated at around 3% in 2020. And as a recommendation they indicated the urgent need for a more robust risk management approach and also practice education and sensitization regarding insurance (ZamStats, 2021). Additionally, studies have indicated that the traditional model of risk management practices (Silos risk management) still continue in the industry. Clear evidence and more literature have continue to show that the silos risk management has failed to address ever changing dynamics of modern risk, these include changing and evolving financial markets, climate change and political dynamics as well as technological developments (ZIC, 2020). This then call for The concept of Enterprise Wide Risk Management (ERM). The major stakeholders in the insurance industry include but not limited to: shareholders, regulators, policyholders, Banks auditors and associations. To archive best industry practice and meeting internation best practice these players have to work together begging with right frameworks and governance.

The pensions and insurance Act of 2019, and the insurance Act of 2021 stand as primary laws that govern the regulation of insurance and practices related to that in Zambia. These are Acts of Parliament in Zambia and enshrined in the constitution of Zambia. The pensions and insurance Act of 2019 guides the establishment, management and operation of the insurance industry as well as individual companies that plays in this industry. The issues around risk management framework implementation and operation are equally overseen. This is aimed at achieving the long-term objective which is financial stability and protecting policyholders in the industry. The Insurance Act, 2021 is the Act of Parliament that repeal and replaces the Insurance Act, 1997 it provides for the following: regulation of the insurance industry; provide for the supervision of insurers, reinsurers and intermediaries; provide for the financial regulation of insurers, reinsurers and intermediaries among others

The research is aimed at exploring the existing risk management practices in Zambia's insurance sector, reviewing the practices comprehensively and making recommendations, emphasizing the role of global frameworks such as ISO 31000 and Basel guidelines. By examining existing practices, regulatory frameworks, and emerging challenges, the research aims to recommend actionable strategies for

improving risk management in Zambia and alignment to best practice and international standards.

According to (Crouhy et al., 2014) the importance of having a robust risk management in insurance industry can not be underestimated. They concluded that having an enterprise wide risk management enables companies to efficiently and effectively identify, mitigate, control and monitor risks as it enables them to proactively anticipate and management risks. Further the study showed a correlation of financial improvement with effective risk management as well as improvent operational efficiency. Thie insurance sector has continued to grow in Zambia and has become an active participant in the Zambia financial markets with bottom line and balance sheets growing steadily over the years.

Given the sector's exposure to market volatility, regulatory demands, operational inefficiencies, and rapid technological changes (Doe, 2018), there are going concerns of whether Zambia has implementation of best risk management practices aligning to global standards. Research indicates that risk management practices in organizations vary widely, influenced by numerous factors (Fadun, 2013a), its application is not uniform as some are inclined to a qualitative approach while others use a quantitative approach (Fell, Ho, Lacasse & Leroi, 2005), and the definition is not uniform (Abuzarqa, 2019). A deeper understanding of the current state of risk management practices in Zambia’s insurance industry and how it can be strengthened is crucial for the sector’s continued resilience and growth. The highlighted factors and need to follow industry best practice alignment to international standards brings out the need for the study to establish the industry is breasted to managing emerging risk and exploits the opportunities that come with modern risks and how they can help to enhance effective risk management (Doe, 2018).

Further studies have shown that Zambia’s insurance sector operates within a complex and ever-changing landscape shaped by a combination of regulatory frameworks, evolving customer needs, technological advances, and economic conditions (IMF, 2020). These factors introduce a range of risks among them; financial, operational, regulatory, and market risk that must be effectively managed to ensure the sector’s stability and protect both insurers and policyholders (Rejda & McNamara, 2020).

The Bank of Zambia financial stability report published in October of 2024, a periodic report published by Bank of Zambia on the financial stability of the general financial market in Zambia. The committee is composed of representatives from various financial industries in the country and various stakeholders with a good representation. There finding wewre that the insurance sector remained stable in the period under review however their resilience is yet to be tested with the new changes that are affecting the industry such as the economic activities and heightened inflation in the near future. Also the changes in Insurance Act on solvency requirements as well as the implementation of the new accounting requirement the IAS17 which was officially come in effect in 2023.

1.3 Problem Statement

Key financial indicators have reviewed that the insurance industry in Zambia has continued to rise. With this growth comes more opportunities, responsibilities and challenges. The BOZ stability report indicates that the gross revenue also known as total written premium rose to 97.8% K 4.9 billion, net revenue also known as net earned premium rose 84.6% to K 2.9 billion and the investment income rose over 100% to all time high, growing by 111 % to K300 million. These growth means also the growth of the asset base as summarized in the industry balance sheet of insurance industry the growth was 9.4 % to ZMW 10.4 billion as at October 2024

This drives a thought of how the current risk management practices operates and as to whether these frameworks are efficient to combat and exploit the ever-evolving risks in the regulatory environment, economic environment, technological environment, and the involvement of stakeholders in the risk management practice. Studies have highlighted concerns that the current frameworks could not be meeting these evolving environments. (Harrington & Niehaus, 2015) indicated that the evolving market dynamics create bring risks and that the sector and companies may struggle to keep up if their risk management frameworks are not improved.

According to the PIA the capital adequacy requirements stipulated in the insurance Act, 2021 and Insurance general regulation of 2022 could see the resilience of the industry weaken as some insurance companies could fall short of meeting this requirement at the end of the transition period in 2025. Further High cost of living cap

uptake of insurance products and services as business and households tend to prioritize spending on necessities, this in turn reduces the revenue (written premiums) that could incapacitate the insurance companies to discharge contractual obligation guaranteed by insurers. The final effect would be on the profitability and liquidity of the insurance companies which is currently considered as their most difficult risk to manage. While some companies have established basic risk management structures, these are often insufficient to handle the increasing complexity of modern risks such as cyber threats, and fluctuating market conditions (Harrington & Niehaus, 2015). Furthermore, there are gaps in the enforcement of regulatory standards and limited stakeholder engagement in refining risk management policies (IMF, 2020).

By focusing on these areas, the study aims to provide practical recommendations for improving risk management in the sector and ensuring the resilience and sustainability of Zambia's insurance industry and the necessity to adopt international best practices, such as the risk management principles outlined in ISO 31000 and the financial stability measures established by Basel. Jones and Brown (2018) emphasize that these frameworks are essential for enhancing risk management practices, enabling insurance firms to navigate emerging risks like climate change, market volatility, and technological disruptions. Moreover, Asongu and Nwachukwu (2017) highlight that the adoption of these practices can significantly improve the sector's resilience and operational efficiency

1.4 Research Objectives

The primary objective of this study is to evaluate and improve risk management practices in Zambia’s insurance sector. The specific objectives are:

1. To assess the current risk management practices in Zambia's insurance sector.
2. To identify the major risks and challenges faced by insurance companies in Zambia.
3. To investigate the effectiveness of the regulatory framework in promoting sound risk management.
4. To investigate how technological innovations can enhance risk management practices.

5. To propose strategies for improving risk management practices in Zambia's insurance industry

Below are the corresponding question to the research objectives. The question are meant to answer and guide the

1.5 Research Questions

This study seeks to answer the following key questions:

1. what are the current risk management practices in Zambia's insurance sector?
2. What are the major risks and challenges in Zambia's insurance sector?
3. How effective is the regulatory framework to foster risk management?
4. How can technological innovation be leveraged to improve risk management?
5. What strategies can be implemented to enhance risk management practices in Zambia's insurance sector?

1.6 Significance of the Study

This research is significant for varying players in the industry and also for other several reasons. The payers of the industry being: insurance companies, academia, business audience, individuals and regulators. Further studies have shown that major considerations has been done on large corporates. Many studies have revealed that regulators of risk management face challenges that need to be overcome especially on the scientific approach to risk evaluations and regulations. Su, Huang, and Drakeford (2019)

It will contribute to the existing knowledge base on risk management within Zambia's insurance sector, providing valuable insights into the challenges and opportunities faced by industry stakeholders. Additionally, the study will offer practical recommendations for insurers, regulators, academic, and policymakers to strengthen risk management frameworks, thereby enhancing the sector's capacity to cope with emerging risks.

For insurance companies, the research findings can serve as a guide for improving internal risk management processes, incorporating new technologies, and ensuring compliance with regulatory standards. For policymakers and regulatory bodies, the study will highlight areas where reforms may be needed to promote better risk management across the sector. Lastly, academic researchers will benefit from the empirical data and analysis generated by the study, which can inform future investigations into risk management practices.

1.7 Scope of the Study

This research will focus on Zambia's insurance sector, examining the risk management practices employed by life and non-life insurance companies. The study will explore how these companies manage financial, operational, and regulatory risks, as well as their response to technological advancements and market shifts (Rejda & McNamara, 2020). Key stakeholders, including insurance firms, regulatory authorities, policymakers, and industry associations, will be involved in the research (IMF, 2020).

The study will cover the period from 2015 to 2023, offering a comprehensive analysis of recent developments and trends in the sector. While the geographical scope is limited to Zambia, international best practices in risk management will also be reviewed to provide comparative insights (Crouhy et al., 2014).

1.8 Limitations of the Study

While this research aims to provide a thorough analysis of risk management practices in Zambia's insurance sector, there are some limitations. One potential challenge is data availability, as some insurance companies may be unwilling to disclose detailed information about their internal processes. Additionally, the reliance on qualitative data from interviews and focus groups may introduce some bias. However, efforts will be made to cross-check and verify data from multiple sources to ensure accuracy (Miles et al., 2020).

Furthermore, the study's focus on Zambia's insurance sector may limit the general applicability of the findings to other contexts. However, the inclusion of international

best practices will provide broader insights that could benefit stakeholders beyond Zambia (Mwansa, 2020).

1.9 Organization of the Study

The study is divided into five chapters. Chapter One introduces the study, outlining the background, problem statement, research objectives, research questions, significance, scope, and limitations. Chapter Two reviews existing literature on risk management in the insurance sector, with a particular focus on Zambia and international practices. Chapter Three discusses the research methodology, including the design, sampling, data collection, and analysis techniques. Chapter Four presents the findings, while Chapter Five concludes the study with a discussion of the results and recommendations for improving risk management in Zambia's insurance industry.

CHAPTER 2: LITERATURE REVIEW

This chapter examines the current literature on risk management within Zambia's insurance sector, focusing on crucial concepts such as risk, risk management, risk management frameworks, and enterprise risk management (ERM). Risk refers to the potential for adverse events that could affect organizational objectives, while risk management encompasses the processes of identifying, assessing, mitigating, and monitoring these risks. The ERM approach advocates for a comprehensive, organization-wide strategy for managing risk, aligning it with strategic goals and decision-making processes. The review also explores the influence of regulatory frameworks, administered by the Pensions and Insurance Authority (PIA), on shaping risk management practices in Zambia. It emphasizes the importance of stakeholder engagement in effective risk management, fostering collaboration between regulatory bodies, insurance companies, and policyholders. Theoretical perspectives such as ERM theory, stakeholder theory, and contingency theory provide the foundation for understanding various risk management approaches. This review aims to establish a thorough conceptual basis for analyzing the risk management practices within Zambia's insurance sector**.**

2.1 Introduction

Risk management is vital in the insurance industry because it aims to protect firms from uncertain events that can jeopardize financial stability (Rejda & McNamara, 2020). Insurers are tasked with identifying, assessing, and mitigating risks, as failure to do so can lead to financial losses and reputational damage. Hull (2018) stresses that, particularly in volatile and emerging markets like Zambia, insurance companies face an array of risks ranging from financial instability, operational risks, to regulatory pressures. In Zambia, these challenges are further compounded by macroeconomic difficulties, limited technological infrastructure, and increased demand for improved governance and risk management practices (International Monetary Fund [IMF], 2020). This chapter discusses these key risk management challenges while exploring strategies, frameworks, and practices that can mitigate them in relation to international standards.

Risk management is a crucial issue, not only for the survival and profitability of the insurance industry, but also for the socio-economic growth and development of the whole economy. As major risks underwriters, insurance companies need to adopt good practices or quality measures in the management of financial risk. This is important, more so, as the industry prepares to re-position itself to underwrite the risks in the emerging markets (Oscar Akotey, J. and Abor, J. 2013)

2.1.1 The Regulatory Environment in Zambia's Insurance Sector

The regulatory environment is a critical factor in shaping risk management practices in any industry, especially the insurance sector. In Zambia, the Pensions and Insurance Authority (PIA) oversees the sector, implementing regulations such as the Insurance Act No. 27 of 1997 and the Pensions Scheme Regulation Act No. 28 of 1996. These regulations are designed to safeguard the financial stability of insurers, ensuring compliance with capital adequacy requirements, governance standards, and risk management protocols (IMF, 2020). However, several scholars argue that the effectiveness of these regulatory frameworks is undermined by limited enforcement, inadequate resources, and inflexibility in adapting to emerging risks in the market (Doe, 2018; Yin, 2018).

Zambia's regulatory framework, while comprehensive in intent, often struggles to keep pace with the evolving global financial landscape and the rapid technological advancements affecting the sector. The IMF (2020) highlights that the regulatory body lacks the capacity to implement reforms swiftly and effectively, particularly in response to the emerging risks posed by digitalization, cyber threats, and new financial products. Moreover, Mwansa (2020) emphasizes that Zambia's insurance sector remains heavily regulated in ways that constrain innovation and operational flexibility, posing additional challenges for risk management. This regulatory environment, though protective, presents limitations that may hinder insurers' ability to effectively identify, assess, and mitigate modern risks.

In response to these challenges, scholars like Tsegaye and Hassen (2021) propose a model for regulatory reform that focuses on improving the agility and responsiveness of the PIA. They argue that Zambia's regulatory bodies must incorporate global best

practices in risk management while simultaneously addressing the unique challenges of the Zambian market, including resource constraints and technological gaps.

2.1.2 Risk Management Frameworks in Zambia

A well-established risk management framework is essential for effectively managing risks in the insurance sector. Risk management frameworks are typically structured processes that enable organizations to identify, assess, and respond to potential risks systematically (Creswell & Creswell, 2017). In Zambia, however, the insurance sector faces challenges in implementing robust risk management frameworks due to factors such as limited resources, insufficient training, and a lack of specialized risk management personnel. According to Miles, Huberman, and Saldana (2020), this gap in expertise makes it difficult for Zambian insurers to adopt and implement effective risk management strategies.

Chifwelu (2020) conducted a research to determine the influence of risk management on the financial performance of Zambian insurance companies. She employed a mixed-method approach to gather data on a sample size of 45 insurance company employees, utilising both a questionnaire and interviews to come up with both quantitative and qualitative data approaches. The interviews were performed with important informants from several departments, including managers and other employees. Individual content examination and analysis were employed to analyse qualitative data, while quantitative data was analysed using Stata. The study also used regression analysis, which demonstrated that the majority of Zambian insurance companies have used risk management approaches in their operations, which has had a substantial influence on their financial performance

To address these shortcomings, Harrington and Niehaus (2015) advocate for a comprehensive approach to risk management, which integrates risk management practices into the overall strategic framework of the organization. This strategy emphasizes the proactive identification and mitigation of risks before they escalate, which is especially important in emerging economies like Zambia, where economic volatility and regulatory changes can introduce unpredictable risks. Additionally, risk management should be tailored to the unique challenges of the local market (Jones & Brown, 2018; Smith, 2019).

Some studies have highlighted the need for frameworks that combine traditional risk management models with new tools, such as data analytics and machine learning, to increase their effectiveness. For example, Landers (2018) discusses how advanced data analytics can be used to identify emerging trends in the market and predict potential risks with a higher degree of accuracy than traditional methods. This approach can be particularly beneficial for Zambia's insurance industry, which faces complex and dynamic risks such as market volatility, regulatory shifts, and natural disasters.

A framework specifically tailored to Zambia’s economic and regulatory environment could help insurers better manage these risks. Researchers like Mwansa (2020) argue that such frameworks should be adaptable to the changing needs of insurers while aligning with international standards. Additionally, integrating risk management with organizational strategy could help insurance firms in Zambia better anticipate and mitigate risks (Harrington & Niehaus, 2015).

2.1.3 Stakeholder Involvement in Risk Management

Stakeholder involvement in risk management is crucial for creating robust and comprehensive frameworks. Stakeholders such as insurance companies, regulatory bodies, policyholders, and industry associations all have valuable perspectives that can enhance the overall effectiveness of risk management strategies (Pritchard, 2014). However, in Zambia, the engagement of key stakeholders in risk management processes has been limited due to poor coordination, lack of effective communication, and insufficient collaboration between different industry players (Mwansa, 2020).

Jones and Brown (2018) suggest that fostering partnerships between regulatory authorities, insurance firms, and industry associations can strengthen the risk management frameworks in Zambia by promoting shared knowledge, experience, and collective action. This approach aligns with the principles of Stakeholder Theory, which holds that organizations are more likely to succeed in their risk management efforts when they actively engage with and consider the concerns of all stakeholders (Freeman, 1984; Mitchell, Agle, & Wood, 1997). In Zambia, improving stakeholder collaboration could result in more inclusive and responsive risk management practices, better able to address the complex challenges facing the sector.

Research by Mitchell et al. (1997) indicates that stakeholder involvement can improve risk management outcomes by ensuring that all parties are aligned and that their interests are considered. This aligns with the findings of Mwansa (2020), who advocates for stronger industry-wide cooperation in Zambia to improve the sector's ability to respond to emerging risks and regulatory challenges.

2.1.4 Impact of Emerging Technologies

Technological advancements have a significant impact on the effectiveness of risk management strategies in the insurance sector. Technologies such as data analytics, artificial intelligence (AI), machine learning, and blockchain have revolutionized how insurers assess and mitigate risks (Maynard, 2010; Harrington & Niehaus, 2015). These tools allow insurers to analyze large amounts of data, identify emerging risks, and develop more accurate risk profiles. However, the adoption of these technologies in Zambia's insurance sector has been slow due to factors such as high costs, inadequate infrastructure, and limited access to skilled professionals (Landers, 2018; Rejda & McNamara, 2020).

A key challenge in Zambia is the lack of digital infrastructure and the high costs associated with implementing cutting-edge technologies. However, research suggests that Zambian insurers could greatly benefit from technological advancements that enable real-time data analysis and decision-making. Landers (2018) posits that emerging markets like Zambia could achieve significant competitive advantages by adopting these technologies, enabling them to better predict and mitigate risks in an increasingly complex and interconnected global environment.

Mukherjee (2019) also highlights the potential for digital tools to improve insurers' ability to meet local regulatory requirements. By using technologies like AI and machine learning, insurers can automate compliance checks, improve reporting accuracy, and reduce operational risks. In Zambia, the adoption of these technologies could help insurers better manage emerging risks while improving operational efficiency and compliance.

2.2 Empirical Studies on Risk Management Practices

Empirical studies on risk management in the insurance sector provide valuable insights into the methodologies employed, the knowledge gaps identified, and the findings that shape current understanding of the subject. This section critically examines the methods used by previous scholars, evaluating their strengths, weaknesses, and appropriateness in addressing risk management challenges. It also highlights the key findings of these studies and the gaps that remain in the literature, particularly in the context of emerging markets), African and Zambian studies.

Empirical studies reveal that insurance firms in emerging markets often encounter unique challenges such as regulatory restrictions, resource constraints, and market volatility, which complicate the development of effective risk management frameworks. Malz (2011) and Smith (2019) highlight that while there is a growing awareness of the importance of risk management in Zambia, significant implementation gaps remain. The two scholars used quantitative approaches in their study, this is appropriate in contexts with well-documented risk management data, the methods are highly effective; however, in Zambia, where data is often fragmented or limited, their utility is constrained. The advantage is that these methods are beneficial for analyzing large datasets and identifying correlations or trends in risk management practices. They are especially useful in providing generalizable insights across a population. On the other hand the downside is that quantitative methods often fail to capture the nuanced and contextual factors influencing risk management, particularly in unique environments like Zambia's emerging market where the sector is developing.

Doe (2018) and Mwansa (2020) point out that while Zambian insurers are increasingly aware of the importance of risk management, many lack the financial resources, technical expertise, and infrastructure to implement effective risk management practices. This lack of resources leads to an over-reliance on traditional risk management models, which are inadequate in addressing modern and complex risks such as cyber threats, natural disasters, and regulatory changes. The two stressed that given Zambia's unique economic and regulatory landscape, qualitative methods are particularly well-suited for capturing the localized and context-specific dimensions of risk management. Qualitative approaches allow for a deeper understanding of the specific challenges faced by practitioners, including insights into regulatory hurdles

and operational realities, the downside that was established using this method was that it is time-consuming and may lack generalizability due to small sample sizes

Creswell and Creswell (2017) and Yin (2018) championed mixed-methods research, combining qualitative and quantitative data to provide a holistic understanding of risk management practices. Mixed-methods approaches combine the statistical rigor of quantitative research with the contextual depth of qualitative research, offering a comprehensive perspective. From the foregoing it proves that the use of mixed method is highly appropriate for studies in Zambia, where both context-specific insights and broader patterns are critical. With the downside being that these methods can be resource-intensive and require expertise in multiple research paradigms.

Studies also emphasize the need for risk management frameworks that are adaptable to local conditions while aligning with international best practices. This highlights the importance of developing customized frameworks that can address the unique challenges faced by Zambian insurers (Smith, 2019). Empirical evidence suggests that while there is a growing awareness of the need for effective risk management, the gap between awareness and implementation remains a critical challenge in the Zambian insurance sector. This is the gap the research aims at address and to make recommendations for using the comprehensive and highly appropriate approach as discussed above the mixed mode.

A study by Khan et al. (2024) examined the impact of Corporate Risk Management (CRM) on firm performance and risk mitigation across nine Asian emerging markets, analyzing data from 4,609 firms. The findings indicate that implementing CRM frameworks enhances firm performance by enabling better capitalization on market opportunities and significantly reduces firm-specific and systematic risks. This underscores the importance of institutionalizing risk management practices to maintain robust contractual agreements and strategic partnerships with key stakeholders. Mansour et al. (2025) investigated the effects of International Financial Reporting Standard (IFRS) 16 on firm risk within the Egyptian market, utilizing data from 38 firms between 2014 and 2022. The study revealed that IFRS 16 implementation is associated with increased firm risk; however, managerial overconfidence can mitigate this effect. This highlights the critical role of managerial behavior in financial reporting and risk management within emerging markets

Santorry (2024) evaluated the impact of emerging technologies—such as artificial intelligence (AI), blockchain, big data analytics, and cloud computing—on operational risk management in financial institutions. The study found that these technologies enhance risk management by improving accuracy in risk detection, increasing response speed, and reducing human error. For instance, AI and machine learning facilitate real-time monitoring and predictive analytics, while blockchain technology enhances transparency and security in transactions, thereby mitigating fraud-related risks.

2.3 Theoretical Framework

This study adopts a theoretical framework that integrates principles of Enterprise Risk Management (ERM), Stakeholder Theory, and Contingency Theory. ERM principles are essential for establishing comprehensive risk management strategies that involve risk identification, assessment, and control across an entire organization (Harrington & Niehaus, 2015). According to Freeman (1984), Stakeholder Theory emphasizes the importance of engaging with all relevant stakeholders to create risk management frameworks that reflect the concerns of various parties. Lastly, Contingency Theory, as described by Mitchell et al. (1997), asserts that risk management practices should be tailored to fit the specific context in which an organization operates. This theoretical framework is especially relevant for the Zambian insurance industry, where the local economic, regulatory, and technological context must inform the development of effective risk management strategies.

2.4 Conceptual Framework

The conceptual framework for this study on enhancing risk management practices in Zambia’s insurance sector is rooted in the integration of key theoretical perspectives, empirical evidence, and practical considerations. The framework highlights the relationships between the core variables, illustrating how various factors influence the effectiveness of risk management practices in Zambia's insurance industry. The conceptual framework draws from Enterprise Risk Management (ERM) theory, Stakeholder Theory, and Contingency Theory, each offering a unique perspective on risk management.

2.4.1 Key Concepts in the Conceptual Framework include the following:

Risk: this refers to the probability of an event occurring that could lead to loss, harm, or damage (Rejda & McNamara, 2020). In insurance, risks are classified into operational risks, market risks, credit risks, and regulatory risks. Zambia's insurance firms must proactively identify and manage these risks to remain solvent and competitive in a dynamic environment (Smith, 2019).

Risk management: this is the systematic process of identifying, evaluating, and controlling risks that could hinder an organization from achieving its objectives (Harrington & Niehaus, 2015). Effective risk management in insurance involves proactive identification and response to potential threats, especially in a regulated sector like Zambia's, where firms must comply with strict rules imposed by the PIA (Mwansa, 2020).

Risk management framework: this is the framework that provides a structured process for risk identification, analysis, mitigation, and monitoring. It ensures alignment with the organization's strategy and regulatory requirements (Jones & Brown, 2018). In Zambia, this framework is shaped by the Insurance Act No. 27 of 1997 and PIA's regulations, which provide guidelines on governance, capital adequacy, and operational controls (IMF, 2020).

Technological advancements: with new developments we have things such as big data analytics, artificial intelligence (AI), and machine learning, that play a vital role in enhancing risk management processes (Maynard, 2010). They enable firms to anticipate risks with greater accuracy, automate decision-making, and improve response times. While Zambia's insurance sector faces challenges in adopting advanced technologies due to financial and technical constraints, embracing these tools could significantly improve the sector's resilience (Mukherjee, 2019).

2.4.2 Theoretical Underpinnings of the Conceptual Framework

Enterprise Risk Management (ERM) Theory: ERM provides a comprehensive approach to managing risk by identifying, assessing, mitigating, and monitoring risks at both strategic and operational levels (Harrington & Niehaus, 2015). ERM shifts from traditional "silo-based" risk management to an integrated, firm-wide strategy. This

theory is particularly relevant in the Zambian insurance context, where firms face multiple, interconnected risks, including operational, regulatory, and financial risks (Mwansa, 2020). ERM principles underscore the importance of integrating risk management with overall business strategy, thereby enhancing risk responsiveness and business continuity.

Stakeholder Theory: introduced by Freeman (1984), asserts that organizations should consider the interests and needs of all stakeholders, including customers, employees, regulators, and shareholders. In the context of Zambia's insurance sector, engaging stakeholders such as the Pensions and Insurance Authority (PIA), policyholders, and insurance firms ensures that diverse perspectives are considered in developing risk management practices. Studies have shown that greater stakeholder involvement results in more transparent, fair, and sustainable risk management frameworks (Mitchell, Agle, & Wood, 1997).

Contingency Theory: Contingency Theory posits that the most effective risk management approach depends on the specific context and environment in which an organization operates (Fiedler, 1967). Since Zambia's economic environment is volatile, with currency fluctuations, inflation, and regulatory uncertainties, contingency-based risk management is crucial. This theory highlights the need for flexibility and adaptability in risk management frameworks to accommodate dynamic changes in Zambia's insurance sector. Contingency Theory emphasizes that a "one-size-fits-all" approach is not feasible for risk management, especially in emerging economies like Zambia.

2.4.3 Variables and Their Relationships

To enhance risk management practices, the following variables are identified and categorized as Independent Variables, Moderating Variables, and Dependent Variables:

2.4.3 .1 A. Independent Variables (factors that influence risk management)

Regulatory Environment

Regulatory policies, rules, and compliance requirements set by the Pensions and Insurance Authority (PIA) and other regulatory bodies. This measures the changes in regulatory guidelines, compliance deadlines, and enforcement mechanisms.

Impact: Regulatory frameworks shape how insurers manage risks by enforcing governance, reporting, and capital adequacy requirements. A flexible and forward-thinking regulatory system enables firms to adopt modern risk management approaches. A strict regulatory environment ensures higher compliance and better risk management, but excessive regulation may limit flexibility (Doe, 2018).

Technological Advancements

The use of new technologies, such as data analytics, artificial intelligence (AI), machine learning (ML), and digital platforms, to improve risk identification, analysis, and mitigation. This parameter measure the level of technology adoption, digital infrastructure, and the number of firms adopting digital tools.

Impact: Technology enhances the efficiency and precision of risk management processes, enabling insurers to detect risks earlier and respond faster. Advanced tools like predictive analytics improve decision-making and reduce uncertainty.

Stakeholder Involvement:

The engagement of key stakeholders such as policyholders, regulators, employees, and industry associations in risk management processes.

Impact: Collaboration with stakeholders facilitates better information sharing, more inclusive decision-making, and more robust risk management frameworks. Greater stakeholder involvement leads to more comprehensive risk frameworks and enhances sector-wide resilience (Mitchell et al., 1997).

Operational and Market Conditions:

Definition: Internal operational challenges (e.g., resource constraints) and external market conditions (e.g., currency fluctuations, inflation, and competition) that affect the risk environment. It Measures Economic indices, market volatility reports, and financial stability ratings

Impact: Economic and operational volatility requires insurers to maintain flexibility and adaptability in their risk management practices. Market shocks and operational disruptions can expose insurers to unforeseen risks.

2.4.3.2 Control Variables (factors that influence the strength of the relationship between independent and dependent variables)

Organizational Culture: The values, norms, and risk appetite of an insurance firm can influence how it responds to risks and adopts risk management improvements.

Firm Size and Resources: Larger firms with more resources are better able to adopt advanced risk management technologies and frameworks compared to smaller firms with limited budgets.

2.4.3.3 Dependent Variable (outcome of the relationship between independent and moderating variables)

Effectiveness of Risk Management Practices:

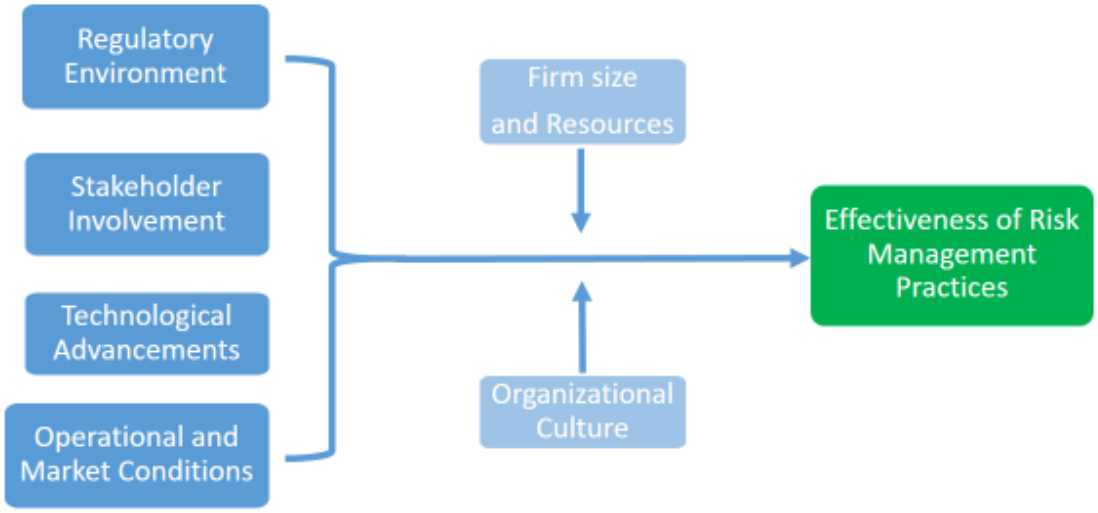
This is the extent to which an insurance company achieves its risk management objectives, such as minimizing financial losses, ensuring regulatory compliance, and maintaining operational stability.

Measurement: Effectiveness will be measured through improved financial performance, fewer regulatory breaches, enhanced competitiveness, and the firm's capacity to withstand market shocks.

Conceptual Framework Diagram

The following diagram illustrates the conceptual framework, showing the relationships between the independent variables, moderating variables, and the dependent variable:

Figure 2.1 Conceptual Framework



In this diagram, the independent variables (Regulatory Environment, Technological Advancements, Stakeholder Involvement, and Operational/Market Conditions) influence the dependent variable (Effectiveness of Risk Management Practices). Moderating variables (Organizational Culture and Firm Size/Resources) impact the strength and nature of these relationships.

5. Research Hypotheses

Based on the conceptual framework, the following hypotheses have been proposed:

H1: A supportive regulatory environment has a positive and significant effect on the effectiveness of risk management practices in Zambia's insurance sector.

H2: Technological advancements positively influence the effectiveness of risk management practices.

H3: Stakeholder involvement positively impacts the effectiveness of risk management practices.

2.5 Summary on literature review.

This conceptual framework illustrates the key factors influencing the enhancement of risk management practices in Zambia's insurance sector. The independent variables (Regulatory Environment, Technological Advancements, Stakeholder Involvement, and Operational/Market Conditions) directly affect the dependent variable (Effectiveness of Risk Management Practices). These relationships are moderated by organizational culture and firm size/resources.

The theoretical foundation draws on Enterprise Risk Management (ERM) Theory, Stakeholder Theory, and Contingency Theory, highlighting that effective risk management is holistic, stakeholder-driven, and context-specific. The conceptual framework will guide this study in identifying strategies that Zambian insurance firms can use to enhance risk management, improve resilience, and meet regulatory standards.

This framework also provides a basis for testing hypotheses, developing methodology, and analyzing findings, ensuring that research conclusions are linked to theoretical constructs. Through the use of this conceptual framework, the study will provide actionable insights into how Zambia's insurance sector can strengthen its risk management practices in a dynamic and uncertain market environment.

Many studies reviewed in the literature review such as Harrington & Niehaus, 2015 and Smith, 2019 highlight the importance of enterprise risk management (ERM) in the insurance sector. While these studies provide useful frameworks, they often assume developed market conditions and may not fully address the unique challenges in emerging economies like Zambia. For instance, Zambia’s regulatory environment, as noted by the International Monetary Fund (IMF, 2020), struggles with resource constraints that hinder effective implementation. A gap exists in how regulatory enforcement can be improved in low-resource settings while maintaining financial stability.

Additionally, empirical studies by Mwansa, 2020 and Doe, 2018 focus on traditional risk management techniques but often fail to assess technological integration in Zambia’s insurance sector. Digital advancements, such as artificial intelligence in risk assessment (Maynard, 2010), have been widely studied in global markets but remain underexplored in Zambia. This highlights a research gap in understanding the barriers

and opportunities for adopting technology-driven risk management strategies in the local context.

Lastly while stakeholder involvement is considered vital (Freeman, 1984; Mitchell et al., 1997), research suggests that collaboration among regulators, insurers, and policyholders remains weak in Zambia according Mwansa, 2020. Existing studies primarily focus on regulatory frameworks but do not adequately examine practical stakeholder engagement strategies that could enhance industry resilience

The literature has identified Research Gaps as summarised below

There is insufficient research on how Zambia can strengthen risk management policies without overburdening insurers, this stands as a regulatory limitation.

Studies have not fully explored how digital innovations can improve risk assessment in Zambia's insurance market that is on technological integration.

More research is needed on how collaborative approaches can enhance risk management effectiveness in Zambia and other emerging markets.

CHAPTER 3: METHODOLOGY

This chapter discusses the research strategy, approach, designs that were employed in the study. provides supporting references and why these were employed to archive the objectives of the study. Its further explores the processes employed to examine how risk management practices can be improved within Zambia's insurance sector. It covers the following topics the approach, study design, the population the study which was the stakeholders in the insurance industry along side the sampling techniques that was used. It further discusses and validates the sampling and data collecting process and tools used to collect data. It finally concludes with the analytical procedure analytical procedures as well as the variable that were devised to archive the objective of the research. The methodology was done in order to have or systematic approach to for collection and analysis of the data to archive both reliability and validity in the findings.

3.1 Research Approach

This study uses a mixed-methods approach, combining qualitative and quantitative techniques. This approach allow for comprehensive address of the research objectives by leveraging the strengths of both methods (Creswell & Creswell, 2017).This approach offers a balanced and in-depth perspective by integrating the nuanced insights of qualitative data with the statistical rigor of quantitative analysis. The mixed-methods approach is ideal for this study as it combines the strengths of both qualitative and quantitative methods. By using surveys to gather measurable data and interviews to capture deeper insights, this approach provides a more holistic understanding of risk management practices in Zambia's insurance sector. mixed-methods approach aligns with the study's aim to provide actionable recommendations for enhancing risk management practices by bridging quantitative trends with qualitative insights (Tashakkori & Teddlie, 2003).

Qualitative Approach: In-depth interviews with key stakeholders such as insurance executives, risk managers, and representatives from regulatory bodies (e.g., the

Pensions and Insurance Authority, PIA) provide a deeper understanding of the challenges and opportunities in the sector.

Quantitative Approach: Surveys are distributed to a broader group, including insurers, policyholders, and regulators, to gather numerical data about current risk management practices.

Rationale: The integration of qualitative and quantitative methods allows for a more robust analysis by cross-verifying findings from multiple perspectives, enhancing the credibility and depth of the study.

3.2 Research Design

The research employs a combination of descriptive, exploratory, and correlational designs to achieve its objectives:

Descriptive research design gives clear overview of current risk management practices in Zambia's insurance sector, which allows the study write about the existing state of affairs in our case risk management in the insurance sector (Babbie, 2020; Creswell & Creswell, 2017). This area of study is under researched and hence the explanatory research was used. The exploratory approach is essential for uncovering new insights, particularly in under-researched areas, such as the integration of emerging technologies in local insurance markets (Saunders, Lewis, & Thornhill, 2019). Correlational design is applied to examine relationships between key variables, such as regulatory compliance, stakeholder involvement, and the adoption of risk management frameworks, offering insights into cause-effect dynamics (Bryman, 2016)

Descriptive Design: Focuses on documenting the current risk management strategies, tools, and frameworks used by insurance companies in Zambia.

Exploratory Design: Investigates emerging challenges, opportunities, and trends, particularly in areas like technology adoption and regulatory reforms.

Correlational Design: Examines the relationships between factors such as regulatory frameworks, technological advancements, and stakeholder involvement, and their impact on risk management practices.

This multi-faceted approach ensures a holistic understanding of both the existing landscape and potential improvements and aligns with the study's goal of providing practical recommendations.

3.3 Study Population

The study targets a diverse group of stakeholders involved in Zambia's insurance sector: This diverse group was chosen to ensure a comprehensive understanding of risk management practices and challenges from multiple perspectives (Saunders, Lewis, & Thornhill, 2019). By targeting these stakeholders, the study captures insights into the operational, regulatory, and technological dimensions of risk management within the sector. These stakeholders include:

Industry Professionals: Individuals like risk managers, underwriters, and senior executives who influence strategic and operational decisions.

Regulators: Officials from the PIA responsible for oversight and enforcement of compliance. As well as the insurance association in this case insurance association in Zambia.

Policyholders: Customers who interact with insurance providers and are indirectly affected by their risk management practices.

By capturing insights from these varied perspectives, the study achieves a holistic view of the sector.

3.4 Sample Size

The sample size, calculated using Cochran's formula for finite populations, ensures statistical reliability and generalizability. The sample size for this study was determined based on the principles of representativeness and feasibility. A calculated sample of stakeholders, including insurers, regulators, and policyholders, ensures the collection of diverse and reliable data (Kothari, 2004). To achieve statistical significance and minimize bias, the study employed Cochran's formula for sample size determination, which is widely recognized for its applicability in social science research. This

approach ensures that the findings can be generalized to the larger population of Zambia's insurance sector (Saunders, Lewis, & Thornhill, 2019). The study plans to engage approximately 100 respondents. This sample size strikes a balance between ensuring meaningful statistical representation and remaining practical in terms of resource and time constraints.

3.5 Sampling Design

A combination of stratified random sampling and purposive sampling is employed: The mixed sampling design was used to ensure a representative and comprehensive dataset. Purposive sampling was employed to target key stakeholders, such as insurance regulators, company executives, and industry experts, whose insights are critical to the research objectives (Etikan, Musa, & Alkassim, 2016). Stratified random sampling was employed to segment the population into distinct groups, such as policyholders and insurance firms, and association members to improve representation and remove biasness (Creswell & Creswell, 2017). This dual approach enhances the study's credibility and ensures robust data collection.

Stratified Random Sampling: Divides the population into distinct groups (insurance firms, regulators, and policyholders) and applies random sampling within each group.

Purposive Sampling: Focuses on selecting individuals with specific expertise, such as senior executives and risk managers, to provide deeper insights.

This dual approach ensures diversity and captures critical viewpoints.

3.6 Data Collection

This study used both primary and secondary and primary data. Secondary data is collected from industry reports, regulatory publications, and academic literature to provide context and validate findings (Saunders, Lewis, & Thornhill, 2019). Primary data was collected using two primary methods: according to Creswell and Creswell (2017) he highlighted the importance of using structured tools like questionnaires and interviews to gather fresh information directly from participants in our case

stakeholders.in addition, Kumar (2019) highlights that primary data is essential in exploratory studies, particularly when investigating under-researched areas, as it provides fresh, unfiltered information directly from the source.

Questionnaires: Distributed to professionals and policyholders to collect quantitative data on variables such as technology use and regulatory impact.

Interviews: Semi-structured discussions with regulators, executives, and senior managers to explore detailed perspectives on the challenges and opportunities in risk management.

Using both methods enables methodological triangulation, enhancing the reliability and comprehensiveness of the findings.

3.7 Data Analysis

The study employs a combination of quantitative and qualitative analysis techniques: According to Creswell and Creswell (2017), statistical software like stata enhances the reliability and accuracy of data interpretation in quantitative research, hence state will be used. Qualitative data, obtained from questionnaire and interviews will undergo descriptive and thematic analysis. This involves identifying recurring themes and patterns within the data, as recommended by Miles, Huberman, and Saldaña (2020).

Quantitative Data: Statistical analysis is performed using software Stata to identify trends and relationships between variables.

Qualitative Data: A thematic analysis is conducted to uncover patterns and recurring themes from the interview transcripts.

This dual analysis ensures a thorough understanding of both numerical trends and contextual insights.

3.8 Study Variables

Key variables are classified as independent variables, dependent variables as well as control variables. Independent variables are the factors that the researcher will assess

for their influence on dependant variable (Effective risk management). For this study, the independent variables include; the regulatory framework, technological adoption and stakeholder involvement. These variables are chosen because they are believed to directly influence the effectiveness of risk management practices in Zambia's insurance sector (Harrington & Niehaus, 2015; Smith, 2019). According to (Creswell, 2014; Yin, 2018) the control variables are other known factors that influence the dependent variable. factors such as company size and the prevailing market and economic conditions but are not the main focus of this research

Independent Variables:

Regulatory Environment (e.g., compliance standards and legislative changes).

Technological Advancements (e.g., AI, machine learning, and analytics tools).

Stakeholder Involvement (e.g., engagement levels of policyholders and professionals).

Operational and Market Conditions (e.g., inflation and market dynamics).

Dependent Variable: Effectiveness of risk management practices, measured by regulatory compliance, financial stability, and minimized losses.

Control Variables: Characteristics such as firm size and organizational culture, which may influence outcomes, are accounted for to maintain accuracy.

3.9 Validity and Reliability

Validity and reliability are very important for any study conducted to guarantee results obtained that they are accurate and consistent. Validity refers to the extent to which the research truly measures what it aims to measure (Creswell, 2014). For this study, construct validity was emphasized to ensure that the regulation, concepts of risk management, technological advancement, and stakeholder involvement are accurately represented in the research instruments (Robson, 2011). The study also consider content validity, ensuring that the survey questions comprehensively capture all relevant aspects of the variables involved (Harrington & Niehaus, 2015).To address potential threats to internal validity, such as bias or errors introduced by external

factors, the research used triangulation by combining multiple data collection methods (interviews and surveys) to cross-check findings and reduce subjectivity (Yin, 2018). Additionally, clear and consistent definitions of variables, along with proper documentation of the research process, will enhance the overall validity of the study (Mitchell et al., 1997).

Internal Validity: Ensured through pre-testing of research tools and the use of established frameworks. The research instruments, such as the survey questionnaire and structured interview, were reviewed by risk management experts and academics to ensure they adequately covered all aspects of risk management in Zambia's insurance sector

External Validity: Enhanced by selecting a representative sample of the target population. To enhance generalizability, the study included a diverse sample of insurance firms, regulators, and industry stakeholders, ensuring representation across different organizational sizes and regulatory perspectives

Reliability: Maintained by standardizing data collection procedures to ensure consistency. Factor analysis was employed to verify that survey items effectively captured the theoretical constructs related to risk management

3.10 Ethical Considerations

Ethical consideration is an important part of the research to ensure that the rights of the respondents are well protected in addition to this the research adhered to the principle of voluntary participation, meaning participants could withdraw from the study at any time without facing any consequences or loss of benefits (Mitchell et al., 1997). Respondents' informed consent was obtained from all participants, ensuring they understand the purpose of the study, their role, and any potential risks involved (Creswell, 2014). The research also strictly abided to confidentiality as guided and was anonymous. Any [personal information was sorely used for the purpose of the study and will be kept confidential and will not be disclosed without their consent (Babbie, 2013). All data will be stored securely, and any identifying information will be removed to maintain the privacy of respondents (Robson, 2011).

Informed Consent: Participants were fully informed about the study’s purpose and their right to withdraw at any time and only those participants that voluntarily accepted participated in the study.

Confidentiality: Personal data was anonymized to protect respondents' identities. Any data that contained identifying information was removed at the collecting point to ensure confidentiality.

Compliance: The study adheres to ethical guidelines from the university and has received approval from a recognized ethics review board.

3.11 Summary

This chapter has detailed the methodology adopted for the study, including the research design, data collection techniques, and analysis methods. The integration of qualitative and quantitative approaches, along with careful ethical considerations, ensures a rigorous and comprehensive exploration of risk management practices in Zambia’s insurance sector.

CHAPTER 4: PRESENTATION AND ANALYSIS OF RESULTS

This chapter addresses issues of interest for the study and is the cornerstone of the presentation of findings that have been highlighted by various respondents, this gives direction for the research. It has answered the primary goal of this inquiry, which was Enhancing risk management practices in Zambia's insurance sector: A comprehensive review and recommendations. Data was gathered to check on the prevailing risk management practices in Zambia's insurance industry and to get practical recommendation from industry experts, regulator and stakeholders.

Data validity and credibility

The first part covers the factors that were considered to assure the trustworthiness of the reported data. Under this section, a discussion on the credibility of data collected is elaborated in terms of how it was done, data checks and description coding. The transferability of the research finding is discussed to afford the comparison of established patterns with other past, current and future research under similar study patterns. The issues of dependability are addressed elaborated in this section with a description of the methodology that will allow future researchers to repeat the probe on the same subject. The section discusses the issues of confirmation admission in terms of the researcher's assumptions taking into account the shortcomings in methodology and the effects they may have on the research.

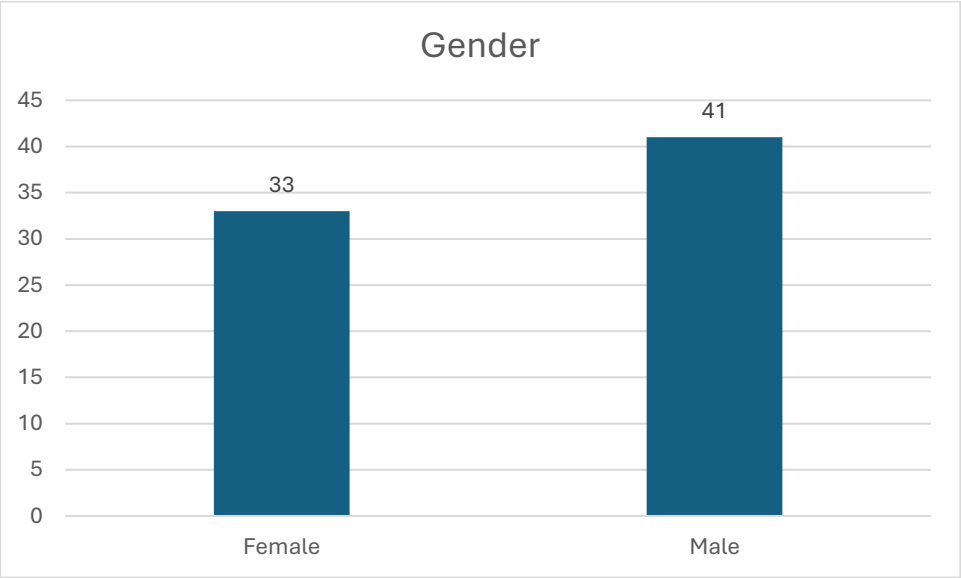
Demographic

The data was collected across among various industry experts and other stakeholders. Questionnaires and structured interviews were administered. These include Directors, risk managers and specialists, underwriters, compliance experts, as well as policyholders. Other sources of secondary data came from journal and publishing from PIA, Bank of Zambia (BOZ), IMF journals, and insurance industry survey report by credible auditors such as PWC. From the methodology, stratified sampling was used to select responded and there was a fair distribution as observed in the graphs below under demographic section.

1. **Gender**

The gender distribution is for 55.41% male and 44.59% female, the results are summarized in the chart below.

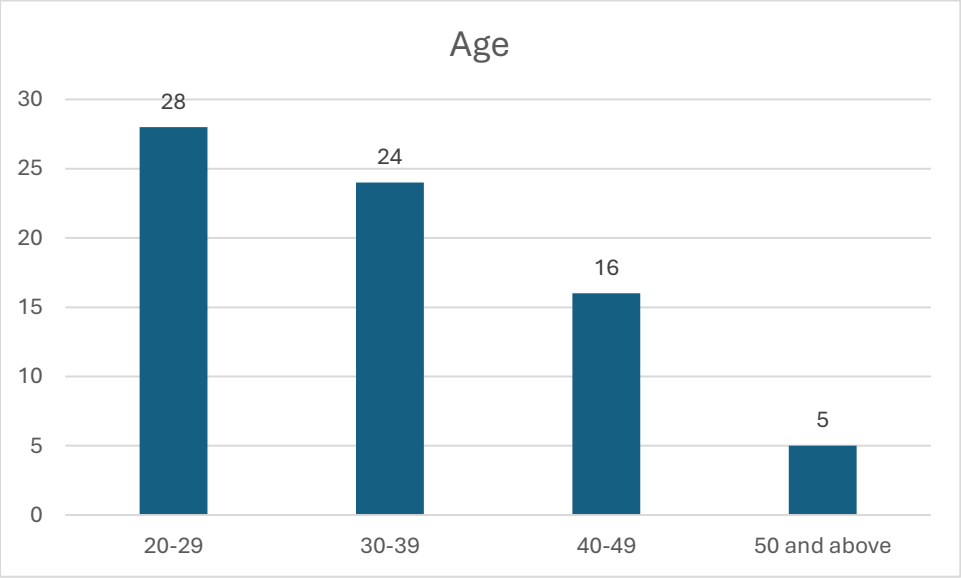
Figure 4.1 Gender distribution.



2. Age

The research was interest to know the age range of the respondents and the distribution is summarised below in the charts.

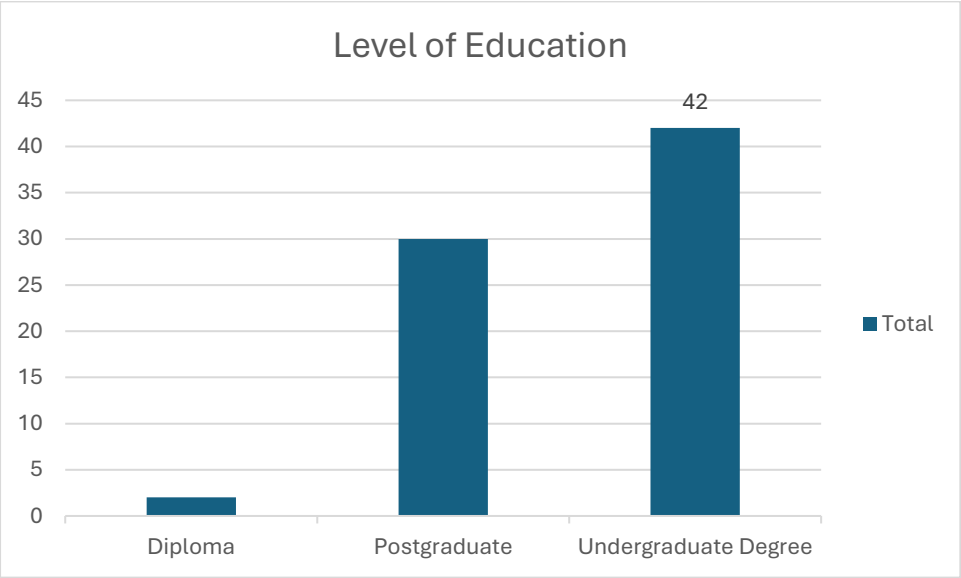
Figure 4.2 Age distribution



3. Level of education

It was also important for this research to understand the level of education for the respondents, the summary is indicated below and will be discussed further.

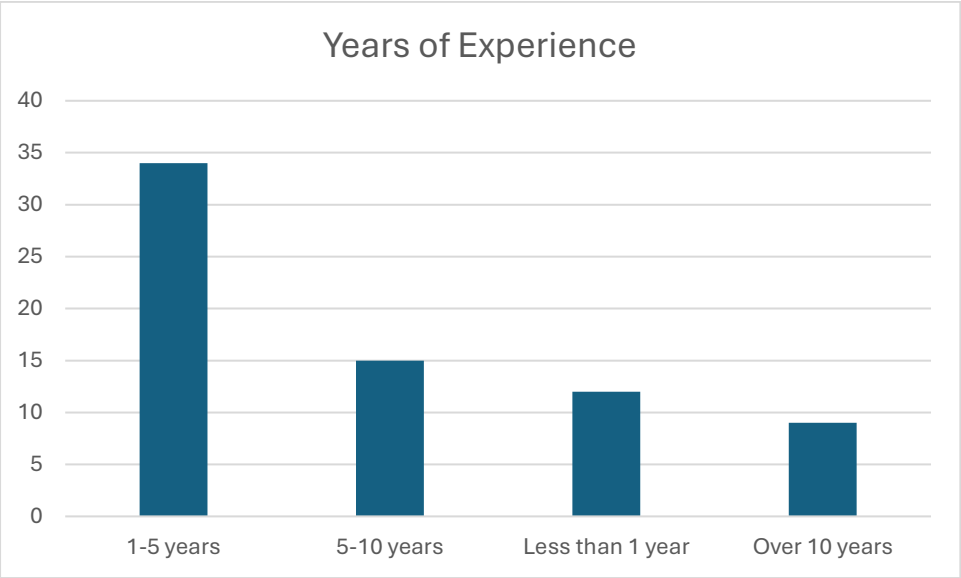
Figure 4.3 level of education



4. Years of Experience

The survey also captured the years of experience for the responded, the summaries are shown below and will be discussed further in the chapter.

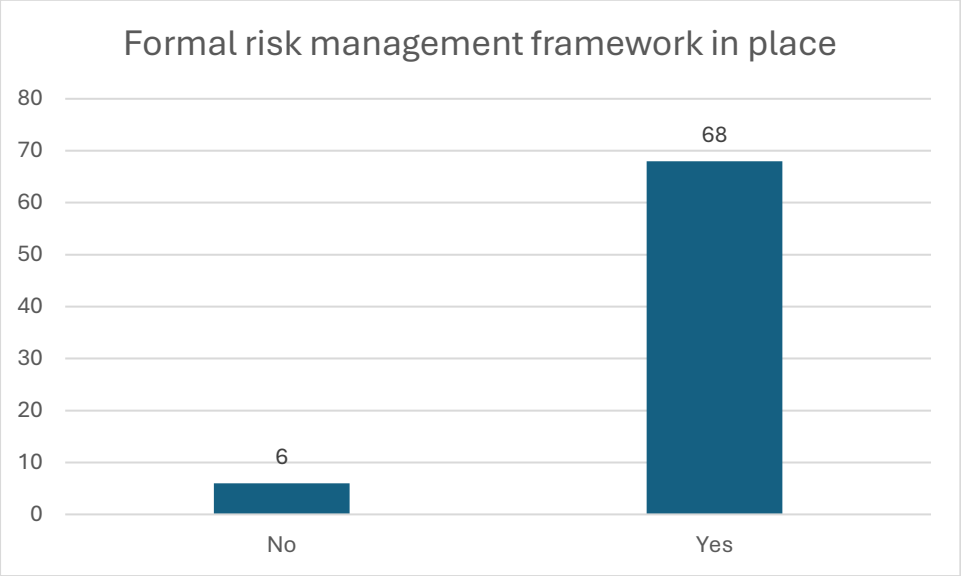
Figure 4.4 years of experience



Formal risk framework.

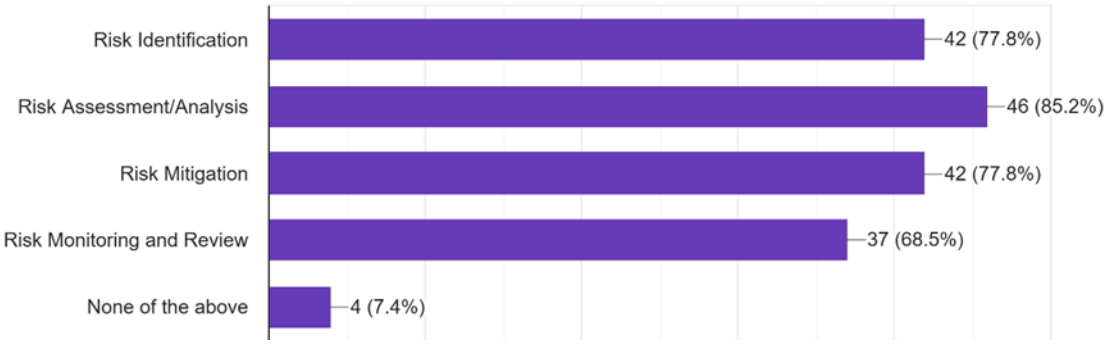
The first inquiry of the research was to find out if the institutions the respondents work for had a formal risk management frame with a defined risk management team. From the table below wee that over 91 percent of the firms have a formal risk management in place against only 8 percent that indicated that they had no formal risk framework.

Figure 4.5 formal/effective risk management



This is already we see that the industry is on a good trajectory as the institution have formal risk management framework that govern risk management. Further we see that the companies follow the all the procedures of risk management begging with identification, risk assessment, risk mitigation and also monitoring and evaluation.

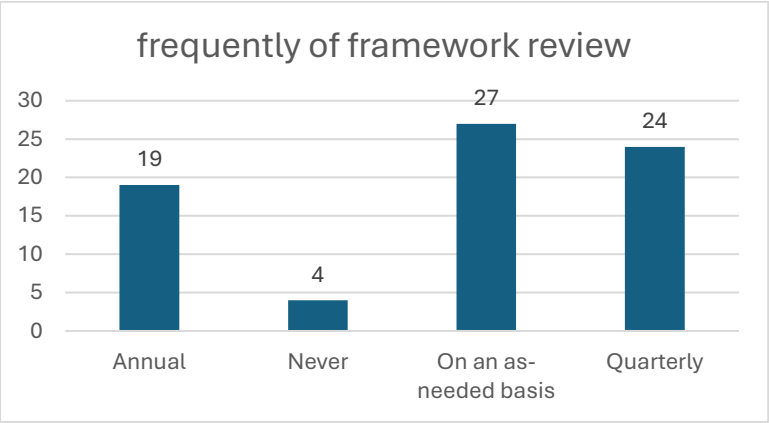
Figure 4.6 risk management processes



Frequency of the review.

The finding that the as-needed basis having is more common among institutions accounting for 36.48%. It is however encouraging to see 32.4% doing a quarterly review while 25.67% have an annual review.

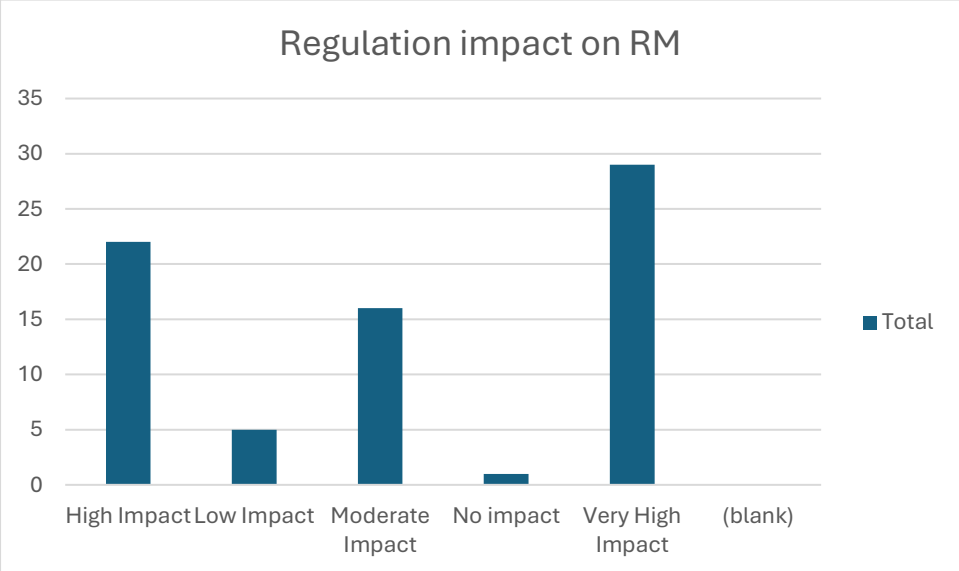
Figure 4.7 frequency of RM review



Impact of regulation on organization's risk management practices

The results show that regulation impact is very important for risk management effectiveness. The table below summarises the results.

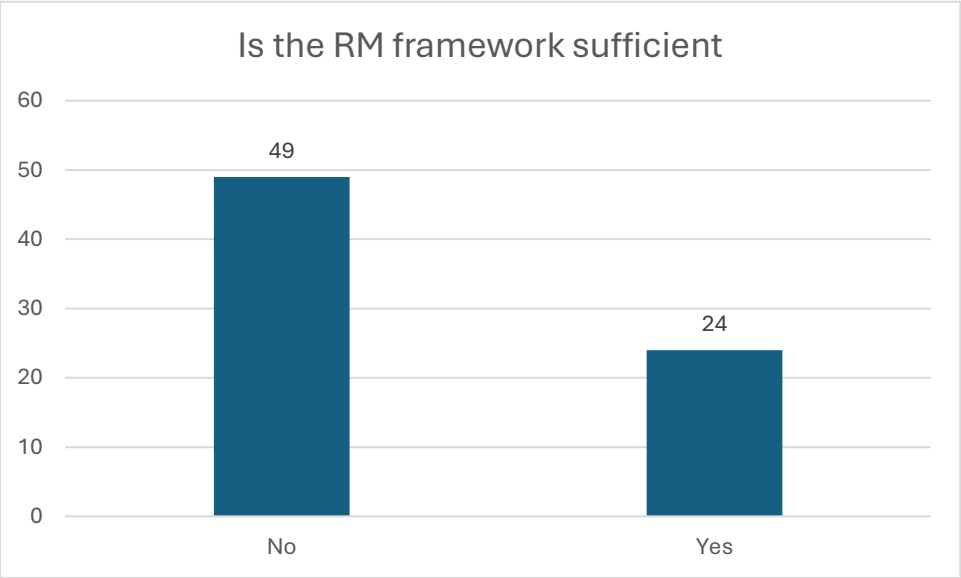
Figure 4.8 Regulation impact



Sufficiency of the framework

The indication is the insufficiency of the framework, 66.22% of the respondents indicated that the framework is not sufficient to enhance risk management framework in the insurance industry.

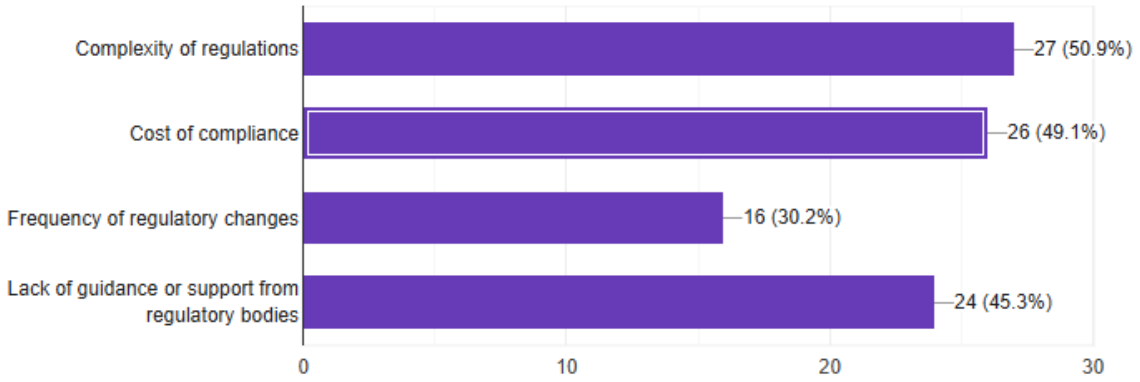
Figure 4.9 framework sufficiency



Challenges faced by organization to implement and operate an effective RM framework.

The following challenges indicated in the figure 4.10 brought out the challenged faced by organisation. The leading challenge was the complexity of the regulation environment and also on the cost attached to regulation and implementation of industry best practice.

Figure 4.10 Challenges for effective RM framework.



ANALYSIS OF THE RESULTS

The next to follow is the analysis of results section in which a systematic order guided by research questions and hypotheses are discussed. This part presents the overall report results of the study but without detailed discussion. The part discusses an overview of demographic information collected. The discussion of research questions and hypotheses follows this section. Data points relevant to the associated research question and hypotheses are discussed under themes and are presented in graphs and tables for all research questions and hypotheses. The section to follow focuses on the evaluation of research findings and attach meaning to them. The section is arranged around topics of the study that are interpreted in light of the theories and/or conceptual framework(s) described in chapter two.

The main objective of this study is to evaluate and improve risk management practices in Zambia's insurance sector. The specific objectives are:

6. To assess the current risk management practices in Zambia's insurance sector.
7. To identify the major risks and challenges faced by insurance companies in Zambia.
8. To investigate the effectiveness of the regulatory framework in promoting sound risk management.
9. To investigate how technological innovations can enhance risk management practices.
10. To propose strategies for improving risk management practices in Zambia's insurance industry

Below are the corresponding question to the research objectives. The question are meant to answer and guide the

1.5 Research Questions

This study seeks to answer the following key questions:

6. what are the current risk management practices in Zambia's insurance sector?
7. What are the major risks and challenges in Zambia's insurance sector?
8. How effective is the regulatory framework to foster risk management?
9. How can technological innovation be leveraged to improve risk management?
10. What strategies can be implemented to enhance risk management practices in Zambia's insurance sector?

Current Risk Management Framework in the insurance industry

1. Acts of Parliament

The insurance industry in Zambia is regulated by the Pensions and Insurance Authority established under the Pension Scheme Regulation Act, 1996. The other act that oversees the industry is The Insurance Act, 2021 is the Act of Parliament that repeal and replaces the Insurance Act, 1997 it provides for the following: regulation of the insurance industry; provide for the supervision of insurers, reinsurers and intermediaries; provide for the financial regulation of insurers, reinsurers and intermediaries among others. The act provides for the management and operation of the insurance industry and gives directions on shareholding structures. This is very fundamental part of the risk management framework given the requirement of the shareholding structure and competences.

2. Pensions and Insurance Authority

The Act further gives power to the Authority (Pensions and Insurance Authority) to issue guidelines set minimum corporate governance standards and practices to be applied by a licensed insurer, reinsurer and insurance broker. Pensions and Insurance

Authority is a regulatory and supervisory body for pensions and insurance companies in Zambia.

As indicated the authority get its powers from the Pensions Scheme Regulation Act and the Insurance Act. The authority is mandated to protest the interests of pension scheme members and insurance policy holders, and to promote the development of the insurance and pensions industries, this sis to be achieved through effective regulation, supervision and excellence in service delivery.

The Insurance Act also provides that the board of directors of a licensed insurer or reinsurer shall have at least five members, sixty percent of whom shall be independent directors. With the key focus now on risk management in financial institutions it requires that the board has one of the directors that has expertise in risk management as it has become an essential part of running and managing financial institutions. The benefit of this is that the tone of risk management and culture are set and driven from the very top of the directors. It is only when the structure at the top is well equipped will the organisation and the industry develop best industry practice in risk management. From the responses given by industry expert emphasis has been given on the composition of the board of director as this give directions and sets a tone for a good risk culture of the industry and organisation.

3. Insurers Association of Zambia (IAZ)

The industry also has an association called the Insurers Association of Zambia (IAZ). This is a member institution for all registered insurance companies in Zambia. It was founded in 1997 by the first few insurance companies that were licensed following the liberalisation of the economy in Zambia. Before the liberalisation of the economy Zambia State Insurance Corporation Limited now ZSIC General Insurance Limited was the only insurance company in the country, allowed to carry out insurance business from 1968 to 1991. With the opening up of the industry this association was formed to speak on the interests of insurance companies. The main objectives of the association are:

To protect, promote and advance the common interests of Members, including the taking of any necessary measures whenever the business of a Member is, or is likely to be, affected by an action or proposed action of any authority, organisation, body or person and to promote professionalism in the conduct of insurance business by the

Members. Other objectives include promotion of knowledge and a clearer understanding of insurance, gather and collate data, information and market-wide statistics from Members, for the purpose of determining market trends and satisfying any other requirements set by the Board from time to time. This makes it a very important association for information and trends in the industry for both research and growth of the industry.

Among its other milestones the association has held annual insurance weeks, last year was the 12th time for the annual insurance week. This serves as a financial literacy campaign aimed at educating the public on insurance. The purpose is to equip citizens with the knowledge and tools to select the right insurance cover for their circumstance.

Summary on Regulation support and effective risk management

Hypothesis 1

H0: A supportive regulatory environment has a positive and significant effect on the effectiveness of risk management practices in Zambia's insurance sector.

The P-value of 0.000 means that it is to reject the null and accept the alternative hypothesis to conclude that there is 95% certainty that the results did not happen by mere chance and that Regulatory support improves effective risk management and brings enforces a formal risk management in insurance organisations.

Figure 4.11 Effective RM and Regulation

```
.
. tabulate formal_risk_framework_ regulatory_support_, chi2
```

Does your organizati on have a formal risk management framework in place?	To what extent do regulatory requirements support effective risk management prac					
	High Supp	Low Suppo	Moderate	No Suppor	Very High	Total
No	1	2	2	1	0	6
Yes	25	1	31	0	10	67
Total	26	3	33	1	10	73

Pearson chi2(4) = 26.5105 Pr = 0.000

Risk Management Practices

As was highlighted in the introduction, risk management is a necessary part of doing business, stemming from the principle of reward expected from calculable risk taken and risk management. The preliminary responses obtained from the respondents have shown that over 90 percent of the insurance companies have a formal risk management framework in place.

With the coming of the IFRS 17 in 2017, though this only came to effect in Zambia in January of 2023. The International Accounting Standards Board finished its long-standing project to develop an accounting standard on insurance contracts and published IFRS 17 Insurance Contracts which replaced IFRS 4. The coming in of IFRS 17 alters the accounting system for business the issue out insurance contracts and investment contracts. This in turn will have an impact on product development and distribution, this requires a change in budgeting and forecasting methodologies used for business planning, which also affect the tax and dividend positions at the end of the financial year.

From the positive definition of risk management, it should be an appreciated model in the insurance sector, this is because the insurance companies have investment in term of bond and guarantees. As highlighted the Bank of Zambia stability report for October 2024 subdued general income growth could lead businesses to fail to discharge contractual obligations guaranteed by insurers, this would in turn lead to an increase in the materialization of performance bonds and guarantees, and ultimately pressure on their profitability and liquidity, which they consider to be the most difficult risk to manage. Hence care also has be done when underwriting these investments.

Factors that influence the review and operation of the framework

There was an interest also to establish the factors that influence the review and operation of the framework. The factors included were as follows, regulatory requirements, industry best practice, company policies and procedures, technological advancements and the prevailing economic conditions. All the factors had a score, with company policies and procedures leading the leader board and the least being technological advancements while regulatory requirements were the second.

From the responses that were received over 91% confirmed that their institutions have a formal risk management in place and only 8.2 percent indicate that they have no formal policy guiding risk management of the institution. The results further show that most companies have a rounded processing of completing the risk management process, that is; identification, assessment/analysis, mitigation and also monitoring and evaluation. This was followed by the frequency of the risk management process are guided by the framework of the company. The preliminary result show that 34.7 percent at least conduct a review quarterly, while 32.7 percent show that the review is conducted as on as when needed basis. We have 28.6 percent that review monthly and a small fraction that never reviews periodically or at all.

Challenges faced in the industry

We live in a world now that has enormous amounts of data being processed at increasingly rapid rates, identifying and mitigating risks is increasingly becoming a challenge for any company compared to when the idea of risk management started as highlighted in the introduction and to this effect the insurance industry is not exempt. Insurance is one of the tools for managing risk, but we divide down to understand how the insurance industry manages its own inherent risk and the governance system in place to ensure that the risk associated with running of business and intermediation are smoothly done.

In the case of Zambia, the following came out prominent as challenges facing the industry: Regulatory environment challenges, collection of subscription premiums from debtor and agents, this also transcends erosion of premiums due to competition among peers, Economic environment and appreciation of the benefits of insurance from many Zambians and other stakeholders.

According to the regulation in the Insurance Act, 2021 capital adequacy requirements have been revised upwards, this is also in line with the Insurance (General) Regulations of 2022. This change could see the resilience of the industry weaken as several insurance companies could fall short of meeting the required capital adequacy by the end of this year, which is the transition period. The new legislation requires Insurers to hold a minimum available capital of 150 percent of their minimum capital requirement which only a handful of insurance firms have achieved thus far

The capital adequacy requirement (CAR) for insurance companies is the ratio of available capital to the minimum capital requirement. Available capital includes paid-up capital, share premium, retained profits, cash and cash equivalent, general reserves, subordinated debt and revaluation reserves for properties. The minimum capital requirement for non-life and reinsurance companies includes risk factored total balance sheet assets, investments in allowable investment, reserves, preceding year gross claims and net earned premiums, reinsurance value ceded to reinsurers and total guarantee policies

The penetration rate marginally increased in 2023 but is still considered low for the size of the economy and compared to the region, as well as the African average rate, which is around 2.78% moving into the first half of 2024, with total assets also recorded growth of 9.4 percent to K10.4 billion while net assets shrunk by 17.8 percent to K1.7 billion as at June 2024

There is no doubt that the economic landscape is changing, the world is becoming smaller. With the implementation of IFRS17 in 2023, the prospect of the African Continental Free Trade Area (AfCFTA) opening up the regional market, and various legislative changes, it is vital that the insurance sector and risk management practitioners are ready to provide a timely and appropriate response to all these changes. We can only strengthen resilience if we interrogate these changes and share ideas on how to adapt and benefit from these changes.

Economic outlook and Insurance

1. **Global economic outlooks**

According to the International Monetary Fund (IMF) and World Bank, global growth for 2024 it was expected to be around 2.9% to 3.0%. This is a slight improvement from 2023, but still below pre-pandemic growth rates (which were closer to 3.5-4.0% annually). The World Bank slightly adjusted its projection downwards, estimating 2.7% global growth for 2024, citing factors such as tighter monetary policies, slower-than-expected recovery in major economies, and geopolitical uncertainties. The ongoing Russia-Ukraine war, tensions in the South China Sea, and other geopolitical risks could further dampen investor confidence and disrupt global trade. Further, high inflation, especially in advanced economies, remains a key concern. Central banks may continue tight monetary policies, affecting consumer spending and investment. It must therefore be noted that while global growth is expected to stabilize, it is still under pressure from high inflation, ongoing geopolitical risks, and a challenging macroeconomic environment. The recovery is uneven across regions, with emerging markets generally expected to outperform advanced economies.

2. sub-Saharan economic outlook

Down to sub-Saharan as of the third quarter of 2024, Sub-Saharan Africa's economic growth and outlook were generally positive but mixed, with several challenges and opportunities shaping the region's trajectory. The International Monetary Fund (IMF) and the World Bank both provide projections that show moderate growth for the region in 2024, with a range of 3.5% to 4.0% growth. This growth, while slightly better than in previous years, reflects a combination of recovery dynamics, commodity price fluctuations, structural reforms, and regional disparities Agriculture remains the backbone of many Sub-Saharan economies, with countries like Ethiopia, Kenya, and Tanzania seeing modest growth in agriculture. However, food security challenges due to climatic shocks, such as droughts and flooding could undermine the potential for growth. Further, there is growing momentum in digital transformation, with advancements in FinTech, e-commerce, and mobile technology in countries like Nigeria, Kenya, and South Africa contributing to economic growth, job creation, and financial inclusion.

3. Zambia’s Economy outlook

As of the third quarter of 2024, Zambia's economic outlook presents a mix of cautious optimism and ongoing challenges. While Zambia has shown some signs of recovery

following years of economic stress, the country continues to face structural challenges, including high public debt, inflationary pressures, and reliance on copper exports.

Annual inflation rose from 9.8 percent in June 2023 to 15.2 percent in June 2024, indicating a significant increase in prices, primarily driven by food costs. The Stanbic Purchasing Manager's Index (PMI) reflected a downturn in business conditions, averaging 48.3 points in Q2 2024 compared to 50.4 points in Q2 2023, with readings below 50 signalling economic contraction.

Further to this The Bank of Zambia also reported reduced economic activity due to rising inflation, fuelled by a weaker exchange rate and drought conditions, which heavily impacted food and energy prices. The economic slowdown led to a downward revision of Zambia's growth forecast for 2024, from 4.4 percent to approximately 2.3 percent 10. The decline was attributed to drought-induced agricultural challenges and low water levels affecting electricity production. However, growth is expected to recover in 2025, driven by a rebound in agriculture and mining, alongside expansions in technology, finance, and insurance sectors. High inflation and constrained energy supplies remain significant challenges, affecting both consumer prices and business operations. However, there are opportunities for growth, especially in sectors like mining, agriculture, and infrastructure development.

Growth opportunities.

Despite these challenges faced there are some opportunities to exploit in the growth and resilience of the industry globally to local markets. The crumbling of the financial markets in the recent past, such as the 2008 economic melt down and the March 2023 failures of Silicon Valley Bank (SVB) and Credit Suisse (CS) has brough about heightening of the risk management models for financial companies. The globally focus now is responding by increasing resilience through risk management. With the support of various worldwide associations, risk management regulators, and risk regulatory authorities, Risk management has grown in importance and relevance in all businesses. With this exposure, it is expected that all Insurance companies adopt and integrate risk management frameworks to the fullest.

Some of the key highlight that were obtained from the structured interview were as follows:

luck of Infrastructure and knowledge in the sector, the industry lacks infrastructure to implement risk management due to the following reasons: Low insurance penetration couple with challenging economic conditions the country has faced these past few years this is because insurance is generally viewed as monthly deductions to an already stretched finances and long struggles to receive the promised services should the need arise. Businesses and households tend to prioritise spending on ‘necessities’ at the expense of taking up insurance cover when faced with low-income levels.

Low adoption of technology in risk management, a laxness by the public in educating themselves on why insurance (in its various forms) is essential to safeguarding quality of life in the medium and long term, while other responded bemoaned the size of the industry. While Key financial indicators suggest that insurance businesses is growing even amid challenges, it still relatively remain very low as an intermediary in the financial system, this space is majorly taken by the banking sector. The banking Sector’s Robust Solvency and Liquidity have continued to foster Resilience of the financial system in Zambia. Due to the size of the insurance industry some experts have bemoaned that some risks are not covered by insurance sector which is a toll of risk management.

Regulation effectiveness and Risk Management

This section answered on whether the regulatory framework in Zambia was sufficient to implement and sustained an efficient risk management. The risk universe is the list of risks the company faces or might face, coupled with a description of their severity and frequency, along with the decision as to what the company wants to do with such risk. It is used as guideline for people managing the risk day in and day out. From the responses the impact of regulation on implementation of an effective risk management was aligned to very high counting for 37.5 percent, high got 33.3 percent and moderate was at 22.9 percent, with low and no impact recording negligibly. This therefore highlights the importance of regulation in risk management implementation. A good regulatory framework brings about an effective risk management. The majority of the industry experts indicated that the framework currently in force was not sufficient to uphold the risk management framework which fits as best industry practice. This is against the background of ISO 31000, IFRS 17 and COSO Enterprise Risk

Management (ERM) framework. The comparison was also made in relation to the region (SADC), and African market.

Consistent management of risk, Lack of ownership from business units who want the Risk Department to identify and manage the risk on their behalf, this is against the background of The Committee of Sponsoring Organizations of the Treadway Commission (COSO) which defines enterprise risk management as: a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives, this increases value to stakeholders. Companies have traditionally managed each type of risk in isolation, rather than on an integrated basis, unfortunately, this "silo" approach to risk management has three disadvantages and these are: Incomplete, Inefficient and Internally inconsistent

The most challenges were also highlight and these include Complexity of regulations, the cost of compliance, guidelines on the frequency and lack of support from the regulatory bodies. The complexity of compliance stood out perhaps not surprising to the recent requirement for the minimum capital requirement which is expected to be completed by the end of the year 2025 and most companies still falling short of it.

Stakeholder effect on effective risk management

Hypothesis 2

H0: Stakeholder involvement does not positively impacts the effectiveness of risk management practices. Based on the findings we reject the null hypothesis and accept the alternative hypothesis since the ($P < 0.05$) as it stands at 0.002 indicating that the is a significant link between stakeholder involvement and effectiveness in the risk management framework. We therefore conclude that among the desired improvements in the sector is that of stakeholder involvement as results clearly show in figure 4.12

figure 4.12 effective RM and stakeholder involvement

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. tabulate formal_risk_framework_ stakeholder_involved_, chi2
```

Does your organizati on have a formal risk management framework in place?	To what extent are key stakeholders (e.g., employees, customers, PIA) involved i			
	Minimally	Not Invol	Somewhat	Very Invo	Total
No	2	3	1	0	6
Yes	13	4	22	29	68
Total	15	7	23	29	74

Pearson chi2(3) = 14.8895 Pr = 0.002

Technological innovations and risk management

According to The International Association of Insurance Supervisors (IAIS) in their December 2024 Global Insurance Market Report (GIMAR), digitalisation and AI systems offer potential benefits for insurers (e.g. streamline processes, reduce costs and improve customer experience). Areas of supervisory concern include increased liquidity risks from potential easier policy surrenders and risks linked with AI underwriting, investment and cyber risks. Supervisory responses focused on increased engagements with insurers to assess governance frameworks, conduct risk surveys, develop compliance requirements for AI and machine learning, and create guidelines to ensure alignment with policyholder rights and to ensure good consumer outcomes. Supervisory responses have tended to focus on areas such as non-life insurance where AI implementation is more advanced.

Increasing access through digital innovation and wider distribution. This requires the use of technology too to improve modelling and analysis of risk in the business. Over 70 percent of industry executives and stakeholder indicated that they use technological tool for model to support the risk management process. Further recommendations where made that technological tools were not only for modelling and analysing risk in the organisation, but useful tools for accelerating growth through competition edge, innovative solutions and for efficiency.

Hypothesis 3

H0: Technological advancements have no influence on the effectiveness of risk management practices.

The P-value of 0.002 means that it is to reject the null and accept the alternative hypothesis to conclude that there is 95% certainty that the results did not happen by mere chance and that Technological advancements influences risk management. The result are shown in figure 4.13

Figure 4.13 effective RM and Technology

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.
. tabulate formal_risk_framework_ technological_support_, chi2
```

Does your organization have a formal risk management framework in place?	Does your organization use any technological tools to support risk management? No	Yes	Total
No	5	1	6
Yes	15	51	66
Total	20	52	72

Pearson chi2(1) = 10.0699 Pr = 0.002

To encourage digital and technological innovation in the insurance industry, The Pensions and Insurance Authority Industry acknowledged aYo by giving awards for, Micro-insurance product of the year, Best Customer Centric Experience, and Product and Service Innovation of the Year. aYo In October 2022 was also awarded the Most Innovative Ecommerce Product in Zambia, by the Institute of Finance and Economics. The success of aYo in Zambia stems from its simplicity in offering, ease in accessibility and affordability of cover, all stemming from linking insurance to actual customer needs and general consumer behaviour. The company partnered with mobile network

company MTN and have seamlessly managed to gain a wide outreach and penetration.

There has been some more development in the sector especially on the health insurance side. Prudential insurance has also steeped up in innovation journey by creating easier access to medical protection & services. They push on expanding options available to the public regardless of where the customer are around the country. This milestone was reached through the launch of the telemedicine platform called PRUCare24. This telehealth program serves as a pioneering tool for the delivery of healthcare, linking patients and providers separated by physical and socioeconomic barriers, all the while mitigating workforce shortages. Below on figure 5.1 the chart show organizations that use technological tools to support risk management against those that do not based on the respondents captured. Figure 5.2 show the technological tools that are employed.

figure 4.14 percentage of technology adoption

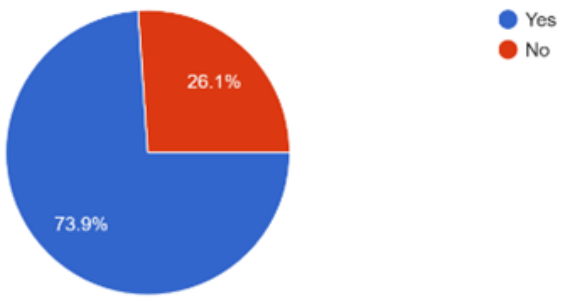
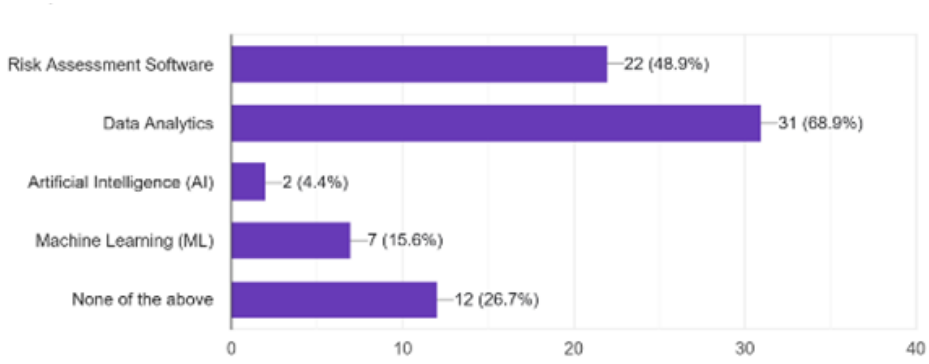


figure 4.15 commonly used technology tools



The willingness and ability for companies to adopt new technology to aid in risk management was also considered and the results indicate that majority of the companies are moderate. This was followed by looking at the barriers to adopting of new technology, high cost was the leading cause followed by resistance to change to modern ways for identifying and managing risks. Risk expertise and limited infrastructure ranked third and fourth respectively while and management support was the least among the considerations. Insurance companies face several challenges in adopting technology for risk management, particularly in emerging markets like Zambia

One of the primary barriers is the high cost associated with acquiring and implementing advanced technological solutions such as big data analytics, artificial intelligence, and real-time monitoring systems. High cost of technological tools that are useful in helping identify and combat risks. In Zambia insurance is mostly common with medical and motor mainly because motor insurance is mandatory for all motor vehicles and also health insurance because most employers subscribe for employees health insurance and also the mandatory health insurance for all employees National Health Insurance Management Authority (NHIMA), insurance companies should spend time to advertise more products like life insurance and property insurance leveraging on the technology available for a wider outreach.

The study highlights gaps in adherence to risk management regulations, suggesting that insurance firms in Zambia struggle with compliance due to limited resources and regulatory complexity (IMF, 2020). This has significant implications for policymakers and regulatory bodies, such as the Pensions and Insurance Authority (PIA), which may need to provide more targeted oversight, training, and enforcement mechanisms that will not burden insurers given that this is an emerging market contained with resources. Further the findings indicate that while some firms have embraced digital tools for risk assessment, a significant number still rely on traditional risk management methods as highlighted by PWC survey report 2022 and also from the studies of Mukherjee, 2019; Landers, 2018 in emerging markets. The limited adoption of data analytics and artificial intelligence suggests an opportunity for insurers to enhance risk prediction and fraud detection through greater investment in InsurTech. This is key for to having and effective risk management practices in Zambia.

Regulators and industry associations could play a role in promoting digital transformation through incentives and policy support. A lack of effective stakeholder engagement emerged as a recurring theme in the study for Zambia's insurance sector. The results indicate that insurers, regulators, and policyholders do not collaborate extensively on risk management strategies (Pritchard, 2014). Addressing this gap requires stronger industry partnerships and knowledge-sharing platforms to improve the sector's overall risk resilience.

Summary

The importance of this chapter to the reader is that it has presented major preliminary findings that further evaluated in chapter five where more attention is given in terms of the research implications, recommendations and conclusions of the research study. This chapter lays the groundwork for the reader to concentrate on the overview of the issue description, goal, approach, constraints, and ethical components. These are also thoroughly presented in chapter five where implications for each research question and hypothesis and how cited the limitations affected the interpretation of the results.

After appreciating this chapter, the reader looks forward to a stage where it is easier to move together and be able to deduce whether the results were as expected from the literature or in conflict with the expected account of events many observable events in deviation from results.

CHAPTER 5: DISCUSSION OF FINDINGS

This chapter discusses in detail the presentation and analysis findings of the data obtained in chapter 4. This is on enhancing risk management in Zambia's insurance industry. The discussions are in light what was found in this research and what was already known. This will further give new insights of the problem having thoroughly investigated using the research objects and the question are aligned to the objectives.

Current risk management practices

The study established that that the insurance sector in Zambia has a formal risk management framework and policies that govern the risk management in the industry. This stems from the Acts of parliament that oversee the operations of the insurance sector and give power to the regulatory authorities which is the Pensions and insurance Authority (PIA). The two Acts are the Pensions and insurance Act and also the Insurance Act. The Act spell out the management requirement and composition of all insurance companies registered. This is good for risk management as the composition require experts and a mix of stakeholder that have expertise in risk management.

The risk management platform in Zambia was first formalised in 2008, when the Central Bank of Zambia issued the Risk Management Guide to all entities in the entire industry of financial institutions, requiring them to create Risk Departments. The country is still with Basel II partially implemented citing several challenges. What is true is that Zambia has not reached a fully-fledged 86 ERM as at end of 2019 (AFI, 2019). By 2018 Zambia lagged on all 3 pillar frameworks of Basel II which were found to be running on a pilot project, being among the 37% AFI countries rated in the category of partial implementation of Basel II. From this status, it has been observed that Zambia has a regulatory system reinforcing risk management practices primarily for financial institutions by the Bank of Zambia as well as the disaster management unit championed by the government of the Republic of Zambia. Mwila (2019) reported several issues surrounding risk management under the disaster management unit. While both central banks and individual enterprises, particularly financial institutions, are making apparent efforts, the present amount of execution of risk management is

unknown. The purpose of this study was to address a knowledge vacuum by analysing the degree of risk management integration levels in Zambia.

However, it was established that implementation of these frameworks remains inconsistent, this aligns with the finding of Mwansa (2020), who indicated that gaps still remain in enforcement and adherence of risk management framework and policy guidelines among insurance companies. There is still use of traditional silos risk management, this is where risk management is not conducted in a holistic approach. The current reliance on traditional methods suggests an urgent need for modernization and alignment with international best practices, ensuring frameworks are dynamic and responsive to market and regulatory shifts. The international standard of risk management now is the adoption of the Enterprise-wide Risk management where were risks are considered as a whole. Rejda and McNamara (2020) emphasize that sustainable insurance operations require comprehensive and actively maintained risk management systems. Pritchard (2014) further supports the need for integrating adaptive risk assessment tools that respond to emerging risks. Hence this gap highlights the need to comprehensive framework that adopts to evolving market and regulatory conditions.

According to ISO 31000 the recommended frequency for organizations to review their risk management framework is annually alternately whenever there are significant changes in the internal or external environment (ISO 31000, 2018). Regular reviews ensure that the framework remains relevant, effective, and aligned with evolving business objectives, regulatory changes, and emerging risks (Fraser & Simkins, 2016). In dynamic markets like Zambia's insurance sector, where economic fluctuations and regulatory updates are common, more frequent reviews—such as semi-annual assessments—may be necessary to proactively address new risks (Mwansa, 2020). Continuous monitoring and periodic updates help maintain a resilient and adaptive risk management system

Challenges in the insurance industry

Th recoverability of premium debtors, this problem seems to be persisting in the insurance industry and rank high among the challenges the industry faces. This is in form of delayed remittance by brokers, agents and the government and indeed policyholder credit risk.

Competition and resultant erosion of premium rates, the growth of the industry come with in with its own, given the size of the industry and the number of firms that have come on board with other financial institutions such as banks offering some forms of insurance has made is very competitive and has thus resulted in the erosion of premium rates.

The role of the regulator and need for regulatory reforms has been one of the major challenges highlighted in the study. The research establishes that there is a strong link between regulation and effective risk management. This align also with other research done on the subject such as the Georges Dionne's Handbook of Insurance, it has an in-depth look on how regulation influences risk management practices and contributes to the overall stability of the industry (Dionne, 2013). In like manner Smith & Brown, 2019, showed how a well-developed regulatory oversight can significantly improve risks management and foster sustainable growth in the sector (Smith & Brown, 2019).

The International Monetary Fund (IMF, 2019) also stresses that effective regulation is key to managing financial risks and ensuring the resilience of insurance markets, particularly in developing economies such as Zambia. These studies have underscored the need to strengthening regulatory enforcement and adopting flexible risk management approaches in Zambia's insurance sector to align with international best practices.

The study also found that the expected impact on the amended insurance act and proposed solvency requirements, according to the new Insurance Act of 2021, has caused a lot of stress and worry on the industry wit only a few companies that have managed to source the required minimum capital requirements. This coupled with the introduction for the new accounting system IFRS 17 which was recently implemented. This is fitting the global challenge as highlighted by Makanjuola 2023, in his article IFRS 17 Challenges, where he brought out some of the common challenges faced with IFRS 17. These include a lack of limited knowledge of the standard and technology, resource commitment, data readiness and timelines implementation.

Regulation of risk management

As highligh in the challenges faced in the insurance sector on regulation, Borraz et al, (2020) found significant differences in the conception and targeting of risk-based inspections by regulators which had starkly different implications in the EU. The same factors appear to be applicable in developing countries. Silva, Silva, and Chan (2019) conducted research in Brazil to evaluate the association between the level of Enterprise Risk Management (ERM) and performance improvement in non-financial businesses. The research found that the major drivers of risk management were legislation, stakeholder demands, and company competitiveness, using a sample of 500 of Brazil's largest and greatest enterprises. Hence regulators are the major determinant of the risk management integration levels.

While the Pensions and Insurance Authority (PIA) has made strides in developing policies, respondents noted that enforcement issues still exist. Doe (2018) underlined the need of more thorough control of regulations and capacity-building to raise compliance. To create risk-resilient financial sectors, the International Monetary Fund (2019) also supports building of regulatory institutions in underdeveloped nations. Smith (2019) also notes that keeping up with changing global risk management criteria depends on consistent review of regulatory systems.

The study established that gap identified exist because of Weak Regulatory Enforcement. This is caused by limited Resources. The Pensions and Insurance Authority (PIA) and other regulatory bodies lack the necessary resources (financial, human, and technological) to enforce regulations effectively (IMF, 2020). This results in inconsistent application of rules and less accountability for insurers. Further according to (Mwansa, 2020) the use of outdated and insufficient regulations that fail to account for emerging risks such as cyber threats, new insurance products, or market volatility. While there have been amendments to the Insurance Act, the implementation and enforcement of these changes are often slow.

To address these gaps the following would be the ideal case

Increased Funding and Resources. The regulators should bargain with the government to allocate more resources to the PIA to enhance its capacity for regulatory oversight. This can include training for regulators, improving technological

infrastructure, and establishing dedicated teams for monitoring compliance with new regulations.

Proactive Regulatory Updates: The regulatory framework should be more dynamic and responsive to emerging risks, including those posed by cybersecurity, climate change, and digital transformation. Regular policy reviews can ensure the regulations remain relevant.

Partnership with International Bodies: Zambia could benefit from collaboration with international regulatory bodies like the International Association of Insurance Supervisors (IAIS) to learn best practices and stay updated on global standards

Stakeholder collaboration

Stakeholder involvement can not be overemphasized, it is a critical component of effective risk management. It ensures that diverse perspectives and expertise are integrated into the decision-making process of formulating and implementation of the framework. In our case these include including shareholders, employees, policyholders, regulators and industry associations. The stakeholders play an important role in identifying potential risks, developing mitigation strategies, monitoring and evaluation and also to foster accountability within organizations (Freeman, 1984). Bringing on board stakeholders promotes a collaborative approach to addressing risks, builds trust, and enhances transparency which is particularly important in dynamic and complex industries like insurance. Stakeholders bring diverse perspectives and expertise, enabling insurance companies to develop comprehensive risk management strategies tailored to local conditions (Smith, 2019).

Pritchard (2014) emphasizes that stakeholder involvement is essential for creating resilient risk management frameworks. By engaging stakeholders early and consistently, organizations can ensure that their strategies are aligned with regulatory requirements, market conditions, and consumer needs. Stakeholder participation also facilitates the exchange of valuable knowledge and insights, enabling companies to anticipate and address emerging risks effectively. Furthermore, Mitchell, Agle, and Wood (1997) argue that inclusive risk management approaches improve the legitimacy of decisions and strengthen organizational resilience against uncertainties.

In Zambia, the importance of stakeholder involvement in risk management cannot be overstated. The country's insurance sector faces unique challenges, such as regulatory constraints, limited technological adoption, and economic volatility (Mwansa, 2020). Engaging key stakeholders, such as the Pensions and Insurance Authority (PIA), insurance firms, industry associations, and policyholders, can help bridge gaps in risk management practices. Jones and Brown (2018) suggest that partnerships between regulatory bodies and insurance firms in Zambia could lead to better enforcement of compliance standards and improved risk resilience. Collaboration with regulators like the PIA can ensure adherence to industry standards and global best practices (IMF, 2020). This works even to the best industry considering the size of the industry, engaging the policyholders and the public, fosters trust and enhances reputation of industry and even for individual firms that are more engaging. This is crucial in a market with growing demands for accountability (Pritchard, 2014). Further more we see that stakeholder engagement can be a source of funding and meeting the capital requirements for solvency in that Partnerships between stakeholders can facilitate the pooling of resources, such as data, technology, and training programs, to overcome challenges related to infrastructure and expertise (Jones & Brown, 2018).

However, stakeholder engagement in Zambia's insurance industry remains limited due to inadequate coordination, a lack of awareness, and insufficient collaboration among stakeholders (Mukherjee, 2019). For instance, Mwansa (2020) notes that some insurance firms operate in silos, focusing on individual risk management strategies rather than collective efforts to address systemic risks.

The gap here is Limited Stakeholder Collaboration Lack of Coordination. There is often a lack of collaboration among stakeholders, such as insurers, regulators, and policyholders, making it difficult to implement comprehensive risk management strategies. Without input from all relevant parties, risk management frameworks tend to be inadequate and disconnected from the realities of the market (Jones & Brown, 2018).

To manage this gap Fostering Stakeholder Collaboration becomes cardinal. There is need for Public-Private Partnerships. A multi-stakeholder approach that includes insurers, regulators, industry associations, and policyholders can improve risk

management. By fostering open communication and collaboration, the industry can better identify emerging risks and develop collective strategies to address them. Furthermore industry Forums such as regular industry forums or roundtable discussions can be held to promote knowledge-sharing and joint problem-solving among stakeholders. This could also enhance the alignment of risk management practices with international standards and the needs of the Zambian market.

Technological advancement and effective risk management.

The research established that the majority of Zambian insurance companies still only use simple IT systems for risk management. However, industry expert indicated and the test run on Stata for chi square regression analysis show that there is a significant link between technology and effective risk management. Innovations in Technology's Contribution to Better Risk Management According to the findings. According to the insurance responded the two Barriers that was highlighted are low technical skills and high implementation costs. This is consistent with research by PwC (2022), which found that Zambia's insurance industry adopted digital solutions and advanced data analytics slowly. Blockchain technology and artificial intelligence (AI) have the potential to greatly enhance real-time risk monitoring and fraud prevention, according to Hull (2018). In order to proactively manage new risks, Landers (2018) also promotes integrating technology into business risk management.

This study enriches the existing literature by offering empirical evidence on risk management practices in Zambia's insurance sector. It identifies critical gaps in regulatory enforcement, technology adoption, and stakeholder collaboration while providing actionable recommendations to address these issues. By integrating theoretical frameworks with real-world data, this research advances the discourse on effective risk management practices (Creswell & Creswell, 2017).

These technologies often require substantial financial investment, which can be a significant burden for smaller firms with limited budgets (Mwansa, 2020). Furthermore, the need for ongoing upgrades and maintenance adds to the financial strain, making technology adoption a daunting endeavor (IMF, 2020).

Another critical challenge is the lack of risk expertise within the industry. Implementing and managing sophisticated technological tools requires skilled professionals who understand both the technology and its application in risk management. Unfortunately, Zambia faces a shortage of such expertise, which is compounded by limited access to specialized training programs and certifications. Brain drains, where local talent migrates to regions offering better opportunities, exacerbates this gap, leaving companies ill-equipped to harness the full potential of technology (Smith, 2019; Landers, 2018).

The issue of limited infrastructure further complicates the adoption of technology. Zambia's insurance sector often struggles with inadequate technological infrastructure, including low internet penetration, outdated systems, and insufficient digital connectivity. These limitations hinder the implementation of real-time risk monitoring and data-driven decision-making, which are critical for modern risk management frameworks (Mukherjee, 2019).

Lastly, the lack of management support is a significant challenge. Many top-level executives in the insurance sector may not fully appreciate the value of investing in technology for risk management. As Pritchard (2014) notes, management often prioritizes short-term profitability over long-term investments in technological advancements. Without a strong commitment from leadership, organizations fail to allocate sufficient resources or develop strategic plans to integrate technology into their risk management processes.

The rest of the questionnaire was open ended to get more views on; how technological adoption can be improved upon, key challenges faced, and the strategies that are being implement or recommended to improve the implementation of a sound risk management in the insurance industry.

To close this gap in Zambia there should be a deliberate effort to promoting Technological Innovation. This can be archived through:

Incentivizing Technological Investments: The government and regulators can offer tax incentives or grants to insurers who invest in new technologies for risk management. This can include AI-driven underwriting, fraud detection tools, or blockchain for claims processing.

Developing Talent: A concerted effort should be made to build a local talent pool capable of driving innovation in the sector. Universities and training institutions can partner with insurers to offer courses on data analytics, cybersecurity, and enterprise risk management.

Summary

In conclusion, the findings stress the urgency for Zambia's insurance sector to modernize its risk management practices. Strengthening regulatory frameworks, embracing technological advancements, and fostering stakeholder collaboration are vital steps toward building a resilient and sustainable industry. Aligning with global standards and adopting adaptive risk management approaches will better equip Zambia’s insurance sector to manage emerging risks and secure long-term growth.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

The study set out to enhance risk management practices in Zambia's insurance sector by identifying existing gaps, challenges, and opportunities while integrating theoretical frameworks to guide practical recommendations. Guided by the principles of Enterprise Risk Management (ERM), Stakeholder Theory, and Contingency Theory, this research sought to evaluate the effectiveness of current frameworks and propose actionable solutions tailored to the unique context of Zambia's insurance industry.

The findings indicate that while risk management practices in Zambia's insurance sector have evolved over the years, significant gaps persist in terms of technological adoption, regulatory alignment, and stakeholder collaboration. Chifwelu (2020) conducted a research to determine the influence of risk management on the financial performance of Zambian insurance companies. Many firms rely on outdated frameworks that inadequately address emerging risks such as cybersecurity threats, economic volatility, and evolving regulatory demands. Moreover, there is a disconnect between theoretical risk management principles and their practical application, largely due to resource constraints and limited expertise

Risk identification was the most critical component in determining financial performance, followed by risk reduction, risk assessment plan implementation and supervision, and vulnerability analysis and measurement. He came to the conclusion that risk management methods adoption and insurance company financial performance in Zambia had a good link. To get the most out of their risk management efforts, the report suggests that insurance 78 businesses in Zambia use a diversified approach to risk management. Furthermore, Zambian insurance firms should embrace Enterprise Risk Management (ERM), which includes various insurance risk quantification methodologies, in order to match current worldwide best practices. Risk management and financial success have a significant link, according to the study, but it did not investigate how far RM had been applied or when the consequences would likely begin to appear. And this research follows in the footsteps of the previous research to determine the risk management levels involved

In conclusion the study's objectives—assessing the adequacy of risk management frameworks, identifying barriers to implementation, and exploring opportunities for improvement—were met through comprehensive analysis. Theories underpinning this research provided valuable perspectives:

Enterprise Risk Management (ERM) emphasized the need for integrated and proactive approaches to managing risks across organizational processes.

Stakeholder Theory underscored the importance of engaging diverse stakeholders, including regulators, policyholders, and insurers, to create inclusive and robust frameworks.

Contingency Theory highlighted the necessity of adapting risk management strategies to Zambia's specific regulatory and market conditions, rather than applying a one-size-fits-all approach.

Propose strategies for improving risk management practices

Based on the findings, the following recommendations are proposed:

1. **Adopt an Integrated Risk Management Framework**

Zambia's insurance firms should transition from siloed risk management practices to a comprehensive ERM framework that aligns risk identification, assessment, and mitigation with organizational objectives. ERM enables firms to anticipate risks proactively and align risk responses with their strategic goals (Fraser & Simkins, 2016). This transition may require capacity-building initiatives, including staff training and system upgrades. This can be archived through strengthening regulatory guidelines. The Pensions and Insurance Authority (PIA) and other regulatory bodies should set clear risk management standards that are comprehensive and cover all areas of risk, such as credit, operational, market, and liquidity risks. These standards must align with global best practices while accounting for Zambia's unique market dynamics. According to IMF, 2020), clear and consistent regulations set the stage for companies to build risk management processes that adhere to national and international standards. Regulatory enforcement also ensures that insurers adopt a uniform approach to managing risk. The Insurance Act should regularly be updated to include comprehensive risk management guidelines, specifying responsibilities and consequences for non-compliance

2. Leverage Technology for Risk Management

The adoption of advanced technologies such as data analytics, artificial intelligence (AI), and machine learning is critical to addressing modern risks. These tools can improve risk prediction accuracy, enhance decision-making, and ensure compliance with regulatory requirements (Rejda & McNamara, 2020). Policymakers and industry leaders should collaborate to provide subsidies or financial incentives for firms investing in such technologies. As indicated in the study finding, the government and regulators can offer tax incentives or grants to insurers who invest in new technologies for risk management (these can range from import taxes for equipment that bring about technology improvement in the sector). A concerted effort should be made to build a local talent pool capable of driving innovation. This can be done in phases but timely with proper planning and resource allocation considering the resource limitation for most companies.

To practically implement technology-driven risk management in Zambia's insurance sector, several key steps can be taken as follows. Insurance firms can adopt digital risk management platforms, use predictive analytics for risk forecasting, and integrate AI tools for claims processing and fraud detection. Additionally, leveraging Insurtech solutions, enhancing cybersecurity, and using mobile technology for customer risk profiling can improve data collection and risk assessment. Real-time digital monitoring, reporting tools, and collaboration with Insurtech startups can also contribute to better transparency and efficiency. However, this shift requires investing in digital literacy and capacity-building to ensure staff are well-equipped to manage these technologies..

3. Strengthen Regulatory Frameworks and Enforcement

While Zambia's regulatory frameworks provide a foundation for risk management, they require periodic reviews to align with global best practices. The Pensions and Insurance Authority (PIA) should focus on ensuring compliance while promoting flexibility to accommodate emerging risks. Additionally, regulatory authorities should invest in capacity building to enhance their ability to monitor and address complex risks (Mwansa, 2020). Motivation is also a way to go by that is for both positive and negative for compliant entities. Ensure that insurance companies comply with local and international regulatory standards setting up industry benchmarks. Regulators

should mandate standardized reporting formats to facilitate benchmarking and comparative analysis across the sector. Finally, there should be more funding for regulators to Enhance the capacity.

4. Promote Stakeholder Collaboration

Stakeholder Theory emphasizes the importance of collaborative risk management practices. Regulators, insurers, industry associations, and policyholders should establish platforms for dialogue and knowledge-sharing. Joint initiatives, such as industry-wide risk assessment workshops and collaborative policy development, can strengthen resilience across the sector (Freeman, 1984).

To promote stakeholder collaboration in Zambia's insurance sector, a multi-faceted approach is required. First, fostering communication between insurance firms, regulatory bodies, and industry associations is crucial for sharing knowledge and best practices. Regular forums, workshops, and roundtable discussions can help in building stronger relationships and aligning goals. Additionally, creating a platform for collaboration on risk management strategies will encourage joint efforts in addressing industry-wide challenges such as fraud, policyholder protection, and market volatility. The involvement of the government in facilitating these discussions and providing incentives for public-private partnerships could further enhance collaboration. Establishing a cooperative framework between stakeholders can lead to shared data, improved regulatory compliance, and a more resilient insurance ecosystem. Encouraging industry-wide collaboration will ensure a more holistic approach to addressing risks and optimizing opportunities in the sector.

5. Develop Tailored Training Programs

Capacity gaps remain a major barrier to effective risk management in Zambia’s insurance sector. Tailored training programs should be developed to enhance the skills of risk managers, particularly in emerging areas such as cyber risk and digital transformation. Universities and training institutions can partner with insurers to offer courses such courses. Companies should have mandatory training and assessment for staff in risk management, then professionals in risk they need advanced risk

management training to be updated on techniques and emerging risks. Comprehensive workshops and awareness campaign so that people don't just see it as a business but actually value it. Educate the public on the benefits of insurance through targeted campaigns.

6. Foster a Culture of Risk Awareness

A strong risk culture is foundational to effective risk management. Insurance firms should promote awareness at all organizational levels, encouraging employees to identify and address risks proactively. This aligns with the principles of ERM, which advocate for embedding risk management into organizational culture and decision-making processes (Harrington & Niehaus, 2015). Improve risk Culture in organisations. Have the right risk culture where management is the driver of the risk agenda. All companies should have a risk management department with specialist personnel with full support from other departments, there must be risk management framework in place and top management must have keen interest.

Educating both industry professionals and the public on the importance of risk management is essential. Insurance companies can implement training programs, workshops, and seminars that focus on identifying, assessing, and managing risks. These programs should be tailored to various stakeholders, including employees, brokers, agents, and policyholders, to ensure that everyone understands the risks involved in the insurance process.

In addition, the use of digital platforms and social media can play a pivotal role in spreading awareness about risks and risk management practices. Regular campaigns highlighting the importance of risk identification and mitigation can empower consumers and other stakeholders to make informed decisions.

7. Periodically Review Risk Management Frameworks

The Contingency Theory emphasizes the need for risk management practices to adapt to changing circumstances. Insurance firms should institutionalize periodic reviews of

their risk management frameworks, ensuring they remain relevant and effective in addressing emerging risks. Annual or semi-annual reviews, guided by external audits or consultants, can identify weaknesses and opportunities for improvement (ISO 31000, 2018).

This research highlights the need for Zambia's insurance sector to embrace a forward-looking and adaptive approach to risk management. While challenges persist, the opportunities for growth and improvement are immense, particularly when guided by global best practices and locally contextualized solutions. By adopting the recommendations outlined in this study, the sector can build resilience, enhance competitiveness, and safeguard stakeholders against the uncertainties of an evolving risk landscape.

Recommendations for future research

Future research should explore the long-term impact of these recommendations, particularly in areas such as technological adoption and stakeholder engagement, to ensure continuous improvement in Zambia's risk management practices.

There is need for research also to establish the real effect of the new insurance act of 2021 on the solvency requirement and the implementation of the IAS17 from its implementation in 2021. **(**Malisa & Partners, 2024**).**

Research to Investigate the Impact of Managers' Risk Management Training on the risk management of an organisation in Zambia and other developing Countries. More study is needed on the influence of technical risk management expertise on risk management integration in organisations so that organisations, policymakers, and regulators can understand the link.

If managers holding risk management positions only have general business qualifications, then their natural inclination or attitude of risk fear, risk-taking or risk neutral (Iswadi, Saputra, Haykal, & Albra, 2019; Holden, Hall & Mailroom, 2010) will be retained and will influence their judgement on risk decision making. The research needs to establish the correlation and the strength it has between managers who have acquired technical knowledge on risk tools, frameworks and models on the decision-making process and RMI

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Appendix

Data Collection Tools - Questionnaire and Interview Questions

Enhancing risk management practices in Zambia’s insurance sector: A comprehensive review and recommendations

Welcome to this survey, which is part of my research study for a Master's Degree in Risk Management. This survey aims to gather information on risk management practices in Zambia's insurance sector.

This survey is anonymous, and all responses will be kept strictly confidential. The data collected will be used solely for academic purposes. Your input will be invaluable in contributing to this important research.

For more information or clarifications kindly contact the researcher: Melvin Choongo

Email: choongomelvin27@gmail.com Phone number: 0977724795

Section 1: Demographic Information

1.Gender

Male Female

2. Age

20-29

30-39

40-49

50 and above

3. what is your education level

High school

Certificate Diploma

Undergraduate Degree

Postgraduate

4.Job title

Risk/Compliance officer Underwriter/Claims officer Risk/Compliance Manager Other:

5. How many years have you been in the insurance sector (even as stakeholder i.e. policy holder)

Less than 1 year

1-5 years

5-10 years

Over 10 years

Section B: Risk Management Practices

6, Does you institution have a formal risk management framework?

Yes No

7, Below are the risk management practice and process, which of the following does your organisation conduct (Select all that apply)

Risk Identification

Risk Assessment/Analysis

Risk Mitigation

Risk Monitoring and Review None of the above

8. What is the frequency for reviewing the risk management farmwork in your organisation.

Yearly

Quarterly

On an as-needed basis

Never

9, From the following factors which one influence risk management? (Select all that apply)

Regulatory Requirements (e.g., compliance with PIA)

Industry Best Practices

Company Policies and Procedures

Technological Advancements

Economic Conditions (inflation, currency fluctuation, etc.)

Section C: Regulatory Environment and Compliance

10. Based on your organisation's risk management process, how do you rate regulatory impact?

Very High Impact High Impact

Moderate Impact Low Impact

No impact

11. Is the regulatory environment sufficient

Yes No

Not sure

12. Among the highlighted challenges which ones does your organisation face? (Select all that apply)

Complexity of regulations Cost of compliance

Frequency of regulatory changes

Lack of guidance or support from regulatory bodies

13. To what extent do regulatory requirements support effective risk management practices?

Very High Support High Support

Moderate Support Low Support

No Support

14. What changes would you recommend to Zambia's regulatory framework to enhance risk management? (Open-ended)

Section D: Stakeholder Involvement in Risk Management

15. To what extent are key stakeholders (e.g., employees, customers, PIA) involved in your organization's risk management processes?

Very Involved

Somewhat Involved

Minimally Involved

Not Involved

16. From the highlighted stakeholders which ones are most influential in shaping the risk management framework? (Select all that apply)

Regulatory Bodies (e.g., PIA) Customers/Policyholders

Employees (internal stakeholders) Senior Management/Executives

Industry Associations (e.g., Insurance Association of Zambia)

17. How effective is stakeholder collaboration influence risk management?

Very

Effective

Effective

Neutral Ineffective

Very Ineffective

18. Are there barriers that you face as an organisation to having active stakeholder participation? (Open-ended)

Section E: Technological Adoption in Risk Management

19. does your institution incorporate any technology to enhance risk management ?

Yes No

20. from the listed tool, which ones does your organisation use for risk management? (Select all that apply)

Risk Assessment Software

Data Analytics

Artificial Intelligence (AI)

Machine Learning (ML)

None of the above

21.How would you rate your organization's ability to adopt new technologies for risk management?

Mark only one oval.

Very High

High

Moderate Low

Not at all

22.What barriers to technology adoption does your institution face?

High cost of technology

Lack of Management Support

Lack of Technical Skills/Expertise Limited Infrastructure

Resistance to Change

23. How can incorporation of technology enhance risk management in your organization?

24. From your experience what are the key challenges faced in Zambia's insurance sector were risk management is concerned?

25. what strategies are can make to enhancing risk management practices in Zambia's insurance sector?

26. Any additional comments or recommendation that can enhance risk management in the insurance sector?