MANAGING ENTERPRISE RISKS FOR SUSTAINABILITY: A STUDY ON COMMERCIAL STATE-OWNED ENTERPRISES (SOEs) DURING THE COVID-19 PANDEMIC IN NAMIBIA

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MANAGING ENTERPRISE RISKS FOR SUSTAINABILITY:
A STUDY ON COMMERCIAL STATE-OWNED ENTERPRISES (SOEs) DURING THE COVID-19 PANDEMIC IN NAMIBIA

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Doctor of Philosophy (PhD) in Business Administration

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Abstract

MANAGING ENTERPRISE RISKS FOR SUSTAINABILITY:
A STUDY ON COMMERCIAL STATE-OWNED ENTERPRISES (SOEs) DURING THE COVID-19 PANDEMIC IN NAMIBIA

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The COVID-19 pandemic affected organisations worldwide, underscoring the need for effective Enterprise Risk Management (ERM). This study explores how pandemic-related challenges affected Namibian commercial state entities, examining existing risk processes, key requirements, and obstacles to ERM implementation. Using an explanatory sequential mixed-methods design, a quantitative survey of 384 cSOE employees assessed risk management capacity and ERM understanding, followed by interviews with 10 management participants on ERM implementation challenges and recommendations.

Using Pearson's correlation in SPSS, relationships between variables were assessed, and linear regression was used to assess impact. Qualitative data analysis used ATLAS. ti for thematic and gap analyses. Findings revealed that challenges imposed by the COVID-19 pandemic had small-to-medium negative effects on the performance of cSOEs in Namibia ($p<0.001$). A strong positive relationship was found between RM effectiveness and risk communication ($r=0.68$, $p<0.001$), risk documentation ($r=0.52$, $p<0.001$), ERM execution and a competent leadership team ($r=0.75$, $p<0.001$) and skilled personnel ($r=0.68$, $p<0.001$). Shortage of risk-trained staff, limited stakeholder engagement, resource constraints, and outdated technology hinder ERM implementation; hence, future studies should explore the financial impact of ERM implementation, particularly in resource-limited settings.

Declaration

This thesis is my sole original work. I declare that the document has not been submitted, either in whole or in part, for a degree at any other institution of higher learning. All sources, references, and acknowledgements used in the preparation of this work are properly cited according to the 7th Edition of the American Psychological Association (APA) citation guidelines.

AI Acknowledgments

I confirm the use of the ChatGPT (OpenAI, https://chat.openai.com/) and Gemini AI (https://gemini.google.com) language models as tools for grammar refinement, spell-check, and structural editing throughout the composition of this thesis across all chapters. I would also like to acknowledge the use of AI in searching for articles during the literature review at the beginning of this thesis and in discussing results in the final chapters.

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Dedication

I dedicate this thesis to God Almighty, who is my strength. I also dedicate it to my children, Howard, Hendrina, and Asher, as well as to my lovely husband, Gotrieb, for their encouragement and support in many ways. When I wanted to give up, they encouraged me to stand and keep pushing. Their continuous support and patience have enabled me to reach this stage today. It has been a long yet amazing journey with my family by my side, and I have felt so strong in their company.

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List of Abbreviations

Abbreviation	Definition
cSOEs	Commercial State-Owned Enterprises
ERM	Enterprise Risk Management
SOE	State-Owned Enterprise
COSO	Committee of Sponsoring Organisations of the Treadway Commission
ISO	International Organisation for Standardisation
SWOT	Strengths Weaknesses Opportunities Threats
COVID-19	Coronavirus Disease 2019
CSR	Corporate Social Responsibility
nCovid-19	Novel Coronavirus of 2019
GDP	Gross Domestic Product
PE	Public Enterprises
MoFPE	Ministry of Finance and Public Enterprises
CAS	Casualty Actuarial Society
ISACA	Information Systems Audit and Control Association
COBIT	Comprehensive Organisational Framework for Information
NIST	National Institute of Standards and Technology
RM	Risk Management
KPIs	Key Performance Indicators
TL	Transformational leadership
LPC	Least Preferred Co-worker
GS	Goal Setting
HBS	Harvard Business School

WTP	Willingness To Pay
SM	Strategic Management
ALARM	Advanced Labour and Risk Management
RCC	Road Construction Company
NCRST	National Commission on Research Science and Technology
RMES	Risk Management Effectiveness Survey
ERMFS	ERM Feasibility Survey
ILO	International Labour Organisation
CIA	COVID-19 impact assessment
SCORE	Sustaining Competitive and Responsible Enterprises
RME	Risk Management Effectiveness Survey
SPSS	Statistical Package for the Social Sciences
SD	Standard Deviation
WAM	Weighted Average Mean
WA	Weighted Average
IPA	Interpretive Phenomenological Analysis
AI	artificial intelligence
APA	American Psychological Association
CAQDAS	Computer-Assisted Qualitative Data Analysis
KRI	Key Risk Indicator
IIA	Institute of Internal Auditors
CRO	Chief Risk Officer
BCP	Business Continuity Plan
CEO	Chief Executive Officer

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CHAPTER ONE: INTRODUCTION

The globe has entered a new era not seen in many years due to the novel coronavirus of 2019 (nCOVID-19) (Chatterjee et al., 2020; Hozhabri et al., 2020). The losses caused by the coronavirus disease (COVID-19) pandemic have affected the operations of most organisations, prompting them to adopt innovative approaches to risk management (RM) to understand how to respond to such calamities as nations attempt to return to normal. Now that global surveillance of the crisis is established (Horvey & Ankamah, 2020), international business task forces are working to mitigate the economic damage caused by COVID-19 and are pivoting their focus towards fostering long-term recovery.

Challenges, such as delays in the delivery of services, equipment, and supplies, as well as technological advancements, have left many people without jobs in many countries (Obrenovic et al., 2020). However, in African nations like Namibia, where State-Owned enterprises (SOEs) are among the primary employers, the situation requires more attention. Commercial SOEs are essential for helping governments in developing countries improve the lives of their citizens.

State entities need careful management because the country's job creation and food security programmes rely largely on government companies. Risk management needs to be properly addressed to ensure that risks that may hinder operations are promptly identified, assessed, and mitigated (Akhmetshin et al., 2019). Therefore, managers and leadership teams in these state entities need to be well informed and understand their roles in improving performance and ensuring the sustainability of state companies.

In many countries, state-owned enterprises, especially commercial ones, contribute to gross domestic product (GDP) through the products and services they

provide (Amwaama, 2026). Government companies, along with private companies, are the main contributors to the country's GDP. Therefore, their performance must be satisfactory to keep the country's economy stable and/or improve it. While they often provide critical services and pursue strategic national goals, SOEs can be inefficient and pose fiscal risks, requiring strong governance and transparency to ensure they remain a net positive for the national economy (Ade et al., 2020). In developing nations, SOEs help reduce income inequality (He & Wei, 2023) by creating jobs and engaging in corporate social responsibility (CSR), such as building houses, schools, and hospitals, and providing other essential services.

Nonetheless, given the current state of most commercial SOEs in Namibia, it is worth forecasting the future of these government entities and the country at large (Kwiatkowski, Gołębiowska, & Mroczek, 2023). Much attention focuses on Namibia's SOEs, from how they are managed to who manages them and who oversees the state enterprise's overall operations. Public Enterprises (PEs) are important tools that governments use to reach a wide range of national development goals. As a result, SOEs need close monitoring to ensure they perform well (Marenga, 2020). Nonetheless, poor performance and maladministration have made many SOEs front-page news. The most concerning part of this discussion is the future of the government's commercial enterprises, which are criticised for failing to meet performance goals and generate the income the government mandates. Additionally, most of these entities are well-known for financial mismanagement, thereby consistently costing the state money (Weylandt, 2017).

According to Phaladi and Ngulube (2022), the extent to which the public accepts the government's administrative processes affects social trust and confidence in government entities. The underperformance of most Namibian PEs can be traced

to several factors, including a lack of performance and financial accountability, high levels of corruption, and irregularities in sourcing (Hlahla & Kaupa, 2024). Hlahla and Kaupa (2024) further argue that the current situation undermines public confidence in the government's capacity to control PEs because of unwavering relationships among shareholders, SOE top management, and the state.

According to Hlahla and Kaupa (2024), leadership selection in SOEs in Namibia, especially for board members, lacks clear guidelines, allowing political intervention. Moreover, because most PEs in Namibia have limited effective communication channels between the government and management, information sharing often falls short. Therefore, it was important to understand how these entities manage risks by examining the capabilities and limitations of the current RM process. Different authors (Dvorski Lackovic, 2022; Gu et al., 2020; Klučka & Grünbichler, 2020) have studied the purpose of organisational risks and the significance of risk analysis; thus, they have encouraged the use of conceptual frameworks that can analyse, identify, and emphasise the importance of RM in any enterprise. This practice is particularly important during a crisis and even afterwards (Gazzola et al., 2022).

Hlahla and Kaupa (2024) argue that government companies need more proactive, knowledgeable, and accountable leadership, and that they should learn from progressive institutions to build resilience and better understand the risks in their industries. Given how drastically the economic climate may change, these leaders must act more strategically, ensuring state companies operate at a meaningful pace with minimal government involvement. According to Obrenovic et al. (2020), this can be done by providing information on how the industry responded to calamities and by highlighting the importance of adopting well-formulated strategies to understand the virus's worldwide aftermath. Moreover, organisations need to equip managers with the

necessary tools to support decision-making, develop preparedness plans for business disruptions, and establish quick, adaptive procedures (Obrenovic et al., 2020).

Authors have indicated that the COVID-19 epidemic did not affect all industries equally (Muthu & Wesson, 2023; Li et al., 2021). Severe disruptions were observed across the tourism, health, education, and mining sectors, prompting boards and top management of these entities to develop better strategies for responding to calamities (Sun et al., 2024; Nayak et al., 2021). Therefore, management and boards of directors, as well as government policymakers, must realign their operations to ensure the whole system can respond effectively to unfavourable economic conditions. Boards and management of commercial state-owned enterprises (cSOEs) in Namibia must therefore understand risk management and have plans so that, in the event of calamities, they can realign operations and make emergency control easier (Harper-Ho, 2020). Harper-Ho (2020) indicated that, to do this, organisational leadership needs autonomy in decision-making and should follow pre-existing contingency plans with clearly defined roles and responsibilities.

In a business environment, a cross-functional crisis management team is crucial for leading and developing strategies during challenging economic times. Top leaders select representatives from each department and include specialists from diverse fields to support operational functions (Harrison et al., 2020). Only resilient businesses can continue to operate and grow through and after crises by adapting, increasing flexibility, and fostering creativity through unconventional thinking. Additionally, knowledgeable and skilled leaders within organisations facilitate teamwork, communication, management of multiple small tasks, and the development of cross-unit leadership skills (Kumar et al., 2026).

Having a resilient management team in organisations means that activities are

distributed, coordinated, and modified constantly, sometimes even hourly, as many departments engage in brainstorming to improve their current products, reroute resources, and/or find new streams (Muthu & Wesson, 2023). The challenge for Namibian state-owned enterprises has long been politicians' involvement in appointing their leadership and boards (Hlahla & Kaupa, 2024). As a result, their leadership capabilities are not always sufficient to propel state enterprises to new heights.

In most state entities, managers have been appointed without a thorough assessment of their ability to manage and properly control the entity's operations; as a result, corruption in these state entities continues (Hlahla & Kaupa, 2024). The idea is that managers across all industries should ensure smooth operations only when they understand how their entity functions and what it provides. However, most managers and boards of SOEs in Namibia lack this understanding, making it difficult for them to appreciate the importance of adhering to all processes and channels correctly (Weylandt, 2017).

Many cSOEs in Namibia are experiencing significant issues, including poor leadership, corruption, bankruptcy, and layoffs (Ade et al., 2020). These organisations often have no option but to seek government support. Therefore, interventions are essential to prevent unnecessary losses in Namibian SOEs, especially the commercial ones, during new pandemics and other crises. The government needs to plan carefully how to manage cSOEs, ensuring they understand their capabilities and operate more effectively to prepare for uncertainty. The current state of cSOEs in Namibia calls for clearer guidance on what actions are needed, how to implement them, who should be responsible, and the timing. Existing risk management strategies need careful review and thorough evaluation to understand the challenges currently affecting the process and how to improve it. This study explores the impacts of COVID-19-related

challenges on the performance of cSOEs in Namibia, emphasising the importance of quality risk communication and documentation.

This study examined whether participants understood the importance of risk communication within and outside the organisation. Moreover, risks need to be properly and effectively documented to track them and better strategise how to mitigate some of them. Therefore, the qualitative aspects of this study examined how ERM frameworks can be incorporated into current risk strategies. The investigation includes understanding the challenges enterprises face in implementing risk frameworks and assessing leadership and human capital capacity and capabilities in facilitating ERM implementation.

Statement of the Problem

The problem is the poor performance of cSOEs in Namibia. Some of these entities are bailed out financially every year. These institutions do not manage resources carefully, as many have reported corruption cases involving misuse of company resources. Commercial SOEs in Namibia play a significant role in the country's economic basket; however, these entities continue to fail to fulfil their mandated responsibilities.

Commercial SOEs employ more people than the private sector (Weylandt, 2017). If these entities underperform, they may remain non-viable, and the country's labour force will be negatively affected. State-owned enterprises have much to fulfil, not only in critical service delivery but also in helping the government realise its developmental agenda. The government cannot do it alone, especially when it comes to service delivery and employment creation. The private sector must support it; however, the government remains the main custodian of service delivery and employment creation for Namibian citizens (Weylandt, 2017).

According to the Namibia Statistics Agency (NSA), the labour force report from the Namibia Population Census of 2023-2024 indicates that Namibia has a population of 3,022 million, with an unemployment rate of 36.9% (NSA, 2023). The unemployment rate is higher among young people. According to the same report, youth unemployment in 2025 continued to rise. The high youth unemployment rate affects the national development agenda and negatively impacts the socio-economic well-being of Namibian youth and the population at large (National Planning Commission (NPC, 2025).

Given that most employers in the country are government-owned entities (Weylandt, 2017), much more needs to be done to create employment opportunities. The problem of unemployment in Namibia will not be solved anytime soon if the state enterprises remain in their current state. Additionally, Links & Mbathera (2024) report that the management of commercial SOEs is poorly monitored, with corruption incidents reported in many commercial SOEs in Namibia. Weylandt (2017) provides evidence that commercial state entities are typically involved in the misuse of resources, improper hiring and tendering procedures, improper risk management procedures, and poor management of state resources by the boards and the top management of these state entities.

The issue of ongoing government financial support for struggling commercial SOEs remains a critical topic of discussion as the government attempts to keep them afloat. According to Weylandt (2017), despite years of this practice, there has been no significant improvement in the performance of cSOEs. This practice is having a significant impact on the state's budget, as new debt is accrued each year to sustain government fiscal plans. If only commercially run state entities could generate revenue for the government or be self-sustaining, the need for borrowing would be reduced.

The actions of political appointees running state entities appear to be another contributing factor affecting the overall performance of Namibia's commercial state entities, as the same governance mentality is being perpetuated across these entities (Marenga, 2020).

Observations have shown that politically influenced or appointed management and board members are typically untouchable, regardless of how poorly they perform or how they run government entities (Hlahla & Kaupa, 2024). Economically, the COVID-19 pandemic has taken the country to another level. As a result, businesses are currently undergoing corporate reform, establishing readiness strategies more effectively than before, and recouping losses incurred during the COVID-19 pandemic. The COVID-19 pandemic affected Namibia's fishing, construction, mining, and tourism industries the most, leaving more young people unemployed than ever before. This brought the unemployment issue to a whole new level (Julius, Nuugulu & Julius, 2022). Apart from unemployment, the pandemic has halted some state projects, such as affordable housing and education initiatives, as funds were diverted to pandemic recovery efforts (Erasmus, 2026).

The country faces droughts, housing shortages, poor healthcare services, educational challenges, and other issues (Hlahla & Kaupa, 2024). Hence, funds could be channelled to these developmental responsibilities if cSOEs were financially viable. Moreover, Namibian studies investigating malpractices within state enterprises have only highlighted the need for reform but have not placed greater emphasis on what needs to be done and how to do it (Marenga, 2020; Tjikune, 2012). Therefore, this study explored the current RM process and identified ways to improve RM by implementing ERM to enhance effective risk management and, hence, the performance and sustainability of cSOEs in Namibia.

Performance issues affecting state entities continue to worry many, even though the public has little to do without government intervention. Marenga (2020) highlighted the poor performance of these state entities but did not emphasise what needs to be done. These entities are widely mismanaged, lack accountability, and are bailed out by the government without clear explanations of how the budgets allocated to them each financial year are used (Marenga, 2020). To improve performance, risk management must be taken more seriously in commercial state-owned businesses than in non-profit organisations, because commercial state entities are meant to generate income for the government (Amoo & Skeffers, 2021).

Even though the government has complete control over these state entities, commercial SOEs are failing to fulfil their mandate: to generate state income and create jobs. Considering the impacts of COVID-19 on cSOEs in Namibia, introducing risk frameworks, such as enterprise risk management (ERM) (Pereira et al., 2022), is needed to help cSOEs navigate operational challenges and enhance sustainability. Gathering data to understand the challenges cSOEs faced amid the COVID-19 pandemic and evaluating existing risk management (RM) practices and their effectiveness will help identify ways to strengthen risk mitigation and operational efficiency. Such efforts are vital to ensure the continued operation of the country's commercial state entities.

Purpose of the Study, Research Aims, and Objectives

This study explored ERM activities and implementation challenges in Namibia's cSOEs as a mechanism for achieving effective risk management and improving the performance and sustainability of these institutions. The focus was on cSOEs because these institutions operate commercially, must generate profit for the government, and remain viable while delivering the state's vital public service mandate.

This study started by assessing how the challenges posed by the coronavirus outbreak affected the performance of commercial state entities in Namibia. The investigation also examined current RM practices and measures to ensure effective RM, such as trained personnel and competent leaders, for the successful implementation of ERM. This investigation aimed to determine whether cSOEs in Namibia can implement ERM using their current risk practices or need to make adjustments. Sustainability goals set for commercial state companies depend on their performance and leadership capacity. The leadership of these state entities must be strategic in the current economic climate to sustain their operations even in unfavourable circumstances, such as economic downturns.

This study examined the effectiveness of current RM processes, focusing on the capacity to communicate and document risks effectively. This includes their capacity to identify and control risks and the feasibility of implementing ERM within cSOEs in Namibia, with a focus on current RM practices. The study provides the first empirical mixed-methods assessment of risk resilience and ERM viability among Namibian cSOEs, offering a novel case study in Namibia in a post-pandemic context. Previous Namibian studies focused on both commercial and non-commercial state entities and relied mainly on quantitative approaches (Harrison et al., 2020; Kuhanga, 2018; Weylandt, 2017). In addition, these studies largely examined RM rather than ERM and did not focus specifically on commercial state entities. By revisiting the effects of COVID-19 six years later, this study provides evidence-based insights into how the pandemic affected commercial state institutions in Namibia. To improve performance and create more value for sustainability purposes, this study explored ways to strengthen risk management processes in commercial state companies in Namibia.

It examined an effective risk-management perspective focused on controlling risks to avoid major losses. This study considered implementing ERM as a first step to manage risks appropriately, employ competent leadership to strategically manage these organisations' operations, and enforce staff training on risk-related issues to build risk awareness among internal stakeholders. Implementing ERM may be the best option to improve cSOEs' performance because it is not just about risk control; it also involves management reconstruction and resilience (Mupa et al., 2024), leadership capacity building, and organisational development (Monazzam & Crawford, 2024). Therefore, before proposing ERM implementation, it was worth determining whether employees and managers understood what ERM is and what it offers. This research used a quantitative approach to assess understanding and a qualitative approach to examine ERM implementation challenges and sustainability plans.

Companies worldwide have faced both financial and operational challenges during the COVID-19 pandemic (Obrenovic et al., 2020). In response, entities are working hard to continue providing services to the public despite significant losses. Namibia is no exception to the challenges of the COVID-19 pandemic. Therefore, this study aims to establish ways to improve the RM process, thereby keeping cSOEs in Namibia running, profitable, and sustainable by enhancing their performance and reputation. As Kuhanga (2018) argues, unnecessary government expenditure is minimised when firms have proper management, control, and accountability. Proper risk control will therefore enable the allocation of state resources to other developmental projects, such as job creation and affordable housing for all Namibian citizens.

The current study also examines ways to help cSOEs in Namibia manage risks, establish adaptive mechanisms amid difficult seasons, and adapt to a new business

environment. Given the current state of most cSOEs in Namibia after the coronavirus pandemic, Namibia's economy would suffer if the right risk-management methods are not put in place. Therefore, implementing ERM, given its comprehensive approach to managing risks across entities, might help cSOEs in Namibia function more effectively and achieve a much more reliable level of risk tolerance.

Part of this study's investigation into the capacity of the current RM process included survey questions on employees' perspectives on current RM practices in their organisation. In addition, the study also examined how ERM could be introduced in Namibia's cSOEs and highlighted its potential benefits for productivity and sustainability in commercial state entities. The explanatory analysis therefore explored the most suitable approaches for these enterprises and how to implement them. Given the unfavourable conditions of many cSOEs (Weylandt, 2017), it was necessary to examine the risk management processes these organisations follow. Effective risk procedures improve risk identification, prevention, mitigation, and governance.

The current investigation also followed a step-by-step approach, first outlining the difficulties commercial entities faced during the pandemic. Identifying the financial and operational challenges experienced during the coronavirus pandemic complemented the current study by helping to understand the issues at hand and to find ways to keep the situation under control in future events. Secondly, given the importance of risk communication and documentation in the RM process, this study analysed the extent to which the quality of these practices affects the robustness of the RM process within the organisations

Third, the study investigated the role of skilled personnel and competent leadership in the successful implementation of ERM frameworks in cSOEs in Namibia. Moreover, this study explored employees' knowledge of the benefits of ERM

implementation for organisational performance and sustainability. Finally, the study identified the challenges of ERM implementation in cSOEs and made recommendations to ease implementation.

The study explored the following objectives:

1. To determine the impact of enterprise challenges on the performance of cSOEs in Namibia during the COVID-19 pandemic.
2. To analyse the influence of risk communication and documentation quality on the effectiveness of risk management in cSOEs in Namibia.
3. To investigate the role of skilled personnel and competent leadership in the successful implementation of ERM frameworks in cSOEs in Namibia.
4. To identify key challenges to ERM implementation in cSOEs in Namibia and propose practical recommendations to overcome them.

Enterprise RM covers many aspects of the business. This means its implementation is likely to positively affect business processes if done correctly. According to Adam et al. (2021), the best way to measure ERM is to construct broad aspects that include all possible signals, outputs, and effects from a firm's operations. In contrast, another study found that public sector reforms have made RM even more popular as a strategy for providing quality services and checking accountability (Mahama et al., 2022). This kind of reform has given the board of directors and managers the power to use effective risk management techniques.

Mahama et al. (2022) developed a method for effective enterprise-level risk management in businesses that serve the public good. However, most state businesses, especially in Namibia, forget that they are supposed to serve the country while also making money from the services they provide. Therefore, this study develops recommendations for establishing an effective RM process to support the

full implementation of ERM. Internal stakeholders can only do what is expected of them if they know what is expected, including ERM aspects such as responsibility and accountability.

When employees understand their responsibilities and are held accountable, organisations can regulate circumstances more effectively in a variety of ways, because everyone involved recognises the importance of risk management and understands their role and the roles of external parties, such as clients, governing bodies, and other cooperating governmental agencies and ministries. With all of it in place, the process inspires hope among individuals and enhances the organisation’s reputation among its stakeholders. The nature and significance of this investigation are detailed in the next section.

Nature and Significance of the Study

Using a hybrid analytical approach, this study assessed the current risk management process, established ERM implementation strategies, and identified and addressed ERM implementation challenges. The study used a sequential explanatory mixed-methods design (Creswell & Creswell, 2018), administering a survey questionnaire as part of the quantitative study, followed by open-ended interview questions. This study's pragmatic philosophical framework supports a sequential mixed-methods approach to thoroughly assess how inadequate risk management practices affect performance issues in Namibia’s cSOEs.

Namibia has twenty-two (22) commercially registered SOEs, of which 20 are fully operational. The study included eleven (11) commercial state companies in Namibia across industries such as tourism, fishing, telecommunications, education, energy, healthcare, agriculture, mining, and transport. Data were gathered from people working in cSOEs in Namibia, regardless of their years of experience and

position. Because this study aimed to identify the root causes of failures observed across many commercial state entities, this inclusion criterion was useful.

The study included all eligible participants rather than limiting participation to employees with many years of experience in the organisations. Restricting the sample in that way would have excluded relevant perspectives from other staff members. Therefore, participants were drawn from all organisational levels, ranging from executive team members to lower-level employees, including drivers and cleaners. The mixed-methods approach enabled the researcher to address all research questions, test the hypotheses, and develop recommendations.

After receiving the required permission or approval from the Ministry of Finance and Public Enterprises (MoFPE), the organisations were contacted to determine their willingness to participate in the study. Organisations that agreed to participate signed the gatekeeper's letter after completing their internal processes. These internal processes included signing a non-disclosure letter and providing the study documents, including the proposal, the Unicaf University Research Ethics Committee (UREC) decision, ministry approval, and data collection tools. The gatekeeper letter and Ministry of Finance and Public Enterprises (MoFPE) permission letter were sent to all 19 cSOEs. Organisations that agreed to participate could choose to complete the survey online or use printed questionnaires. Gatekeepers distributed either the survey link or hard-copy questionnaires, depending on each organisation's preference. The study collected data from 384 participants across eleven cSOEs. Participants were between 25 and 60 years old, able to read and write, and able to make independent decisions. The study excluded individuals who were unable to provide independent consent. Participants who consented to the quantitative study completed a 3–5-minute closed-ended questionnaire. Because access to and familiarity with technology varied

across organisations, gatekeepers advised on the most suitable method for distributing and collecting the questionnaires.

Given the importance of this study, the researcher needed to recruit enough participants to ensure the recommendations were relevant to the broader population of cSOEs in Namibia. Survey questions were distributed through each organisation's gatekeeper across the fishing, tourism, healthcare, mining, transportation, energy, telecommunications, agriculture, aviation, and education sectors. This approach promoted broad participation and helped reduce delays in questionnaire returns. In addition to the closed-ended survey questionnaires, the study conducted open-ended interviews with 10 management-level participants, drawn from the original 384 quantitative respondents.

The study also examined whether managers who understand both RM and ERM processes can manage cSOEs effectively and efficiently. A South African study found that boards of directors oversee RM in organisations (Phaladi & Ngulube, 2022). The study also indicated that some government entities are led by executives who do not sufficiently consider key ERM themes, such as organisational culture and governance, which are necessary to establish consistent organisational practices (Phaladi & Ngulube, 2022). Given Namibia's similarities with South Africa, similar management challenges may also apply to Namibian cSOEs.

Phaladi and Ngulube (2022) further explain that aligning ERM with organisational strategic objectives, monitoring and controlling ERM activities, and managing ERM-related assets and liabilities are key management responsibilities when implementing ERM. This study did not focus on board involvement extensively because most Namibian studies have already addressed the role of boards of directors (Marenga, 2020; Shighweda, 2020; Limbo, 2019). Instead, it emphasises that,

alongside board members, management and employees of state entities must understand their essential roles in RM processes and ERM implementation.

Management has primary responsibility for ensuring that ERM is integrated with and aligned to existing organisational policies and procedures. Effective risk processes are difficult to establish when management does not understand why RM is necessary, how to conduct it, who should be involved, and how to communicate risk information. This study therefore examined what cSOEs are doing, or attempting to do, to minimise risk-related issues. It also provides a foundation for clarifying how ERM operates and how management can develop a holistic approach to addressing different types of risk.

The recommendations from this study may help cSOEs control and mitigate potential risks, reduce major losses, and strengthen existing RM processes. The findings may also help risk practitioners and policymakers improve organisational risk practices. By applying these recommendations, cSOEs may be better prepared for adverse economic conditions, reduce the likelihood of employee layoffs, and avoid unnecessary government bailouts. In addition, improved RM can strengthen disaster preparedness and organisational resilience. The COSO ERM framework identifies four key areas of organisational risk control: strategic management, operations, reporting, and compliance (Park et al., 2021; Malik et al., 2020).

Within these four areas, strategic goals represent the organisation's high-level objectives and should align with its vision and mission. Strategic management should therefore incorporate RM, as risk monitoring begins at the senior management level and extends throughout the organisation (Malik et al., 2020). Liu et al. (2020) note that effective resource utilisation is central to business management and reflects the quality of management planning. This includes recruitment, promotions, and resource

allocation across departments. Reporting and compliance are also essential components of RM and control, as reliable reporting and adherence to relevant standards and laws support organisational accountability. Obrenovic et al. (2020) argue that efficient RM enables organisations to prepare for uncertainty and mitigate the negative effects of crises.

Notably, dimensions define the organisations' units that comprise the risk framework: entity level, division, business unit, and subsidiary. Consequently, Namibian cSOEs face many challenges related not only to RM but also to other predicaments (Limbo, 2019). These include sustainability and reputational issues. Therefore, this study explores how ERM implementation can benefit cSOEs' overall performance and reputation.

Public discourse in Namibia frequently reflects declining confidence in the future viability of state entities, particularly regarding subpar service delivery and job security (Kuhanga, 2018; Weylandt, 2017). This perception stems from persistent coverage of operational issues and corruption scandals involving government entities (Amoo & Skeffers, 2021). Consequently, individuals are compelled to seek employment in the private sector, which is often characterised by exploitative and opaque practices and is frequently implicated in tax inversion arrangements, particularly with foreign corporations (Marenga, 2020).

Because some directors and top management of the state's commercial entities fail to make the required efforts to ensure the organisations operate effectively, most of these entities have poor reputations (Weylandt, 2017; Tjikune, 2012). According to Tjikune (2012), because SOEs' activities are governed by government laws and regulations, these laws and regulations are sometimes outdated or incompatible with how the organisations function. As a result, some cSOEs are bailed out by the

government each fiscal year when they become unprofitable. Nevertheless, no thorough investigations are conducted before a bailout to determine the cause of the loss and how to avoid future losses.

Implementing ERM in cSOEs in Namibia is recommended to establish sound, effective risk management practices that help organisations cope with adverse situations. Therefore, examining ERM implementation strategies within commercial state entities may help establish and strengthen risk management practices (Adam et al., 2021). According to Adam et al. (2021), integrating ERM can enhance the risk management process, especially for entities with weaker existing practices, thereby establishing stronger RM standards. Organisations with a proper RM process are better positioned to implement ERM and are less prone to the negative consequences of calamities.

Because SOEs are among the country's primary employers, maintaining them over the long run will ensure job stability and sustainable development. Moreover, the public often questions the management of commercial SOEs in the country because of a perceived lack of commitment and responsibility, as there seems to be little ownership and awareness within the state’s commercial enterprises in Namibia (Tjikune, 2012). Because many commercial SOEs in Namibia are underperforming, private companies are identifying flaws and loopholes in the current state system, creating opportunities to plan and build businesses that compete with or complement the products and services offered by commercial SOEs (Kuhanga, 2018).

While Namibia’s cSOEs have long faced public outcry over corruption and the misuse of state resources (Tjikune, 2012), the COVID-19 pandemic was a catastrophic environmental shock that exacerbated these systemic weaknesses. The crisis may have highlighted a critical lack of adaptive mechanisms and exposed how ineffective

RM processes threaten the very sustainability of these entities. In an era of heightened fiscal pressure, cSOEs' dependence on government support is no longer sustainable and requires a Darwinian shift, driven by transformational leadership, contingency approaches, and rigorous stakeholder-centric decision-making, to ensure institutional survival. According to some authors, the strengths, weaknesses, opportunities and threats (SWOT) analysis is a robust method for problem analysis that helps formulate sound recommendations based on study results (Wang & Wang, 2020; Jasiulewicz-Kaczmarek, 2016).

A case study by Jasiulewicz-Kaczmarek (2016) illustrated the use of analytical techniques, such as SWOT, to identify factors that could affect business operations and the organisation's current and potential future problems. This makes SWOT analysis the most popular and easiest method of problem analysis in businesses (Wang & Wang, 2020). However, given the complexity of this study's mandate, the researcher considered more advanced analyses, such as regression analysis. This allows a more comprehensive understanding of the current RM situation, the implementation of ERM and its challenges, and sustainability measures. To identify possible solutions to help the government implement policies, it was important to thoroughly examine the current RM process and identify the positive aspects that encourage the establishment of ERM, a decision based on scientific evidence. The following section elaborates on the study's questions and hypotheses.

Study Questions and Research Hypotheses

This study addressed four research questions and objectives, as well as its aims. The research objectives and hypotheses were derived from the research questions, so the responses to both the quantitative and qualitative data addressed all aspects. These four questions were designed to address both the qualitative and

quantitative aspects of the study, covering various issues related to RM, ERM, organisational performance, leadership, value creation, and sustainability. The study questions were:

RQ1: What was the impact of enterprise challenges on the performance of cSOEs in Namibia during the COVID-19 pandemic?

RQ2: To what extent does the effectiveness of the RM process in cSOEs depend on the quality of risk communication and documentation?

RQ3: What is the impact of skilled personnel and competent leadership on the successful implementation of ERM within Namibia's cSOEs?

RQ4: What are the key challenges faced by cSOEs in Namibia when implementing ERM frameworks?

RQ1: What was the impact of enterprise challenges on the performance of cSOEs in Namibia during the COVID-19 pandemic?

Early in this investigation, the researcher identified the most significant challenges faced by cSOEs in Namibia. The outlined challenges were then examined to assess how they may have affected the performance of commercial government entities. The study investigated challenges related to entities' operations, finance, strategy, reputation, and compliance.

RQ2: To what extent does the effectiveness of the RM process in cSOEs depend on the quality of risk communication and documentation?

Research question two investigated the impact of the quality of risk documentation and communication on the effectiveness of the RM process. Therefore, the process involved analysing whether risk documentation and communication are enforced to establish the need for quality risk documentation and communication to support the effectiveness of the RM process. This research question assessed the

current RM process by examining its strengths, weaknesses, opportunities, and threats.

RQ3: What is the impact of skilled personnel and competent leadership on the successful implementation of ERM within Namibia's cSOEs?

Research question three examined how skilled personnel and competent leadership can facilitate integrating ERM into strategic planning. Skilled staff can understand risks better than low- or unskilled staff; therefore, institutions with skilled staff are better able to establish and monitor risks than firms that mostly employ unskilled staff.

Moreover, effective leadership skills, such as those of a transformational leader, are recommended for cSOEs management because TLs can ensure employees follow their leaders' good examples and are accountable for what they do. Creating flexibility in the organisations requires proactive, visionary leaders who can realise it.

RQ4: What are the key challenges faced by cSOEs in Namibia when implementing ERM frameworks?

The fourth and final research question focused on the challenges of ERM implementation and provides clear guidance on key components of the ERM process. These include risk identification and control strategies, as well as risk reporting channels, in commercial state companies in Namibia. Some of the guidance mentioned involves providing employees with training and resources to help the organisations build a culture of risk awareness. Additionally, the Committee of Sponsoring Organisations' ERM framework emphasises choosing a communication style and language, establishing clear guidelines for the organisation's goals, and outlining how everyone can contribute to fostering a positive organisational culture.

Research Hypothesis

Answering the four research questions of this study entails evaluating three hypotheses (Table 1). Hypothesis one examined how the challenges encountered during the COVID-19 pandemic affected the performance of cSOEs in Namibia. The second hypothesis assessed the robustness of the current RM process with respect to risk communication and documentation quality. The last hypothesis examined whether skilled staff and competent leadership are major factors in ERM implementation in cSOEs.

The three alternative hypotheses aligned to the null hypotheses were analysed:

Table 1

Hypotheses of the Study

Alternative Hypotheses	Null Hypotheses
H1: There is a statistically significant negative association between enterprise-related challenges and the performance of commercial state-owned enterprises in Namibia during the COVID-19 pandemic.	H10: Enterprise challenges did not significantly affect the performance of cSOEs in Namibia during COVID-19.
H2: There is a statistically significant positive association between the quality of risk communication and documentation and the effectiveness of the RM process.	H20: The effectiveness of the RM process in cSOEs in Namibia is not significantly affected by the quality of risk communication and documentation.
H3: There is a statistically significant positive association between the presence of skilled personnel and competent leadership within the organisation and the implementation of ERM	H30: Having skilled personnel and a competent leadership team is not a significant factor in the successful implementation of ERM frameworks in cSOEs in Namibia

Each hypothesis was analysed separately using statistical methods. The analysis was primarily conducted to assess correlations between variables and to understand the effects of independent variables on dependent variables.

Enterprise challenges and organisational performance

There is a statistically significant negative association between enterprise-related challenges and the performance of commercial state-owned enterprises in Namibia during the COVID-19 pandemic.

This hypothesis relates to the first study question, which examines the impact of challenges faced by cSOEs in Namibia during the COVID-19 pandemic on their performance. During the pandemic, state-owned firms in certain industries maintained operations despite hurdles such as supply chain delays and the need to adopt new technologies (Obrenovic et al., 2020). However, some of the challenges stemmed from lockdowns, transport restrictions, shifts in consumer demand, and other factors. Companies that did not face substantial supply chain delays were either well equipped to handle these obstacles or operated in sectors less affected by disruptions. Information and technology (Papaioannou, 2023; Dung et al., 2022) became increasingly important amid the coronavirus pandemic, prompting improvements in current leadership practices.

According to Papaioannou (2023), emerging technologies significantly improve performance; therefore, companies that effectively integrate and adapt to them demonstrate high resilience and adaptability in their operations. This flexibility likely helped such companies overcome pandemic-related difficulties. For cSOEs in Namibia that maintained operations despite the challenges of the COVID-19 pandemic, their ability to overcome supply chain obstacles and adopt new technologies may have helped them maintain operational stability.

The first hypothesis draws on Corporate Darwinism and Stakeholder theory within the framework of adaptive strategies. Corporate Darwinism suggests that major environmental disruptions, such as the pandemic, act as selective pressures that

expose institutional weaknesses (Lopez & Peters, 2025; Klymenko & Lillebrygfjeld Halse, 2022). When an enterprise faces significant 'enterprise challenges,' its ability to succeed is jeopardised. Stakeholder Theory posits that if an organisation fails to adapt to external challenges, it breaches stakeholder expectations and suffers operational setbacks (Rela et al., 2022), underscoring the need to empirically examine the negative relationship between external challenges and performance (Ashmawy, 2021). Furthermore, based on stakeholder theory and corporate Darwinism, it is important for management and stakeholders to discuss possible enterprise risks and possible impacts to foster transparency and trust (Lopez & Peters, 2025). Well-informed stakeholders are more likely to behave responsibly, develop trust easily, and become more productive.

Quality of risk communication, documentation and effective RM

There is a statistically significant positive association between the quality of risk communication and documentation and the effectiveness of the RM process.

The second hypothesis examines how the quality of risk documentation and communication can significantly affect the effectiveness of risk management processes. An assessment of the strengths, weaknesses, threats, and opportunities of the current risk management processes highlighted the accuracy and timeliness of risk communication and documentation within the commercial state organisations. Fraser et al. (2021) stated that risk documentation is crucial; therefore, if the risk mitigation process and controls are not well documented, the entity will struggle to achieve its risk management objectives. An effective risk management process is typically a proactive measure undertaken before a crisis occurs, aimed at preventing crises and preparing the organisation for potential ones (Dahmen, 2023).

Iandolo et al. (2025) state that the RM process must include all relevant

stakeholders in its communications. Moreover, timely risk communication is especially important during crisis management, as crises introduce new hazards that affect various stakeholders. Therefore, organisations must consistently recognise, control, and convey risks to key stakeholders across various stages of the organisation (Iandolo et al., 2025). Commercial SOEs must actively involve stakeholders in their risk management process to maintain a stakeholder-oriented RM process. Consequently, participation in the RM process depends on the types of risks and their potential effects on stakeholders, taking stakeholders' opinions and suggestions into account, with a focus on timely communication and high-quality documentation of events for relevant stakeholders (Ndlela, 2019).

The second hypothesis aligns with the study's theoretical framework on operational efficiency and implementation strategies, drawing on contingency and goal-setting theories. Contingency theory argues against a universal approach to risk management, highlighting that a process's success depends on how well it fits the organisational context (Brychko, 2023). Effective risk communication and thorough documentation create the customised, data-informed environment necessary for this alignment (Gontarek & Bender, 2019).

Moreover, Goal-Setting Theory suggests that clear documentation and structured communication channels establish specific objectives, preventing resource waste and improving the overall accuracy and effectiveness of formal risk management. In relation to the second hypothesis and Goal-Setting Theory, Freudenreich et al. (2020) emphasise that organisations must develop clear communication and documentation policies to help stakeholders easily understand the organisation's mission and vision.

Gontarek and Bender (2019) state that the goal-setting theory emphasises that communication should be clear, specific, and centered on what individuals need to accomplish. Employees must understand the risks involved, their responsibilities, and the expected outcomes. Contingency theory suggests that how, how often, and at what level communication occurs should vary based on the situation (Brychko, 2023). For instance, urgent risks might demand immediate reporting to senior management, while less critical operational risks could simply be documented in routine reports.

Skilled personnel, competent leadership and ERM implementation

There is a statistically significant positive association between the presence of skilled personnel and competent leadership within organisations and ERM implementation.

Integrating enterprise risk management into organisations' strategic planning requires competency in organisational development to improve organisational output, thereby promoting value and sustainability (Nayme & Taybi, 2025). Therefore, skilled, well-equipped staff and competent, initiative-taking leadership are particularly important, as they make it much easier to implement ERM in organisations. According to Monazzam and Crawford (2024), skilled, well-equipped staff with proactive leadership can support improved performance, thereby increasing the organisation's reputation and financial value through profitability and shareholder returns, operational efficiency, and strategic accomplishments.

Enterprise risk management improves performance by integrating all areas of the business, social, and governance domains into strategic goals (Benmira & Agboola, 2021). This approach ensures risks are evaluated against the organisation's objectives and purpose, supporting well-informed decision-making. Strategic

alignment helps organisations allocate resources effectively by prioritising significant risks that may affect strategic goals (Crawford & Jabbour, 2024). Moreover, implementing ERM within organisations promotes resilience to unforeseen occurrences or disruptions. Therefore, Lima Rua et al. (2023) argue that transparency and proactive risk management build stakeholder confidence, which investors, customers, and other stakeholders value. Consequently, incorporating risk factors into strategic planning enhances the organisation's long-term viability by identifying potential obstacles to achieving strategic objectives.

Therefore, the third hypothesis stems from the operational efficiency aspect of the study's framework and is grounded in Transformational Leadership Theory. As outlined in the theoretical framework, visionary leaders do not work in isolation; they actively promote human capital development, creating skilled personnel to enable complex organisational changes (Farahnak et al., 2020). Consequently, effectively institutionalising an ERM framework requires more than policy mandates; it also depends on behavioural and cognitive support from a capable leadership team and a skilled workforce to implement the strategy. This supports the expected positive relationship (Mach et al., 2022).

According to Farahnak et al. (2020), Transformational leadership offers motivation, vision, and support for employee growth, while employee skill development supplies the knowledge and abilities necessary for effective performance and adaptation. Combined, these approaches can enhance employee performance, foster innovation, increase organisational adaptability, and strengthen long-term competitiveness. A transformational leader not only directs employees but also fosters ongoing learning and growth. They often delegate tasks and create opportunities for employees to build leadership abilities.

CHAPTER TWO: LITERATURE REVIEW

Introduction

The second chapter explores RM and ERM, providing a comprehensive overview of ERM concepts. It reviews existing scientific evidence on ERM to support the development of the study's concepts and establish its methodologies. Additionally, the chapter examines various ERM framework concepts, including those from the Committee of Sponsoring Organisations of the Treadway Commission (COSO) and the International Organisation for Standardisation's (ISO) 31000 risk management standard.

Moreover, chapter two reviews the literature on the challenges that affected state entities during the COVID-19 pandemic, the challenges that hindered organisational performance, the benefits of ERM, and the roles of stakeholders in RM. The literature review explored the state of research on ERM and organisational performance, identified gaps, and identified ERM implementation strategies applicable to Namibian cSOEs. Furthermore, the literature search clarified how ERM helps organisations, particularly cSOEs, improve performance, sustain operations, generate profits, and build survival mechanisms during complex economic times.

The literature review also examines five key theories underpinning this study: Darwin's natural selection, transformational leadership, goal setting, stakeholder theory, and contingency theory. It first considers how enterprise risks affect performance and emphasises the Contingency Theory principle that risk management strategies must be tailored to specific contexts. This theory provides a framework for understanding how organisations adapt internal elements, such as information systems, employee skills, and leadership, to respond effectively to environmental challenges.

Contingency theory holds that organisational success depends on aligning contextual factors with structure, a central focus of this research. The review then examines how organisational adaptive mechanisms, influenced by risk communication and documentation quality, are supported by Darwinian and stakeholder theories to improve risk management. Finally, achieving operational effectiveness hinges on strong leadership and skilled personnel, drawing on transformational leadership and goal-setting theories to facilitate ERM implementation.

This chapter also covers key insights from the literature review on the leadership styles that most effectively promote organisational performance. Consequently, it examined topics such as organisational structure, leadership skills, performance enhancement mechanisms, and organisational risk management processes. The final remarks of Chapter Two explored how the COVID-19 pandemic affected commercial state companies worldwide and examined the benefits of ERM for businesses, its effects on sustainability, implementation requirements, and associated challenges. Therefore, the study conducted a literature review of peer-reviewed articles and other empirical publications from various sources.

During the literature search, the study applied a filter to exclude materials published before 2019 and to focus solely on journals, textbooks, and peer-reviewed sources. The search employed keywords such as risk management, enterprise risk management, COVID-19 consequences for state companies, ERM theories and concepts, SOEs' governance structure and strategies, and challenges of ERM implementation. To find books, journals (including peer-reviewed articles), and newspaper publications, the researcher utilised various search engines, including Google Books, Google Scholar, and library databases such as ProQuest.

Theoretical Framework

Enterprise RM is a management approach that helps organisations adapt to change and respond to adverse events during their operations (Fraser et al., 2021). Although several theories inform this study, contingency theory is the primary theoretical framework. Contingency theory holds that organisations should not always adopt the same approach to risk when operating in different industries or environments (Błaszczyk et al., 2022). In Namibia, cSOEs operate across industries such as mining, agriculture, telecommunications, healthcare, energy, and many others. Therefore, the risks they experience and their impacts may differ across industries (Cleverley, Cousins & Burnett, 2023).

Building on theory on how effective risk management affects company performance, this study explored how the COVID-19 pandemic affected various enterprises in Namibia. Hence, the study investigated the benefits of integrating ERM into companies' strategic planning and how effective communication and risk documentation can improve the RM process. The aim is to lead organisations to improve performance, value creation, and sustainability. The literature reviewed provided insights into theories of ERM implementation and into effective RM for operational efficiency and improved organisational performance for sustainability. The investigations involved understanding the leadership characteristics that enable ERM implementation and affect firms’ value and sustainability.

The search also explored other theories aligned with the research aim, objectives, and hypotheses, including stakeholder theory, goal setting, transformational leadership, and corporate Darwinism. The third hypothesis examined the importance of skilled personnel and a competent leadership team in implementing ERM. Organisations must prioritise ERM implementation to strengthen risk

management effectiveness and improve the performance of cSOEs in Namibia. In addition, implementation requires understanding the benefits ERM can offer organisations, as well as considering the potential implications of its implementation (Mishra et al., 2019). This brings us to research question three, which investigated the need for skilled personnel and competent leadership to implement ERM effectively and overcome implementation challenges.

However, the first assumption linked enterprise challenges faced during the COVID-19 pandemic to the performance of commercial state enterprises (McMaster et al., 2020) by assessing the impact of these challenges on performance. This assumption was consistent with the study's first hypothesis, which examined the impacts of the COVID-19 pandemic on the performance of Namibia's cSOEs. According to the study's conceptual framework, the primary stage for improved performance is ERM implementation. However, it was worth exploring the risks associated with the COVID-19 pandemic, assessing their impacts, understanding the challenges of the current RM process, and thereafter analysing ways to improve it.

Furthermore, the study analysed its second hypothesis, related to establishing an effective RM process, including an assessment of the quality of risk communication and documentation within cSOEs. Accordingly, investigation two examined correlations between risk communication and documentation quality, and between RM process effectiveness and documentation quality. The analysis incorporated a SWOT analysis of the current RM process to provide appropriate recommendations. During the quantitative study approach, in addition to risk communication, knowledge, and documentation capacity of cSOEs in Namibia, the study also explored the leadership capacity of these entities.

The analysis examined whether these organisations are led by competent

people, whether staff are well trained in risk-related issues, and whether these teams understand what effective RM can offer the organisations. This constitutes the third research question and hypothesis, which examined the correlation between skilled personnel and competent leadership in implementing ERM in cSOEs. This information was complemented by the qualitative study, which focused mainly on ERM implementation challenges and possible solutions or recommendations.

The theoretical framework in this study was built on five theories: Contingency, Corporate Darwinism, Goal Setting, Stakeholder, and Transformational Leadership. These theories guided the effective implementation of a risk framework, the establishment of an effective RM process, and improved performance and sustainability of cSOEs in Namibia. Considering these theories, the first hypothesis of this study was formulated in relation to the concept of creating adaptive mechanisms in cSOEs. With enterprise risks as the independent variables and improved performance as the dependent variable, the study examined two theories: Corporate Darwinism and Stakeholder theory. At this stage, the study examined how the performance of cSOEs was affected by the challenges imposed by the COVID-19 pandemic.

Moreover, the second hypothesis and the study's research question were based on a conceptual understanding of how to analyse the effectiveness of the current RM process. The analysis includes organisational operational efficiency to establish adaptive mechanisms by incorporating contingency and goal-setting theories. Risk communication and documentation served as independent variables, and effective RM as a dependent variable. The third hypothesis and research question were based on ERM implementation strategies and adaptive mechanisms, considering the involvement of skilled personnel and a competent leadership team,

guided by Transformational leadership theory. For the third hypothesis, skilled personnel and a competent leadership team are independent variables, and ERM implementation is the dependent variable. This study aims to enhance enterprise sustainability by implementing ERM as a risk framework that guides the overall RM process within organisations, establishing an effective RM process, and establishing adaptation mechanisms. Table 2 presents the assumptions, which align with the study's three hypotheses.

Table 2

Theoretical Assumptions

Research Hypotheses	*Independent variables*	*Mediating or dependent variables*	*Theoretical Anchor*	*Assumptions to Sustainability (Dependent Variable)*
H1	Enterprise Challenges	Improved performance	Corporate Darwinism, Stakeholders' Theories	Negative Impact
H2	Risk communication and documentation Quality	Effective Risk management	Contingency and Goal Setting Theories	Positive Impact
H3	Skilled personnel and competent leadership	Successful ERM implementation	Transformational Leadership Theory	Positive Impact

Theories on ERM Implementation Strategies

Implementing ERM is the first step towards establishing an effective RM process that enhances the enterprise's performance and sustainability. Organisations need to implement ERM first to establish an effective RM process. Therefore, only through proper RM guidance, as stipulated in the risk frameworks, can an effective

RM process be achieved (Fraser et al., 2021). Therefore, this study's theoretical approach was guided by this concept, recognising the need for human capability and expert execution to become living, institutionalised organisational habits that promote ERM implementation. Transformational leadership theory explains the types of leadership needed to improve performance in Namibian cSOEs.

Transformational leaders are concerned not only with leadership but also with training followers and encouraging them to do their best (Farahnak et al., 2020). Therefore, when considering Transformational leadership as a guiding theory, implementing ERM requires knowledge and understanding of the process and its benefits. This study examines skilled personnel and competent leadership as mechanisms for driving ERM implementation. Accordingly, this study considered TL theory a mediating factor in ERM implementation.

Transformational Leadership Theory

Transformational leadership (TL) theory holds that leaders inspire change in their followers to help the organisations perform better. James V. Downton first discussed transformational leadership theory in 1973. Transformational leadership provides the behavioural mechanism through which leaders influence followers to adopt complex risk-mitigation behaviours. In 1978, James MacGregor Burns expanded on this concept in his book on leadership, offering a comprehensive explanation of transformational leadership. Burns emphasised the importance of a leader's capacity to motivate superior performance by appealing to others' fundamental beliefs and aspirational needs. According to Benmira & Agboola (2021), transformational leadership is typically employed when a company requires a fresh start or is undergoing significant transformation.

Notably, Bernard made a significant contribution to transformational leadership

theory, particularly through his 1985 book Leadership and Performance Beyond Expectations (Farahnak et al., 2020). Together with Bruce Avolio, Bernard developed the Multifactor Leadership Questionnaire (MLQ), which measures how transformational leaders guide their teams. The questionnaire helps identify various leadership styles and their outcomes. Research and practitioners in the field of leadership have shown that transformational leadership is one of the most well-studied leadership styles because of its effectiveness in achieving organisational goals (Siangchokyoo et al., 2020).

This is why Farahnak et al. (2020) identified a connection among transformational leadership style, employee performance, and company success. A key trait of transformational leaders is their capacity to encourage others to achieve more than they thought possible, thereby serving the company's broader objectives (Greimel et al., 2023; Mach et al., 2022; Siangchokyoo et al., 2020; Krinsky & Hickson, 2014) (Figure 1). Most studies on TL have been carried out in only a small number of areas. In 2020, Bukusi published an article aimed at analysing current publications on the topic to determine the anticipated qualities of a transformational leader. Research on the subject has largely been limited to the African continent.

Bukusi, however, states that the beginning of the 21st century brought a need to implement a revolutionary plan on the African continent. Employees tend to embrace and engage with changes more readily when leaders clearly articulate a vision and clarify the reasons for the change (Mach et al., 2022). Setting ambitious goals and offering support can motivate employees to perform at greater levels. Additionally, organisations that invest in their employees' growth often foster a sense of being valued, which can increase their dedication to the company.

Figure 1

Transformational Leadership Theory Model



Adapted from Krinsky & Hickson (2014)

However, the tumultuous political climate, ever-changing economic landscape, and disruptive global occurrences, such as the COVID-19 pandemic, necessitate a new kind of leadership to address unprecedented challenges. Transformative leadership, a nascent field of research, is described and interpreted differently by leaders worldwide (Bukusi, 2020). The author conducts a comprehensive analysis of publications published from 2010 onwards to compile up-to-date viewpoints and theories. This aims to equip leaders with a single, well-established reference source on the subject.

Additionally, Mach et al. (2022) emphasised the link between transformational leadership and team cohesion, explaining that cohesion is the mechanism through which TL influences team outcomes. The indirect effect is stronger when the team has experienced greater past success (Siangchokyoo et al., 2020). Because transformational leaders champion their team members, followers must develop trust and be willing to follow their leaders to achieve better performance (Bakker et al., 2022). This approach can help companies manage risks effectively.

According to Eliyana and Ma'arif (2019), transformational leadership

encourages a culture of performance improvement and increased output while leading followers by example. Transformational leaders work hard to achieve both short- and long-term strategic goals while considering employees' livelihoods. Moreover, TL sets smart goals, inspires and motivates others, and considers development and promotion. This type of leadership promotes teamwork, emphasises ethics, values, and standards, and fosters effective change agents (Bakker et al., 2022; Hussain et al., 2019).

A recent study by Greimel et al. (2023) found that TL articulates a compelling vision for the organisation’s future and sets clear, aligned goals. Consequently, transformational leaders foster a positive, supportive work environment, encourage innovation, creativity, and learning, and sustain motivation by recognising and celebrating achievements (Mach et al., 2022). Growing concern is that some commercial state entities in Namibia are led by leaders who lack vision and the capacity to transform them into profitable organisations. This study therefore aimed to enhance transformational leadership within Namibian commercial state entities, a subject previous studies in Namibia have not addressed (Maseke & Swartz, 2021; Ngwangwama et al., 2019; Limbo, 2019).

Poor leadership has left many commercial state firms in Namibia unprofitable due to underperformance (Maseke & Swartz, 2021; Limbo, 2019). Understanding and promoting the recruitment of competent leaders to head these commercial entities will help improve their performance and thereby fulfil their financial mandates. Since transformational leaders provide mentoring, coaching, and guidance (Bakker et al., 2022), they can help individuals enhance their skills and abilities.

Supporting this idea, Madi Odeh et al. (2023) state that transformational leaders foster collaboration and teamwork within organisations, which in turn boosts

performance and productivity. Additionally, transformational leaders encourage open communication, facilitate knowledge sharing (Aziz et al., 2025), and build strong relationships among team members (Mach et al., 2022). In contrast, Bakker et al. (2022) argue that TL cultivates a culture of ethical behaviour within organisations and supports long-term achievement and a strong public image by emphasising sustainability principles to stakeholders. Transformational leadership was prioritised because transformational leaders can enact significant positive changes within organisations (Greimel et al., 2023).

Theories on Operational Efficiency

For operational efficiency, organisations must ensure that RM is carried out properly. In this study, operational efficiency was assessed through activities such as the quality of risk communication and documentation (Khali et al., 2025), because these provide a precise baseline of data that adheres to compliance requirements and establish clear feedback channels for staff to manage operational micro-tasks safely and effectively (Adepoju et al., 2022). Operational efficiency examines the entire process, including who is responsible and what is required of them (Khali et al., 2025). In this view, output is the result of the process's input efforts.

At this level, the study applied contingency and goal-setting theories as guiding principles for achieving operational effectiveness. Contingency theory recognises that risks cannot be generalised; instead, they must be examined in relation to the organisation’s industry, operating context, and associated risk profile (Gontarek & Bender, 2019). It therefore emphasises that organisational effectiveness depends on the fit between contextual factors and organisational structure (Waheed & Malik, 2019). In risk management, this means there is no one-size-fits-all approach. Each organisation must develop internal processes and procedures, guided by risk

frameworks, to manage risks appropriately. Therefore, this study's theoretical framework was grounded in contingency theory.

Moreover, goal-setting theory was examined to clarify organisational objectives and mission, which all stakeholders need to understand. Furthermore, goal-setting theory is important because organisations need to clearly define their purpose and primary objectives to thrive and to monitor their processes effectively (Aarts, 2019). Together, these two theories underscore the significance of ERM for operational efficiency and business longevity. In this study, the hypotheses linked operational efficiency and risk communication and documentation, with effective RM as the mediating variable, aligning with the second hypothesis.

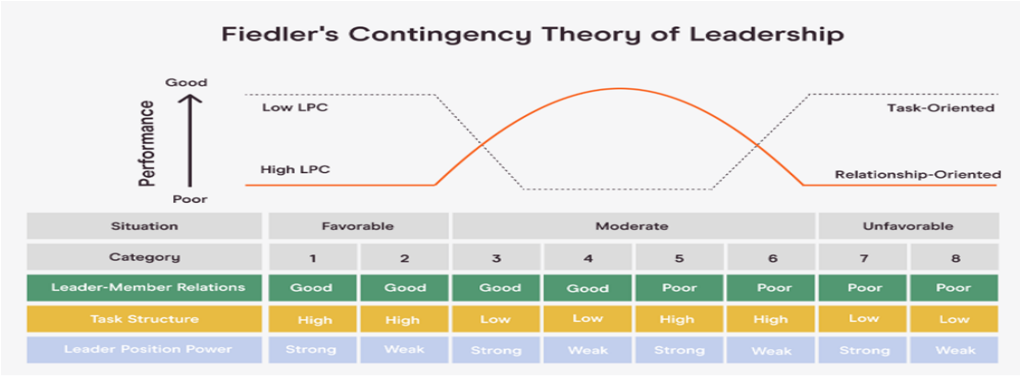
Contingency Theory

Contingency theory explains the contextual fit required for leadership to be effective within the unique Namibian cSOEs landscape. Developed by Fiedler in 1964, the theory explains how organisations differ in the services they offer, the actions they undertake, and the environments in which they operate. Emerging during the situational era of the 1960s, contingency theory posits that when addressing risks in various organisations, certain criteria must be considered. The organisation's structure, size, and technology must align with the demands of its environment (Ajupov et al., 2019). This is because contingency theory proposes that there is no one-size-fits-all method for managing an organisation. The optimal management style varies based on factors like the nature of the work, employee skills, organisational structure, technology, and external environmental changes.

According to contingency theory (Fiedler, 1964, as cited by Brychko, 2023), the optimal organisational or leadership strategy may vary from one situation to another, and from one organisation to the next (Figure 2).

Figure 2

Fiedler's Contingency Theory of Leadership



Adapted from Fiedler (2015)

The contingency theory of leadership is grounded in three principles: leader-member relations, task structure, and leader position power (Fiedler, 2015). This theory underpins the Least Preferred Co-worker (LPC) test, which suggests that leaders with a high LPC score excel at building strong relationships and resolving conflicts, whereas those with a low LPC score are adept at organising tasks and ensuring work gets done (Figure 2).

Contingency theory, when applied to RM, emphasises that RM methods must be tailored to the organisations' unique context, risk landscape, appetite, and structure (Gontarek & Bender, 2019). Examining contingency theory within Namibian cSOEs was valuable, as it provides insight into whether current leadership is guiding these state entities towards resilience. According to Gontarek and Bender (2019), contingency theory supports organisations in creating effective, customised ERM plans that align with their distinct needs and circumstances by recognising each organisation's unique nature and risk profile.

Araral (2020) highlights that contingency theory recognises the dynamic nature of the risk environment, which varies across industries and markets. Therefore, ERM approaches must be customised to the organisations' unique risk environment. He

further explains that applying contingency theory effectively acknowledges that organisations have differing risk preferences, tolerance levels, and risk cultures, all of which must be considered when designing ERM practices. Because this study involved organisations from various sectors, applying contingency theory helped develop a holistic risk management framework suitable for commercial entities across industries.

Consequently, researchers emphasise that all decision-making processes should align with the organisation's decision-making structures and procedures (Lakens, 2022; Mishra et al., 2019). Hence, RM practices should depend entirely on the type and magnitude of the risks the organisations face. Contingency theory helps firms develop in-house policies and processes that align with their industry and consider the organisations' risk profile (Waheed & Malik, 2019). According to Donaldson (2001), a key advocate of contingency theory, "organisational effectiveness results from fitting characteristics of the organisations' contingencies that reflect the situation of the organisations" (cited in McAdam et al., 2019).

Strategy and culture are common contingency variables, and effective leaders develop strategies that adapt to situations and foster strong relationships (see, for example, Sousa & Voss, 2008; Langfield-Smith, 2007; O'Regan & Ghobadian, 2006, as cited in McAdam et al., 2019). From this perspective, organisations aim to enhance their performance by better aligning with the current set of contingency variables that reflect the dynamic nature of the external environment (Waheed & Malik, 2019). "Consequently, this approach is dynamic and continuous, especially in an evolving business environment. It stresses the need for context-specific solutions fitting the situation rather than relying on a single, universally best way to manage the organisation" (Donaldson, 2001, as cited by McAdam et al., 2019).

Contingency theory also suggests that organisations must align their internal processes and structures with external environmental influences to be effective (Waheed & Malik, 2019). Emphasising the importance of contingency theory, a significant study conducted in China during the COVID-19 pandemic on sustaining enterprises during challenging times identified several aspects of business operations, such as adequate infrastructure, access to information and technology, leadership agility, and local supply chain management, as key factors that can assist enterprises in maintaining their operations post-crisis (Obrenovic et al., 2020).

Second, contingency theory argues that organisations must manage risk in line with their specific environment and scope of operations (Obrenovic et al., 2020), as in RM, one size does not fit all (Fraser et al., 2021). Furthermore, contingency theory is one of four crisis management theories that guide leaders across organisations in responding to unplanned events (Obrenovic et al., 2020).

Goal Setting Theory

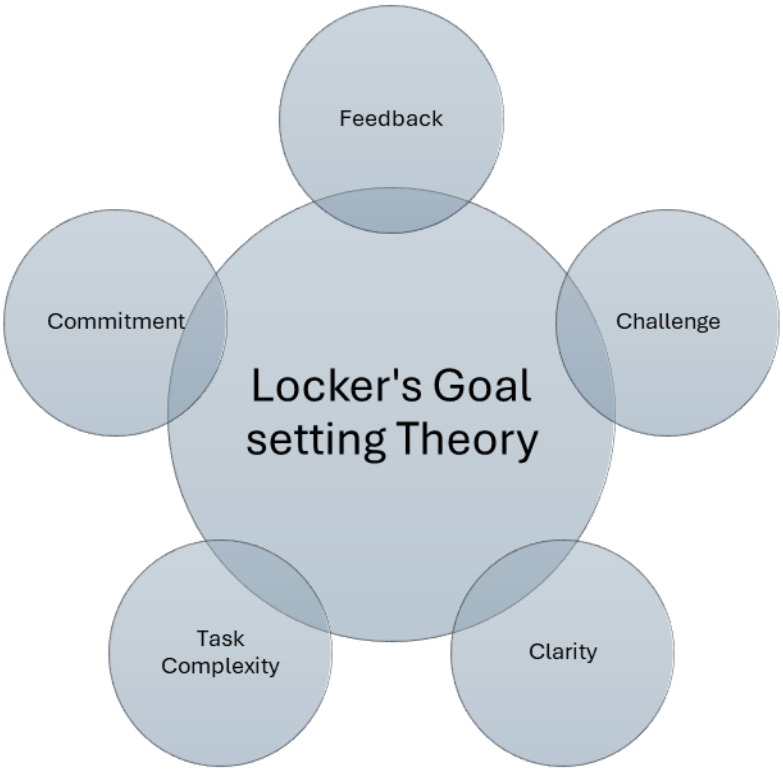
Goal Setting theory provides the precision needed to translate abstract risk policies into specific, measurable performance outcomes. Goal Setting (GS) theory is a performance management framework in which employees first establish clear, specific objectives, then develop a system to track their progress toward those targets (Pietsch et al., 2024). GS theory suggests that setting clear, precise, and challenging goals can enhance both individual and organisational outcomes (Aarts, 2019) (see Figure 3). According to Aarts (2019), GS is a psychological framework that examines how setting specific, demanding goals affects employee performance and motivation. Drawing on Locke's goal-setting theory, organisations can boost performance by giving employees clear, achievable objectives (Aarts, 2019).

The goal-setting theory offers a clear guide for employees to understand their

exact objectives. This enhances productivity by motivating employees to concentrate their time and effort on key tasks (Pietsch et al., 2024). Additionally, the GS theory enhances accountability by enabling employees to be evaluated against well-defined objectives. This approach fosters motivation and encouragement, especially when challenging yet realistic goals are established, prompting employees to exert more effort (Freudenreich et al., 2020). Clearly defined goals also facilitate performance measurement, allowing managers to compare actual outcomes with planned targets and identify areas that need improvement.

Figure 3

Locke's Goal-setting Theory



Adapted from Aarts, 2019

Edwin A. Locke and Gary P. Latham developed the goal-setting theory in the late 1960s and early 1970s (Aarts, 2019). Through extensive research and publications, they established and popularised the theory. Their seminal work culminated in the publication of their book A Theory of Goal Setting and Task

Performance in 1990.

According to this study's hypothesis on organisational performance, setting clearly defined goals increases performance and motivation. Freudenreich et al. (2020) supported this theory, explaining that goals provide direction, focus attention, and encourage perseverance, resulting in better outcomes for individuals and organisations. Locke and Latham's goal-setting theory has had a considerable influence in the field of organisational behaviour and is widely applied in other areas such as management, human resources, and performance improvement (Freudenreich et al., 2020). Edwin Locke introduced the concept of goal-setting theory in his 1968 article "Towards a Theory of Task Motivation and Incentive".

According to Locke, when goals are clearly communicated, people are more motivated to achieve them. He also emphasises the need to provide meaningful feedback on established goals (Freudenreich et al., 2020). Locke's goal-setting philosophy is grounded in five key principles essential to developing more effective and lasting goals. These principles include clarity, problem-solving, dedication, evaluation, and intricacy (Gkizani & Galanakis, 2022). The goal-setting theory offers guidelines to boost employee engagement, motivation, and productivity, inspiring individuals to develop professionally and feel more fulfilled at work.

This study operates on the premise that clear communication of RM throughout the organisation leads to faster incident reporting and more appropriate corrective action. With proper guidance on how to manage matters, risks are reduced, and if they do occur, mechanisms are in place to mitigate them and establish effective risk control. Gkizani and Galanakis (2022) also highlight that goal-setting theory promotes employee career growth and that strategic planning should be integrated into modern management practices. Notably, staff development plays a significant role in

productivity (Pietsch et al., 2024); however, many organisations do not view it as a means of improving performance.

The goal-setting theory provides principles to enhance employee engagement, motivation, and productivity, encouraging individuals to grow professionally and find greater fulfilment in their roles (Aarts, 2019). Therefore, this study bases its approach on this concept, recognising that when RM is clearly explained across the organisation and staff receive the necessary education on risks and their organisational impact, timely incident reporting will contribute to the organisation's sustainability (Khan et al., 2021).

When appropriate procedures are in place, risks are reduced, and when they do occur, measures are in place to mitigate them, making it straightforward to establish effective risk control mechanisms. By applying goal-setting theory in business, organisations can boost employee motivation, focus, and performance. Furthermore, Freudenreich et al. (2020) state that clear, specific, and challenging goals, together with feedback, commitment, and goal alignment, create a framework that drives individuals and teams to achieve desired outcomes, thereby contributing to business success.

Supporting this view, Pietsch et al. (2024) found in their analysis of the do-your-best goal strategy that setting attainable goals is more effective in many ways. They argue that goal-setting theory supports employee career development and that staff need the expertise to complete tasks effectively. Despite some criticisms of strategic planning, it remains essential for modern organisations to integrate it into their standard management practices and enforce goal setting to facilitate the successful implementation of ERM (Pietsch et al., 2024). Together, these theories form a cohesive 'Survival and Performance' model, moving the study from a general

investigation to a robust analysis of institutional resilience. The study also explored theories of adaptive mechanisms and strategies beyond operational efficiency.

Theories on Adaptive Strategies

Adaptive strategies encompass theories that help organisations understand themselves and maintain their viability in the industry. In this study, two theories, Corporate Darwinism and Stakeholder Theory, were examined to enhance the adaptive capabilities of cSOEs. The Corporate Darwinism Theory promotes adaptation mechanisms (Zhao, 2024) as an essential driver for reducing reliance on government bailouts. This suggests that cSOEs must develop internal adaptive processes suitable for all economic conditions, ensuring their survival even without government intervention.

The Stakeholder theory seeks to mitigate public criticism of underperforming cSOEs by aligning ERM practices with the specific context and stakeholder expectations (Pedrini & Ferri, 2019). It emphasises stakeholder engagement in organisational activities to foster transparency and build trust. The theory highlights two key aspects: addressing the community the organisation serves (Turyakira et al., 2023) and helping investors understand its stance, thereby establishing confidence and encouraging investment (Rela et al., 2022).

The theoretical concept in this study suggests that organisations with well-established RM processes are better equipped to overcome adverse situations, remain competitive, and sustain their operations. Therefore, when an organisation establishes effective risk management practices, its performance also improves (Freudenreich et al., 2020). The Stakeholder theory clearly explains why organisations must involve various stakeholders in their RM process and develop clear, well-defined strategies to guide stakeholders on key organisational priorities. Notably, stakeholder

theory primarily examines stakeholder involvement (Rela et al., 2022) and emphasises businesses' mandates or roles within the society or community in which they operate (Turyakira et al., 2023), particularly through activities such as corporate governance. Sustainable development of cSOEs is crucial to addressing Namibia’s current unemployment crisis, and establishing an effective RM process could help change the situation.

According to Weylandt (2017), managers and boards in most organisations do not truly value their stakeholders; therefore, they do not involve them as important contributors to business operations and value creation. Therefore, these theories suggest that organisations need to value stakeholders’ participation in organisational activities, provide platforms to engage their ideas, and ensure their needs are met. Supporting the intended outcome of this study, Jankensgård (2019) states that only organisations with established ERM are sustainable, regardless of their size or scope. Because ERM enables organisations to better tolerate risk, resulting in less severe harm than organisations without a well-established risk management process (Aarts, 2019).

Corporate Darwinism

Fraser et al. (2021) link the ERM concept to Charles Darwin's theory of natural selection. According to Darwin’s theory, only organisms that can adapt readily to their environment survive adverse conditions. This is Charles Darwin’s ‘Theory of Natural Selection ' (1859), or simply the theory of the survival of the fittest (Jalal et al., 2024). Charles Darwin’s theoretical framework offers relevant concepts for understanding why some commercial entities may outperform others, especially in adverse economic conditions.

Darwin's Theory (Corporate Darwinism) (Darwin, 1809–1882) holds that

organisations must adapt to changing environments to survive, as species do in nature (Robert, Jane, & Warren, 1966). In nature, animals survive by developing mechanisms to adapt to new environments. Applying Darwin's theory of the survival of the fittest to the current study, only companies that adapt to changing economic conditions will survive. To establish survival mechanisms, ERM is one of the most effective risk frameworks, helping organisations determine the optimal level of risk to accept to maximise their prospects and, consequently, improve their chances of survival. Risks are part of everyday life, even in business. No business can guarantee total risk avoidance or control all risks. However, organisations implement survival and risk-mitigation strategies to maintain business continuity without major disruption.

After implementing ERM strategies and improving operational efficiency, organisations adapt, creating an equitable operational environment that enables survival. Darwinism merits attention for its mechanisms of adaptation, but stakeholder theory complements it by ensuring stakeholders play their role in organisations' adaptive processes. This helps ensure that when disasters arise, organisations can make swift changes while preventing the waste of valuable resources.

Stakeholder's Theory

Stakeholder Theory was considered valuable in this study because stakeholders are central to organisations and play a significant role in maintaining their reputations (Rela et al., 2022). Stakeholder Theory addresses the external legitimacy required to ensure long-term sustainability and public support. First introduced by Freeman in 1984 as a management tool, it has since become a prominent theory in business management. Freeman and others popularised the stakeholder concept in their 1984 book Strategic Management: A Stakeholder Approach (Freeman et al., 2010). According to Stakeholder Theory, business decisions are shaped by balancing

the priorities of various stakeholder groups (Freeman et al., 2010). In 1984, Freeman and colleagues also argued that companies, when making decisions, should consider the interests and concerns of all stakeholders, such as employees, customers, suppliers, the public, and owners (Figure 4).

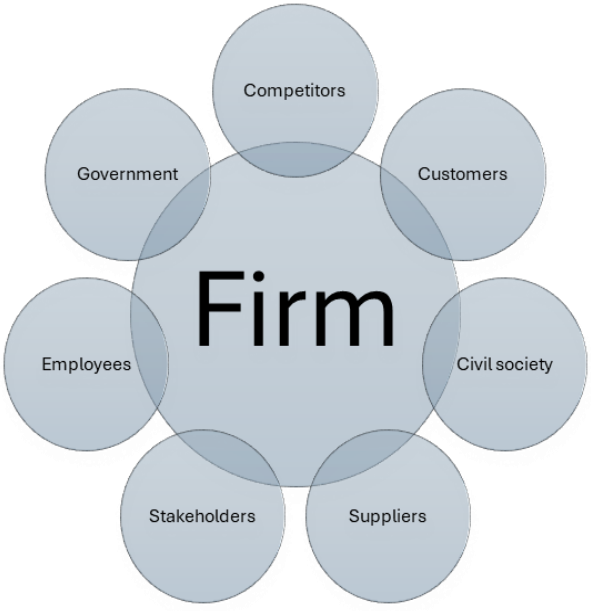
Freeman's stakeholder theory challenged the widely held notion that corporations should prioritise maximising shareholder value. His work laid the foundation for a broader understanding of organisational responsibility and underscored the importance of considering stakeholders in strategic management. From its inception, the stakeholder concept has generated extensive debate, growth, and application across diverse fields, including corporate social responsibility (CSR), ethics, and sustainability (Pedrini & Ferri, 2019). Rela et al. (2022) define stakeholders as "a group or individual who can influence or is influenced by the activities of the organisation's purpose." Based on Post et al. (2002), as cited in Rela et al. (2022), stakeholders are those who stand to benefit from or be affected by the organisation, including all people and groups, whether they choose to or not, who contribute to the organisation's ability to create sustainable income.

Ashmawy (2021) argues that companies should include employees, customers, suppliers, and the community in decision-making. Previous research has identified key stakeholder groups that support public preparedness and recovery from natural disasters, including government entities, business organisations, NGOs, academics, and the wider community (Rela et al., 2022; Ashmawy, 2021). Another study explored fundamental concepts of risk management theory to guide firms in assessing risk management practices within enterprises (Ajupov et al., 2019). This research examined how management and other organisational subsystems interact internally and collaborate with external stakeholders.

It was also concluded that management must invest in building economic relationships among enterprises to facilitate effective risk communication channels (Rela et al., 2022; Ajupov et al., 2019). According to Ndlela (2019), organisations should continuously assess and control risks, disseminating information to key stakeholders throughout both crisis management and normal operations (Figure 5). She advises firms to adopt a stakeholder-oriented approach and to actively include relevant stakeholders in RM. However, some authors have highlighted that certain managers avoid involvement in the RM process, perceiving it as the sole responsibility of board members, which often contributes to organisations failing to manage risks effectively (Ashmawy, 2021; Freudenburg et al., 2020).

Figure 4

The Stakeholder's Theory Model



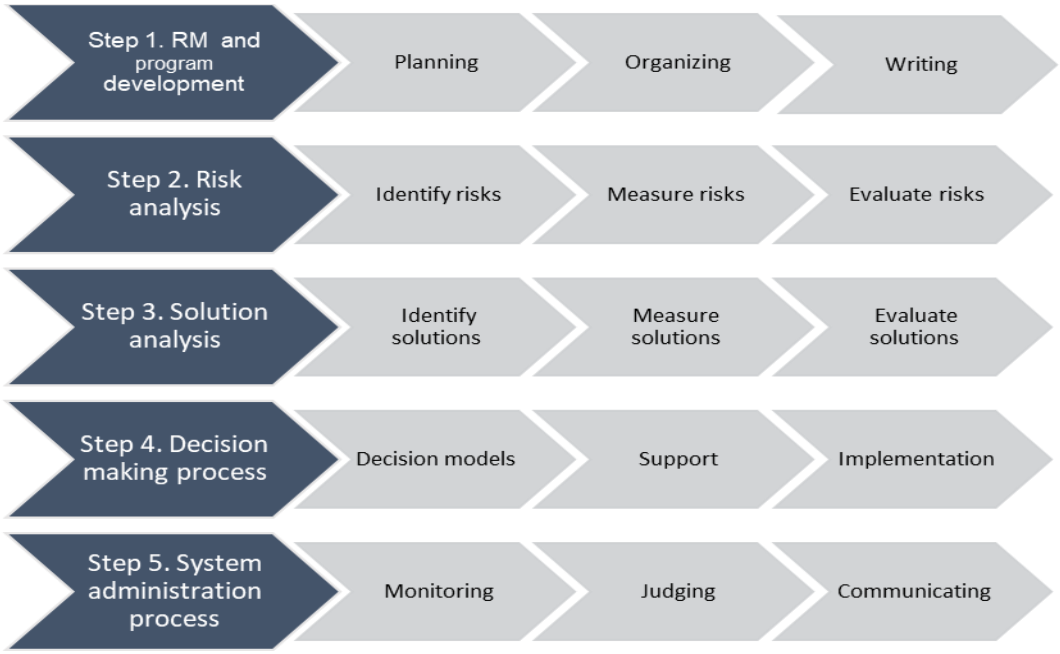
Adapted from Freeman et al. *(*2010)

As shown in Figure 5 (adapted from Ndlela, 2019), all five stages of risk management require the participation of various stakeholders to foster a risk culture and establish a proactive RM process. According to Figure 5, risk awareness is a sequential activity that follows a series of processes and procedures. This approach

engages different individuals within the organisations in relation to risk control and mitigation. In other words, every individual within the organisations contributes to one of the processes outlined below across the five stages of the RM process.

Figure 5

The Five Main Stages of Risk Management



Adapted from Ndlela (2019)

The extent of stakeholder involvement depends on the identified risks and how proposed solutions affect their participation and ability to influence decisions. The core idea is to identify the specific hazards being addressed and the potential consequences of any proposed solutions or decisions (Ndlela, 2019). Rela et al. (2022), in a study conducted during the COVID-19 pandemic, emphasised the importance of engaging all stakeholders, not just key ones. They stressed the need to keep everyone involved in the process well informed to prevent delays, new risks, and other adverse outcomes. In addition, it is recommended that society at large be involved, ensuring two-way interactions between social organisations and key players such as governments and private companies (Pedrini & Ferri, 2019).

Enterprise risk management differs from the traditional RM process. The

traditional approach is simpler and typically used by smaller organisations because it is less complex and easier to implement, often requiring minimal stakeholder input (Krüger & Meyer, 2021; Pagach & Wieczorek-Kosmala, 2020; Jankensgård, 2019). However, these authors assert that risk management is widely practised across companies of all sizes. In many firms, the board and managers oversee the RM process (Jankensgård, 2019). Since boards tend to be risk-averse, they often prioritise shareholder interests and seek to maximise organisational sustainability. By contrast, the present study investigates whether this holds true in Namibian cSOEs with respect to organisational risk control.

The board of directors is entrusted with this mandate because it understands the firm's RM challenges and oversees the allocation of corporate resources to address them (Krüger & Meyer, 2021). However, Jankensgård (2019) notes that, because of decentralised decision-making structures, the board sometimes lacks complete information about the risks faced by individual divisions and their risk-mitigation efforts, making it difficult to assess the organisation's overall risk profile. Consequently, the board takes measures to centralise information on the organisation's net risk exposures. Notably, some studies have found that smaller boards are more vigilant and proactive in risk management, which facilitates recovery following challenging periods (Obrenovic et al., 2020).

Highlighting the board of directors' role in the RM process, Jankensgård (2019) states that the board establishes monitoring procedures and incentive systems to address agency risk management concerns. This requires the board to invest in developing new risk management skills to effectively oversee risk governance (Gontarek & Bender, 2019) and to ensure the aggregation of risks across the organisation.

Summary

Enterprise RM helps organisations prepare for future events by integrating risk management procedures into strategic planning, providing a comprehensive approach to risk control (Fraser et al., 2021). Various concepts and perspectives on ERM are widely regarded as a gold-standard risk management approach that conveys important risk management principles (Moeller, 2007, as cited in Fraser et al., 2021). Moeller (2007) defines risk as “any potential event that can have either a positive or negative impact on the organisation.” When people discuss risks, they often focus on the negative aspects, but ERM aims to address this by embedding the RM process within the entity’s strategic planning (Fraser & Simkins, 2010).

Risk management literature increasingly recognises ERM as a more encompassing paradigm. This evolution is supported by its compelling commercial logic and positive impact on firm value (Fraser & Simkins, 2010). The Treasury COSO introduced ERM in the 1990s as a natural progression from traditional RM (Fraser & Simkins, 2010). According to the COSO, ERM is defined as "a process that an entity's board of directors, management, and other personnel apply to strategy setting and across the entity to identify potential events that may affect the entity. Management of risks means that the organisation must ensure that risks are within its risk appetite and provide reasonable assurance regarding the achievement of entity objectives" (Branson, 2010, p. 56).

In 2017, the COSO committee redefined ERM as "the culture, capabilities, and practices integrated with the strategy setting and performance that organisations depend on to manage risks in creating, preserving, and realising company value" (Fraser et al., 2021, p. 4). Businesses use ERM as an effective risk management framework and a key value driver, ensuring the systematic identification of risks and

opportunities and the establishment of risk responses (Naik & Prasad, 2021). Fraser and Simkins (2010) state that, under ERM, all risk categories are components of an integrated, strategic, and enterprise-wide system. While senior leadership coordinates risk management, ERM encourages users at all levels to view it as a natural, ongoing part of daily activities (Fraser & Simkins, 2010).

Furthermore, the ERM process includes a thorough examination of many duties, such as the role of the board, risk tolerance, risk profile, risk workshops, and resource allocation, while underscoring the principles that drive firm success (Naik & Prasad, 2021). A fundamental premise of ERM is that no two firms can employ the same approach to risk management, since each company is unique (Naik & Prasad, 2021). Supporting Fraser and Simkins (2010), Bakker et al. (2022) explain that one key principle of ERM that differentiates it from the traditional RM process is that risk management is everyone's responsibility, and risk management techniques differ from company to company because companies are different and operate in different industries with varying degrees of risk exposure.

Several researchers have reported that the concept of ERM is not difficult to grasp; however, the implementation process is always fraught with difficulties. This is due to a lack of knowledge and support for employees by managers, or a lack of management support from boards (Fraser et al., 2021; Naik & Prasad, 2021). Studies have also found that when a company takes a methodical, consistent approach to monitoring and managing risks and provides business managers with the knowledge and incentives they need, performance increases (Nocci & Stulz, 2022; Naik & Prasad, 2021). Moreover, it maximises the balance between risk and return and enhances the company’s capacity to implement its strategic plan and engage in ERM (Lima Rua et al., 2022; Akhmetshin et al., 2019).

For many years, the fundamental theoretical topic that has dominated the field of ERM has been business value creation, owing to ERM's influence on organisations at both the "macro" (company-wide) and "micro" (business unit) levels (Akhmetshin et al., 2019). Other studies have shown that value is created at the enterprise level because ERM helps senior management better understand and manage the risk-reward trade-offs organisations face (Nocca & Stulz, 2022; Fraser et al., 2021). Nevertheless, value can be created only if management and boards truly understand the concept and organisations have the resources and ability to manage risks holistically. A previous study suggested that the approach must ensure the company continues to have access to the funds required to carry out its strategic objectives (Lima Rua et al., 2022).

According to Naik and Prasad (2021), ERM must be integrated into the everyday routines of managers and workers across the company at the operational level. In practice, the micro-level benefits of ERM are critical, yet the scientific literature has paid more attention to the macro-level benefits (Naik & Prasad, 2021). This is an area where new studies should focus on developing a clearer understanding of whether risks affect management or lower levels of the organisations. In most organisations, when it comes to risks and consequences, such as financial risks, people at lower levels suffer the most. These are the first to be laid off and, in most cases, to have their wages cut.

The most important basic understanding of ERM is that it is a macro-level risk management framework that seeks to detect, assess, and manage risks at the organisational level (Chege et al., 2023; Syahputri & Kitri, 2020). However, the notion is that ERM incorporates the traditional approach to RM at a strategic level, as it is a disciplined alignment of strategy, processes, people, technology, and knowledge to

manage uncertainty while the organisation creates value (Meagre & O'Neil, 2000, as cited in Syahputri & Kitri, 2020).

Because of the technique's complexity, many viewpoints exist on RM implementation in business, as many attempt to align this process with their business strategy (Alijoyo & Norimarna, 2021). In contrast, Pagach and Warr (2010), as cited in Ching et al. (2020), describe ERM as a widely adopted strategy for analysing and managing an enterprise's overall risk exposure, which has led to recent innovations in RM and renewed interest in ERM. Therefore, ERM, as a holistic approach to RM, is replacing the traditional approach to risk management, which isolates risks in distinct parts of the organisation (Naik & Prasad, 2021; Fraser et al., 2021).

Those who support ERM argue that risk reduction is not the main goal of ERM (Naik & Prasad, 2021), but rather to improve enterprise-wide risk management to retain or even increase stakeholder value. This means that ERM prepares management and the board for superior, "risk-intelligent" strategic decision-making (Fraser et al., 2021). Notably, empirical evidence indicates that ERM is popular among researchers because it aids strategic management and budgeting, aligns corporate governance with strategic management, creates value, minimises risks, enhances performance, and supports strategic decision-making (Naik & Prasad, 2021).

Some experts argue that ERM is merely a fleeting management trend, centered primarily in the banking industry (Horvey & Ankama, 2020; Ngwangwama et al., 2019). After several corporations failed despite touting strong levels of 'holistic' risk management during the Global Financial Crisis in the 1990s, criticism of the practice grew louder (Fraser et al., 2021). Despite these common concerns about ERM research and ERM's portfolio approach to RM, many remain doubtful, believing ERM can only prioritise risks and not fully diversify them (Naik & Prasad, 2021).

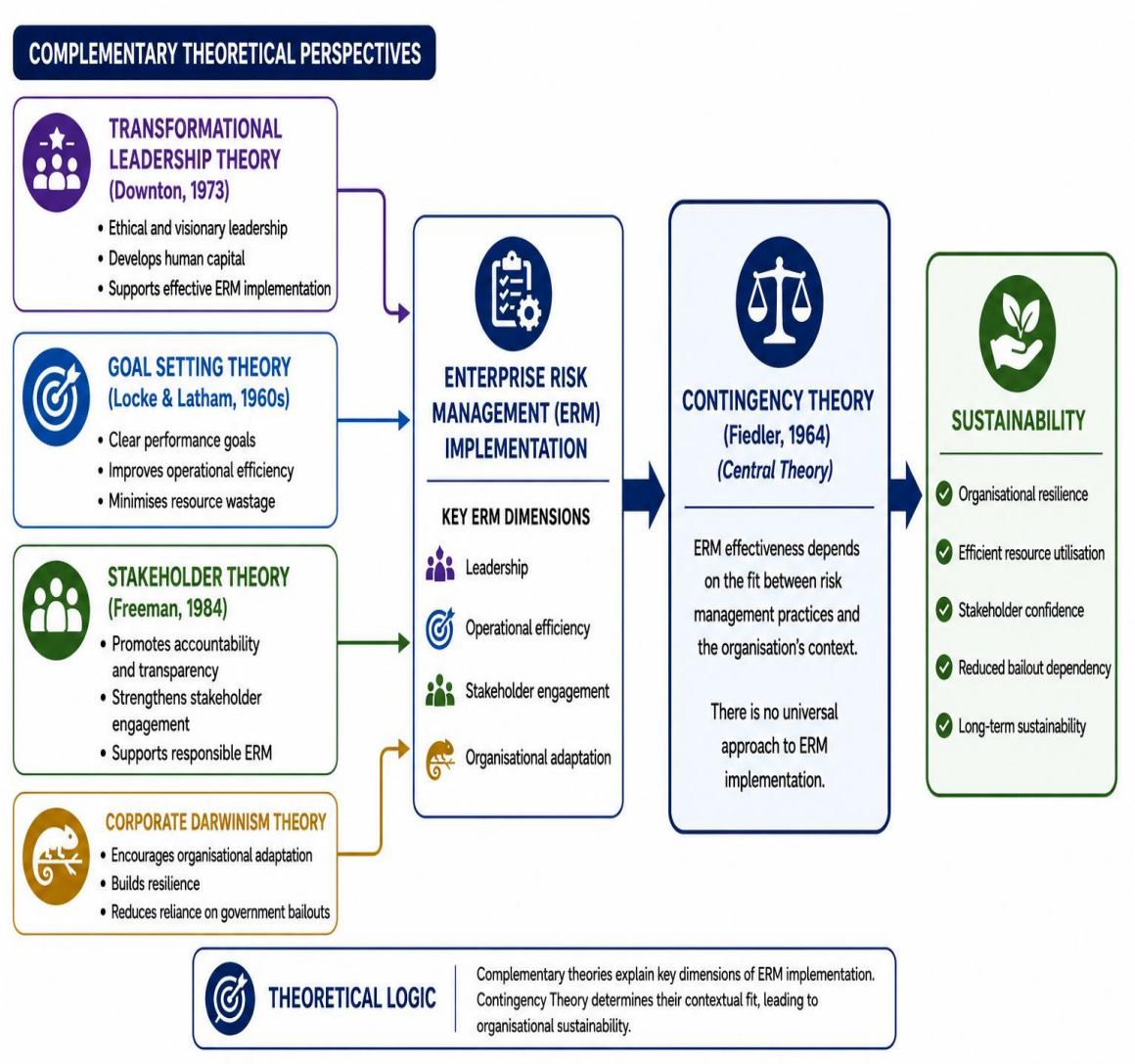
Notably, business units, senior management, and board members can all benefit from the structured input and direction an ERM framework provides when implementing and overseeing ERM projects. Regardless of personnel turnover, other researchers have indicated that ERM frameworks help establish a consistent risk management culture (Cheg et al., 2023). Fraser and Simkins (2010) demonstrated that ERM frameworks help firms cope with complexity by visualising risks, identifying who is responsible for assessing and monitoring controls, and articulating those roles and responsibilities. They explain that an enterprise-specific risk management framework makes it easier to incorporate risk management into important business activities and processes.

The five theories discussed in this study (stakeholders, contingency, transformational, goal setting, and corporate Darwinism) complement one another to improve the performance and sustainability of cSOEs in Namibia (Figure 6). For survival mechanisms to be effective, cSOEs must develop adaptive and operational efficiency to support organisational sustainability. The Contingency theory, as the main theory in this study, encourages cSOEs to establish organisational adaptation mechanisms to avoid relying on government. The Contingency theory examines the strategic fit of businesses' RM processes by looking at ERM implementation, ensuring that RM is not seen as a one-size-fits-all approach but rather as grounded in organisations’ capacity to establish their own risk resilience strategies for survival.

The four supporting theories shown in Figure 6 drive the identification of key areas for effective ERM implementation. This leads to the main theory of this study: contingency theory.

Figure 6

Integrated Theoretical Framework for Enterprise Risk Management Implementation and Sustainability



Contingency theory then determines the contextual fit of each strategy set for appropriate RM within the organisations. Therefore, the main idea is that for organisations to achieve sustainability, they must ensure that the set strategies align with the organisation's leadership and human capital capacity, operational efficiency, and relevant stakeholders, and that appropriate adoption mechanisms are in place.

According to contingency theory, one size does not fit all; therefore, as in RM, organisations need to establish their operational fitness to achieve contextual fit for

the RM process and the implementation of ERM. The framework integrates Transformational Leadership Theory, Goal Setting Theory, Stakeholder Theory, and Corporate Darwinism Theory as complementary perspectives that explain key dimensions of ERM implementation. These dimensions are interpreted through the overarching lens of Contingency Theory, which holds that ERM implementation effectiveness depends on its alignment with the organisational context. Consequently, contextually appropriate ERM implementation enhances organisational sustainability.

The framework notably integrates Stakeholder Theory in areas such as risk management, operational accountability, and safeguarding against public backlash in underperforming cSOEs. This reflects the insights from Martin N. Ndlela's 2019 book, Crisis Communication: A Stakeholder Approach (Palgrave Pivot), which includes a pivotal chapter titled "A Stakeholder Approach to Risk Management." Ndlela (2019) highlights that risk management is not solely an internal process, but an ongoing activity tied to stakeholder expectations, reputation management, and environmental uncertainty.

Stakeholder theory promotes accountability, reputation, and transparency within organisations. This will protect organisations against resource mismanagement, thereby reducing public outcry over poor performance and irregularities in cSOEs. Meanwhile, Transformational leadership theory is equally important in complementing contingency theory, as it focuses on developing human capital by ensuring the presence of ethical leaders who lead by example. Visionary leaders encourage employees to go the extra mile, fostering a willingness to learn, which eases the process of implementing ERM and its sustainability. Goal-setting theory complements contingency theory by taking organisational operational capacity into consideration to ensure that clear, specific goals are set and resources are not wasted. Therefore,

cSOEs in Namibia require the right mindset, actions, and resources to ensure sustainability.

Conversely, a study by Obrenovic et al. (2020) advocates establishing clear organisational goals for stakeholders to enhance performance, trust, and transparency. Additionally, partner organisations, employees, risk managers, and other stakeholders need to communicate with one another and make joint decisions in the face of crises, such as the COVID-19 pandemic. This brings in Darwinian theory, which holds that organisations, like organisms, must undergo transformation to adjust to the current economic environment, and that this requires the involvement of all necessary stakeholders.

Moreover, for stakeholders to get involved, they need to understand what is expected of them, which is why this study also examines goal-setting theory as a complement to the Contingency theory for operational efficacy. The new theories and concepts of ERM entail that not only are organisations' boards mandated to manage the risk process; managers must also ensure that both internal and external risks are managed effectively and that all organisational structures are involved in the strategic planning for RM (Fraser et al., 2021).

In summary, the integrated theoretical framework of this study posits that ERM implementation serves as a link among several theories and sustainability outcomes. Four theories inform ERM implementation, after which contingency theory should be applied to achieve sustainability. In this regard, leadership theory shows that ERM depends on strong leadership, organisational structures, and accepted practices. Goal-setting theory explains that clear goals help ERM improve performance and resource use. Stakeholder theory adds that ERM should support accountability, transparency, and stakeholder expectations.

In this regard, contingency theory serves as a mediator between ERM and the sustainability of cSOEs. The idea of contingency theory being primary to this study is established in the sense that, after ERM, all processes and procedures must be adapted to the organisation's specific context rather than applied the same way everywhere, which leads to organisational sustainability and value creation. Considering this, organisations put themselves in a good position to maintain a good reputation within their communities and in the eyes of potential shareholders. When ERM is implemented effectively and fits the context, it leads to greater resilience, reduced uncertainty, more efficient use of resources, long-term value creation, and overall sustainability (Cheg et al., 2023).

This study's conceptual framework links enterprise risk control to enhanced performance of cSOEs, emphasising high-quality risk communication and documentation within an effective risk management process. It also highlights that trained personnel and strong leadership are crucial for successful ERM implementation. The framework suggests that ERM promotes an efficient risk management process, which in turn boosts organisational performance and sustainability. The key independent variables identified are: 1) challenges faced by cSOEs during the COVID-19 pandemic, 2) quality of risk communication and documentation, and 3) the presence of skilled personnel and capable or competent leadership.

Conceptual Framework of ERM

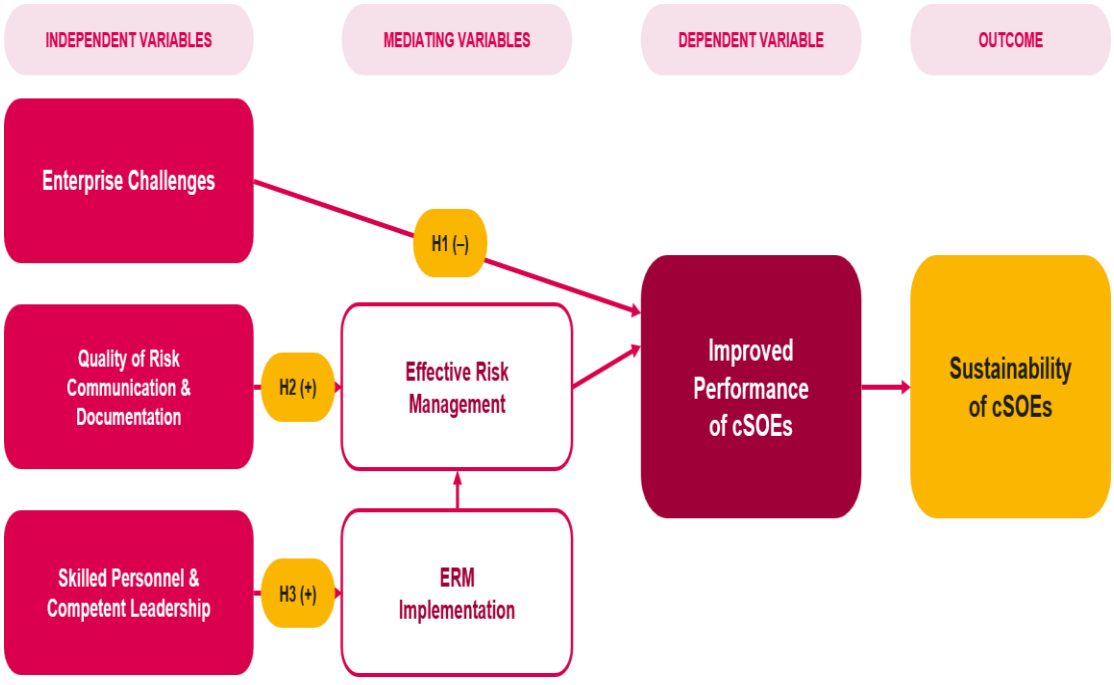
This study examined evidence suggesting that, to improve the sustainability of cSOEs in Namibia, ERM needs to be implemented to achieve effective RM through operational efficiency, thereby improving adaptability to different economic conditions. Improved organisational performance is essential to minimise extreme risks in any

economic environment. In this study, operational effectiveness was considered to include the quality of risk communication and documentation, as well as the presence of trained personnel and competent leadership within the organisations. Therefore, it is important to ensure that, as risks arise, they are properly documented and communicated to all relevant stakeholders. Moreover, the knowledge of internal stakeholders, such as employees, and the leadership capabilities of managers and boards of organisations play a significant role in ensuring that an effective, sustainable risk management plan is in place.

The idea behind this conceptual framework (Figure 7) is that improving organisational performance requires implementing ERM, which drives an effective RM process.

Figure 7

Conceptual Framework



According to the current concept, only when ERM is implemented can organisations achieve an effective RM process, thereby improving performance and, ultimately, sustainability and value creation. Establishing an effective risk

management process requires implementing ERM and ensuring quality assurance of risk communication and documentation throughout the entire organisation. Moreover, skilled personnel and competent leadership teams are the driving forces behind ERM implementation; hence, their involvement in the process is crucial. This includes personnel training and resource availability.

Therefore, the holistic approach of this conceptual framework underscores that integrating enterprise risk management into the organisation’s strategic planning is a sound strategy for improving performance and sustaining the ERM process. Extended interruptions to business activities can negatively affect a company's ability to fulfil client requirements and sustain its competitive advantage in the market (Al Lawati et al., 2025; Zhang, 2026). By implementing ERM, organisations can proactively identify, evaluate, and control potential risks. The ERM process enables cSOEs to anticipate and manage unexpected occurrences, resulting in more dependable delivery timelines and enhanced business continuity.

On the other hand, the second scenario in the conceptual framework posits that the quality of documentation and risk communication positively contributes to establishing an effective risk management process. This means that a methodical approach to recording and conveying detected hazards is an essential element of an efficient risk management plan (Recchia, Aloisi & Zizza, 2022). Thorough documentation and open, effective communication about risks ensures that everyone in the organisation is informed of potential difficulties and prepared to help reduce them. According to Khali et al. (2025), transparency in the risk management process not only facilitates the synchronisation of organisational operations with recognised risks but also cultivates a proactive culture of risk awareness and collaboration, thereby enhancing the resilience of organisational processes.

The third scenario of the conceptual framework describes the association between skilled personnel and competent leadership in implementing ERM. The underlying concept is that when an organisation has skilled employees and competent leadership, implementing ERM becomes much easier (Farahnak et al., 2020). This is because skilled employees can quickly understand concepts and adapt to change and modern technologies. Moreover, Müller et al. (2024) argue that competent leaders are transformative and function as change agents. They have the necessary abilities to manage employees and processes effectively without causing stress or anxiety among staff. Organisational leaders must demonstrate the competencies required to lead successfully; if they do not, they should pursue upskilling training (Müller et al., 2024).

The conceptual framework is based on the notion that ERM implementation, efficient risk management, and enhanced performance are three mediating factors that enhance cSOEs' sustainability. According to the conceptual framework, the three mediating factors work in collaboration with the independent variables in multiple directions. This means that for ERM implementation to succeed, not only trained personnel and transformative leadership are required, but the process also requires quality risk communication and documentation, as well as effective risk identification and monitoring. Therefore, once the risk management process is deemed effective, it must contribute positively to the organisation's performance, thereby improving sustainability.

The three mediating variables were correlated with the independent variables, indicating that changes in the independent variables had a significant impact on the dependent variable, overall enterprise sustainability (Figure 7). The three hypotheses of this study were based on the conceptual framework, which holds that mediating factors result from the independent variables' impact and that, through this impact, the

outcome is achieved. In this case, the main outcome for both independent variables is the sustainability of cSOEs. Therefore, the main idea of this conceptual framework is to create a pathway for cSOEs in Namibia to understand how enterprise challenges, risk communication, documentation quality, and the roles of trained personnel and competent leadership affect the sustainability of these state entities' operations.

Overall, the conceptual framework indicates how the three mediating variables or factors are valuable to entities in remaining valuable, promoting transparency, creating sustainability plans, and improving reputation. Moreover, quality assurance in risk documentation and communication, as well as skilled personnel and competent leaders in cSOEs, can guide commercial state entities to greater heights, improving performance and helping the government achieve its sustainability plans. Enterprise risk management enables organisations to achieve improved performance, a clear sense of direction, and enhanced firm value. Based on these concepts, this study aimed to outline the importance of ERM implementation in Namibia's cSOEs for promoting effective RM and performance and, in the long run, keeping cSOEs' operations viable and sustainable.

Therefore, the study examines the current RM process and proposes improvements, such as implementing an ERM risk framework. This means understanding the importance of ERM implementation within cSOEs in Namibia to promote value creation and a strong sense of corporate purpose. Based on Fraser and Simkins' argument, ERM provides a wide range of ideas and approaches for effectively managing and evaluating risks, and for choosing appropriate methods to reduce them. The fundamental theoretical framework of this study proposes that, for enterprises to achieve long-term success, they must have a strong risk management strategy capable of identifying and effectively controlling risks to acceptable levels.

The hypotheses of this study propose that: ***H1****: There is a statistically significant negative association between enterprise-related challenges and the performance of commercial state-owned enterprises in Namibia during the COVID-19 pandemic*. The dependent variable is improved performance, with enterprise challenges as the independent variable.

H2*: There is a statistically significant positive association between the quality of risk communication and documentation and the effectiveness of the RM process.*

The RM process serves as a mediator, with sustainability as the dependent variable and the quality of risk documentation and communication as the independent variables.

H3: *There is a statistically significant positive association between the presence of skilled personnel and competent leadership within the organisations and the implementation of ERM*. Enterprise risk management is a mediator, with sustainability as the dependent variable and skilled personnel and a competent leadership team as two independent variables.

The quantitative approach of this study utilised survey questionnaires to gather opinions on the general understanding of ERM and effective risk management, and to identify the components underlying the positive association among five phenomena: effective risk management, ERM, performance, value creation, and sustainability. Furthermore, the qualitative approach, which served as a complementary study, involved conducting interviews to gather perspectives on ERM implementation and implementation challenges. Several studies have highlighted that a conceptual understanding of ERM helps management and board members recognise the firm's risk appetite, revenue determination, capital allocation, performance evaluation system, and decentralisation of risk investments and support (Ahmad & Teo, 2024;

Fraser et al., 2021; Naik & Prasad, 2021).

A few studies have demonstrated the impact of ERM on entities' performance by examining its course and effects on organisational outcomes (Naik & Prasad, 2021; Alsyouf et al., 2021; Pombo & Gomes, 2020). In seeking to understand the various philosophical approaches to RM, Zainuddin et al. (2020) emphasised that there is confusion among researchers about what constitutes the RM process and its key characteristics. Moreover, some believe that ERM is only relevant to large organisations; however, Ahmad and Teo (2024) stated that the ERM process is applicable to all types of enterprises, although it requires a thorough conceptual understanding.

Therefore, it would be valuable to investigate this in smaller settings to determine whether the process is also effective for smaller organisations. Enterprise RM, as a comprehensive approach to RM, has been studied in relation to ERM benefits, and research has noted that most risk officers within organisations lack a comprehensive understanding of RM components; as a result, they do not implement measures that raise organisational awareness of risks (Zainuddin et al., 2020). Furthermore, Zainuddin et al. (2020) emphasise that many entities seeking to integrate ERM into their operations collectively view ERM as solely the board's responsibility. However, effective risk control requires the involvement of everyone within the organisations, guided by the board and management, to ensure fair strategic implementation and oversight.

In agreement with Zainuddin et al. (2020), the researchers believe that many state entities in Namibia are failing due to the boards' ignorance or, at times, their incompetence (Harrison et al., 2020). Studies by Limbo and other authors on the performance of Namibian SOEs have emphasised that inadequate board members

have been a significant factor hindering government entities. However, the researcher in this study recognises that support from the government, board composition, the competence of the leadership team, and the length of their tenure all need to be reconsidered in light of the observed inferior performance.

Therefore, the first goal of this study was to investigate the impact of the challenges experienced during the COVID-19 pandemic on the performance of cSOEs in Namibia. The investigation further examined whether these state entities could develop adaptive mechanisms to survive the pandemic. The challenges investigated in this study included strategic, financial, reputational, and operational challenges. This suggests that only organisations that were able to adapt to the COVID-19 pandemic survived and continued operating.

The second goal examined the importance of quality risk documentation and communication and linked these practices to effective risk management. Several studies have emphasised the importance of quality communication and risk documentation, noting that when risk communication and documentation are done properly, there is a prompt response to risk and resources are saved. Moreover, quality risk documentation and communication positively influence organisational performance and facilitate the ERM process. Effective, high-quality communication must include all relevant stakeholders so that their ideas and opinions are considered. According to Fraser et al. (2021), quality risk communication and documentation also promote risk culture awareness, which positively contributes to employees' well-being and, in turn, increases employees' output.

The third goal of this study is to link skilled employees and competent leadership to facilitate ERM implementation. It is worth noting that ERM implementation could be more effective if the frameworks are considered from the

outset of the planning process (Gleißner & Berger, 2024), making it easier to embed them within the organisations' activities. Failure to integrate RM or ERM into the organisations' strategic planning may undermine effective risk control (Stasse et al., 2025). Poor risk management set back the performance of commercial state organisations during the COVID-19 pandemic, forcing many such institutions in Namibia to close or take on debt to survive.

The rationale behind the third hypothesis of this study is that firms lacking efficient and effective risk management processes, and without ERM integrated into their organisational strategic planning, will struggle to cope with the new normal created by adverse economic conditions. Consequently, only organisations that have implemented ERM may have robust and efficient risk management processes, which may have helped them get through the pandemic. Meanwhile, this study also establishes a link between mediating variables. The relationship is that implementing ERM promotes an effective RM process, which leads to improved performance of cSOEs and, in turn, creates sustainability mechanisms for the entity. The implementation of ERM must be central, streamlining the RM process to enhance effectiveness, which is at the centre of improving performance and therefore sustainability and value creation. All three hypotheses contribute to organisational sustainability and value creation.

Several studies on the impact of effective RM on organisational sustainability (Fitriana & Wardhani, 2020; Manab et al., 2020) have been conducted to better understand how effective RM helps organisations endure challenging periods. To the researcher's knowledge, this study is the first in Namibia to examine how effective risk management can enhance the sustainability and value creation of cSOEs. Notably, earlier studies conducted in Namibia (Maseke & Swartz, 2021; Limbo, 2019; Weylandt,

2017) on SOEs revealed the inferior performance of most state entities; however, they did not focus on RM.

Therefore, this study explores in detail the primary obstacles to satisfactory performance in the country's commercial state entities, ranging from the current RM process to the feasibility of ERM implementation within cSOEs in Namibia. According to the literature, ERM frameworks help develop and implement an ERM infrastructure to manage risks and establish monitoring, control, and discipline mechanisms that drive the continual improvement of an entity's risk management capabilities within an evolving operational environment (Fraser et al., 2021). The authors further suggest that the use of ERM frameworks supports management in effectively managing uncertainty, risk, and opportunity, thereby influencing the organisations' ability to create value. Hence, the same approach may assist Namibian commercial state entities in improving their current situation to satisfactory levels.

Consequently, this study considered two ERM frameworks, namely COSO and ISO 31000, as the basis for its research questions, which explored the benefits of ERM implementation in cSOEs in Namibia. The research questions were developed by examining the extent to which the requirements of these two ERM frameworks are met and by identifying weaknesses in the current RM processes within cSOEs, particularly in risk identification, evaluation, communication, and control. Therefore, the next section outlines the concept behind ERM frameworks and their advantages.

Enterprise Risk Management Frameworks

According to ISO Guide 73 on risk management, a risk management framework is a "set of components that provide the foundations and organisational arrangements for designing, implementing, monitoring, reviewing, and continually improving risk management throughout the organisations" (ISO Guide 73, "Risk Management-

Vocabulary," 2009, Geneva, as cited by Fraser & Simkins, 2010, p. 97). According to Lam (2014, as cited in Ching et al., 2020), ERM provides an overall, interconnected structure for organisations to manage their most important risks. Doing this effectively, ERM helps organisations achieve their strategic goals, reduce volatility of earnings, and enhance their value.

Meanwhile, Gottwald and Mensah (2016, as cited in Ching et al., 2020) define ERM as a programme that helps firms reduce organisational vulnerability to failure, which, in turn, can improve productivity and value, as demonstrated by a positive correlation between ERM and entities' performance and value. Both definitions convey the same message: business viability. Strategic planning and all other operations within the organisations benefit from enterprise risk management (Alijoyo & Norimarna, 2021). ERM contributes to value creation and preservation by encouraging management to identify, measure, and evaluate risks amid uncertainty (Naik & Prasad, 2021).

Fraser et al. (2021) suggest implementing enterprise risk management to align risk appetite with strategic objectives and to link risk considerations to growth and profitability. This approach also improves risk-response decisions, reduces operational surprises and losses, and enables management of widespread corporate threats. Additionally, it facilitates a systematic response to diverse risks, the exploitation of new opportunities, and the efficient allocation of capital. Møller (2007) outlined six ERM frameworks: the Casualty Actuarial Society (CAS), the Information Systems Audit and Control Association (ISACA), the Comprehensive Organisational Framework for Information Technology (COBIT), the National Institute of Standards and Technology (NIST), the COSO, and ISO 31000.

Regardless of staff turnover rates or the prevalence of any industry standard,

ERM frameworks help to establish a consistent culture of risk management (Ade et al., 2020; Hanggraeni et al., 2019). ERM frameworks are also recognised for facilitating risk communication among various stakeholders (Pagach & Wieczorek-Kosmala, 2020). Notably, numerous studies have emphasised the importance of communicating internal risks within enterprises, a function that ERM frameworks provide (Alijoyo & Norimarna, 2021; Pagach & Wieczorek-Kosmala, 2020). The two frameworks examined in this study aim to identify existing gaps and issues affecting effective RM, as well as significant challenges in implementing ERM, particularly in Namibia.

Recently, there has been a distinct rise in interest in the theoretical foundations of ERM, including its principles, concepts, the role of the board, and risk management. International standardisation on RM, including ISO 31000 and the COSO frameworks, aligns with the hypotheses underpinning this study, as COSO emphasises the importance of internal risk control, the integration of ERM into enterprise strategic planning, and the roles of management, stakeholders, and boards in enhancing performance (Björnsdottir et al., 2022). Meanwhile, ISO 31000 addresses aspects such as integration, regulation, design, implementation, evaluation, external risk control, and the improvement of the integrated ERM process.

These frameworks serve as roadmaps for risk management operations, guiding businesses in managing complexity, mapping risks, distributing responsibilities, and establishing ownership. According to Fraser and Simkins (2010), the integrated COSO ERM framework provides clear guidance on implementing ERM. Organisations must assess the full scope of their risks and the interrelationships between them as part of this framework. Furthermore, businesses need to develop risk mitigation plans that align with their risk tolerance and long-term organisational objectives (COSO, 2004;

cited by Thabit, 2019). ISO 31000 on risk management was considered for this study because it guides organisations on the principles and processes of RM. The three processes involved in this ISO standard are value creation and protection, leadership, and commitment. Another framework examined in this study is COSO ERM. This risk framework provides comprehensive guidance on internal risk control. The COSO framework aligns four key principles with eight main activities undertaken to achieve the organisations' objectives effectively.

ISO 31000:2018

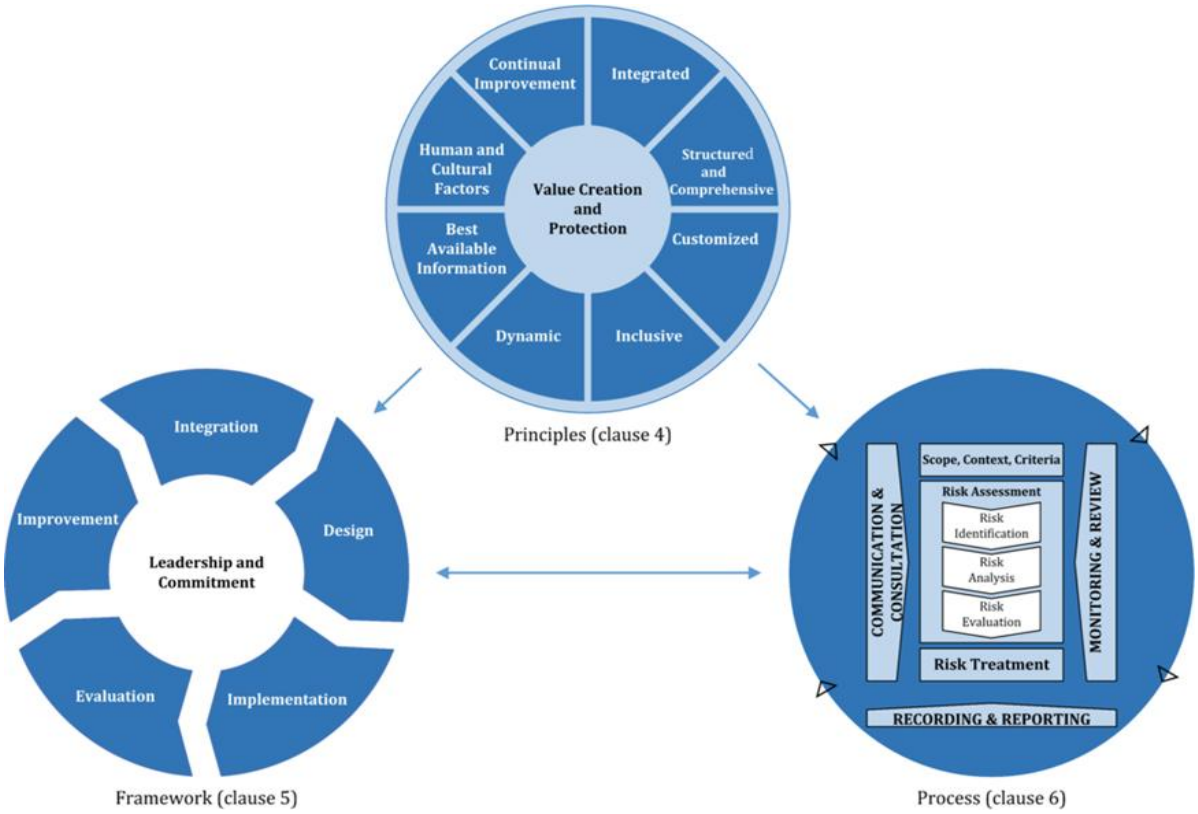
ISO 31000:2018 is a risk management standard that provides organisations with guidance on the principles, framework, and processes for managing risk to help them achieve their objectives (Figure 8, adapted from Alijoyo & Norimarna, 2021). This second edition supersedes and replaces the first edition (ISO 31000:2009), which has undergone technical revision. The principal modifications relative to the prior edition include the study of core RM principles, which are essential for its efficacy; the emphasis on the administration provided by senior executives; and the incorporation of RM, commencing with organisational leadership and increased focus on the main goals of RM, acknowledging that fresh ideas, insights, and analyses may necessitate revisions of workflow components, deals, and monitoring at all levels (ISO, 2018).

Lastly, the revised version of ISO 31000 focused on optimising content and enhancing its emphasis on maintaining an accessible process model to address diverse challenges and needs. One of its fundamental aims is to create and preserve the organisations' value. Alijoyo and Norimarna (2021) further explain that the framework is built around a single overarching principle and eight related subsidiary principles. This study focused on the components covered by the 2018 revision of ISO 31000. According to Alijoyo and Norimarna (2021), ISO 31000 is a risk regulatory

framework applicable to businesses of all sizes and scopes.

Figure 8

Principles, Framework, and Process of ISO 31000:2018



(Adopted from Alijoyo & Norimarna, 2021)

Strengthening leadership and committing to implementing enterprise-wide RM will generate and protect the organisation's value (Alijoyo & Norimarna, 2021). Leadership and dedication are essential to developing an effective RM strategy within the organisation. A resolute manager can support the process of establishing, integrating, implementing, evaluating, and enhancing the company's risk management framework (Obrenovic et al., 2020).

Regarding the ISO 31000 RM standards, Sidorenko and Demidenko (2016), in one of the early studies on RM, explain that all organisational activities require authority, resources, and skills to manage risk. This means leadership must ensure

that every department and employee understands their responsibilities in RM. Conversely, Fraser and Simkins (2010) argue that all core departments within the organisation should enhance RM, and that employers should prioritise risk management capabilities when recruiting. It has also been recommended that all employees receive RM training and that mature organisations integrate risk management with employee success (Fraser & Simkins, 2010). Training on RM frameworks, such as the ISO RM standard, is available to organisations. This aligns with several studies, as cited in Almeida et al. (2019), which have highlighted the challenges of implementing ISO 31000 as a risk standard, focusing on three typical clauses (Figure 9) that remain poorly explained and understudied to date.

Nonetheless, studies have emphasised the importance of ISO 31000 in protecting organisations against risks by establishing regulatory standards, guidelines, and requirements (Hardjomidjojo et al., 2022; Björnsdottir et al., 2022; Akhmetshin et al., 2019; Hanggraeni et al., 2019). Management in all organisations is advised to set up key performance indicators (KPIs) for risk management and staff engagement and to ensure that all relevant information, including potential threats, is shared during discussions (Fraser & Simkins, 2010).

It was further emphasised that risk management should achieve outcomes such as safeguarding financial resources, reputation, public safety, sustainability, overall benefits, and harm reduction (Fraser & Simkins, 2010). Effective risk management helps decision-makers gain a deeper understanding of how uncertainty can affect their objectives by supporting the development of appropriate risk treatments and facilitating the continuous monitoring, review, and improvement of risk controls (Januarita & Sumiyati, 2021; Fraser & Simkins, 2010). Although RM can be effective, many authors do not sufficiently address the high costs and long-term sustainability of

implementing the RM framework. Additionally, few studies have examined ERM implementation costs, particularly in small firms. This study does not focus on costs but instead investigates implementation challenges. Future research could explore the implementation costs of ERM in government-owned entities.

The aims of risk management are to establish and maintain robust performance and to preserve the organisation's value (Hardjomidjojo et al., 2022). They further emphasised that the RM process specifies the essential qualities of effective risk management (Hardjomidjojo et al., 2022). Therefore, when implementing risk management across the organisation, the risk management principle serves as the key reference point. The COSO RM guideline comprehensively addresses the strengthening of risk controls, particularly internal risks. However, upon closer inspection, while the practice may be important, organisations must also assess their capacity and understand their operating industry. This helps them anticipate potential implementation challenges and identify ways to address them at minimal cost, especially in resource-limited settings.

The COSO ERM Framework

Moeller (2007) states that all governing bodies, the executive team, and all organisational staff, including risk officers, must follow the COSO risk framework as an internal risk procedure to help the business gain assurance in achieving its objectives. Moeller (2007) further explains that the framework is established to monitor the entity's operational success and efficiency, including accurate financial reporting and compliance with relevant laws and regulations. Interestingly, this author did not address any possible ERM framework implementation challenges or how to overcome them. However, the COSO ERM framework has been widely used and successfully implemented by organisations across various sectors (Alijoyo & Norimarna, 2021; Naik

& Prasad, 2021).

Similarly, this study involved multiple state commercial organisations in Namibia from diverse industries, including agriculture, fishing, telecommunications, transport, healthcare, mining, and tourism, making the COSO ERM framework particularly relevant. Furthermore, the COSO framework is important for this study as it addresses organisational governance and culture. It clarifies organisational roles in relation to establishing objectives and offers recommendations on risk identification, assessment, and communication (Naik & Prasad, 2021). However, in the current context of Namibia's cSOEs, much remains to be explored, including the feasibility of implementing risk frameworks, the costings of training and technology, and leadership capacity.

The COSO team developed a pyramid-shaped ERM model in 1992 that focused on evaluating existing controls (Thabit, 2019). However, this pyramid model lacked guidance on risk management processes and has therefore been revised several times to incorporate additional aspects of organisational function. In 2013, COSO integrated all necessary principles and procedures for internal risk management (Figure 9) (Thabit, 2019). According to Thabit (2019), the revised guideline contains four main pillars of internal risk control: strategic, operations, reporting, and compliance. These four pillars are intended to complement one another by creating a risk management strategy that involves all relevant departments within the organisational structure. However, understanding how the four pillars integrate or relate to one another requires subject-matter knowledge.

From my perspective as a researcher, this framework will be effective only if implementing organisations receive adequate training to apply it accurately. Furthermore, by exploring the pillars of this framework, organisations can better

understand it, especially if they prioritise integrating it early in their planning process.

Figure 9

Integrated COSO Enterprise Risk Management Cube



(Adapted from Thabit, 2019)

Supporting this concept, Fraser et al. (2021) states that the COSO internal RM framework/guideline promotes the engagement of the board of directors, management, risk officers, and internal audit in establishing objectives, identifying and assessing risks, and facilitating communication and monitoring of events. In the 1990s, some companies began to reassess their RM process amid global economic challenges, a period when many organisations' inadequate risk management was exposed not only in the financial services sector but across all corporate industries (Yazid et al., 2018). This led to a revision of the framework to involve all organisational structures working towards a shared objective of risk control.

According to Moeller (2007), firms should ensure that their internal RM systems incorporate a code of conduct so that all stakeholders are appropriately prepared in corporate ethics. The code of conduct, or ethics, helps reduce irregularities within the organisations that may arise from poor management and control systems. Furthermore, unethical behaviours can occur when incompetent managers and board

members lack understanding or interest in what is happening at the operational level, and when individuals are not held accountable for their misconduct (Derenyielo & Joseph, 2018; Moeller, 2007).

The aims of this study were to identify and assess the impact of the challenges faced by Namibian cSOEs from the onset of the COVID-19 pandemic; to examine the effectiveness of current RM techniques in detecting and managing uncertain situations, with a focus on the quality of risk communication and documentation; to identify key obstacles to implementing ERM within Namibian cSOEs; and to offer recommendations. The current study provides a valuable opportunity to advance understanding of ERM, particularly within commercial state organisations in Namibia, based on three key hypotheses:

H1: There is a statistically significant negative association between enterprise-related challenges and the performance of commercial state-owned enterprises in Namibia during the COVID-19 pandemic.

H2: There is a statistically significant positive association between the quality of risk communication and documentation and the effectiveness of the RM process.

H3: There is a statistically significant positive association between the presence of skilled personnel and competent leadership within the organisations and the implementation of ERM.

The next section explores theories for establishing an effective risk management process and improving overall organisational performance.

Impacts of effective RM on organisational performance, sustainability, and value generation. Risk management is a vital aspect of business that significantly affects a company’s effectiveness and future viability (Obrenovic et al., 2020). However, the risk management process must incorporate elements of risk appetite

and control as the organisation operates. In their review, Pombo and Gomes (2020) explain that leadership style, organisational culture, organisational processes and structures, the organisational environment, resources, expertise, and organisational adaptability all contribute to the organisation's effectiveness. When considering the ERM process, these organisational factors are incorporated within a broad approach to RM (Alsyouf et al., 2021; Pombo & Gomes, 2020). Consequently, these factors create an environment that supports success at the individual, team, and organisational levels. Therefore, these considerations are essential for effective RM (Alsyouf et al., 2021).

The authors note that organisations strive for higher levels of performance and the associated benefits, recognising that maintaining conditions that enhance performance in their operational environments is an ongoing endeavour (Pombo & Gomes, 2020). Nonetheless, academics and professionals are increasingly receptive to and capable of implementing technical methods to identify the types of management interventions (Zainuddin et al., 2020) that enhance organisational performance and human resource development (Pombo & Gomes, 2020). The next section explores how effective RM fosters organisational performance.

Effective RM and Performance Management

In a study examining the impact of management styles across organisations of varying sizes, Krüger and Meyer (2021) found that the management approaches of state entities and small businesses warrant thorough investigation, as they significantly influence organisational performance. This is because an organisation's performance is assessed based on management's leadership capabilities (Turyakira et al., 2023), a complex, multifaceted endeavour that can be linked to the organisation's size. This evaluation process has attracted considerable scholarly

attention due to its strong focus on the efficiency and effectiveness of organisational leadership in establishing a successful risk management process (Kanu, 2021).

Several studies, including Saeidi et al. (2021), have documented a growing body of research linking effective RM to organisational performance, highlighting the increasing importance of RM for improving performance. Many researchers emphasise the importance of ERM in business, citing evidence of its positive impact on organisational performance (Naik & Prasad, 2021). However, the current situation in Namibia reveals that many cSOEs do not regard risk management as a key management function.

Back in 1992, Kaplan and Norton published a book on management and leadership, in which they argued that, to help organisations achieve their goals and maintain sound management practices, executive management must monitor progress towards organisational objectives using both monetary and qualitative performance metrics (Kaplan & Norton, 1992, as cited by Kanu, 2021). These organisational performance metrics can be either marketing-based or accounting-based. They further emphasise the importance of both employees and managers understanding their purpose and the organisations' key performance indicators for the organisations' overall success.

Most organisations have established performance and RM processes that are reviewed at senior management levels (Kanu, 2021; Saeidi et al., 2021). However, when managers fail to perform effectively, the entire organisation suffers. Based on my observations in Namibia, there are individuals at lower organisational levels who are more proactive and capable of challenging management, yet they are often not given the opportunity simply because of their lack of managerial experience. Despite the collapse of many state-owned enterprises in Namibia (Limbo, 2019), executives

and boards in all state entities hold ultimate decision-making authority, including over risk management processes, yet organisations continue to fail (Maseke & Swartz, 2021; Krüger & Meyer, 2021).

Pombo and Gomes (2020) outlined the most common factors that significantly affect a company's productivity, including management style, company culture, organisational systems and structures, external factors, internal strengths and weaknesses, and organisational flexibility. These factors create an environment that supports success at the individual, team, and organisational levels. As in several other studies, the authors noted that businesses often focus on improving performance by maintaining favourable conditions within their operational settings but fail to evaluate the impact of risk management on performance (Iqbal et al., 2021; Zainuddin et al., 2020).

According to Fraser et al. (2021), the traditional approach to RM has two major drawbacks. Firstly, risk control and mitigation within a single department or section of the organisation can inadvertently create risks in another area. For this reason, a comprehensive approach to risk is recommended, in which departments collaboratively discuss potential risk mitigation measures and their effects on other departments (Iqbal et al., 2021). Secondly, the traditional RM process lacks mechanisms to identify risks that arise or develop from other risks within organisations (Naik & Prasad, 2021). In most cases, this compromises the organisations' performance.

In line with Naik and Prasad (2021), during the COVID-19 pandemic, employees who contracted the virus were sent home to prevent transmission to others. However, at times, a reduced workforce led to lower productivity. This resulted in significant losses that adversely affected overall organisational performance.

Consequently, many businesses have not recovered from the damage caused by the pandemic; despite initially believing the situation was under control. Sindorenko and Demidenko (2016) explain that a thorough risk assessment can enhance the planning process and positively influence organisational performance. However, effective risk management requires risk officers to examine and develop managerial concepts used in scenario analysis, or to incorporate simulation modelling, to ensure all relevant risks are identified; and their impacts on organisational performance are analysed. They further stress that an effective RM process must be capable of identifying, mitigating, and controlling risks to establish risk tolerance (Sindorenko & Demidenko, 2016).

Fraser et al. (2021) define risk tolerance as the level of risk the organisation is willing to accept or avoid. They note that not all risks lead to negative outcomes, provided that appropriate measures and mechanisms guide risk assessment. Consequently, organisations without such risk controls in place are more vulnerable to exposure and tend to suffer the consequences. A resilient risk management process is therefore essential for organisations to establish their own risk tolerance, recognising that risks will always exist, whether monitored and controlled or not (Sindorenko & Demidenko, 2016). The key priority is to ensure that risk exposure does not adversely affect the organisation’s operations.

Additionally, the RM process must be capable of assessing the potential impact of risk events and the likelihood of their recurrence (Fraser et al., 2021). They further note that potential risks can affect not only the organisation’s financial position but also its ability to achieve objectives and maintain its reputation. Historically, organisations have primarily focused on the financial implications of risk events, leading some to overlook other operational risks (Kamau & Simiyu, 2019). Therefore, Kamau and Simiyu (2019) argue that organisations should implement RM processes that help

organisations attain their goals and vision effectively.

Iqbal et al. (2021), when examining how RM improves performance, highlights that effective risk management facilitates the development of key management performance indicators. Supporting this view, Sindorenko and Demidenko (2016) acknowledge that risk analysis helps organisations identify financial threats, thereby enabling management to allocate a risk budget for analysis, mitigation, and control. Collectively, these authors emphasise the importance of an RM process that is robust enough to identify, mitigate, and neutralise risks, particularly those that may impede organisational goals and damage reputation (Kamau & Simiyu, 2019; Sindorenko & Demidenko, 2016; Iqbal et al., 2021). These observations underscore the necessity of adopting a comprehensive approach to risk management that goes beyond a sole focus on financial risk. Comprehensive risk analysis thus allows organisations to remain competitive, further emphasising the importance of establishing ERM to enhance business longevity.

Enterprise RM on Organisational Sustainability

Apart from performance management analysis, this study examined the likelihood of sustaining cSOEs in Namibia, given their significant impact on state revenue and job creation. This underscores the need for cSOEs to be designed with social systems that prioritise robustness, resilience, redundancy, and adaptability, mirroring business management practices, to guarantee their long-term survival (Missimer & Mesquita, 2022; Roy et al., 2022; Mignon & Bankel, 2022).

The sustainability of state entities is one component capable of alleviating Namibia's present unemployment crisis. This study examined alternative methods of sustaining commercial state organisations in Namibia with considerable value. According to current observations, the sustainability of commercial state entities can

be achieved if leaders who are transparent, competent, resilient, flexible, and prepared to groom their followers to enhance organisational performance manage cSEOs.

Notably, the current literature on state entities in Namibia (Limbo, 2019; Weylandt, 2017) has failed to outline the types of leaders needed to stimulate SOEs, assess the RM process, and identify solutions and mechanisms for retaining SOES in the country. Moreover, the available studies on SOEs did not focus on cSOEs, despite their valuable contribution to the country's gross domestic product (GDP). Previous studies also did not provide recommendations on how SOES can improve their performance to increase their competitiveness. Insufficient data on state-entity challenges and obstacles in Namibia prompted this study to outline the main challenges hindering these entities' operations and affecting their sustainability.

The study by Naik and Prasad (2021) noted that ERM implementation helps organisations manage risks well because both managers and boards are equally involved in the RM process. Given the current objectives, this point is worth emphasising, as it may explain why some entities are failing, particularly those where board members and managers are consistently in agreement. Involving both groups within the organisations can build capacity for risk management that effectively addresses both internal and external risks. In contrast, a 2019 study on monetary management and performance in Kenyan cSOEs by Kamau and Simiyu highlighted that risk managers within SOEs are mandated to identify weaknesses in internal risk processes and to guide management on appropriate risk controls.

Brychko et al. (2023) developed a structural equation model demonstrating that the claim that sustainable development directly leads to enterprise development is debatable, as sustainable development encompasses changes in both internal and external business conditions, which in turn influence enterprise development and drive

shifts in the external environment. The study by Brychko et al. (2023) indicated that organisations with high-quality ERM also have high-quality sustainability reporting. This means that for the organisation to attain its long-term goals, it needs to manage both internal and external risks, thereby improving performance and increasing operational sustainability. This is why Fraser et al. (2021) state that major hurdles affecting organisational performance may be associated with disruptions to strategic goals and improper risk management. Therefore, an effective risk management process must control risks and their sources effectively and efficiently.

The two theories discussed earlier were stakeholders and goal-setting theories, both of which highlight the importance of involving various stakeholders in organisational affairs. The goal-setting theory emphasises the need to consider organisational objectives when managing risk. Alijoyo and Norimarna (2021) found in their study that ERM helps organisations enhance competitiveness by reducing the likelihood of adverse events. Minimising risks and implementing mitigation measures lower operational costs and increase the organisation's capability and capacity to capitalise on opportunities. Additionally, a study by Turyakira et al. (2023) stated that board composition influences the enterprise's corporate governance.

According to the authors, boards with greater representation of women tend to demonstrate greater understanding of and commitment to corporate governance than those composed of men, making such organisations more resilient in crisis management (Turyakira et al., 2023; Miążek, 2021). However, their findings did not identify any significant association between board composition and organisational performance. In a separate study examining sustainable models during the COVID-19 pandemic, it was found that virtual operations during crises are more effective in organisations with well-established technology networks (Obrenovic et al., 2020). A

study by Swedish authors noted that although examining different sustainable goals requires a holistic approach, privately owned companies are much more accessible than government-owned ones. This makes it difficult to identify the hindrances in state companies compared with privately owned companies (Argento et al., 2019).

The state entities examined in Namibia for this study are state-owned, raising research questions for future exploration regarding the shareholding structure of Namibian commercial state enterprises. The potential for long-term development and success has made sustainability a crucial objective for thriving businesses. While modern corporations have a fiduciary responsibility to their shareholders, their success increasingly depends on considering the needs of a broad range of other stakeholders (Kanu, 2021). With this understanding of the concept and necessity of enterprise sustainability, the following section addresses the importance of ERM in building successful businesses.

Importance of ERM towards value creation

According to Boyles (2022), drawing on insights from Harvard Business School, value is subjective and shaped by individual priorities. Value creation begins with identifying and prioritising a firm's core activities to enhance market share. While buyers act on their perceptions of value, investors seek sustainable returns, and employees exchange their skills for financial or personal benefit. Consequently, value creation is inseparable from stakeholder satisfaction, requiring executives to deliver benefits across all stakeholder groups to improve profitability.

Porter (1998, as cited in Alijoyo & Norimarna, 2021) defines competitive advantage as the ability to achieve and sustain superior performance. In this view, value creation reflects value-adding processes informed by pricing strategies and cost structures. Organisational success therefore depends on understanding both internal

capabilities and customer needs. The value creation model enables firms to decompose operations into strategically significant activities to identify sources of competitive advantage. This may involve modifying activities that increase costs (Alijoyo & Norimarna, 2021). Furthermore, a company's value chain often operates within a broader system comprising upstream suppliers and downstream distribution channels.

According to Boyles (2022), value is created through two main channels: financial value and perceived value.

Financial value is the tangible monetary worth recorded in a company's accounts. This value is key for organisations focused on profit generation and for investors seeking quick returns. Companies often reinvest this profit to fuel long-term shareholder growth. The second source, perceived value, is a subjective measure encompassing factors such as a customer's willingness to pay and employees' job satisfaction. While this type of value is difficult to measure, it is just as crucial because it directly influences financial results; a drop in perceived value will hurt the company financially.

Porter (1998), as cited in Alijoyo & Norimarna (2021), argues that creating value requires managers to assess each activity that contributes to the final product or service. In line with this, Boyles (2022) contends that managers committed to advancing their organisations must actively pursue value creation for all stakeholders. He further stresses that both internal and external stakeholders should be regarded as equal partners, and that their involvement should extend across all areas of management, including risk management. Effective RM enables organisations to identify and mitigate potential threats that could lead to financial losses, operational disruptions, or wasted resources, thereby safeguarding organisational assets and

laying a solid foundation for value creation (Alijoyo & Norimarna, 2021).

According to Alijoyo and Norimarna (2021), a comprehensive RM framework also equips risk policymakers with a clear understanding of risks, including those associated with poor planning or insufficient information, which may cost the organisations additional resources. In support of this, Beasley and Figo (2010) highlight that effective RM not only prevents negative outcomes but also enables organisations to recognise and exploit opportunities arising from calculated risks. The process involves evaluating organisational strengths and weaknesses alongside external opportunities, thereby contributing to improved performance and sustainable value creation.

To enhance organisational value, firms may pursue growth and innovation initiatives that account for risk-reward trade-offs. Beasley and Figo (2010) argue that ERM is the only strategy-aligned RM framework that systematically considers the interrelated effects of multiple risk events and aims to balance the organisation's overall risk portfolio in line with stakeholders' risk appetite. The ultimate purpose of ERM is therefore to maximise the likelihood of achieving strategic objectives while protecting and enhancing value.

Expanding on this perspective, Kumar and Rajeev (2016, as cited in Alijoyo & Norimarna, 2021) emphasise that before focusing on value creation, risk analysts must first deconstruct the organisations' core activities within the framework and evaluate opportunities for value addition through cost advantage or differentiation. This process then requires identifying strategies to direct attention to these activities, thereby enabling organisations to sustain long-term competitive advantage.

By contrast, Beasley and Figo (2010) maintain that ERM can create value only when it is integrated into the organisations' strategic planning processes and aligned

with its primary objectives. Shortreed (2010) further contends that risk management must evolve from a narrow, technical control function, detached from shareholder value to an integrated, system-oriented approach that situates organisations within their wider market environment. He suggests that firms should move beyond measuring risk to actively managing it by incorporating risk considerations into strategic planning, capital allocation, and governance practices. Failure to do so may expose organisations to significant reputational damage arising from risks such as legal violations, ethical misconduct, or data breaches (Alijoyo & Norimarna, 2021).

Effective risk management ensures that organisations comply with legal, regulatory, and ethical standards. It safeguards the organisations' reputation and strengthens its capacity to attract both customers and investors. It also enables more efficient allocation of resources by categorising risks according to their likelihood of occurrence and their implications for the organisations. This approach allows organisations to focus on the most severe risks. Stakeholders, including shareholders, customers, employees, and business partners, tend to place greater trust in organisations that adopt a proactive approach to risk management (Boyles, 2022). Such trust can translate into increased investment, stronger consumer loyalty, and improved collaboration, all of which support wealth creation. In the long term, effective risk management enhances organisational sustainability by identifying and mitigating risks that may threaten ongoing value-creation initiatives.

Regulatory compliance is essential across all sectors, and effective risk management reduces exposure to legal disputes and associated financial penalties. Shortreed (2010) further argues that well-implemented risk management saves resources, thereby preventing fiscal deficits and operational inadequacies caused by financial constraints. Moreover, organisations that demonstrate a comprehensive

understanding of their risks and mitigation strategies are more likely to attract investor confidence, potentially leading to higher stock valuations and easier access to finance for further value-enhancing projects. In an increasingly complex business environment, robust risk management is therefore critical. Through a structured process of identifying, assessing, and managing risks, organisations can position themselves for sustainable growth, innovation, and long-term value creation.

Benefits of ERM implementation for business success and the role of stakeholders

Enterprise RM is valued for reflecting risk management from the perspective of senior executives and board directors across industries (Syahputri & Kitri, 2020). Kanu (2021) argues that ERM does not focus on a single category of risk; rather, it addresses the organisation's overall, aggregated exposure and evaluates both its capacity and willingness to tolerate such risks. Research further indicates that ERM represents an innovative approach to structuring organisational control systems, enabling firms to manage a broad spectrum of risks more effectively (Saeidi et al., 2021; Syahputri & Kitri, 2020).

According to Saeidi et al. (2021), ERM strengthens organisational control mechanisms, including strategic, operational, financial, and risk management systems, in a coordinated, enterprise-wide manner. Similarly, Mishra et al. (2019) states that ERM provides organisations with a competitive advantage by integrating and managing risk-related activities more effectively than traditional risk management practices.

Recent evidence confirms that ERM can be applied across all industry sectors (Mishra et al., 2019). However, some studies caution that adoption should reflect the organisation's mandate and financial position, as ERM is often associated with larger

firms because of its cost implications (Horvey & Ankamah, 2020; Jankensgård, 2019). These studies emphasise that all organisations, regardless of size or sector, face diverse risks that can affect operations, reputation, financial performance, and long-term sustainability. Unlike traditional risk management, which often focuses narrowly on performance outcomes, ERM assesses the organisation's broader progress, including reputation, stakeholder engagement, corporate governance, and leadership capacity. Consequently, ERM is relevant across a wide range of industries, including banking, healthcare, energy, manufacturing, technology, and transportation (Jankensgård, 2019).

Although organisations face different risks across industries, Jankensgård (2019) notes that risk management principles and practices remain universally applicable and can help organisations manage risk effectively. In Namibia, however, observations of state-owned enterprises, both commercial and non-commercial, indicate that their current approaches to risk management fail to position them as risk-tolerant. This study therefore seeks to establish whether aspects of risk management recommended in existing standards are being overlooked. According to Fraser et al. (2021), ERM is a more effective approach to managing opportunities and threats by enhancing the efficiency and effectiveness of risk management.

ERM not only helps organisations meet regulatory requirements but also strengthens stakeholder trust, an area overlooked in prior studies of underperforming Namibian state-owned enterprises. Furthermore, firms adopting risk management frameworks such as ISO 31000 can build resilient and responsive systems that enhance organisational performance and sustainability (Fraser et al., 2021). Similarly, Alijoyo and Norimarna (2021) argue that ERM enhances corporate governance by improving risk awareness. They contend that ERM functions as a strategic tool that

integrates risk analysis across business units and departments, accounting for end-to-end organisational processes. Consequently, entities that have implemented ERM and manage it effectively can promptly align their strategic objectives with their risk tolerance.

It is therefore pertinent to investigate the effectiveness of ERM in organisations that claim to have implemented it. This is particularly important given that ERM requires robust organisational resilience, strong management capacity, and adequate knowledge to be implemented successfully (Alijoyo & Norimarna, 2021). The COVID-19 pandemic further highlighted these challenges, revealing that despite state entities' claims of effective risk management processes, many were unprepared for the disruptions it caused.

Syahputri and Kitri (2020) argue that to generate value, organisations must set objectives, develop strategies, implement plans, and pursue continuous improvement, though these ambitions inevitably face risk. Enterprise risk management offers a structured approach to addressing such uncertainties, enabling firms to monitor value creation at an integrated organisational level and thereby supporting the achievement of strategic goals (Naik & Prasad, 2021). Despite its importance, the complexity of ERM has prompted scholars to conduct further literature reviews, with growing recognition of its relevance as a framework for strengthening corporate governance. As a result, ERM has become increasingly significant for organisations that have adopted, or are considering adopting, its practices (Turyakira et al., 2023; Kamau & Simiyu, 2019).

Nevertheless, challenges remain in implementing risk management frameworks, as organisations apply them differently (Jankensgård, 2019). Critics contend that risk cannot always be easily quantified, particularly given that many

organisations still underestimate the value of risk management (Kamau & Simiyu, 2019). In the Namibian context, several commercial SOEs lack dedicated risk officers, with responsibility often delegated to individuals with limited expertise. Firms that demonstrate more effective RM typically have designated officers or established systems. This study therefore analysed the effectiveness of current RM processes in selected Namibian SOEs to identify which organisations recognise and leverage RM's benefits.

A well-developed RM process provides organisations with a clear framework for determining which types of risk they can accept while still achieving their strategic goals. Additionally, organisations can only accept the consequences of potential risks if they have contingency plans in place to balance operational efficacy with minimal impact from the risks they expose (Fraser et al., 2021). However, Nocco and Stulz (2022) note that some organisations use the two terms interchangeably. Meanwhile, risk-related research in fields other than finance and the construction industry remains underexplored, resulting in limited empirical evidence on risk management.

The role of internal stakeholders in the ERM process

Internal stakeholders are involved in the organisations' risk management process in diverse ways. This may include direct involvement in identifying, assessing, communicating, and mitigating risks in day-to-day operations, or participation in activities outside their employment (Nieuwenhuijs & Yerkes, 2021). These stakeholders include employees at various levels, such as managers, risk officers, risk managers, and other designated risk representatives. Their engagement ensures a comprehensive understanding of risks from managerial, strategic, and operational perspectives and facilitates effective communication and consultation across the organisation. This also extends to coordinating, promoting, and aligning risk

discussions, assessments, and control measures (Müller et al., 2024; Nieuwenhuis & Yerkes, 2021).

By leveraging the expertise and knowledge of internal stakeholders, organisations are better positioned to identify potential operational risks. Furthermore, Müller et al. (2024) argue that empowering internal stakeholders strengthens their ability to monitor the effectiveness of risk mitigation strategies and highlight areas for improvement. This may involve recommending policy adjustments, fostering a stronger organisational culture of risk awareness, and encouraging wider employee participation in mitigation and control practices.

Responsibilities of the Risk Managers and Managers

Traditionally, responsibility for RM has been allocated to board members and senior management. However, recent literature has emphasised the significance of risk managers in the process (Fraser et al., 2021). Naik and Prasad (2021) observed that managers are not always receptive to board directives on RM, often perceiving it as beyond their remit. A similar challenge appears to exist in Namibian state-owned enterprises, where management tends to regard risk management as the board's responsibility rather than their own. Despite the pivotal role of risk officers or chief risk officers, their contributions are not always fully recognised; in many organisations, they are treated as ordinary managers and frequently excluded from strategic decision-making platforms, thereby limiting their capacity to foster a risk-aware culture. Naik and Prasad (2021) argue that risk managers should be viewed as key actors in cultivating such a culture, which ensures timely and transparent communication of risks throughout the organisation.

A well-established risk culture also enables risk managers to integrate risk strategies into broader organisational strategies. While their contribution to risk

communication is widely discussed, Obrenovic et al. (2020) emphasise the role of RM in the supply chain industries, observing ways to strengthen and establish minimal-risk supply chain mechanisms. They contend that risk managers with supply chain expertise can enhance organisational confidence in risk strategies, particularly during periods of disruption when firms often struggle to adapt to rapidly changing conditions.

According to Mikes (2010), in many organisations the chief risk officer collaborates closely with the chief executive officer, who oversees enterprise-wide risks. Nevertheless, in practice, RM in many firms is reactive rather than proactive, with risks typically addressed only after an event occurs, often through root cause analysis and corrective action (Thabit, 2019). This tendency raises concerns about the lack of effective control mechanisms to identify risks in advance. Thabit (2019) proposes three “lines of defence” in risk management and control, in which distinct groups within the organisations are accountable for risks at distinct levels. However, their study did not specify who should lead each level, suggesting that a more distributed approach to responsibility would be beneficial. Involving employees at lower levels in early risk identification allows them to escalate concerns to management and risk officers, who are responsible for communicating appropriate control measures across the organisation.

Responsibilities of the Board Members

Although much emphasis has been placed on the board’s responsibilities in RM, several studies have shown that board size and composition are critical factors in risk mitigation and control (Dowell et al., 2011, as cited in Obrenovic et al., 2020). Turyakira et al. (2023), building on Branson (2010), examined board characteristics and their influence on the risk management process. The study found the board to be the primary driver of effective risk oversight and concluded that more frequent board

meetings would enable earlier detection of potential threats. Beyond examining board composition, Turyakira et al. (2023) also investigated the broader role of corporate governance in shaping the performance of cSOEs.

Their study found that weak governance in Ugandan cSOEs undermined risk management effectiveness, leaving many unable to exercise adequate control. This suggests that the mere presence of boards is insufficient; their effectiveness and capacity to oversee risks are paramount, particularly as external auditors and stakeholders evaluate boards, in part, on their ability to reduce and control risks. These findings align with wider evidence showing that when boards fail to prioritise risk management, inappropriate practices such as corruption, nepotism, poor service delivery, financial losses, reputational damage, liquidity issues, and underperformance often ensue (Klovien & Gimauskien, 2014, as cited in Turyakira et al., 2023).

Branson (2010), in a dedicated chapter within Fraser and Simkins' (2010) volume, elaborates on the role, composition, and mandate of boards. He contends that board members must ensure the RM process is established and professionally managed, and that risk mitigation mechanisms are in place. Moreover, the board of directors must ensure that the organisation's strategic mission is considered when establishing risk mitigation strategies to avoid setting unrealistic goals. However, Branson (2010) stresses that boards should not be directly involved in day-to-day risk management, as this responsibility falls within the remit of organisational management.

An effective enterprise RM framework should prioritise risks, clarify stakeholders' roles and responsibilities, assess potential negative consequences for the organisation's operations, and establish preventive and sustainability mechanisms. Branson (2010) underscores that board members must have the

requisite expertise, training, and comprehensive business knowledge to evaluate risks effectively.

In addition, boards must consider the most appropriate organisational structure to ensure adequate attention to risk oversight at board level. This has led some corporations to establish dedicated risk management committees. However, such mechanisms have not always proved effective, as evidenced by the continued failures of companies attributed to insufficient risk management expertise and capacity within boards. This issue is particularly prevalent in government entities, where risk ownership and accountability are often poorly defined, as demonstrated by the underperformance of many state-owned enterprises in developing countries. The board must ensure RM processes are effective through robust supervision. It must also actively embed a culture across the company in which risk awareness is central to all decision-making.

Further emphasising the centrality of board involvement, Branson (2010) argues that firms should designate risk “champions” within management to work closely with the board to monitor and control risks. In this regard, ERM provides a platform for boards, managers, shareholders, and stakeholders to work collectively to strengthen risk governance and align it with strategic management. Developing clear mechanisms and frameworks to resolve governance issues between boards and management can enhance the effectiveness of risk management, thereby reducing associated costs. From an oversight perspective, the board should establish a continuous and effective dialogue on risk with management, design appropriate oversight relationships with its standing committees, and ensure sufficient resources to support the RM process, especially risk mitigation strategies (Dhlamini, 2022).

Several studies emphasise that risk management must be tailored to each

organisation’s specific context to develop an effective framework (Dhlamini, 2022; Bensaid et al., 2021; Harper Ho, 2020). A robust, well-resourced system enables timely identification of critical risks and the deployment of strategies aligned with the organisation’s risk profile. Dhlamini (2022) further highlights that boards must ensure risk management remains consistent with business strategies, identify material exposures and tolerance thresholds, and integrate risk considerations into strategic planning processes.

As Lipton et al. (2011) explain, board members and other governance bodies must work collaboratively with managers to foster a corporate culture that aligns with board expectations and the organisation’s broader goals. A clear understanding of the board’s role in this process contributes to more effective risk control. Recognising the importance of enterprise-wide culture, Bensaid et al. (2021) argue that successful companies embed risk management within organisational values and practices.

According to Lipton et al. (2011), qualities such as honesty, consistency, and engagement are essential to establishing an appropriate “tone at the top.” The company's vision must clearly demonstrate the board's commitment to risk oversight, adherence to codes of conduct, and preventing compliance failures. This commitment needs to be clearly and effectively communicated throughout the organisation. I agree with this view, as many organisations undervalue basic practices such as effective communication. This shortcoming often explains why some organisations fail to control risks and act proactively, owing to weak or inefficient communication channels.

Furthermore, in sectors where product or service failures could compromise consumer safety or endanger human life, organisational culture should never prioritise cost reduction or profit generation at the expense of safety and compliance, whether through deliberate decisions, negligence, or insufficient resource allocation (Lipton et

al., 2011). This is particularly relevant in the Namibian healthcare sector, where cost-saving measures have prompted calls for low-cost medical consumables and reagents, sometimes at the expense of patient safety. Organisations must therefore avoid compromising service quality merely to achieve financial savings.

Lipton et al. (2011) note that investors typically assess risk oversight practices when considering businesses for investment, as they seek lower-risk opportunities. Investors and shareholders are also concerned with how boards and management teams approach risk (Harper Ho, 2020; Lipton et al., 2011). Such practices enhance transparency, which in turn encourages greater investor confidence. Consequently, shareholders must understand both the nature of the business and the potential risks associated with their investments.

Additionally, firms are expected to adopt fair remuneration frameworks, particularly for executives. In this regard, the NamCode (2019) emphasises that companies should implement executive remuneration policies and practices that foster long-term value creation. These policies should align with the organisation's strategic objectives, be reviewed regularly, and link remuneration to executives' contributions to company performance (NamCode, 2019, as cited in Hakweenda, 2021).

The role of external stakeholders in the ERM process

A common observation is that many individuals mistake the responsibilities of external business contributors, such as auditors (Albastaki et al., 2023), often assuming that organisations should conduct their own audits and, as a result, withhold risk disclosures from external parties (Fraser et al., 2021). According to the authors, excluding external auditors from the risk management process may, in some cases, foster opportunities for corruption by undermining transparency (Fraser et al., 2021). For this reason, Enterprise Risk Management is recommended to enable

organisations to manage both internal and external risks effectively.

According to Alijoyo and Norimarna (2021), traditional RM focuses on internal processes. This narrow focus constrains organisations, limiting their capacity to respond to external challenges such as social or environmental issues (Alijoyo & Norimarna, 2021). Moreover, by focusing primarily on internal risks, organisations expose themselves to additional vulnerabilities, as they fail to build resilience against potential external threats and face significant consequences (Fraser et al., 2021). Within this context, ERM offers a more comprehensive framework by addressing both internal and external risks in an integrated manner.

Shareholders

The RM process should not be confined solely to the board; other stakeholders within the organisations must be actively involved. Observations of organisational practices reveal that key stakeholders are frequently overlooked in the RM process. Both stakeholders and shareholders are crucial to the organisation and need to understand their risk position. This enables stakeholders to make informed decisions that align with their interests and values (Kajwang, 2022). Consequently, investors are more likely to commit to a company when they are confident that their investments are secure, typically in contexts where risk is minimised, transparency is evident, and an effective RM framework is in place.

Through collaboration with other business functions, ERM helps identify external factors that may affect business performance and ensures an appropriate response. Kajwang (2022) further emphasises that sustainability reports, which outline significant risks, exposures, and opportunities, should be shared with investors and other relevant stakeholders. Analyses of these reports have shown that sectors such as insurance, where investors actively seek sustainability information, tend to perform

strongly (Kajwang, 2022; Ashmawy, 2021). Beyond simple communication and openness, investors require deep insight into how the company operates both inside and outside. This comprehensive understanding is crucial for them to be certain that the business is not linked to any unscrupulous practices. Several businesses have failed because of corrupt activities.

However, unethical practices, particularly corruption and nepotism, remain prevalent in many African countries and are increasingly seen as a harmful norm, especially within SOEs. Braun et al. (2019) argue that achieving business sustainability requires active stakeholder engagement to foster transparency and accountability. Other studies have emphasised the broader importance of stakeholder engagement across organisational activities, extending beyond RM to overall business operations (Rela et al., 2022; Kordi et al., 2021). These findings highlight that stakeholders are as pivotal to organisational success as management and the board of directors.

In his study of work-integrated learning in education, Effeney (2020) developed a model that helps businesses integrate diverse stakeholder involvement across operations. The model clarifies the roles of different stakeholders and their contributions to organisational processes. Given the operational challenges many SOEs face, a fundamental issue is excluding key stakeholders from decision-making, which can discourage participation by critical stakeholders, including investors.

Kujala et al. (2022) highlight that stakeholders' involvement in business activities encompasses the moral, strategic, and pragmatic dimensions of the organisation's objectives and activities, all aimed at creating meaningful impact. Consequently, both boards of directors and management must thoroughly understand stakeholders' needs and rights. Failure to do so may result in conflicts between

employers and employees. Their study also provides an inclusive definition of stakeholder engagement and offers guidance for research organisations, thereby contributing to the existing understanding of previously overlooked negative aspects of stakeholder participation in business activities (Kujala et al., 2022).

Shortreed (2010) emphasises the importance of information sharing between the organisation and its stakeholders. According to Shortreed, stakeholder consultation involves informed communication about matters affecting the organisation before making any decision. Consultation should be viewed as a process rather than an outcome, influencing decisions through engagement rather than authority. Moreover, it gives stakeholders input into decision-making, resulting in cooperative agreements that must be thoroughly documented (Shortred, 2010). Enterprise Risk Management similarly encourages proper documentation; however, this is possible only if RM processes are fully integrated into the organisation's strategic planning. Therefore, top management is responsible for ensuring that all stakeholders are adequately informed.

Jensen and Meckling (1976, as cited in Turyakira et al., 2023) support this view through contingency theory, which suggests that managers possess firm-specific expertise in running organisational affairs. Without board oversight, managers may pursue private objectives to the detriment of the company's ultimate beneficiaries, investors, and other stakeholders, a phenomenon underlying many corruption cases in Namibian government enterprises (Limbo, 2019). More broadly, Weylandt (2017) argues that improper procedures across various management areas within government entities have led to irregularities due to a lack of accountability between managers and boards.

This underscores the need to integrate risk information into strategic planning.

Beyond routine risk activities, budgeting for risks is essential, as stakeholders, particularly employees, require awareness of the organisation's financial position to avoid disputes over remuneration. Sindorenko and Demidenko (2016) recommend that every organisation have a risk policy outlining its overall risk management philosophy, guidelines, roles and responsibilities, RM architecture, processes, and resources. The policy should reflect both actual organisational practices (Narula, 2020) and the strategic approach to managing material business risks. It should also incorporate the organisation's risk appetite within strategic management, helping stakeholders understand the risk position and promoting transparency.

According to Sindorenko and Demidenko (2016), risk appetite guides management decisions while maintaining transparency for stakeholders. Organisations that neglect to include diverse stakeholders and investors risk losing critical business information, which can have long-term negative effects on operational and financial performance. Lins et al. (2017) further note that confidence between a corporation and its partners or shareholders is often assessed through corporate social responsibility (CSR) and investment in social capital.

Customers

Customers are a crucial external stakeholder group in ERM because their expectations, behaviours, satisfaction, and reactions to products and services influence both risk exposure and long-term success (Ullah et al., 2024). Meanwhile, Hall, Harrison and Obilo (2023) stated that ERM requires organisations to identify and assess risks associated with customer satisfaction, service quality, changing preferences, customer attrition, complaints, data privacy, and delivery issues. Therefore, customer feedback provides important insights for identifying emerging operational, strategic, and reputational risks.

In cSOEs, reliable and accessible services are essential because disruptions can negatively affect organisational performance, public confidence, and stakeholder trust (Limbo, 2019). Including customer-related risks in the ERM process helps organisations better anticipate changes in customer expectations, strengthen business continuity, improve service quality, protect their reputation, and support long-term sustainability. In addition, customers are central to both operational and strategic risks, as their decisions and actions directly affect revenue stability, reputation, and market position.

Regulators & Government

Regulators and government are crucial external stakeholders in the ERM of commercial State entities because they shape the institutional, legal, and governance frameworks within which these organisations operate (Diyagama et al., 2024). Through legislation, regulatory policies, ownership expectations, governance arrangements, and public policy objectives, they influence the nature and extent of risks faced by cSOEs, as well as the methods used to identify, assess, monitor, and manage these risks.

Regulatory compliance is essential since non-compliance with statutory and governance standards can introduce financial, operational, reputational, and legal risks. According to Contingency Theory, regulators and government play a pivotal role, emphasising that ERM success depends on the external environment (Latip et al., 2022). Therefore, ERM systems must be tailored to the specific regulatory, institutional, and governance contexts in which cSOEs operate.

Suppliers & Supply Chain Partners

Suppliers and supply-chain partners are crucial external stakeholders in RM

because their activities can directly affect the organisation's operational continuity, financial stability, and strategic objectives (Siems, Seuring, & Schilling, 2023). For all organisations, including commercial State entities, dependence on external suppliers, contractors, and logistics providers may pose risks (Boruchowitch & Fritz, 2022), such as supply shortages, delivery delays, price fluctuations, quality problems, contractual breaches, and disruptions in transportation and international markets. The COVID-19 pandemic demonstrated how disruptions beyond the organisation's control can affect its operations.

As a result, ERM should adopt a structured approach to identifying, evaluating, monitoring, and reducing supply chain risks, particularly when depending on critical or few suppliers (Siems, Seuring, & Schilling, 2023). Good strategies include diversifying suppliers, creating alternative sourcing plans, including contractual protections, monitoring supplier performance, and preparing contingency and business continuity plans. According to the literature, a suitable ERM strategy must align with the unique traits and risks of the organisation's supply chain context (Klassen, Shafiq & Johnson, 2023). Consequently, cSOEs with varying degrees of supplier reliance, geographic exposure, and supply-chain complexity might need different risk management setups to ensure effective risk control, better performance, and sustained long-term growth.

Insurers & Risk Transfer Partners

Insurers and other risk-transfer partners are essential external stakeholders in ERM, providing methods for organisations to transfer or share the financial consequences of risks that cannot be entirely avoided or mitigated internally (Niakan & Khadivar, 2022). In cSOEs, insurance typically covers risks such as property damage, business interruption, equipment failure, liability, cyber incidents, transportation, and various operational risks.

In an ERM framework, insurance should complement, rather than replace, activities such as risk identification, assessment, mitigation, or monitoring (Gbenro et al., 2023). Risk transfer should be integrated into a comprehensive risk-response plan, in which management selects the optimal response for each significant risk based on its likelihood, potential impact, risk appetite, and organisational capacity. Insurers and specialised risk-transfer partners can support ERM by providing risk assessments, loss prevention advice, claims data, and other expertise to improve risk identification and mitigation. According to Contingency Theory, the effectiveness of risk-transfer arrangements depends on each cSOE's specific context, including industry, operational exposure, financial resources, and external factors.

Therefore, cSOEs should develop risk-transfer strategies tailored to their specific risk profiles and aligned with broader contingency and business continuity plans. This method can improve organisational resilience, protect financial assets, and promote better performance and long-term sustainability.

Local Communities & Civil Society

Local communities and civil society organisations, including NGOs, are vital external stakeholders because their insights, experiences, and interests shape the social, environmental, operational, and reputational risks SOEs face (Buijs et al., 2024). They provide essential information on environmental effects, health and safety concerns, livelihood disruptions, community dissatisfaction, and other risks that internal processes might miss.

Similarly, NGOs and civil society organisations offer independent viewpoints on environmental protection, accountability, transparency, human rights, and ethics. Effectively engaging these stakeholders can enhance risk detection, boost organisational flexibility, and lessen reputation and social risks (Al Mokdad, 2025). For

cSOEs active in sectors with significant community and environmental effects, stakeholder engagement should be integrated into the overall ERM process rather than treated as a separate corporate social responsibility activity.

From a theoretical perspective, the significance and nature of community and civil society risks vary by industry, location, operations, and stakeholder characteristics. Consequently, cSOEs need to customise their stakeholder engagement and ERM systems to suit their specific environment. Incorporating community and civil-society insights into risk identification, assessment, mitigation, and oversight can improve organisational resilience, boost stakeholder confidence, enhance transparency, and support long-term sustainability.

Key Governance Frameworks and Partners in ERM Implementation

Modern organisations operate in highly volatile, complex, and uncertain environments, characterised by rapid technological advances, geopolitical instability, increasing regulations, and supply chain vulnerabilities. Traditional risk management, which addressed financial, operational, hazard, and compliance risks in isolation, no longer suffices. Instead, ERM offers a holistic approach to identifying, assessing, responding to, and monitoring risks organisation-wide, with the goal of safeguarding and creating value (COSO, 2017).

In practice, ERM failures are seldom due to the framework's technical design. Instead, issues typically stem from shortcomings in governance, cross-functional collaboration, and cultural adoption (Fraser & Simkins, 2010). ERM cannot succeed as merely a top-down directive or an isolated administrative task. Its effectiveness depends on a network of partners spread throughout the organisation. Identifying these key stakeholders, clarifying their responsibilities, and creating robust communication channels among them are crucial steps for integrating risk awareness

into strategic decision-making.

To address these vulnerabilities, ERM has become a comprehensive approach. According to the COSO (2017), ERM includes "the culture, capabilities, and practices, integrated with strategy-setting and performance, that organisations depend on to manage risk in creating, preserving, and realising value." Instead of viewing risk simply as a hazard to avoid or minimise, modern ERM treats risk as the effect of uncertainty on objectives (ISO 31000, 2018), considering both threats and strategic opportunities for growth.

Empirical studies show that ERM failures during implementation rarely stem from technical flaws in the risk matrix or software. Instead, they often result from governance issues, unclear responsibilities, cultural resistance, and limited cross-departmental collaboration (Kgoadi, 2022; Fraser & Simkins, 2010). According to Fraser and Simkins (2010), ERM cannot succeed if it is treated as a bureaucratic or top-down directive, or as an isolated administrative task handled by a single department. Its success depends on a coordinated ecosystem involving both internal and external partners. Defining the key partners, setting their authority boundaries, and establishing structured communication channels among them are crucial steps for integrating risk awareness into organisational decision-making.

Frameworks Underpinning ERM Governance

Contemporary literature primarily uses two main frameworks to systematically classify partners involved in ERM: the COSO ERM Framework (2017) and the Institute of Internal Auditors (IIA) Three Lines Model (2020). The COSO Framework highlights the importance of aligning risk management with strategy and performance, assigning significant responsibility to executives and the board to define the organisation's risk appetite and culture (COSO, 2017).

The COSO ERM Framework: 2017

The revised COSO framework, also known as Enterprise Risk Management, integrates strategy and performance. This shift moves risk management from a mere compliance activity to a crucial element of strategic decision-making and governance. It is built on five interconnected components: governance and culture, strategy and objective setting, performance management, process review, and information sharing and reporting. In governance and culture, the ERM framework emphasises oversight roles, organisational structures, and expected behaviours within the organisation. Strategy and objective setting involve incorporating risk parameters into business planning and assessing risk appetite against strategic goals.

Meanwhile, performance management involves recognising, evaluating, ranking, and addressing risks that affect strategic outcomes, and reviewing processes that monitor portfolio risks and periodically assess the framework's effectiveness (COSO, 2017). In the final stage, the COSO framework addresses information sharing, communication, and reporting, including the use of ongoing information exchange across all management levels. COSO explicitly states that governance underpins all ERM components. It emphasises the Board of Directors and Executive Management's direct responsibility to foster an environment where risk ownership is shared across the organisation.

The IIA Three Lines Model: 2020

Supporting the COSO framework, the IIA Three Lines Model explains organisational roles and their relationships. These involve the governing body, the first-line roles, the second-line roles, and the third-line role. Each tier has its own role in the process; however, they must collaborate at times. According to IIA (2020, as cited in Kgoadi, 2022), the governing body includes the board of directors and audit

team, which oversees the organisation and ensures accountability to stakeholders. First-line roles involve operational management that handles risks directly through front-line activities and operational controls. Meanwhile, second-line roles, such as the Risk & Compliance team, provide expertise, support, oversight, and constructive challenge to first-line management. Lastly, third-line roles, which include the Internal Audit team, provide independent and objective assurance and guidance on the sufficiency and effectiveness of governance and risk management (Kgoadi, 2022).

The link between the COSO framework and the IIA Three Lines Model emphasises that ERM operates as a collaborative network. No single group manages enterprise risk independently; instead, effective success depends on well-defined roles and seamless communication among oversight teams, operational managers, risk experts, and independent assurance providers (Fraser & Simkins, 2010).

Key Partners in ERM Governance: Executive Leadership

Board of Directors and Risk Committees

The Board of Directors stands at the top of ERM governance. In line with contemporary corporate governance standards, it does not handle day-to-day risk management tasks; rather, it bears final responsibility for overseeing risk governance. According to the COSO framework (2017), the Board of Directors, usually through a Risk or Audit Committee, leads ERM governance. Although not involved in day-to-day risk management, the Board bears final responsibility for overseeing risks. Their main duties include establishing risk appetite and tolerance, which involves setting qualitative and quantitative parameters for acceptable risk levels to pursue strategic goals (COSO, 2017). The Board also officially ratifies the ERM policy, charter, and governance structures, and approves policy frameworks. It must hold leadership accountable by reviewing high-level risk exposures, assessing new threats, and

confirming that executive management dedicates sufficient resources to mitigate risk.

To fulfil this mandate effectively, boards often establish dedicated Risk Committees or rely on the Audit Committee for structured oversight. The board's main duties in implementing ERM include establishing and approving the risk appetite, framework, and policy ratification; monitoring top-tier exposures; and evaluating the risk culture (Fraser & Simkins, 2010). The board is mandated to officially set the qualitative and quantitative risk thresholds that the organisation is prepared to accept in pursuit of its strategic goals. This includes defining boundaries for financial loss, operational disruptions, compliance violations, and reputational harm (Lam, 2014).

When establishing the framework and ratifying policies, the board must approve the ERM charter, governance structure, and key policies that set risk escalation procedures. Board members also monitor leading risk exposures by regularly assessing the company's risk profile and verifying management's plans to mitigate high-impact, low-probability events such as systemic economic shocks or cyber crises. The board must ensure that funding is secured and that implementation is feasible, evaluating risk culture and tone while examining whether corporate incentive programs, performance KPIs, and executive pay structures inadvertently promote excessive or unchecked risk-taking.

Chief Executive Officer and Executive Management

While the board oversees overall governance, the CEO and executive committee implement ERM. The CEO fosters a corporate culture that promotes risk disclosure without fear of penalties (COSO, 2017). Leadership ensures that risk assessments are integral to strategic planning, capital budgeting, and performance management. These teams play a key role in keeping ERM on the planning agenda. While the board maintains fiduciary oversight, the Chief Executive Officer (CEO) and

executive leadership team are operationally accountable for translating the board's risk appetite into day-to-day organisational practices.

According to Kgoadi (2022), the CEO serves as the primary sponsor of ERM. Without visible, sustained executive leadership, ERM initiatives routinely stagnate into secondary compliance burdens. The executive leadership team's key functions in this include cultivating an open, transparent corporate culture where risk identification is rewarded rather than penalised, and where "bad news" escalates rapidly without fear of reprisal. They integrate risk into business strategy, ensuring that strategic planning, capital budgeting, and resource allocation decisions explicitly incorporate risk assessments rather than treating risk evaluation as an afterthought. While they also oversee resource allocation, they must assign adequate financial, technical, and human capital to build dedicated risk management infrastructure, software platforms, and continuous training programs across all business units (Lam, 2014).

Key Partners in ERM Governance: Core ERM, First and Second-Line Control Functions

The Chief Risk Officer (CRO) and Central Risk Team

The CRO, or Head of Risk, acts as the main architect and coordinator of the ERM framework. Situated within the second line of defence, the CRO does not own operational risks but instead supports operational managers in identifying and assessing them (Fraser & Simkins, 2010). The CRO's main responsibilities include creating standardised taxonomies for risk identification, scoring matrices, and reporting templates; and consolidating decentralised risk registers into a comprehensive, enterprise-wide risk profile for review by executives and the board. As a central risk team, they also question initial assumptions about risk likelihood, impact, and control effectiveness.

First-Line Operational Risk Owners

A key reason ERM initiatives fail is the lack of engagement from first-line management. Operational managers, department heads, and project leaders are the actual "risk owners" (IIA, 2020). First-line partners are specially equipped to identify emerging operational threats early, before these issues appear in higher-level reports. Their duties include performing daily internal controls integrated into operational workflows; managing the identification, assessment, and maintenance of operational risk registers within each business unit; and creating and executing targeted risk treatment strategies, such as mitigation, transfer, avoidance, or acceptance. Without proactive first-line ownership, ERM becomes a recurring administrative task dictated by the central risk office, often reduced to ticking boxes (Fraser & Simkins, 2010).

Specialised Second-Line Partners

Specialised control units support the central risk function by overseeing particular areas of enterprise risk. The second level includes the compliance and Legal team that tracks regulatory updates, oversees statutory compliance risks, and safeguards contractual integrity. They also deal with finance and business strategy, linking Key Risk Indicators (KRIs) to financial outcomes, liquidity, and capital allocation frameworks. The second line of partners also oversees the organisation's quality assurance and safety. They do this by implementing operational standards, safety procedures, and quality control measures to prevent failures, and by leading IT and Cybersecurity. This involves managing data governance, ensuring system redundancy, strengthening cybersecurity defences, and developing business continuity plans (BCP).

Independent Assurance and External Partners

Internal Audit (The Third Line)

Internal Audit serves as an independent observer. To ensure objectivity, internal auditors do not create, implement, or oversee the ERM framework. Instead, they assess whether the ERM framework functions as expected; whether the first- and second-line controls are well designed and properly implemented; and whether risk assessments provided to senior leadership and the board accurately reflect the organisation's actual risk exposure.

External Stakeholders and Value-Chain Partners

Enterprise RM boundaries go beyond the organisation's physical and legal limits. Regulators and external auditors, suppliers and contractors, and insurance companies are key players in ERM implementation (COSO, 2017). Regulators and external auditors set initial governance and compliance standards, offering external validation of internal controls. Meanwhile, according to Naik and Prasad (2021) suppliers and contractors play a vital role in managing vulnerabilities in the third-party supply chain, operational dependency risks, and cybersecurity threats posed by vendors. Insurance brokers and underwriters help quantify risks and support risk transfer strategies for rare, high-impact events.

Strategy formulation and Implications

Implementing a successful ERM program involves coordinating various partners into a unified ecosystem. Conflicts may occur, especially between first-line managers prioritising performance targets and second-line risk functions that enforce control limits. Hence, successful institutionalisation of ERM requires clear accountability set by using tools and matrices to clarify risk ownership versus risk

support. Integrated reporting must also align risk metrics with operational performance indicators and culture, incentivising proactive risk identification and transparent escalation across all lines of defence.

Enterprise RM relies on collaboration. Although the framework provides structure, it is the relationships among key partners, ranging from the Board of Directors to frontline staff, that enable its effectiveness. Therefore, using the IIA Three Lines Model and COSO principles, organisations can break down operational silos, promote shared risk ownership across functions, and shift risk management from a compliance cost to a strategic asset. Enterprise RM has shifted from a reactive, compliance-focused activity to a vital strategic function. Effective ERM framework design, adoption, and integration rely on well-defined governance and active collaboration among diverse stakeholders. This essay explores the main internal and external partners involved in implementing ERM. Using the Institute of Internal Auditors' (IIA) updated Three Lines Model, the COSO ERM framework, and the ISO 31000 standards, it discusses the specific roles of executive oversight, control functions, operational risk owners, independent assurance providers, and external value chain partners. The Three Lines Model shows that ERM is not managed solely by a risk department but is a collective organisational effort that must be aligned across leadership and operational levels.

ERM Implementation challenges

Enterprise RM is widely recognised for its benefits to organisational performance and is particularly prevalent in the financial sector. However, its significance is increasingly recognised across other industries, underscoring the need for further research into its implementation (Naik & Prasad, 2021; Jean-Julès & Vicente, 2021; Kamau & Simiyu, 2019). According to Naik and Prasad (2021),

implementation often poses challenges for organisations seeking to adopt ERM. Firms must therefore gather comprehensive information on the purpose of implementation, the organisations' primary objectives, and the presence of relevant committees to ensure the process is not overlooked over time. Observations of risk management practices within Namibian government entities indicate that many lack dedicated risk committees. Among those that do have such committees, they are frequently inactive or ineffective. Furthermore, financial constraints may hinder the effectiveness of risk management practices within these organisations. Establishing a risk committee is crucial, as it serves as a custodian for monitoring and mitigating risks (Frans, 2018).

Recent evidence suggests that ERM enhances organisational understanding of risk and strengthens the capacity to mitigate risk across all levels and departments. Horvey and Ankamah (2020) examined factors influencing the risk management process, noting that implementing ERM requires considerable time and financial investment, as strategic planning demands substantial resources. They further emphasise that ERM requires integrating risk indicators into decision-making at every level, while considering organisational characteristics such as size, ownership, and operational efficiency.

These characteristics, particularly high operational efficiency, reduce the overall risk of organisational failure and improve performance (Fraser et al., 2021; Horvey & Ankamah, 2020). Operational efficiency can serve as a performance metric; however, it is also influenced by factors such as product and service offerings and management capabilities. Products and services are particularly critical for organisations that provide essential everyday goods, as these entities cannot afford operational stagnation. For instance, industries such as telecommunications, which supply SIM cards and airtime, must maintain continuous operations. Observations

indicate that such industries in Namibia were resilient during the COVID-19 pandemic. In fact, the communications sector benefited from increased reliance on internet and voice services required for remote work.

Given that ERM implementation appears to be the primary challenge for organisational risk committees, it is essential to consider the organisations' products and services when strategising for ERM adoption (Deloitte, 2020). Although much discussion centres on ERM implementation challenges, few studies have examined practical approaches to overcoming them (Naik & Prasad, 2021). In this context, "coping" means establishing mechanisms and a structured work plan to sustain the ERM process over the long term, with resource allocation a key priority. The authors also note that another significant challenge arises when management does not follow the board's directives, thereby undermining implementation efforts (Naik & Prasad, 2021).

In other words, when management fails to recognise the board's objectives, programmes often fail due to insufficient control or guidance. This can lead to a loss of trust between the board and management, frequently resulting in conflict. Obrenovic et al. (2020), in their study on enterprise sustainability during the COVID-19 pandemic, emphasised the need for organisations to have robust emergencies and risk management plans to mitigate crises and performance breakdowns. However, their observations revealed that many entities had risk management programmes that were either poorly implemented or ineffective, indicating that these organisations were unprepared for crises of the scale of the COVID-19 pandemic or other significant economic shocks.

Examining the role of risk management in supply chains, Gurtu and Johny (2021) argue that it entails translating strategies and plans into actionable measures

for managing supply chain networks, typically through continuous risk assessment and vulnerability mitigation. They further note that while some risks are common across supply chains, each organisation faces unique risks. Managers and boards often overlook this uniqueness, particularly when board members serve on multiple boards and apply a uniform approach across entities. Accordingly, Gurtu and Johny (2021) emphasise that risk management plans and implementation strategies must be tailored to the specific operational context and area of work to be effective.

The successful implementation of the ERM process depends not only on senior management but also on a comprehensive assessment of business operations to determine their capacity to address existing risk management gaps. Moreover, during severe crises, Obrenovic et al. (2020) argue that organisations should conduct thorough evaluations of economic actors and business processes, as existing theoretical frameworks explain how businesses operate, their efficiency, and their responses to disease outbreaks. This implies that if an organisation implements or monitors an ERM framework poorly, the overall risk management process may be compromised.

In their guide to effective ERM implementation, Sindorenko and Demidenko (2016) emphasise the need to establish a clear plan for integrating risk management into the enterprise, taking into account the organisation’s risk tolerance. This critical step is often overlooked in Namibian studies, which have tended to assess ineffectiveness without examining whether organisations understand their own risk tolerance (Harrison et al., 2020; Limbo, 2019; Weylandt, 2017).

Furthermore, embedding ERM into decision-making, strategic planning, budgeting, procurement, and auditing requires creating new policies and revising existing ones (Dvorski Lacković et al., 2022; Sindorenko & Demidenko, 2016). This

process requires careful consideration of multiple factors before implementation, including the roles and responsibilities of risk managers, the key metrics for evaluating risk management effectiveness, and the integration of risk information into management reports. Clearly defining risk managers' duties is essential for meaningful implementation. Several scholars have also highlighted the need to address the resources required to operationalise risk management, audit its effectiveness, support continuous improvement, and develop risk management software (Sindorenko & Demidenko, 2016).

Moreover, the literature emphasises the need for further research on the influence of corporate culture on ERM implementation. Despite calls for such studies, the literature on the impact of corporate culture on ERM remains limited. However, a recent study by Li et al. (2021) demonstrated that organisations with strong, positive cultures consistently outperformed those with weaker cultures. Their research, conducted during the Omicron variant period, highlighted that many organisations had experienced significant setbacks and diminished optimism. These findings suggest that fostering a positive corporate atmosphere in which all employees feel valued is critical to successfully implementing ERM.

Additionally, Li et al. (2021) found that organisations with a robust corporate culture are more likely to invest in local communities, embrace digital transformation, and develop innovative products and services. The authors concluded that cultivating a strong corporate culture is one of the most effective ways for organisations to adapt to change and establish new operational practices. Consequently, these insights encourage organisations to actively develop their corporate culture to facilitate smoother ERM implementation.

Risk Management: SWOT Analysis

Organisations inevitably face a variety of risks throughout their operational lifespan, as no entity is entirely risk-free. Risks are a constant reality and must therefore be managed or mitigated. Analysing the RM mechanisms in place allows organisations to identify areas for improvement as well as their strengths. In their publication *Risk Management in Crisis: Winners and Losers during the COVID-19 Pandemic*, Jedynak and Bak (2021) note that RM has historically been challenging, as many hazards' businesses encounter are not easily mitigated by conventional, readily accessible instruments such as insurance.

The analysis of the RM process's strengths and weaknesses serves as a common strategic planning tool, enabling organisations to assess internal and external factors affecting their performance and objectives (Jedynak & Bak, 2021). While traditionally used for strategic planning and decision-making, SWOT analysis is equally applicable to risk management. It is particularly valuable during risk identification, helping organisations assess their internal capabilities and deficiencies while reviewing external market potential and risks (Taufik et al., 2021). By identifying potential hazards early, organisations can develop strategies to mitigate or control them.

Shenkir et al. (2010) further highlight that SWOT analysis provides a comprehensive overview of an organisations' internal and external environment, encompassing both favourable and unfavourable conditions. The information gathered can then inform assessments of the likelihood and potential impact of risks. For instance, internal strengths may mitigate certain risks, whereas weaknesses could exacerbate them. Similarly, opportunities may facilitate growth and risk reduction, while external threats may increase the likelihood of adverse events. Once risks are

identified and assessed, they must be prioritised according to their probability and potential impact (Taufik et al., 2021; Shenkir et al., 2010).

Strengths, weaknesses, opportunities and threats analysis supports this prioritisation by providing a clear framework for understanding the factors driving each risk. Proper use of SWOT ensures that organisational resources are directed towards addressing the most pressing concerns, informing subsequent risk response planning. For example, a particular strength may be leveraged to build defences, while a weakness associated with a significant risk may be addressed to reduce exposure (Taufik et al., 2021).

Hrytsenko et al. (2021) argue that SWOT analysis promotes consideration of multiple scenarios, enabling the development of risk response strategies for various contingencies. Supporting this view, Patrishkoff (2015) notes that organisations can anticipate potential risk outcomes and design strategies based on how internal strengths and weaknesses align with external opportunities and threats. Furthermore, SWOT analysis facilitates communication and collaboration by requiring input from a diverse range of internal stakeholders, thereby enhancing the comprehensiveness and effectiveness of the RM process.

Moreover, a collaborative approach can enhance awareness of risks and their potential consequences. Supporting this perspective, organisations are encouraged to sensitise all internal stakeholders to risk management, with the SWOT analysis serving as a particularly effective tool. Additionally, this practice fosters the inclusion of diverse viewpoints, contributing to a more comprehensive process of risk identification and assessment. The COVID-19 outbreak and its widespread repercussions demonstrated the importance of such preparedness. Using SWOT analysis as part of environmental scanning can facilitate organisational adaptation to

evolving conditions. Regular SWOT assessments allow organisations to remain current regarding their strengths, weaknesses, opportunities, and threats, thereby enabling them to respond to emerging risks and adjust risk management approaches, as necessary.

Jedynak and Bak (2021) developed a model of enterprise resilience to crisis, offering guidance on establishing and implementing risk management approaches that do not induce panic under adverse conditions. Their research emphasised identifying effective risk control mechanisms that enable organisations to prepare for potential disruptions, survive crises, and, in some cases, leverage crises as opportunities for development. For instance, some businesses established during the COVID-19 pandemic capitalised on emerging opportunities, whereas many other organisations struggled to maintain operations. This underscores the critical importance of analysing the business environment, enabling management and boards to evaluate the effectiveness of their strategies.

Strengths and weaknesses analysis of any business process is a recommended method for assessing the capabilities of existing processes (Taufik et al., 2021). SWOT analysis is widely used as a risk identification technique, helping organisations determine their risk position or appetite (Shenkir et al., 2010). Shenkir et al. (2010) emphasise that firms must fully understand their risk exposure and implement cohesive, integrated strategies to manage risks effectively; failure to do so can result in outcomes ranging from minor erosion of shareholder value to complete financial collapse.

Benzaghta et al. (2021) note that SWOT analysis is a strategic tool used across industries, aiding managers and executive teams in formulating informed strategies. Drawing on a literature review of SWOT methodologies, they argue that the approach

enables executives to identify and strengthen organisational strengths, recognise primary threats, and pinpoint areas requiring improvement, thereby facilitating more effective future planning. Franco and Franco (2022), in a study conducted during the COVID-19 pandemic, similarly assert that SWOT analysis supports the development of strategic directions. Establishing an organisation's strengths, weaknesses, opportunities, and threats is essential for positioning it competitively. Furthermore, Chenjiao and Raju (2020) emphasise that SWOT analysis helps organisations identify strategic positions that enhance their performance relative to competitors and develop methods to outperform rivals operationally.

Within the context of business risk management, SWOT analysis offers an efficient and effective method for assessing the current state of RM practices among cSOEs in Namibia. This assessment supports the development of relevant strategies, plans, and countermeasures that reflect the evaluation outcomes. Wang and Wang (2020), in their study conducted during the COVID-19 pandemic, argue that SWOT analysis is among the most effective approaches for identifying favourable and unfavourable conditions, targeting key issues, recognising barriers and constraints, and formulating strategic plans to guide informed decision-making.

Similarly, Nwabuko et al. (2021) emphasise the importance of SWOT analysis in the healthcare sector, particularly for enhancing patient care. Environmental scanning, facilitated by SWOT, is therefore valuable not only for business owners and managers but also for employees, as identifying factors that influence operations can promote organisational sustainability. This involves evaluating both internal and external environments and processes to determine strengths and weaknesses and identify areas for improvement. Benzaghta et al. (2021) describe SWOT analysis as a practical tool for the analytical stage, providing a foundational understanding of

potential future outcomes.

They highlight that it is a straightforward assessment method that enables organisations to evaluate advantages and disadvantages, identify gaps between current plans and future objectives, and analyse the competitive landscape. SWOT analysis is encouraged across all organisational levels for its simplicity and ease of application. Wang and Wang (2020) further note that the method is highly familiar and user-friendly and does not require specialised computer systems or software.

Although studies on SWOT analysis have examined various areas of interest, few have focused specifically on ERM. Nevertheless, the literature demonstrates the value of SWOT analysis for evaluating circumstances or procedures prior to implementation. Consequently, this approach ensures that both internal and external organisational contexts are considered when developing strategic business plans.

Strengths And Weaknesses Analysis

Strengths are internal attributes of the organisations that facilitate the achievement of their objectives, whereas weaknesses are internal factors that impede organisational success. Benzaghta et al. (2021) further note that the body of literature on SWOT analysis has expanded due to its use in strategic planning to evaluate organisational positions and formulate strategies. However, the broad application of SWOT across diverse fields has constrained the development of a comprehensive review.

Many organisations employ this internal risk assessment approach to assess their potential. Evaluating a firm’s strengths, weaknesses, opportunities, and threats is known as SWOT analysis (Taufik et al., 2021). Understanding the organisation’s capabilities facilitates clear goal setting and streamlines problem-solving. In their study on using SWOT analysis to develop environmental risk management strategies in

small businesses, Taufik et al. (2021) emphasised that recognising an organisation's strengths and weaknesses is essential to understanding the relevance and impact of environmental legislation.

Moreover, this approach helps determine actual conditions regarding staffing levels, skills and training programmes, equipment maintenance procedures, and top management's commitment to funding essential components (Taufik et al., 2021; Chenjiao & Raju, 2020). Chenjiao and Raju (2020) further argue that a failure to identify organisational opportunities may stem from underutilisation of human resources or from the absence of formalised methods for assessing personnel risks and monitoring processes. Effective alignment of strengths and weaknesses requires developing strategies to address identified shortcomings. Consequently, environmental scanning should encompass all internal and external factors that could affect the organisation. Wang and Wang (2020) further stress the importance of involving a team of relevant experts in this process.

Analysing the organisation's internal strengths and external opportunities is most effective when experts are engaged. Several organisations have successfully employed this strategy, either independently or alongside other analytical tools (Benzaghta et al., 2021). A clear understanding of strengths and weaknesses enables organisations to implement necessary modifications, ensuring that recommended changes are grounded in operational realities, regulatory requirements, shareholder expectations, personnel competencies, and other contextual factors.

Wang and Wang (2020) also emphasise that, when evaluating organisational strengths, all core competencies and their impact on overall performance must be considered. Awareness of the external environment is equally critical, as it informs organisations about potential avenues for achieving competitive advantage. A robust

and trustworthy approach to environmental analysis enables organisations to identify external opportunities and constraints that could affect their strategic objectives. By identifying internal strengths and weaknesses, organisations can better align strategic planning, establish effective RM processes, and develop innovative operational approaches. Addressing identified weaknesses enables firms to enhance their capabilities, remain competitive, and proactively manage market opportunities and threats.

Opportunities And Threats Analysis

In reviewing the literature on SWOT analysis, Benzaghta et al. (2021) explain that opportunities are external influences that facilitate the organisation's achievement of its objectives. They highlight that opportunities encompass not only favourable environmental conditions but also avenues to address internal weaknesses and to initiate new ventures, which can support business growth and confer a competitive advantage. Conversely, threats are external forces that pose current or potential risks to the organisation's capacity to achieve its goals (Lee & Lin, 2008, as cited in Benzaghta et al., 2021).

Shortreed (2010, p. 98) defines an opportunity as "a situation where, on balance of probabilities, the net expectation is a favourable decision outcome," whereas a threat is "a situation where, on balance of probabilities, the net expectation is an unfavourable outcome." He further notes that both opportunities and threats carry associated risks; therefore, risk managers must consider these risks in their decisions and actions. Observations indicate that many risk managers focus on opportunities while neglecting the associated risks. Consequently, organisations may concentrate on strategies to increase market share without adequately considering potential obstacles that could hinder these plans.

Rogers (2010) explains that strategic risk reflects the organisation's competitive environment, encompassing both opportunities and potential hazards. Some firms may invest in high-risk assets, believing their personnel possess the expertise and knowledge to generate value, though such outcomes are not guaranteed. As a result, an organisation's operational RM strategy must incorporate measures to mitigate risks associated with operational decisions. Risks that could adversely affect operations are classified as threats, while those with potential positive impact are viewed as opportunities.

Despite several studies on SWOT analysis, there remains a notable gap in research specifically examining RM process analysis. Given the limited literature on applying SWOT to RM processes, this study focuses on the risk management procedures of Namibian cSOEs, with findings that may be transferable to other organisations seeking to establish effective risk management systems. Hillson (2018) defines an opportunity as a favourable outcome that can add value to a project by creating opportunities for improvement. Furthermore, opportunity oversight in processes may involve tools and approaches that enable risk managers to identify and understand potential enhancements to project objectives. Recognised opportunities should be documented in the risk register, as each may give rise to additional threats.

Threat management involves using project risk management resources to describe risks, analyse their characteristics, assess likelihood, and record identified risks in the risk register (Hillson, 2018). Hrytsenko et al. (2021) argue that effective RM requires understanding of guiding methodologies, the ability to identify suitable solutions rapidly, and prompt, accurate evaluation of potential financial implications for individuals or organisations. Process analysis is a recommended aspect of monitoring and evaluation, as it clarifies the components of operational processes and identifies

areas for improvement. While SWOT analysis can offer valuable insights, it is only one instrument within a broader risk management toolkit.

Therefore, to develop a comprehensive and effective RM framework, a SWOT assessment should be complemented by additional risk evaluation methods and procedures. Organisations face a wide spectrum of risks, from environmental to operational, and must be prepared to encounter any type during their activities. They must also have the capacity to implement appropriate risk mitigation and control measures to safeguard organisational objectives.

Impact of the COVID-19 Pandemic on Commercial State Companies

Commercial enterprises across many industries were significantly affected by the COVID-19 pandemic. The extent of disruption depended on factors such as the nature and size of the business, its location, and the specific government measures implemented to manage the pandemic. Although infection and mortality rates were not uniformly severe, many African countries faced additional challenges, including disruptions to product delivery and the imposition of various restrictions. These challenges adversely affected commercial enterprises, as their performance depends on a steady revenue stream.

Kang et al. (2021), while examining business marketing processes between firms during the COVID-19 pandemic, observed that many organisations experienced significant supply chain delays with suppliers, compared with other operational difficulties encountered during the crisis. The authors proposed strategies to improve marketing and inter-business trade, including implementing supply chain management mechanisms to accelerate product flows and increase stock levels to meet customer demand. Although some enterprises adopted these interventions, the flow of goods in Namibia and other developing countries with limited manufacturing capabilities

remained severely constrained. Many organisations suffered supply chain disruptions due to lockdown measures, transportation restrictions, and the closure of production facilities (Kang et al., 2021; Obrenovic et al., 2020), resulting in production delays, raw material shortages, and difficulties meeting client demands.

Observations during the pandemic indicated that suppliers had to prioritise deliveries, determining which countries would receive goods first, while others faced delays. Consumer behaviour also shifted as people stayed home during lockdowns, and travel restrictions severely affected Namibia's tourism sector. Conversely, sectors such as e-commerce and home entertainment recorded increased demand as consumers turned to online shopping and digital media (Obrenovic et al., 2020). Faced with declining consumer spending, many businesses were compelled to lay off employees, reduce payroll, or cease operations altogether.

The closure of some businesses highlighted a lack of preparedness for crises such as COVID-19. The pandemic generated considerable uncertainty and fear, with some individuals apprehensive about engaging in business activities due to concerns about potential future disruptions. Norouzi (2021), analysing the post-COVID-19 effects on the oil and gas industry, noted that the sector was significantly affected, yet some improvements have been observed since the crisis. Similarly, in Namibia, as companies attempt to resume normal operations, some continue to struggle because revenue streams have recovered only partially.

The end of the COVID-19 pandemic has coincided with geopolitical tensions, such as the war between Ukraine and Russia, which affect countries that supply Africa. This situation underscores the vulnerability of nations that are not self-sufficient, as their operations depend heavily on external factors and the performance of developed economies. Norouzi (2021) further emphasises that COVID-19 affected every aspect

of human society, including the energy sector, influencing costs, demand, supply, investment, and other business elements, notably in the oil and gas industry. Chamba and Chazireni (2021) similarly argue that the business environment has changed dramatically, necessitating constant adaptation of business models to continue meeting client needs profitably. To build resilience and prepare for adverse business conditions, enterprises need an efficient, effective risk management process that can identify potential risks promptly (Obrenovic et al., 2020).

Chamba and Chazireni (2021) advocate integrating intrapreneurship within parastatals to generate public value by adhering to established norms. They further argue that involving intrapreneurs in adapting to the business environment can enable parastatals to deliver value more efficiently and effectively. Because commercial entities provide essential public services, high-performing parastatals focus on developing innovative client solutions in response to the new normal. Consequently, several studies have highlighted the urgent need for reform within state-owned enterprises (Le et al., 2023; Bett & Kihara, 2022; Lin et al., 2020; Jahja et al., 2020).

Reforming state-owned companies offers a potential avenue to enhance operational effectiveness, efficiency, and sustainability. Many non-governmental entities were affected by the COVID-19 pandemic as well. As a result, researchers emphasise the importance of collaborative efforts to transform state entities into profitable businesses. Various recommendations have been proposed, including adopting intrapreneurship (Chamba & Chazireni, 2021), engaging in public-private partnerships (Hrytsenko et al., 2021), changing leadership and board composition, and improving corporate governance (Turyakira et al., 2023), among others.

Upgrading information and communication technology (ICT) infrastructure should be a priority for any business (Obrenovic et al., 2020) because it enables

businesses to continue operating remotely, especially during periods of crisis. During the pandemic, remote work became essential for many firms, creating operational challenges related to technology, communication, and maintaining staff productivity. Organisations had to rapidly adapt to new ways of working and managing remote employees. Without alternative working mechanisms, many businesses faced closure and incurred additional expenses for treatment and insurance for individuals and property (Liu et al., 2020).

In unprecedented situations, businesses first consider how to reach their customers. This prompts the adoption of sophisticated technologies that enable operations to continue with minimal disruption. Firms that quickly transitioned to digital solutions for sales, marketing, and communication were better able to reach customers and maintain operations. In Namibia, this transition posed significant challenges, particularly for state-owned enterprises, both commercial and non-commercial, due to limited expertise in areas such as ICT and healthcare. Despite government support, resource constraints meant not all organisations could adapt successfully. To navigate the new reality, some Namibian organisations were required to rethink their business models. For instance, restaurants shifted to takeaway and delivery services. At the same time, manufacturers redirected production to supply essential medical items locally, a process that remained costly because they relied on semi-processed imported materials.

Wang and Wang (2020), in their SWOT analysis of the Chinese healthcare sector's preparedness for COVID-19, emphasised the need to establish a joint defence and control task force comprising experts from various disciplines to identify system strengths and areas for improvement. In China, social responsibility and a proactive approach to problem-solving are highly emphasised (Liu et al., 2020). Their

study demonstrated that by identifying strengths and opportunities, organisations could enhance both healthcare delivery and public safety, necessitating modifications to operational processes, organisational layouts, and regulatory frameworks (Liu et al., 2020).

Having identified both the system's weaknesses and its positive practices, it becomes easier to manage and mitigate risks where feasible. Persistent uncertainty during the pandemic made business planning particularly challenging. With constantly changing conditions and unpredictable consumer behaviour, firms struggled to make informed decisions. However, the post-COVID-19 environment carries profound implications for commercial enterprises, reshaping industries, accelerating digital transformation, and underscoring the importance of resilience and adaptability amid unforeseen economic challenges. A key lesson from the COVID-19 pandemic is that only organisations capable of responding rapidly, innovating, and adjusting their strategies were better positioned to navigate the crisis successfully. Analysing the strategies employed by companies that weathered the pandemic can provide valuable insights to help other businesses prepare for and respond to future disruptions.

Literature Review Summary

This chapter explored the theories of RM and ERM, as well as the conceptual frameworks underpinning ERM implementation and effective risk management within the organisations. It examined the importance and benefits of implementing ERM to achieve an effective RM process, and the role of leadership capacities in guiding commercial state companies to greater heights. Numerous studies have emphasised the importance, challenges, and prerequisites of ERM, encompassing both state-owned enterprises and private-sector firms. However, this study primarily centres on state-owned commercial entities, resulting in most of the reviewed literature focusing

on research conducted on all state-owned organisations.

This chapter also examines the existing literature on Darwin's theory of natural selection, with particular attention to the concept of survival of the fittest. Darwin's theory is applied within the context of ERM and sustainability, reflecting the notion that only organisations equipped with the necessary systems and strategies to navigate demanding business environments can sustain their operations over time. Darwin's conceptual framework has been utilised to enhance insights into ERM, as elaborated in the book chapters edited by Fraser et al. (2021). These authors argue that when ERM is properly adopted and implemented, it can enable organisations to manage difficult periods effectively and ultimately increase their overall value. Even though Darwin's theory is less studied or considered in business research, this study explored the mechanisms of this theory in practice, particularly regarding organisational sustainability.

In addition, this study investigates theories concerning the effectiveness of the RM process and the performance of improved entities, specifically transformational leadership theory and contingency theories. Transformational leadership theory emphasises the importance of leaders who positively influence their employees, act as agents of change, motivate and inspire followers to develop alongside the organisations, and foster an inclusive organisational culture. Contingency theory, on the other hand, posits that leadership and management approaches must be tailored to the organisations' internal and external environment. Consequently, what works in organisation A cannot necessarily be applied in organisation B in the same way. Every organisation must have its own way of doing things, taking into account each organisation's risk consumption levels. Moreover, organisations need to have their own contingency plans in case things do not work out as intended and operations may

be affected.

Furthermore, in exploring the benefits of ERM for organisational sustainability, this research considers stakeholder theory and goal-setting theory. Stakeholder theory advocates the inclusion of stakeholders in organisational processes to promote transparency and accountability. This prompts organisations to consistently consider the needs of key stakeholders, such as employees, suppliers, customers, shareholders, and the community, when making important decisions. In this way, the organisation's value is boosted, and long-term sustainability is ensured. Meanwhile, goal-setting theory emphasises the importance of setting challenging yet achievable objectives for employees to improve organisational performance. According to this theory, goals must align with the organisation's short- and long-term strategies.

In addition to the theoretical framework, a conceptual framework was developed for this study based on the reviewed literature. The study therefore establishes a connection between the challenges faced by enterprises and the improved performance of commercial state-owned enterprises. Moreover, the literature identified a relationship between the quality of risk documentation and communication and effective risk management. The review also covered the COSO and ISO 31000 risk management frameworks, both of which promote the implementation of enterprise RM. The ERM framework, exemplified by the Committee of Sponsoring Organisations of the Treadway Commission, is widely recognised for guiding organisations towards favourable outcomes. The COSO is extensively utilised and considered effective in embedding ERM within the organisation's strategic management and planning processes.

This chapter further explores the current literature on the challenges encountered while implementing ERM, as well as the impacts of the COVID-19

pandemic on governmental entities. The literature analysis aimed to deepen understanding of ERM's effect on organisational performance, with a particular focus on commercial state-owned companies. The primary objective was to determine how ERM practices contribute to the sustainability, value creation, and profitability of commercial state organisations.

Given the emphasis on ERM's role in organisational value creation, it was essential to investigate the leadership styles that facilitate a company's success. The literature examined not only transformational leadership but also organisational structure, performance, and resource management techniques. Moreover, the chapter addressed the ramifications of the COVID-19 pandemic for businesses, particularly the advantages of ERM during times of crisis. Additionally, it reviewed the consequences for organisational sustainability, the prerequisites for adoption of ERM, and the associated challenges. The existing body of literature provides convincing evidence of ERM's significance in enhancing firm performance and sustainability (Ali Shah- et al., 2024; Shad et al.,2019).

Notably, the paucity of research on ERM implementation across many firms, especially in Namibia, highlights a significant gap warranting further investigation. While the literature emphasises ERM's importance in improving firm performance (Ali Shah- et al., 2024), it also recognises the continued use of traditional RM approaches. This duality has prompted further questions about the barriers organisations face in implementing, utilising, and maintaining ERM. Integrating risk management processes into strategic planning, as advocated by Fraser et al. (2021), enables organisations to proactively anticipate and manage future risks, facilitating a comprehensive approach to all forms of risk. Moeller (2007) underscores that ERM has emerged as a leading risk management approach, encompassing diverse concepts and perspectives, and is

increasingly regarded as the gold standard for communicating critical risk management ideas effectively.

Initial perspectives in the literature suggest a growing recognition of ERM as a more comprehensive approach to risk management. This approach is viewed as commercially advantageous, significantly enhancing business value (Fraser & Simkins, 2010). The concept of business value creation refers to ERM's capacity to generate positive outcomes and enhance overall organisational performance and success. This topic has therefore generated significant interest among both researchers and business professionals, providing valuable insights into how ERM can be effectively implemented and its potential advantages. Fraser and Simkins (2010) further highlight that ERM's impact on organisations is evident at both macro and micro levels.

At the macro level, ERM influences the entire organisation, shaping strategic direction, decision-making processes, and risk culture. By embedding RM within strategic planning, ERM supports the identification and evaluation of risks, the development of appropriate risk response strategies, and the organisation's ability to achieve its objectives. At the micro level, ERM's influence is apparent within individual business units or departments, which, through ERM practices, can effectively identify and manage risks specific to their operations. This leads to greater operational efficiency, improved allocation of funds, and enhanced planning outcomes, thereby contributing to the organisation's overall success and positive value.

The concept of business value creation through ERM has been extensively examined and debated in both academic and practitioner literature (Akhmetshin et al., 2019). Scholars have investigated various dimensions of this topic, including the relationship between enterprise RM and financial wellbeing, its influence on

shareholder value, and the role ERM plays in strengthening organisational resilience (Braun et al., 2019; Akhmetshin et al., 2019). The studies by Braun et al. (2019) and Akhmetshin et al. (2019) are particularly pertinent to this subject. Nevertheless, it is important to acknowledge that value creation depends on management and boards' comprehensive understanding of the concept, as well as on the availability of sufficient resources and capacity within organisations to manage risks holistically. Many academic writings emphasise that ERM offers a comprehensive strategy for managing risk. This framework operates by identifying, evaluating, and mitigating potential risks across the entire organisation (Chege et al., 2023).

The assertion that ERM represents a comprehensive approach to risk management stems not only from its departure from the traditional practice of isolating risks within discrete organisational units. Beyond the perspectives of Naik and Prasad (2021) and Fraser et al. (2021) on overall organisational performance, other factors contribute to the holistic nature of ERM. These include the integration of strategic management, stakeholder engagement, and shareholder involvement. Empirical evidence demonstrates that ERM is widely used by researchers for its ability to facilitate strategic management and budgeting processes (Alijoyo & Norimarna, 2021). Moreover, ERM helps align corporate governance with strategic management, resulting in enhanced value creation, risk reduction, improved performance, and informed strategic decision-making (Naik & Prasad, 2021).

However, some experts argue that ERM is a transient management trend focused on the banking sector (Horvey & Ankamah, 2020; Ngwangwama et al., 2019). Reflecting on the Global Financial Crisis of the 1990s, during which many corporations that had emphasised comprehensive RM nonetheless suffered significant failures, criticism of the ERM approach has grown (Fraser et al., 2021). Consequently, it is

pertinent to examine the current standing of holistic risk management, especially given the COVID-19 pandemic and its aftermath. The literature has noted reservations and uncertainties surrounding ERM research and its portfolio approach to risk management. Some remain skeptical, contending that ERM tends to focus on risk prioritisation rather than achieving full diversification (Fraser et al., 2021). In light of recent crises affecting numerous organisations, including those with well-established risk management practices, this scepticism appears justified.

The execution and oversight of ERM projects can provide structured guidance and support to business units, senior executives, and board members, delivering a range of benefits to these key stakeholders. Prior academic research suggests that adopting ERM frameworks plays a vital role in fostering a unified risk management culture, particularly in contexts characterised by staff turnover (Chege et al., 2023). Meanwhile, Fraser and Simkins (2010) present empirical evidence that ERM frameworks facilitate the effective management of organisational complexity. This is achieved through the application of risk visualisation techniques, the designation of individuals responsible for evaluating and monitoring controls, and the clear definition of roles and responsibilities.

Kajwang (2022) studied shareholder involvement in risk management, arguing that shareholders play a significant role in the process. This involvement stems from their active assessment of potential investment opportunities, taking into account factors such as security and expected returns. Furthermore, Naik and Prasad (2021) and Kamau and Simiyu (2019) highlight the importance of recognising potential obstacles to ERM implementation. These challenges include government regulations and duties, resource availability, and personnel competence and expertise. As such, implementing ERM requires a comprehensive evaluation of existing risk management

initiatives.

Several methodologies recommend evaluating strengths, weaknesses, opportunities, and threats to address potential barriers to successful process execution (Wang & Wang, 2020). Addressing these gaps enables organisations to develop more effective RM strategies, particularly during periods of uncertainty such as the COVID-19 pandemic. Fraser et al. (2021) argue that contemporary discourse on ERM reflects an emerging consensus that oversight of risk management should not be the sole responsibility of organisational boards. Rather, both boards and management are expected to ensure the effective management of internal and external risks.

Moreover, it is essential for organisational structures to actively participate in strategic risk management planning. Consequently, this study employed a conceptual framework to demonstrate the correlation among effective risk management, appropriate risk documentation, performance outcomes, and the challenges encountered in integrating ERM, particularly as they relate to organisational value creation and sustainability. Regarding risk documentation, Lobato et al. (2010) emphasise the necessity of accurately recording risks and establishing a standardised approach to identified risks. Fraser and Simkins (2010) offer a comprehensive range of concepts and methodologies for holistic risk management, risk assessment, and the identification of appropriate solutions through ERM frameworks, aligned with the risk management principles outlined in ISO 31000.

This study is grounded in the concept that, for businesses to endure adverse conditions, a robust RM framework must be in place, one capable of identifying and managing risks effectively to an acceptable level. Therefore, the relationships between independent variables, such as challenges encountered during the COVID-19

pandemic, the quality of risk documentation and communication, and the presence of skilled personnel and competent leadership, and mediating variables, including effective risk management, improved organisational performance, and successful ERM implementation, were examined towards the overall goal of achieving enterprise sustainability as a dependent variable.

This research reviewed two ERM frameworks, namely COSO and ISO 31000, as foundational tools for exploring the benefits of implementing ERM within Namibian cSOEs. The study sought to conduct a SWOT analysis of the existing risk management processes and to assess the feasibility of adopting ERM. By examining these two frameworks, the study aimed to identify prevailing deficiencies and challenges that affect effective RM, as well as the significant barriers encountered in implementing ERM in developing countries such as Namibia. The ISO 31000 and COSO frameworks, along with other relevant models, align with the underlying hypotheses of this study. This is particularly evident in the COSO framework's emphasis on internal risk control, the integration of ERM into strategic planning and execution, and the roles of skilled employees and competent leadership.

Fraser and Simkins (2010) argue that the integrated COSO ERM framework provides clear guidelines essential to the successful implementation of ERM. In line with this study's objectives, ISO 31000 offers guidance on the principles, methods, and processes of risk management within organisations. The ISO 31000:2009 standard advises businesses on the principles, framework, and risk management practices that support the achievement of organisational goals (Alijoyo & Norimarna, 2021). According to Alijoyo and Norimarna (2021), strengthening leadership and demonstrating a firm commitment to adopting risk management strategies throughout the organisation enhance and safeguard corporate value.

Notably, competent leadership and unwavering dedication are critical to developing an effective risk management strategy (Akhmetshin et al., 2019; Hanggraeni et al., 2019). This is especially relevant given the challenges organisations face when applying ISO 31000 as a risk standard. A few studies have emphasised the importance of considering or adhering to international standards to ensure organisations' operations align with universal standards, thereby enhancing quality and confidence in products and services (Hardjomidjojo et al., 2022; Björnsdóttir et al., 2022; Akhmetshin et al., 2019; Hanggraeni et al., 2019). ISO 31000 mitigates business risks by establishing regulatory standards, recommendations, and criteria. It is recommended that management across all organisations develop key performance indicators (KPIs) for risk management and employee engagement. Equally important is ensuring that all relevant information, including potential hazards, is disclosed during decision-making processes (Fraser & Simkins, 2010). Therefore, in implementing risk management across the organisation, the risk management principle serves as the primary reference point.

The COSO risk framework has been adopted as an internal RM protocol to instill confidence in the organisations' ability to meet their strategic goals (Thabit, 2019; Moeller, 2007). The framework encompasses four key pillars of internal risk control: strategic, operational, reporting, and compliance. Considering the four objectives of this study, nations have experienced significant challenges during and following the COVID-19 pandemic. Analysing the current situation in relation to the requirements of these two risk standards will assist in addressing the research questions posed by this study. Therefore, it is crucial to examine the current RM procedures within commercial state-owned entities. This assessment will help identify weaknesses that need to be addressed to improve the organisations' overall performance. Consequently, the

literature review examined potential obstacles to effective risk management in commercial state firms.

Moreover, adopting an appropriate leadership style grounded in contingency theory is beneficial within organisations and among all individuals involved in the risk management process. This view is well supported by the existing literature (Greimel et al., 2023; Fraser et al., 2021). Organisations are influenced by both environmental and economic fluctuations, making effective leadership essential for establishing strategic management goals. Such leadership enables employees to clearly understand their roles and responsibilities, thereby reducing anxiety and minimising avoidable losses during periods of difficulty. The two leadership theories explored in this study were selected because effective risk management is fundamental to achieving favourable organisational performance.

Benmira and Agboola (2021) demonstrated that effective leaders, particularly those exhibiting transformational leadership qualities, play a vital role in driving organisational change and achieving organisational objectives. Similarly, Siangchokyoo et al. (2020) contend that extensive findings from both research and real-world application highlight the critical role of transformational leadership skills. Their findings revealed a positive correlation between transformational leadership style, employee performance, and overall organisational success. In a related study, Eliyana and Ma'arif (2019) found that implementing a transformational leadership approach focused on fostering a culture of excellence and sustainability can significantly enhance the likelihood of sustained business success. Consequently, it is crucial for organisations to nurture visionary leaders who possess transformative capabilities.

Transformational leaders articulate a compelling vision for the organisations'

future and set well-defined objectives aligned with it (Greimel et al., 2023). According to Mach et al. (2022), transformational leaders cultivate a positive, supportive work environment that fosters innovation, creativity, and continuous learning among their subordinates. They also sustain motivation by recognising and celebrating achievements. Therefore, there is a strong case for empowering transformational leaders to guide Namibian commercial state-owned enterprises in improving ERM implementation. The existing literature indicates that inadequate leadership within state entities is placing most commercial state enterprises in Namibia at a disadvantage (Maseke & Swartz, 2021; Limbo, 2019).

Enhancing the recruitment and development of capable leaders for positions within commercial enterprises in Namibia would improve the overall performance of cSOEs and, as a result, enable these organisations to realise their financial objectives more effectively. Contingency theory, as formulated by Fiedler in 1964, explains organisational differences in terms of service offerings, operational strategies, and the contextual environment in which they operate. Research focused on Namibian cSOEs could provide valuable insights into the effectiveness of current leadership in steering these state organisations towards resilience. By incorporating a broad range of enterprises in this study, applying contingency theory may help develop a comprehensive risk management framework applicable across commercial organisations in various sectors.

Obrenovic et al. (2020) emphasised the need for further research into the relationship between enterprise sustainability and performance following the COVID-19 pandemic. Drawing on stakeholder and goal-setting theories, they highlighted the crucial role of ERM in enhancing business performance and securing long-term viability. The present study addresses the third hypothesis by analysing the link

between risk documentation and communication and effective risk management. If effective RM fosters business sustainability and value creation, organisations that successfully implement ERM demonstrate resilience, competitiveness, and ongoing viability. To substantiate this, the study explores the theoretical foundations of stakeholder engagement in risk management and the importance of goal setting.

These two theories clearly illustrate why it is imperative for businesses to involve stakeholders in the ERM process. Stakeholders within organisations are vital to the successful implementation of well-defined strategies to achieve key organisational objectives (Pedrini & Ferri, 2019). Current evidence suggests that achieving sustainability in state-owned enterprises depends heavily on management and boards recognising its importance, as well as on active stakeholder participation in risk management.

Naik and Prasad (2021) noted that managers frequently show little concern for board activities, often viewing risk management as outside their remit. However, Fraser and Simkins (2010) emphasise the importance of a comprehensive risk management approach that involves all organisational members, thereby challenging this perspective. This suggests that various individuals undertake distinct responsibilities within the risk management process, while the board retains ultimate accountability for safeguarding key decisions. Accordingly, it was pertinent for this research to conduct a SWOT analysis of the process's effectiveness within the selected state-owned enterprises. The role of boards, regardless of their formal position in organisational affairs, is critical with respect to their competence and capacity to manage and mitigate risks effectively.

This is especially important given that multiple stakeholders, including external auditors, closely monitor boards' capabilities in risk mitigation and regulatory

compliance. Alijoyo and Norimarna (2021) argue that a company's vision must encompass the board's commitment to risk monitoring, adherence to ethical standards, and the prevention of compliance breaches. Equally, this commitment must be communicated effectively throughout the organisation. They further emphasise the importance of integrating the organisation's risk appetite into strategic management processes (Obrenovic et al., 2020). Their study also highlights the need for businesses to have robust emergencies and risk management plans to respond to crises and avoid performance disruptions. Additionally, organisations that adapted swiftly to digital platforms for sales, marketing, and communication demonstrated superior performance in customer engagement and operational continuity.

CHAPTER THREE: RESEARCH METHODS

The first two chapters of this thesis discussed the purpose of this study, identified gaps in the literature, and reviewed findings from empirical studies on RM, particularly during crises. In particular, chapter two examined ERM implementation strategies and potential hindrances to implementation. This included gaining a deeper understanding of how ERM implementation can potentially enhance the performance of these entities. The literature review highlights several obstacles that impede the performance of government entities in other countries and in Namibia. The existing body of research has extensively explored methods to enhance the performance of these entities, using ERM as a comprehensive approach to strategic management (SM).

This investigation explored the current state of risk management processes and approaches to implementing ERM within commercial state entities, with the aim of assisting commercial SOEs during times of uncertainty. This investigation was conducted only on commercial state enterprises because they play a major role in the country's economy. These state entities are the largest employers in Namibia and provide day-to-day services, including medical services, infrastructure, safety and security, and many others. The COVID-19 pandemic had significant impacts on some of these entities, creating numerous obstacles and adverse effects. A lack of preparedness among these entities for adverse situations may be one reason they faced the consequences of COVID-19.

The literature has outlined ways to enhance operational efficiency that could cause little harm even in unfavourable economic climates. Operational efficacy can be established when risk monitoring and evaluation procedures are in place to ensure organisational preparedness for uncertainties, and when RM measures are embedded

within operations. The COVID-19 pandemic has resulted in substantial economic setbacks for numerous countries and entities, including Namibia, where SOEs are the principal source of employment. These enterprises play a key role in enhancing individuals' well-being by mitigating income disparities, especially in developing nations. Nevertheless, the current condition of most SOEs, especially those that are commercially run, raises concerns about the prospects of several enterprises and the nation as a collective entity. The Namibian government's commercial companies have faced criticism for poor performance and maladministration, resulting in an inability to meet performance objectives and generate revenue. The public's confidence in these government entities has been eroded due to their inability to regulate expenditure, inadequate accountability mechanisms, inconsistencies in procurement practices, and instances of corruption (Marenga, 2020; Shighweda, 2020; Limbo, 2019).

A notable disparity exists in the communication channels between the government and the management of most public enterprises (PEs) in Namibia, resulting in an information gap. To tackle this issue, it is advisable to employ conceptual frameworks that can analyse, identify, and underscore the significance of RM within organisational contexts. The substantial negative impact of the COVID-19 pandemic on multiple businesses requires management of the cSOEs to devise solutions that foster resilience. This entails anticipating shifts in customer behaviour, offering appropriate industry responses, and advocating a resilient approach. A resilient approach can only be achieved with good leadership and proper procedures within organisations to help businesses remain sustainable.

To provide effective leadership, it is important for organisational leaders to modify existing structures and reconfigure operational processes to grant sufficient autonomy in decision-making. Hence, establishing a cross-functional crisis

management team is crucial for firms to effectively navigate the aftermath of a catastrophe (Obrenovic et al., 2020). The nomination of top management in state-owned enterprises in Namibia is subject to political influences rather than capabilities. This practice has the potential to impede their efficiency in managing operational matters (Limbo, 2019). According to Limbo (2019), a notable number of managers in SOEs demonstrate a lack of understanding of the operations and processes specific to their individual organisations.

As a result, several problems are on the rise, including inadequate leadership, corruption, financial insolvency, and the regrettable outcome of staff redundancies (Jean-Julès & Vincente, 2021; Klučka & Grünbichler, 2020). Interventions play a pivotal role in mitigating irreparable losses and enhancing leaders' preparedness amid uncertainty. These include identifying the individuals responsible for executing the RM process and determining the optimal timing for execution, helping leaders take proactive measures to prepare for potential events and improve their resilience strategies.

The performance of cSOEs is suboptimal, as evidenced by the higher number of individuals employed in government organisations compared with the private sector (Marenga, 2020; Shighweda, 2020; Limbo, 2019). Issues of unemployment, inadequate shelter and housing, poor sanitation, and droughts within the country will remain unresolved if state-owned firms remain stagnant. Management oversight in these companies is inadequate, as evidenced by the prevalence of reported corruption within commercial SOEs. The state's budget is significantly affected by this phenomenon, as it incurs new loans annually.

The COVID-19 pandemic affected many sectors in the country, including fishing, construction, mining, education, and tourism. Consequently, a larger number

of young individuals have been left unemployed because of these disruptions. Research on malpractices within Namibia's state firms has primarily focused on the need for change rather than the significance of performance and risk management practices (Marenga, 2020). The adoption of efficient risk management strategies, such as ERM, can help SOEs resolve these issues and strengthen their long-term viability. The public's loss of confidence in cSOEs has resulted in growing trust in the private sector, which is often characterised by potential exploitation and distrust (Marenga, 2020; Limbo, 2019). Certain commercial SOEs require annual financial assistance from the government due to financial losses and lack of profitability.

Therefore, there is a need to introduce ERM in Namibia's SOEs to foster effective RM strategies that may enable commercial state entities to navigate challenging economic climates. Ensuring the long-term viability of cSOEs is crucial for promoting employment stability and fostering sustainable economic growth; hence, this study focused only on commercial state-owned entities. The malpractices of commercial state entities in Namibia encouraged private enterprises to identify deficiencies and gaps in the existing governmental framework, enabling them to strategise and establish businesses that either rival or supplement the goods and services offered by commercial SOEs.

This study also examines how RM is conducted and what can be improved in the process. The findings of this research will provide significant insights into the current RM practices of state-owned enterprises and propose recommendations to improve their risk identification and mitigation strategies to ensure the long-term viability and prosperity of these institutions. The findings will also guide the study on the need to implement ERM within these entities, considering what is in place and what needs to be improved or introduced. The study aimed at addressing the following

research questions:

RQ1: What was the impact of enterprise challenges on the performance of cSOEs in Namibia during the COVID-19 pandemic?

RQ2: To what extent does the effectiveness of the RM process within cSOEs depend on the quality of risk communication and documentation?

RQ3: What is the impact of skilled personnel and a competent leadership team on the successful implementation of ERM in Namibia's cSOEs?

RQ4: What are the key challenges faced by cSOEs in Namibia in implementing ERM frameworks?

Answering these research questions, the study explored current risk practices, mechanisms for improving risk management, and the feasibility of ERM implementation. The current RM process was analysed to assess its strengths and weaknesses, opportunities, and threats. The main method of analysis of the current RM process was the SWOT analysis, used to investigate the status of the current risk management process in commercial state companies in Namibia, and regression analysis was conducted to understand the impact of risk documentation and communication on an effective RM process. Using the SWOT analysis, conclusions were drawn based on the collected evidence and information, as well as the results of other analyses. Additionally, given that the study also examined the challenges these companies faced during the difficult period of the COVID-19 pandemic, listing these challenges was one of the preliminary data points analysed before conducting the SWOT and regression analyses. Moreover, the challenges experienced were useful in correlating them with weaknesses and threat analysis of current risk practices.

Questions 1 and 2 assessed the effectiveness of the risk management processes and the challenges faced during the COVID-19 era. These questions were

answered in the initial phase of the study using survey questionnaires. The initial inquiry outlined the difficulties faced by cSOEs in Namibia during the COVID-19 pandemic. The subsequent questions explored the importance of risk documentation and communication, the need for skilled personnel and competent leadership to manage cSOEs, and the challenges of implementing ERM. The analysis of the research questions was followed by the analysis of the study hypotheses, which assessed the statistical significance and magnitude of the independent variables on the mediating variables, thereby determining the severity of the impact on cSOEs sustainability.

For research question four, quantitative data was complemented by interviews to subsequently outline the challenges of ERM implementation and to establish appropriate recommendations. The primary emphasis of these discussions was on potential obstacles to implementing ERM and the main challenges enterprises face in doing so. Chapter three outlines the methodology of this study and the procedures followed from data collection to analysis. The chapter will provide a more comprehensive analysis of the research methodology and study design. To examine employees' understanding of risk management across various organisational levels, this study combined quantitative and qualitative methods and classified participants by organisational position. Additionally, the study data were collected in two phases.

The investigation adopted an explanatory sequential mixed-methods approach, first collecting quantitative data from a random sample of 384 respondents across eleven (11) cSOEs via a structured survey. This was subsequently complemented by qualitative data from ten (10) purposively selected managers and supervisors via semi-structured interviews. This chapter discusses the procedures employed in the present study, with an emphasis on the sampling techniques, the types of data

collected, the population, and the instruments and methodologies used for data collection and analysis. The initial section covers the research approach and design, emphasising sample selection, data collection procedures, the types of data collected and their sites of collection, as well as the methods of data analysis.

Research Approach and Design

This was an explanatory-sequential mixed-methods design, enabling in-depth examination (Stern et al., 2021) and evaluating the current effectiveness of RM to inform ERM implementation recommendations (Downing et al., 2023). A probabilistic stratified random sampling method was used to select participants for the quantitative study across all organisational levels, and a non-probabilistic purposive sampling method was used to select participants from the management level for the qualitative study.

The COVID-19 pandemic may have reduced the likelihood of survival among some cSOEs in Namibia. This necessitated an exploration of equitable strategies to mitigate the liquidation of these state entities. The current situation also necessitated an investigation into the current RM and advice on suitable strategies for managing risks in government enterprises (Baum et al., 2020). Such an endeavour could contribute to the long-term viability of these enterprises and foster job stability, thereby facilitating sustainable economic growth within the country. Furthermore, it is imperative to identify the primary factors contributing to maladministration within cSOEs in Namibia. It was therefore necessary to identify an appropriate RM approach for these organisations to enhance performance in cSOEs in Namibia, especially in adverse economic climates.

To understand the strengths and weaknesses of the current RM process, the study investigated strategies to raise organisations' awareness of the significance of

risk management and the benefits it offers. The subject of ERM promotes the customary implementation of RM strategies and readiness to confront unpredictable situations, such as the COVID-19 pandemic (Obrenovic et al., 2020). A thorough examination of the current status of cSOEs revealed that job security in Namibia is a cause for concern, necessitating urgent and substantial solutions. The situation prompted an examination of how the environment around cSOEs can be leveraged to better sustain the institutions, thereby securing jobs for civil servants.

The objective was to identify the strengths and weaknesses of the RM processes and to devise effective strategies to help non-performing SOEs overcome their challenges in aligning with local, performing cSOEs and with the international ERM framework, such as COSO and ISO 31000. The findings of this study will assist policymakers within commercial state institutions in making informed decisions regarding risk record management rules. Additionally, the study examined employees' RM knowledge, conducted feasibility checks for ERM implementation, and identified its implementation challenges. The quantitative survey provided sufficient information on risk communication and documentation in the current RM process. The survey also examined the key issues that affected the performance of cSOEs during the COVID-19 pandemic. Hopkin (2010) asserts that the participation of board members and managers in the RM process is an essential practice that requires well-informed, engaged individuals. The participation of board members and managers in the RM process is most effective in guiding firms towards appropriate courses of action, even in the face of challenging circumstances.

The understanding of risk management varies among organisations, reflecting entrenched traditional or siloed approaches prevalent in many firms. Nevertheless, the implementation of ERM has garnered significant attention in various business contexts

owing to its numerous advantages. The present study utilised the principle of Charles Robert Darwin's theory of natural selection, namely the concept of survival of the fittest, as outlined by Fraser and Simkins (2010). Based on Darwin's theory, it may be argued that firms can only survive in a changing climate if they implement effective strategies and adoption mechanisms to sustain their operations. However, the central theoretical approach in this investigation was formulated around contingency theory.

The utilisation of the four other theories in this research facilitated the development of numerous constructs across strategic management processes, operational efficiency, strategic RM, and adaptive strategies. The construct in this study pertains to organisations' capacity to enhance performance even in unfavourable economic conditions. The exploration of this subject matter concerning commercial entities in Namibia necessitated a comprehensive examination of the existing risk management protocols to conduct a proper investigation. Therefore, the investigations aimed to ascertain whether any of the cSOEs in Namibia have adopted ERM to regulate their RM practices and to gain insights into the obstacles or perspectives of entities that have not embraced ERM.

To outline the importance of RM, the study established the conditions of cSOEs during the COVID-19 pandemic to determine whether the RM process contributed to the challenges encountered. This was also an opportunity to understand the diverse tactics implemented by business entities, including those that successfully navigated the challenges posed by the COVID-19 epidemic and those that encountered difficulties or continue to face significant obstacles. In addition to administering a survey, a qualitative investigation was conducted as a follow-up to gather supplementary insights and perspectives on topics the survey did not adequately address.

The mixed-methods approach incorporated both qualitative and quantitative methodologies. Employing an explanatory sequential design, this study was structured into two distinct phases. The initial phase focused on quantitative methods, while the subsequent section adopted a qualitative approach. Stern et al. (2021) state that the utilisation of mixed-methods research offers greater complexity in examining the subject matter under investigation, particularly when dealing with more complex concerns. The use of a mixed-methods study strategy is beneficial for addressing complex questions, making it increasingly valuable, particularly in policy formulation and decision-making.

The rationale for choosing an explanatory sequential study was to leverage qualitative data to offer further elucidation or to augment the initial quantitative conclusions. To identify gaps and gain a comprehensive understanding of ERM, quantitative data collected during the initial stage was utilised to inform the subsequent qualitative approach. This approach aimed to provide a comprehensive assessment of the status of ERM within commercial state entities in Namibia. The quantitative results will subsequently be elucidated in the qualitative phase to obtain a complete understanding of the findings derived from the quantitative methodology. For instance, given the absence of an effective RM process across the entities examined, the qualitative approach employed helped gain deeper insight into the reasons for its ineffectiveness. This would involve identifying and elucidating the issues that impeded the RM process in cSOEs.

Based on the investigation by Dawadi et al. (2021), a mixed-methods approach encompasses both qualitative and quantitative methodologies and enables sufficient data collection and analysis. For this study, a mixed-methods approach was particularly useful because the topics of ERM and the COVID-19 pandemic were both

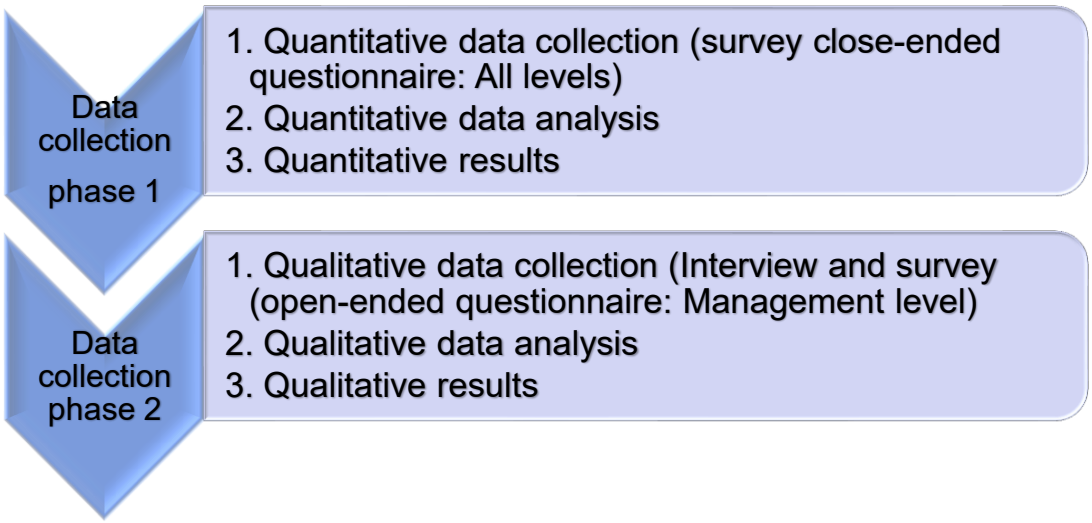
new to Namibian SOEs, thereby requiring a thorough investigation using multiple data collection methods to enhance the validity and reliability of the results. Exploring the current RM process within cSOEs in Namibia also required examining the status of RM and ERM within cSOEs, explaining how and why the situation is as it is, and identifying possible interventions.

Another study on the mixed-methods approach outlined that the technique involves analysing the problem, implementing a data collection procedure, determining the categories of data to be gathered, and employing diverse data collection methods (Cohen, 2008). Moreover, a mixed-methods approach to research offers a more comprehensive understanding of a phenomenon by prioritising the identification of strengths rather than shortcomings. Therefore, the mixed-methods approach aims to gather robust evidence to gain deeper insight into the issue under investigation (Stern et al., 2021).

The present investigation employed an explanatory sequential design. During the initial stage, quantitative data were collected and analysed, followed by a second stage in which qualitative data were gathered and analysed (Figure 10).

Figure 10

Explanatory Sequential Design



Quantitative survey results were collected to get a full picture of how risk documentation and communication promote effective RM, and how skilled personnel and competent leaders enable ERM integration in strategic planning to promote business sustainability and value creation. Additionally, this analysis aimed to gain further insights into the existing knowledge gaps surrounding ERM. The utilisation of a mixed-methods research design has been shown to be advantageous for comprehensively assessing the significance of ERM for both value generation and sustainability (Dawadi et al., 2021).

The initial stage of data collection involved gathering quantitative data to identify the issues faced by cSOEs in Namibia. The impacts of these challenges on the performance of cSOEs were then determined, after which other research questions were addressed. The survey also gathered data on the status and several dimensions of leadership within the commercial state enterprises in Namibia. Based on the findings from the quantitative study, a set of qualitative inquiries was subsequently formulated to explore specific aspects further or to gather additional data, as indicated by the responses collected.

Vivek and Nanthagopan (2021) state that the core objectives of mixed-method research include triangulation, complementarity, development, initiation, and expansion. Those involved in decision-making in fields such as technology, education, society, and business can utilise this modern framework to enhance the credibility of research outcomes, particularly in strategic and project management within academic contexts (Vivek & Nanthagopan, 2021). A thorough investigation and evaluation of information and data on the underperformance of government entities in Namibia required a rigorous, reliable analytical method. Surveys and interviews served as the data collection tools, with data being analysed and interpreted individually; however,

the overall results complemented each other.

The conclusions and recommendations were derived by correlating the findings from both data sources. Interviews were used as a data collection method, conducted either face-to-face or via an open-ended questionnaire. To strengthen reliability, findings from both surveys and interviews were used to understand the overall status of the risk management process in cSOEs, the impact of COVID-19 on performance, and the feasibility of ERM implementation.

Quantitative Data Collection

Quantitative data collection involved gathering information that can be expressed numerically in a research study. A quantitative study is a methodical approach that employs numerical data derived from observations to clarify and characterise the events under study (Taherdost, 2022). This method incorporates both empirical assertions and descriptive statements to understand instances in practical terms, rather than prioritising normative aspects. In the context of elucidating the utility of quantitative studies, Taherdost (2022) emphasised their empirical nature, in which they are employed to assess the extent to which a prescribed criterion or benchmark is met within a specific policy or programme (Dowling et al., 2023; Smith & Hasan, 2020).

The author further asserts that quantitative studies rely on numerical data, necessitating the use of mathematical tools for analysis. The present investigation utilised a quantitative methodology for data collection, employing both physical and digital questionnaires in the survey phase. The reliability of the survey questionnaire was established by conducting a pilot study using solely online questionnaires, employing a sample size of ten (10) participants chosen from one cSOE in Namibia. The objective of this action was to ascertain the authenticity of the study's data-

collection materials and to evaluate the appropriateness of the data-collection and analysis technology. The data obtained were used to investigate the initial research inquiry, which aimed to comprehend the impact of the COVID-19 pandemic on the performance of cSOEs.

The study included quantitative questionnaires consisting of closed-ended questions, incorporating techniques such as Likert scoring and multiple-choice. This suggests that the participants were constrained from choosing their responses exclusively from the options provided in the questionnaires. The subsequent phase of data collection involves conducting interviews with open-ended questions to gather qualitative data that complements the quantitative data, thereby facilitating informed decision-making. According to Mehrad and Zangeneh (2019), the fundamental aim of employing a quantitative data design is to establish a causal association between an independent variable and a dependent or outcome variable within a particular population. Subsequently, qualitative research data can be categorised into two main types: descriptive and experimental. A descriptive inquiry exclusively establishes associations among variables.

The present study aimed to provide a descriptive analysis of the relationships among variables such as effective risk management, improved performance, risk documentation, communication quality, skilled personnel, and competent leadership, and to assess their impact on the sustainability and value creation of cSOEs in Namibia. The study thoroughly examined COVID-19 and RM as phenomena of interest. Therefore, this research employed an interpretative phenomenological analysis (IPA) to gain insight into the consequences of COVID-19 difficulties and the absence of efficient risk management in commercial state organisations in Namibia.

Qualitative Data Collection

The qualitative data collection in this study served as a complementary component to the quantitative data. Given that the initial phase of the research was a quantitative analysis, it was necessary to complement the findings with qualitative data to gain a comprehensive understanding of participants' perspectives on ERM implementation, the challenges it entails, and sustainability mechanisms.

The research employed a blended methodology to undertake a thorough examination of ERM in the context of the COVID-19 pandemic. This involved integrating participants' experiences and personal interpretations of ERM understanding and implementation within their respective organisations, both during and after the pandemic. According to Neubauer et al. (2019), phenomenology is a well-established research methodology that seeks to understand the essential essence of an event by exploring it from the subjective perspective of those who have personally experienced it. Hence, the primary aim of phenomenology is to provide a thorough analysis of the significance of a specific encounter, encompassing both its substance and its understanding. The qualitative aspects of this study involved the use of unstructured questionnaires or telephone interviews.

To ensure data transparency and create a reliable audit trail, a Qualitative Data Collection Participant Log was implemented (see Appendix K). This log methodically records all respondents, whether they participated through unrecorded semi-structured interviews or self-administered open-ended questionnaires. In the realm of qualitative evidence synthesis, Fleming and Noyes (2021) emphasised that qualitative analysis can provide significant judgements about the effects of a specific circumstance. Therefore, qualitative research plays a crucial role in deepening understanding of the experiences, perspectives, attitudes, and priorities of individuals

and groups alike.

Population and Sample of the Research Study

This research study focuses exclusively on government-owned commercial enterprises in Namibia. Commercial state-owned enterprises perform a range of functions within the economy, often combining commercial objectives with state ownership. These entities are government-owned and operate with the dual aims of generating profit and fulfilling specific public policy goals. The roles of cSOEs vary depending on the country, industry, and the governmental objectives set for them.

The study population was drawn from twenty (20) operational and registered cSOEs in Namibia. While the exact workforce size within cSOEs is unknown, the Ministry of Finance and Public Enterprises estimates that around 25,000 individuals are employed across both commercial and non-cSOEs in Namibia. Participating state-owned enterprises span a range of sectors, including mining, industry, agriculture, healthcare, telecommunications, aviation, transport, tourism, education, supply chain and logistics, energy, and fishing. The initial phase of the study used simple random sampling within a quantitative research design to select participants. The sampling strategy aimed to ensure equal representation of employees from all commercial enterprises included in the study. For the qualitative phase, purposive sampling was used to focus exclusively on managers and supervisors from three (3) state commercial entities.

Quantitative Study: Probabilistic Random Sampling

The study utilised probability sampling for its quantitative analysis, thereby selecting participants through a probabilistic sampling method. This approach ensured that all members of the organisations were considered and understood within the

sampling process. The method encompassed employees across all levels and types of employment, including management positions. Probability sampling involves the random selection of a subset of individuals (a sample) from a larger population, enabling estimation of the likelihood that the sample's collective responses accurately represent the entire population (Trochim et al., 2016).

According to Trochim et al. (2016), sampling is the systematic process of selecting units, which may include individuals, groups, or organisations, and can also extend to textual sources such as diaries, internet forums, blogs, or visual materials. The purpose of sampling is to enable the generalisation of research findings from the chosen sample to the broader population from which these units originate. This underscores the importance of ensuring the selected sample accurately represents the wider population.

If the sample size does not accurately reflect the study population, it may introduce bias, thereby undermining the research's reliability and validity (Trochim et al., 2016). The study population comprised employees of commercial state-owned companies in Namibia. In Namibia, the government retains full authority to sustain or dissolve commercial state companies that fail to meet their mandates. These state companies are among Namibia's largest employers, recruiting recent graduates from educational institutions as well as individuals from non-commercial state and private organisations.

The study selected participants aged 25 to 60 from nineteen commercial organisations. This age range is considered to represent mature individuals capable of articulating their views effectively. Furthermore, the group included both employees and managers from the eleven commercial organisations, who provided substantial and candid insights into the challenges faced by commercial state-owned enterprises

and potential practical solutions. Invitations were extended to all nineteen registered commercial state entities; however, only eleven organisations that gave consent were included in the study.

A pre-calculated table for a 95% confidence interval and a 5% margin of error was used to determine the sample size, based on 25 000 employees across all government enterprises, as cited by Ahmed (2024) from Gill and Johnson (2010) (Table 3). The quantitative study then used simple random sampling with probability proportional to size to select participants from nineteen commercial state entities. The study collected responses from 384 participants, including both managers and employees, from only 11 registered commercial SOEs. The sample size was calculated using the Gill and Johnson (2010) table, which suggested a minimum of 378 respondents for the target population (Table 3). The study collected 384 valid responses, slightly over the minimum by six (1.6%). Because the sample exceeded the minimum, all responses were used for analysis. This small increase improves estimate accuracy and secures sufficient statistical power while preserving the study's validity.

Table 3

Required Sample Sizes for Various Population Sizes at 95 % Confidence Level with Different Margins of Error

Population size	Required sample size (Margin of Error = 5 %)	Required sample size (Margin of Error = 3 %)	Required sample size (Margin of Error = 1 %)
50	44	48	50
75	63	70	74
100	79	91	99
150	108	132	148
200	132	168	196
250	151	203	244
300	168	234	291
400	196	291	384
500	217	340	475
600	234	384	565
700	246	423	652
800	260	457	738
1000	278	516	906
1500	306	624	1297
2000	322	696	1655
3000	341	787	2286
5000	357	879	3288
10,000	370	964	4899
25,000	378	1023	6939
50,000	381	1045	8057
100,000	383	1056	8762
250,000	384	1063	9249
500,000	384	1065	9423
1,000,000	384	1066	9513

Source (Ahmed, 2024)

Furthermore, the quantitative component of this study involved a stratified selection of participants from both management and non-management levels,

ensuring representation across various organisational tiers (see Figure 11). Given that ERM is a novel concept for many, particularly in Namibia, there may be limited understanding of the distinctions between ERM and traditional risk management approaches. Although Adeoye-Olatunde and Olenik (2021) emphasise the importance of involving participants with adequate subject-matter knowledge in such studies, it is acknowledged that only a small number of individuals may fully comprehend the scope of ERM.

Consequently, participants were drawn from a range of organisational levels. The study focused on adults aged 25 to 60, including employees likely to have a sound understanding of the operations and status of state-owned enterprises. Due to practical constraints, it was not feasible to include all 20 commercial state entities and their entire workforce; therefore, a representative sample of 19 fully operational cSOEs at the time of the study was selected.

An appropriate sampling method was used to ensure that the selected sample accurately reflected the overall population. Given the constraints typical of academic research, such as limited time and resources, it was not feasible to include the entire population. Consequently, the study recruited 81 participants (54 + 27 = 81) from executive and middle management levels, while the remaining 303 were drawn from the broader personnel of the companies (see Figure 11).

Figure 11

Stratified Random Sampling of Employees and Managers



Quantitative Study: Participants

A permission letter to conduct a study on commercial state companies in Namibia was first obtained from the Ministry of Finance and Public Enterprise. In addition, the researcher could not obtain approval from the National Commission on Research Science and Technology (NCRST), a national body regulating research in the country. Upon contacting the institution, it was found that the national research policy framework was still under development. NCRST serves as a national custodian for research activities in Namibia.

The permission letter and the UREC ethics approval were emailed to twenty (19) cSOEs in Namibia. Companies that responded positively were provided with the gatekeeper's letter for signature. Non-respondents were followed up to ascertain the reasons for their non-participation. Companies were initially given fourteen (14) days to respond; those failing to reply within this time limit were excluded from the study. Nonetheless, most companies took between four and six (6) months to respond

despite several follow-up attempts.

The survey questionnaire and informed consent forms were sent to the gatekeepers of the eleven participating commercial state-owned enterprises, with instructions to distribute them to all employees and managers. Distributing the questionnaire organisation-wide ensured that all staff had the opportunity to take part in the study. The total study population comprised twenty-seven (27) senior or executive managers, fifty-four (54) middle- and lower-level management personnel, and 303 employees from the remaining workforce (see Figure 11).

Based on this stratification within each organisation, at least thirty-five participants were expected from each participating entity. The closed-ended questions in the survey were well-structured, clear, and straightforward, and took two to five minutes to complete, either in print or electronically via a link. To facilitate participation, some questionnaires were provided in hard copy. Respondents who did not meet the study criteria were excluded from the analysis, particularly those outside the prescribed age range or not employed by commercial state-owned enterprises.

Qualitative study: Non-probabilistic Purposive Sampling

The qualitative component of the study was conducted exclusively at the management level, using a non-probabilistic purposive sampling method. The management level encompassed executives, middle managers, and lower-level managers. Purposive sampling was used because the study specifically targeted participants in managerial roles, aiming to obtain insights from individuals responsible for overseeing organisational operations and possessing a comprehensive understanding of overall risk management performance within their entities. At this stage, the data gathered from the interviews was intended to complement the survey findings, allowing for clarification, confirmation, and a deeper understanding of issues

concerning ERM knowledge and its implementation. This methodological approach was crucial for enhancing the reliability and validity of the study. Conducting interviews also provided additional insights, particularly regarding the analysis of ERM implementation challenges, possible solutions, and sustainability mechanisms or plans for cSOEs. Unstructured, open-ended interview questions were designed to elucidate ERM implementation status, sustainability plans, organisational leadership, and issues pertaining to improvement plans for cSOEs' reputation.

Purposive sampling is advantageous when there is a need to rapidly obtain a specific sample and when proportional representation is not the primary objective (Creswell & Clark, 2011). By utilising this approach, the study captured the perspectives of a targeted population. Hence, managers from diverse commercial entities in Namibia were purposefully selected to provide their specialised knowledge and expertise in leadership and risk management.

Additionally, it was important to determine whether these managers understood ERM and its benefits to their organisations. Interviewing managers enabled an exploration of their capabilities and intentions to drive commercial entities forward, as well as the challenges they face. However, purposive sampling has limitations; according to Creswell and Clark (2011), it may result in overrepresentation of certain groups that are more accessible. In this context, the manager population within Namibian cSOEs is balanced, especially at the top executive level, which typically comprises four to six executives.

Therefore, selection was undertaken to ensure that at least three managers were chosen from each entity: one from lower management, one from middle management, and one from the top executive level. The inclusion of lower-level managers was essential given the communication challenges observed within state

entities, where senior managers often operate independently without involving lower management. Moreover, lower-level managers are typically most engaged with daily organisational operations and activities. Taking these factors into account ensured comprehensive representation of participants across management levels.

Expert sampling was employed to gather critical information on ERM implementation status, sustainability plans and organisational leadership, as well as issues related to improvement plans for cSOEs' reputation. Managers were considered best placed to provide detailed information on risk management and organisational processes. Creswell and Clark (2011) define expert sampling as the selection of individuals with proven experience and specialised expertise in a specific domain. Researchers frequently use expert sampling to capture insights from knowledgeable individuals (Palinkas et al., 2015).

Accordingly, risk managers were the primary candidates for the interviews. In organisations lacking formal risk managers, the study included participants from both lower-level and top/middle management to provide interviews. Entities with designated risk managers overseeing risk processes were included to facilitate comparisons between organisations with and without such managers. An additional advantage of expert sampling is its utility in consolidating existing specialised knowledge, which can guide policy development in the absence of definitive scientific evidence (Creswell & Clark, 2011).

The deliberate selection of management-level participants was based on the understanding that managers possess greater awareness of their organisations' overall functioning and are expected to have a higher level of knowledge and experience. Thus, the study benefited from engaging a panel of experts, including risk managers and officers with extensive knowledge of risk or enterprise risk

management, as well as the overall management and performance of cSOEs. Their expertise enabled precise definitions of specialised terms that may differ from interpretations provided by less knowledgeable individuals. Recognising that expert sampling is appropriate when data on a particular subject are limited, this approach enabled the integration of existing knowledge on ERM with the generation of new insights to inform ERM policy implementation decisions.

Qualitative Study: Participant Selection

At this stage of the study, individuals at the management level within the cSOEs were approached through the study's gatekeeper and invited to participate either in an interview or to complete the survey, which included open-ended questions in printed or electronic form. Those expressing interest arranged a convenient time and mode of interview with the researcher via the gatekeeper. Interviews were conducted either face-to-face or by telephone, according to participants' preferences. The study involved 10 managers from 3 cSOEs, regardless of their length of service. This approach did not exclude participants based on their working experience, as the researcher sought to gather insights from both long-standing employees and recent recruits.

Purposive sampling was used to select 10 participants. This sample size was determined by the principle of data saturation (Glaser & Strauss, 1967) and aligns with Creswell's (2013) recommendations for qualitative inquiry, ensuring sufficient depth and breadth for thematic analysis. Including participants with varied tenure enhances data transparency, recognising that newer employees often bring fresh perspectives and may critique existing practices due to unfamiliarity with established systems (Darwish, 2023). Since the study focused on eleven cSOEs, obtaining at least three managers from each organisation was deemed sufficient. However, to accommodate

organisations with more willing participants and to account for potential non-participation, the study anticipated up to 30 interviewees.

Drawing on precedents in qualitative research, a sample of thirty (30) or fewer participants is considered adequate. For instance, Hennink and Kaiser (2022) indicate that between nine (9) and seventeen (17) interviewees typically provide reliable evidence. Accordingly, securing ten participants in this study was sufficient to produce robust findings that complemented the quantitative data and effectively addressed the research questions. Of the ten (10) participants, seven completed the open-ended survey questions, while three took part in in-depth interviews.

Instrumentation of Research Tools

This research employed two distinct data collection instruments. The first was a survey questionnaire used for the quantitative component of the study, followed by interviews that constituted the qualitative segment. The survey questionnaire, the primary data collection method, was designed to address the research questions. The survey items were adapted from three validated instruments: the COVID-19 Impact Assessment Survey by the International Labour Organisation (ILO, 2020), the Risk Management Effectiveness Survey (RMES), and the ERM Feasibility Survey (ERMFS) developed by Pereira et al. (2020). All these studies were conducted during the COVID-19 pandemic.

Both questionnaires included an initial section outlining the study's background and a consent form. Participants were required to indicate their willingness to participate by selecting a designated box before answering the questions. This consent section was compulsory; failure to provide consent prevented respondents from accessing subsequent questions. The questionnaires comprised eight sections featuring a range of question types, including multiple-choice and Likert-scale items.

These questions were formulated based on insights from peer-reviewed online journal articles and other relevant online platforms.

The validity of the questionnaire (Perrenoud et al., 2021) was established through a pilot study involving ten managerial-level participants from the healthcare and telecommunications sectors. Data from this preliminary investigation were used to evaluate whether the collected information adequately addressed the research questions and to confirm the suitability of the selected participants for the study. The pilot study was conducted over a period of two weeks. Upon finalising the target study population, the gathered data were collated and prepared for subsequent analysis.

The survey's questions were organised in line with the research objectives. Before responding, participants were required to read a statement outlining the study's purpose, assurances regarding confidentiality, and confirmation of their consent to participate. Following this, demographic information was collected from the participants.

Validation of the data collection tools.

The survey questions in this study were aligned with three validated surveys conducted independently during the COVID-19 pandemic. The data collection tools were customised to address specific research questions; therefore, the validated instruments were not incorporated in full into the current questionnaire. Instead, the questions were designed to correspond with those in the validated tools. This alignment aimed to benchmark the current study against prior research, thereby enhancing the validity and reproducibility of the data collection methods while ensuring consistency with the study's objectives. To further strengthen the instrument's reliability, the survey administered to participants was identical to that used in the pilot study.

COVID-19 Impact Assessment Survey: This tool is available online, and the questions on COVID-19 challenges in the current study were adapted from the International Labour Organisation's (ILO) COVID-19 Impact Survey (ILO, 2020). The ILO developed this survey during the pandemic to provide insights into organisational operations amid unprecedented disruptions. Various governmental agencies, employers' organisations, and business groups devised strategies to support enterprises during this difficult period, aiming to mitigate widespread business closures and unemployment. However, the precise support required by each firm may not always be immediately apparent. Enterprise surveys offer an effective means of gathering data on businesses' status and understanding the assistance they need. For the current study, this survey framework helped shape the questionnaire. Responses from 384 participants provided representative evidence to address the research questions.

Risk Management Effectiveness Survey: Adopted from Perera et al. (2020), this survey evaluates the effectiveness of risk management strategies currently in place. It examined correlations between RM and parameters such as organisational performance. Within the present study, the questionnaire included a section assessing organisational performance, based on enterprise risks experienced during the Covid-19 pandemic. The nine independent variables were correlated with enterprise performance. In this case, the independent variables served as performance indicators for these entities during the Covid-19 pandemic, assessing how these enterprise risks have affected performance. This section also addressed Research Question 2 (RQ2), which evaluated the efficacy of risk communication and documentation in effective risk management. The RM SWOT analysis section of the survey questionnaire included Likert-scale questions to capture stakeholders' perspectives on the effectiveness of

risk communication and documentation within current risk management processes. The main independent variables here were risk communication and documentation quality, with an effective RM process as the dependent variable.

ERM Feasibility Assessment Survey: Also adapted from Perera et al. (2020), this survey explored the requirements and capacity for implementing ERM. It aimed to answer Research Question 3 of the current study by identifying the importance of skilled personnel and competent leadership within the organisations for successful ERM implementation. The key independent variables were skilled personnel and a competent leadership team, with effective ERM implementation as the dependent variable.

Questions in the Quantitative Questionnaire

Demographic Information:

1.1. *Company Name* – Participants indicated the organisations for which they worked.

1.2. *Rank/Position* – Information was collected regarding job titles or employment levels, including executive, middle, and lower management, in addition to non-managerial roles.

1.3. *Gender* – This data served to assess gender balance and inclusiveness within the study cohort.

1.4. *Employment Duration* – Collected to evaluate participants' expertise and attitudes towards risk management, comparing those with long and short tenures.

1.5. *Age Range* – Participants specified their age group. Age is a relevant factor correlating with employment experience and organisational knowledge. New employees may offer fresh perspectives, often identifying anomalies that longer-serving staff might overlook.

1.6. *Industry* – Identification of the industry sector helped contextualise challenges experienced during the COVID-19 pandemic, highlighting sectors such as medical manufacturing that benefited from increased demand.

1.7. *Education* – Educational attainment was examined to determine its correlation with managerial proficiency in risk management and leadership, particularly among individuals involved in risk controls, such as risk officers, auditors, and compliance personnel.

1.8. *Employment Type* – This distinguished permanent from contractual employment, with unstable businesses tending to employ greater numbers of contract workers due to workforce instability.

COVID-19 Impact Assessment (CIA) Survey

The CIA survey addressed Research Question 1 (RQ1), focusing on the difficulties cSOEs encountered during the COVID-19 pandemic. Section Two of the survey addressed this research question. The questionnaire was based on the ILO's COVID-19 Impact Assessment Template (Needs Assessment Survey). Although the exact questions from the ILO template were not used, its thematic approach was adopted. In 2020, the ILO launched the Sustaining Competitive and Responsible Enterprises (SCORE) programme, which developed this survey template to guide enterprises in collecting the information needed to compile reports on pandemic-related challenges. The SCORE survey also identified the forms of assistance enterprises might require to navigate the crisis.

Based on existing literature, the list of challenges in the questionnaire aligned with those most frequently reported by enterprises throughout the COVID-19 crisis. Participants were asked to select from these difficulties to pinpoint the issues most frequently faced by businesses. The thematic structure of the COVID-19 Impact

Assessment survey informed the development of the second question in the quantitative questionnaire.

2. What are the challenges encountered during the COVID-19 pandemic (More than one answer can be selected)?

The COVID-19 pandemic has affected companies worldwide to varying degrees. Numerous challenges arising from the pandemic have had a detrimental effect on organisations globally, leading to the closure of businesses unable to withstand the resultant pressures, thereby rendering them unsustainable. Participants were therefore asked to identify the challenges their organisations faced from a predefined list. This list was compiled with reference to the ILO survey template and further informed by multiple studies conducted during and after the COVID-19 pandemic.

Participants were permitted to select multiple challenges, recognising that many organisations faced several issues simultaneously, which could contribute to business closures. The list of challenges included:

2.1. Supply chain delays
2.2. Unfavourable working conditions
2.3. Cash flow shortages
2.4. Changes in consumer behaviour
2.5. Regulatory compliance (e.g., mask-wearing, social distancing, curfews)
2.6. Bankruptcy or closure
2.7. Mental health issues among employees
2.8. Adoption of modern technology
2.9. Staff reductions

Risk Management Effectiveness (RME) Survey

The RME survey was designed to examine sustainability profiles and to conduct

a SWOT analysis of risk management processes across various commercial state-owned enterprises. The survey comprised three sections: organisational sustainability, SWOT analysis of risk processes, and organisational risk communication and knowledge. These sections corresponded to Research Question 2, which sought to identify the strengths and weaknesses of current risk management practices, particularly in risk communication and documentation.

The RME survey was adapted from Perera et al. (2020). As RQ2 evaluates both the strengths and limitations of risk management processes and communication within cSOEs, the survey provided valuable insights into the risk management landscape of Namibian state-owned commercial enterprises. Analysis of responses to RQ2 drew on data from sections three, four, and five of the questionnaires. These sections examined the sustainability status of commercial state organisations, assessed current risk management procedures, and evaluated the effectiveness of risk communication within these entities.

3. **Organisation sustainability**

Research Question 3 examined the challenges faced by state enterprises, while Research Question 4 assessed the sustainability of these entities by examining factors such as sustainability objectives, resource availability, performance and risk monitoring, evaluation mechanisms, stakeholder engagement, and leadership. The questions in this section were designed to elicit participants' perceptions of their organisations' sustainability levels. They aimed to determine the overall position of organisational activities in relation to sustainability and to evaluate the likelihood that these organisations would survive the pandemic crisis. Based on organisational performance, entities were categorised as remaining resilient during and after the pandemic, failing to survive the pandemic, or surviving but facing difficulties post-

pandemic.

Enterprise sustainability was assessed using Likert-scale questions ranging from 1 to 5, with 1 indicating “strongly disagree” and 5 indicating “strongly agree.” Participants rated statements on various aspects of organisational sustainability, including:

3.1. More funds will be needed to keep the organisation running.
3.2. There are clear sustainability goals and objectives.
3.3. The organisation regularly monitors its environmental impact.
3.4. There are stakeholder engagement platforms.
3.5. Overall Performance is satisfactory.
3.6. There is a commitment to sustainable practices, including environmental, urban, agricultural, economic, social, and individual.
3.7. The organisation is led by a competent leadership team.

4. Risk Management Process: Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis.

Section four of the survey questionnaire examined the strengths and weaknesses of the current risk management processes within commercial state-owned enterprises. The aim of the SWOT analysis was to identify the inherent strengths and limitations of existing risk management procedures in these commercial organisations and to explore potential opportunities for improvement. An ineffective risk management process indicates factors that may be impeding its effectiveness. Moreover, for a risk management control programme to be successful, it is essential that both employees and managers understand the concept of risk management and appreciate its significance.

The Likert scale was used as an effective tool to assess stakeholders’ perceptions of the effectiveness of current risk management strategies. Participants

were asked to assess the extent to which they believed the risk management practices in their organisations were effective and whether they understood the purpose of risk management. The questions also addressed risk documentation and record-keeping, as well as the presence of risk mitigation mechanisms. Participants rated the following statements as part of a SWOT analysis of their existing risk management practices on a scale from 1 to 5, where 1 indicated ‘strongly disagree’, and 5 indicated ‘strongly agree’.

4.1. The current risk management process is ineffective.
4.2. Our risk management process is working well.
4.3. Everyone understands what risk is.
4.4. There is an effective risk documentation process.
4.5. There are risk-mitigation mechanisms in place.

5. Organisational risk communication and knowledge

On a scale of 1 to 5, with 1 being "strongly disagree" and 5 being "strongly agree," the statement below was rated to assess how risks are communicated within commercial state entities.

5.1. Management and the board timely discuss possible organisational risks.
5.2. Management ensures that all staff understand possible operational risks.
5.3. Risks are well communicated.
5.4. Staff are trained in risk management.
5.5. Risk process management is discussed with everyone.
5.6. There is a risk officer in place.

Section five of the survey questionnaire was set to obtain information on how risks are communicated within various organisations and how well employees and managers understand RM in general. The responses to this question provided this study with sufficient information to assess the status of commercial state entities in establishing their risk tolerance and appetite. Risk tolerance is defined as the entity's

ability to determine the level of risk it can accept while pursuing its objectives without interruption. Meanwhile, risk appetite refers to the number and types of risks that the organisation can take while pursuing its objectives with little or no interruption. Section five of the survey questionnaire was designed to gather information on how managers and the board communicate risks to the entire organisation. The way and speed at which risks are communicated and documented within the organisation dictates the robustness of the risk management process. Communication is vital not only in risk management but also in the overall organisational operation.

When communication is not well facilitated, the flow of information may not be as effective as it should be. This can prevent information from reaching all employees on time, resulting in delayed responses to events. Understanding the parameters of risk communication status within commercial state companies indicates these entities' capabilities in establishing their risk tolerance and appetite levels.

ERM Feasibility Assessment Survey

According to the Oxford dictionary, a feasibility study is a comprehensive assessment of the viability of a proposed plan or project. It evaluates the practicality of an initiative to determine its likelihood of success. In this study, a feasibility assessment was conducted to determine how Namibian cSOEs might implement enterprise risk management within their risk and performance control frameworks. The ERM feasibility study addressed Research Question 3 and encompassed questions from sections six to eight of the survey questionnaire.

These research questions were further supplemented by oral interviews with participants at management level to provide a more holistic understanding. RQ3 focused on identifying the impact of skilled personnel and competent leadership on effective ERM implementation; RQ4, in its qualitative format, examined how cSOEs

could implement ERM and outline recommendations. Both the survey and interview questions in these sections were adapted from the ERM Feasibility Assessment Survey developed by Perera et al. (2020), which investigated the reliability of indicators measuring the impact of ERM adoption on organisational performance.

Their study examined the relationship between ERM and performance and assessed the indicators' effectiveness in producing accurate outcomes. Key ERM-related indicators included management and board involvement in ERM implementation, stakeholder engagement throughout the process, and the leadership capabilities of organisations' executives. The same performance indicators were also considered during this study. The quantitative questionnaire used multiple-choice questions on this to collect data on stakeholders' knowledge of ERM, the feasibility of its implementation, and its association with performance indicators, value creation, and sustainability.

Section six, the initial segment addressing the final research questions, consisted of statements designed to assess participants' understanding of ERM. Respondents evaluated these statements on a five-point scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"), enabling an assessment of their perceptions of the relationship between ERM implementation, its associated benefits, and key outcomes such as value creation, sustainability, and organisational performance. This section of the survey assessed essential prerequisite knowledge of the purpose of ERM implementation.

6. Enterprise Risk Management (ERM)

6.1. There is a connection between organisational sustainability and effective risk management.

6.2. ERM is integrated into the organisation's strategic planning process.

6.3. Effective risk management can positively influence performance.

6.4. ERM promotes organisational value.

6.5. There is a formalised enterprise risk management framework/policy.

Section seven of the survey questionnaire comprised multiple-choice statements designed to assess participants' understanding of ERM. Individuals who possess a clear understanding of ERM are better positioned to appreciate the benefits and value ERM provides.

7. Choose the correct answer on how you understand Enterprise Risk Management.

7.1. A risk framework that looks at the process of risk management from the perspective of the entire firm.

7.2. Is a holistic approach to risk management that involves the whole organisation.

7.3. It is a process of identifying and monitoring risks.

7.4. All above

A comprehensive understanding of ERM is essential to appreciate the benefits of its implementation, and this was the focus of Section 8 of the survey questionnaire. Responses to this section were crucial in determining whether participants understood what ERM can offer their organisations. Additionally, the questions provided insights into participants' awareness of which individuals within their organisations are most critical to the successful implementation of ERM. Enterprise Risk Management enables organisations to prioritise resource allocation by identifying and assessing risks, allowing them to focus on the areas of greatest vulnerability and thereby reduce the likelihood of operational disruptions. Consequently, understanding these benefits prevents organisations from expending resources on projects of limited strategic importance.

This section comprised multiple-choice statements designed to explore

participants' perceptions of the benefits of ERM implementation. It examined how ERM contributes to organisational growth, how it supports the monitoring and mitigation of risks, who should be involved in the risk management process, and how ERM, as a holistic risk management approach, integrates with other organisational strategies. Participants were permitted to select more than one response.

8. Choose the correct answer on what enterprise risk management offers to organisations.

8.1. It helps organisations control risks effectively.
8.2. It puts measures in place before risks occur.
8.3. The process involves everyone in the organisation, especially the management and the board.
8.5. It allows an integrated approach to dealing with risks.
8.6. All the above

Interview Questions for the Qualitative Questionnaire for supervisors and managers

The qualitative questionnaire was set to establish the status of ERM implementation and implementation challenges as well as to identify strategies to help cSOEs address potential challenges while implementing ERM. Moreover, this questionnaire was to establish sustainability plans that organisations may have in place for ERM, especially for those that have already implemented the process. The responses to this questionnaire were qualitatively analysed to complement the responses or findings from the quantitative study. The participants in the qualitative study were from those who had participated in the quantitative study.

1. **What are the potential areas for improvement in the existing RM?**

This question aimed to capture managers' perspectives on the existing risk management process and identify potential improvements to enhance current risk management practices.

2. **What kind of leadership would you want to see in your organisations?**

The second interview question sought to gather further insight into the leadership styles deemed most suitable for commercial state entities. A deeper understanding of which leadership approaches managers across various organisations consider most effective will also facilitate comparison of performance outcomes across different commercial state enterprises.

3. **Have you implemented ERM? If so, what were the challenges?**

Question three of the interviews was to record commercial state entities that have implemented ERM and to understand the challenges they faced during implementation. This was beneficial in drafting the RM framework for state commercial companies.

4. **What is your organisation doing to improve its reputation?**

Given that many commercial state-owned enterprises in Namibia have negative reputations, this question was designed to assess whether managers of these entities understand the concept of reputational loss and its implications for their organisations.

5. **What is your organisation doing to maintain its sustainability and create value?**

Organisations are required to achieve various sustainability goals to remain viable both nationally and internationally. However, some organisations may lack an understanding of the importance of engaging in sustainable initiatives that support their long-term viability and resilience.

6. **Where do you see your organisation in the years to come?**

As organisational leaders, managers need a clear understanding of their long-term objectives to plan effectively. An organisation lacking a mission and vision statement may struggle to remain competitive. Therefore, managers must have a clear vision of where they aspire to position their organisations, even in the event of changes in the leadership team.

7. **If you could change one thing in your organisation, what would that be?**

Some commercial state organisations continue to underperform, and some managers may wish to instigate change. However, due to differences in authority, a manager with a valuable idea may see it disregarded because they lack executive power. Consequently, several of these promising ideas have been presented as recommendations, particularly for underperforming cSOEs.

Operational Definition of Variable

The study surveyed employees of cSOEs in Namibia and invited voluntary participation from those able to complete the questionnaire. Following the survey, managers at various organisational levels were interviewed one-on-one, either face-to-face or by telephone, while the researcher recorded the responses in the questionnaire. The quantitative survey aimed to gather perspectives on the comprehensiveness of ERM, current risk management procedures, and the challenges faced during the COVID-19 pandemic, as well as the impact of these challenges on organisational performance. Additionally, the survey sought to identify factors influencing the efficiency of commercial state enterprises in Namibia by examining the capabilities of existing risk management processes.

The study's three hypotheses examined the relationship between enterprise

challenges and organisational performance during the COVID-19 crisis, as well as the influence of timely, quality risk communication and documentation (Naik & Prasad, 2021; Alsyouf et al., 2021). Effective implementation of ERM depends on the alignment of organisational strategies, personnel understanding, and leadership capabilities. The data collected from the two instruments were specifically used to address the research questions and hypotheses. The variables measured in this study included firm performance, effective risk management, and the successful implementation of ERM as factors contributing to the sustainability of cSOEs. The study also analysed several independent variables, including enterprise challenges, the quality of risk communication and documentation, skilled personnel, and competent leadership.

Consequently, firm performance was treated as the dependent variable, while effective risk management and ERM implementation were mediating factors contributing to firm performance. During data analysis, ERM implementation and effective RM were treated as dependent variables; however, conceptually, they were treated as mediating variables to improve performance. The literature suggests that implementing ERM leads to a well-established and robust risk management system. Integrating ERM into strategic organisational planning facilitates seamless performance improvement, thereby promoting the organisation's sustainability and value creation. The quantitative study addressed the following hypotheses:

H1: There is a statistically significant negative association between enterprise-related challenges and the performance of commercial state-owned enterprises in Namibia during the COVID-19 pandemic.

During the COVID-19 pandemic, the performance of most, if not all, organisations were adversely affected by numerous challenges, including supply

chain delays, technological adaptations, and employee fatigue (Govindan et al., 2020). Many individuals were compelled to work remotely, participating in online meetings and delivering services digitally, a shift that proved difficult for those unaccustomed to daily computer use. Furthermore, supply chain disruptions caused considerable frustration, as customers often faced extended waiting times for orders, ranging from days to months, depending on supply chain congestion and demand levels (Rad et al., 2022). Certain goods were difficult to obtain due to increased demand or reduced production resulting from raw material shortages and other challenges, particularly in the healthcare sector.

This hypothesis was addressed in question two of the survey questionnaire, which sought to identify the major challenges faced by cSOEs in Namibia during the pandemic. The hypothesis proposed that these challenges, as independent variables, were associated with cSOEs' performance. To evaluate this, participants' responses were analysed to determine which factors had the greatest impact on their organisations. Respondents were asked to select from a list of challenges in a multiple-choice format.

H2: *There is a statistically significant positive association between the quality of risk communication and documentation and the effectiveness of the RM process.*

The second hypothesis of this study concerns the association between the effectiveness of RM practices and the quality of risk communication and documentation within the organisation. This suggests that when risks are communicated and documented accurately and promptly, the risk management process is more likely to be effective, enabling appropriate, timely action. In this case, the independent variables are the quality of risk documentation and communication, which influence the effectiveness of the risk management process and, in turn, the

sustainability of cSOEs in Namibia.

The survey questions investigated how risks are communicated and documented within organisations. Evaluating these two aspects provides insight into whether the current risk management process is operating effectively. Proper and timely reporting, recording, and risk mitigation indicate that the process can control and reduce potential threats.

To achieve an effective risk management process, it is essential to establish a system that ensures the prompt and accurate dissemination of information about potential hazards across all organisational levels (Balog-Way et al., 2020). This requires that relevant stakeholders, from frontline employees to senior executives, receive timely, high-quality information on emerging risks. According to the literature reviewed, effective communication enables those in positions of authority to be fully aware of the challenges and uncertainties that might affect the organisations, empowering them to make well-informed decisions that minimise or resolve risks. Fundamentally, the success of the risk management process is closely linked to the clarity and speed of communication and to the documentation of risks of all kinds throughout the organisation.

H3: *There is a statistically significant positive association between the presence of skilled personnel and competent leadership within the organisation and the implementation of ERM.*

According to this hypothesis, having skilled staff and a competent leadership team can significantly ease the implementation of ERM in cSOEs in Namibia. Skilled staff or personnel are a major driving force behind performance (Biswal et al., 2024). Essentially, this aligns with competent leaders who steer organisations, ensuring that resources are distributed as required, risks are well documented and communicated,

staff are provided with what they need to carry out their day-to-day duties, and all other stakeholders are well cared for.

Skilled personnel and a leadership team together form a competent team capable of managing most risks, even without a proper ERM framework. Masama et al. (2022) highlighted that organisations can effectively manage and mitigate risks even when there is no explicit alignment between their risk management procedures and their overarching strategic objectives. When staff are equipped with the relevant skills, companies operate effectively and efficiently, and employees are motivated to do better. Moreover, the sustainability of organisations depends on how much they make and how much they lose. When the organisation is losing more than it is making, it is not sustainable.

Hence, competent leadership is required to ensure the organisation maintains its mandate and does not lose more than it earns. According to Masama et al. (2022), employee skills play a significant role in renewing training and employment dynamics, shifting the association between employees and the organisations towards a more individualised, performance-based compensation framework. Enterprise RM implementation and its integration into strategic planning also require competent leadership. This is why risk management can be effective even without ERM frameworks being integrated, provided employees and organisational leadership are competent enough to carry out their duties.

Numerous professionals and organisations strongly advocate integrating ERM into strategic planning. By aligning risk management activities with strategic objectives, organisations can more effectively identify and prioritise risks that may impede the achievement of long-term goals. Furthermore, implementing ERM enhances decision-making by considering both risk and strategic factors. Many

organisations recognise the importance of linking ERM with strategic objectives to bolster their overall resilience and their ability to navigate uncertainties in a manner consistent with their long-term vision. Achieving this alignment requires skilled personnel and competent leadership.

The independent variables in the third hypothesis are skilled personnel and competent leadership, with the successful implementation of ERM as a mediator that leads to enterprise sustainability as the dependent variable. This hypothesis assesses how effectively organisations can equip their staff and develop strong leadership to facilitate the smooth implementation of ERM and its integration into organisational strategic planning.

Quantitative Variables

Construct/Variable 1. Impact of challenges experienced during the COVID-19 pandemic

The first research question was addressed using a multiple-choice item to assess participants' knowledge of the factors perceived to have negatively affected their performance during the COVID-19 pandemic. This question was the first item following the demographic section of the survey questionnaire. Participants were allowed to select multiple responses from a provided list of challenges. The responses were then tabulated and presented visually using a bar chart. The data collected from this question were used to test the first hypothesis, which examined the impact of the various challenges experienced during the COVID-19 pandemic on the performance of cSOEs in Namibia. This hypothesis considered all listed challenges, which were analysed to assess their impact on the performance of these state entities, and was either accepted or rejected based on the analysis.

Therefore, in the analysis, the number of challenges experienced by

organisations served as the independent variable, while organisational performance was treated as a mediator of the sustainability outcome. This implies that the performance of cSOEs in Namibia was influenced by the challenges they encountered during the COVID-19 pandemic.

Construct/Variable 2. Quality Risk Communication and Documentation: RM Process SWOT Analysis

The second variable investigated in the quantitative survey of this study was measured on a Likert scale. Likert scaling converts qualitative ordinal data into a form suitable for analysis. This study utilised a five-point Likert scale. Kusmaryono et al. (2022) recommend using scales with an even number of points, such as 1-6 or 1-12; however, the five-point scale remains widely accepted for its inclusion of a neutral midpoint, allowing participants to express ambivalence (Preston & Colman, 2000, as cited in Kusmaryono et al., 2022).

The scale comprised three odd-numbered points and two even-numbered points, including a neutral middle option, which is considered appropriate. To enhance the reliability and validity of the findings, multiple-choice and Likert-scale questions were included in the survey questionnaire. Participants rated various statements on a scale from 1 to 5, where 1 represented “strongly disagree,” 2 “disagree,” 3 “not sure,” 4 “agree,” and 5 “strongly agree.”

To facilitate analysis, the ordinal data were coded as follows: strongly disagree (SD), disagree (D), not sure (NS), agree (A), and strongly agree (SA). Respondents evaluated risk processes according to their understanding of ERM, organisational sustainability practices, and risk management activities within their organisations. Based on these ratings, Pearson’s correlation was utilised to assess the strength and direction of the association, and linear regression was used to examine the impact of

the independent variable on the dependent or mediating factors. To address the second research hypothesis, the quality of risk documentation and communication was treated as an independent variable, with effective risk management as a mediating factor leading to sustainability. The hypothesis implies that the effectiveness of risk management is contingent on the quality of risk documentation and communication within organisations.

Construct/Variable 3. Presence of trained personnel and competent leadership: ERM Implementation Solution

This investigation examined two related and validated questionnaires that assessed both risk management and the feasibility of implementing Enterprise Risk Management**.** These survey tools investigated the risk management process and assessed whether ERM implementation is feasible, determining how respondents understand ERM and its benefits to organisations.

Risk Management Effectiveness Survey: Adopted from Perera et al. (2020), this survey evaluates the effectiveness of risk management strategies currently in place. In their study, this questionnaire examined correlations between RM and parameters such as organisational performance. In the present study, the questionnaire included a section assessing the viability of risk management and the feasibility of ERM implementation in commercial state firms in Namibia. This section specifically addressed Research Question 3, evaluating the impact of skilled personnel and competent leadership on the implementation of the ERM process.

ERM Feasibility Assessment Survey: Also adapted from Perera et al. (2020), this survey explored the requirements and capacity for implementing ERM. It aimed to answer questions around ERM implementation. Research Question 3 of the current study identified key prerequisites for ERM adoption and the challenges faced by

cSOEs in Namibia. Likert scales and multiple-choice items were used to collect data on stakeholders' views regarding ERM feasibility and potential obstacles.

Qualitative Objective

Enterprise Risk Management implementation challenges and organisational sustainability

The third variable in this study involved the use of open-ended questions administered through surveys and interviews, allowing participants to provide their perspectives that complemented the quantitative data. The responses were analysed to identify potential challenges encountered during ERM implementation, the type of leadership necessary to facilitate ERM adoption, and improvements to safeguard organisational reputations for sustainability and value creation. As a comprehensive approach to risk management, ERM has been associated with positive outcomes, including organisational performance (Naik & Prasad, 2021), sustainability (Jankensgård, 2019), value creation, and reputational enhancement (Alijoyo & Norimarna, 2021). Therefore, ERM represents a methodical and comprehensive strategy for identifying, assessing, and managing risks within the organisation.

Integrating ERM into planning requires effective leadership and skilled personnel who understand how to mitigate the impacts of potential risks on strategic objectives. Moreover, when the organisation possesses skilled personnel and competent leadership, ERM can generate value by maximising opportunities and overcoming challenges, thereby improving decision-making and resource allocation. This, in turn, positively influences the organisation's overall value. Consequently, developing a comprehensive dataset that reflects participants' understanding of the appropriate approach to ERM implementation while accounting for the availability of skilled employees and leadership was deemed essential.

Skilled personnel and competent leadership were regarded as key enablers of successful ERM implementation. Hence, the third hypothesis posits that the effective implementation of ERM depends on the presence of qualified staff and strong leadership. This suggests that having proficient employees and competent leaders within Namibian commercial state enterprises may be the optimal approach to ERM adoption, offering guidance applicable not only to commercial state entities but also to other organisations across Namibia.

Study Procedures

The study received ethical approval from the Unicaf Research Ethics Committee (UREC) on 5 December 2023, with no comments or conditions. Both data collection instruments, the survey questionnaire and the interview questions, were approved by the committee. Prior to data collection, permission to conduct the study was granted by Namibia's Ministry of Finance and Public Enterprises (MoFPE), with the stipulation that the study findings be shared with the ministry. Furthermore, several participating organisations signed letters of gatekeeping, which served as official authorisation for the data collection period and identified the organisations' designated contact person for the study.

Data was collected through online surveys, printed questionnaires, and interviews. Online survey links were distributed to participating organisations, while printed copies were provided for those who preferred them. The sample comprised 384 participants from 11 cSOEs in Namibia. Participation was voluntary, and non-participating companies were contacted by telephone to confirm receipt of the invitation. Before data collection commenced, these organisations received the gatekeeper letters for signature. Only after receiving approval from each organisation were the survey links and printed questionnaires shared with the designated

gatekeepers.

Survey participants were employees of the 11 cSOEs, aged 25 to 60, and able to read and respond to the questions. Voluntary participation led to varying response rates, with between 10 and 50 participants from different organisations. Interviews, as part of the second data collection phase, were conducted exclusively with management-level personnel. Both data collection tools included a section explaining the study and an informed consent process. Participants were required to provide consent before completing the questionnaires. To preserve anonymity, personal data were not collected. This anonymity extended to organisations as well; their names were recorded solely to facilitate recommendations and were not disclosed in the thesis. This decision was made by the researcher to respect organisations' potential concerns regarding the study's outcomes.

Although the study involved mature, independent individuals completing the questionnaires, specific inclusion and exclusion criteria were applied because of the diverse backgrounds of employees across government organisations. The researcher explained the study's objectives, data requirements, and confidentiality measures to gatekeepers who facilitated questionnaire completion.

Questionnaire Capturing and Filtration

A total of 429 questionnaires were returned from Google and the hard copies. The Google Form questionnaire was configured with mandatory-response settings, requiring respondents to answer every item in all sections before submission. Consequently, electronic questionnaires could not be submitted unless all items had been completed, and all electronically administered questionnaires therefore met the completeness requirements for inclusion in the study.

In contrast, some manually completed questionnaires contained unanswered

items or incomplete sections; therefore, they were not captured. During the initial data-capturing stage, all manually completed questionnaires were screened for completeness before capturing. Any questionnaire containing an incomplete section or question was not captured hence; excluded from the analysis in accordance with the study's inclusion criteria.

Following the data collection procedure, all 429 returned questionnaires underwent completeness and data-quality screening. This was also applied to the Excel sheet obtained from the Google document. The manual verification process focused particularly on the manually completed questionnaires and involved checking for unanswered items and incomplete responses.

A total of 340 responses were received from Google and were all included in the analysis. Meanwhile, out of the 89 dispatched hard copies, five (5) questionnaires were not completed fully and 35 were returned uncompleted. Therefore, the 40 questionnaires were excluded from the dataset. This brings the amount of valid printed questionnaires to 44. Of 429 questionnaires, 340 responses were submitted through Google Forms, and all were included in the analysis. A further 44 hard-copy questionnaires were added, amounting to 384 respondents. The final dataset therefore comprised of 384 valid cases, with zero missing values.

Inclusion Criteria

All participants in this research were required to have independent literacy skills, including the ability to read, understand, and write without external assistance. Eligible participants were aged between 25 and 60, an age range chosen to ensure maturity and the capacity to provide informed consent and personal perspectives on the subject matter. Consequently, employees younger than twenty-five or older than sixty were excluded from the study. The names of participating organisations were

used solely for comparison and to track which entities took part; however, these names were not used in the analysis, which instead employed alphabetical codes to represent organisations. For example, organisations were ordered alphabetically rather than by their actual names. This approach also facilitated accurate record-keeping of questionnaire distribution.

The study posed minimal risk to participants, but certain ethical considerations were nonetheless addressed. Demographic data were collected because they were essential for accurate reporting and dissemination of findings, providing clarity on the characteristics of the study population. Both employees and supervisors had an equal opportunity to participate in the survey. Only managers who expressed interest were invited by organisational gatekeepers to participate in interviews. Participant names were not collected at any stage of data gathering. Interviews were conducted by telephone and were not recorded, but responses were recorded in the form. Participants were advised not to disclose information that could reveal their identities, despite the secure handling of data.

Participants requested anonymity to protect their positions, as issues surrounding ERM implementation involved malpractice by top management and board members. However, to ensure data credibility, the date of data collection was recorded, and participants had to agree to participate. This meant that the qualitative data collection form included a consent form that had to be completed before the interview. Additionally, responses were recorded immediately in the questionnaire and then added to the qualitative raw data for theme analysis. To address the absence of audio recordings, a highly transparent Qualitative Data Collection Participant Log was maintained (see Appendix K).

Regarding demographic information, participants were asked to provide their

employer's name and specify their job role, indicating whether they held managerial or executive positions or were non-supervisory employees. Gender was a mandatory demographic field, with participants restricted to selecting either male or female, as other genders and those unwilling to disclose were excluded. To better understand the participating population, additional factors such as years of experience, duration of employment, industry sector, age group, and highest qualification were also considered.

Exclusion Criteria

The study excluded minors and individuals under twenty-five, focusing instead on participants aged twenty-five (25) to the retirement age of sixty (60) in Namibia. This deliberate selection targeted a demographic capable of fully understanding the study requirements and providing informed consent. Individuals within this age range were considered mature enough to share relevant viewpoints and actively engage in the research. Consequently, excluding younger individuals ensured a more focused and pertinent participant group.

Furthermore, the study exclusively involved employees of cSOEs, deliberately excluding employees from other sectors or non-commercial state-owned entities. This decision was influenced by the significant economic role that commercial state enterprises play in Namibia, given their substantial contribution to the country’s financial landscape. Concentrating on this sector allowed the study to generate findings specifically relevant to cSOEs, given their sizeable workforce and economic influence.

The exclusion of non-commercial state-owned companies was also based on their distinct mandates and economic functions. Unlike commercial state entities, which are tasked with generating profits for the government, non-commercial entities

often pursue different objectives or operate under different economic models. By focusing solely on cSOEs, the study provided a more targeted analysis of organisations with similar financial goals and structures, thereby enhancing the research's relevance and applicability within Namibia's economic context.

Given the diverse workforce employed by cSOEs, the findings of this study offered insights applicable across a broad spectrum of commercial state institutions in Namibia that were operational during the COVID-19 pandemic. By focusing on this sector, the research aimed to provide conclusions and recommendations applicable across various commercial state enterprises, given the substantial number of participants in this study, especially in the quantitative component. Even though the study may not have included everyone in the organisation, its findings would be impactful for several commercial state entities in Namibia, contributing to a more comprehensive understanding of organisational practices and dynamics in this specific context.

In summary, the study's selection criteria, targeting a defined age group and employees of cSOEs, were deliberately chosen to ensure the relevance, applicability, and specificity of the research findings within Namibia's economic and organisational landscape. Nonetheless, the study promoted voluntary participation and anonymity, excluding minors and those requiring exceptional care. The following section elaborates more on the ethical considerations applied to this study. The section explains the selection criteria for participating organisations and participants, as well as the flexibility in participation.

Ethical Assurances

This research study aimed to explore the challenges impeding growth in commercial state-owned enterprises in Namibia. All collected data were used solely

for research purposes and were not intended to expose or single out specific organisations. Companies experiencing difficulties were not to be criticised or penalised; rather, the objective was to assist them in improving performance by benchmarking the strategies and services of successful organisations. Given that the research involved human participants, ethical considerations were paramount to ensure the confidentiality of both the information provided and participants' identities.

Measures were implemented throughout the study to protect participants' well-being and mitigate potential physical, psychological, or emotional harm (Nichol et al., 2021). To avoid causing participant fatigue or frustration, the survey and interview instruments were kept as brief as possible. To maximise participant numbers, employees were allowed to choose between completing an online survey or a printed questionnaire. Although the study initially intended to rely exclusively on an online questionnaire, printed versions were distributed to some organisations upon request.

Informed consent was meticulously obtained, with participants fully briefed on the study's aims, procedures, benefits, and their rights before completing any questions (Kambhampati et al., 2023). The consent process involved providing organisations with the study proposal, which outlined the study's objectives, methodologies, risks, benefits, and participants' rights. Participants were given ample time to consider the information and ask questions before freely consenting. The consent form clearly stated that participation was voluntary, confidentiality was prioritised, and withdrawal from the study was permitted at any time without consequence.

Participant privacy was rigorously maintained (Drolet et al., 2023), and all data were securely stored. No identifiable information about individuals or organisations was used. Ethical standards were upheld to ensure the study's transparency and

integrity, and data were collected directly from participants without bias. Completed printed questionnaires were securely locked away and accessible only to the researcher. Any published results or reports will exclude information that could identify participants or their organisations to preserve confidentiality.

Official approval to conduct the study was granted by the Ministry of Finance and Public Enterprises (Appendix B), reinforcing the study's legitimacy and transparency for participating organisations. Additionally, research proposals had to be vetted by organisational research committees, which decided whether to approve or reject participation based on their priorities. To minimise bias, the researcher ensured that only necessary information was collected and that interview data were carefully reviewed multiple times to avoid misinterpretation. The researcher also disclosed any relevant personal or professional experiences and implemented measures to prevent these from unduly influencing the analysis or conclusions.

Interviews, a critical part of data collection, were conducted with managers from various Namibian commercial state enterprises. During the qualitative data collection phase, the researcher recorded data in the collection forms because participants were hesitant. Aware that executives often oversee enterprises within structured hierarchies and central planning (Soulsby et al., 2021), the study avoided political topics or affiliations, recognising that many executives are political appointees. No political matters were discussed or disclosed during interviews to maintain focus and objectivity.

Ethical and integrity issues, such as conflicts of interest, data fabrication, rights violations, and plagiarism, can severely damage a study's credibility (Kambhampati et al., 2023) and may have adverse consequences for stakeholders, including researchers, participants, institutions, and society (Drolet & Girard, 2020, as cited by

Drolet et al., 2023). Thus, the academic community must identify, assess, and manage these risks through education, policies, procedures, and risk mitigation strategies. The current study adhered strictly to privacy protocols and assessed potential risks and benefits, ensuring that identities were not disclosed to third parties.

A favourable aspect of this study was that the information collected was non-sensitive, and the study excluded individuals requiring exceptional care or minors. This research on the challenges facing Namibian commercial state companies upheld ethical standards and safeguarded the integrity and validity of its findings by prioritising informed consent, participant confidentiality, and the prevention of bias. Upholding ethical standards and transparency remains essential to conducting research that is both ethically sound and impactful. The next section explains the type of data collected for this research, the number of participants, and how the data was analysed to address the study's research questions and hypotheses.

Data Collection and Analysis

This was a sequential, explanatory mixed-methods study that enabled the collection and analysis of both qualitative and quantitative data. The initial stage of the study comprised a quantitative research method, which was later complemented by qualitative data. Quantitative data were collected via a Google Form, then cleaned and imported into IBM SPSS version 30.0 for analysis. Qualitative data were processed and analysed using ATLAS.ti v26. To describe, summarise, and organise the dataset, quantitative measures were obtained using descriptive statistics. To assess the study's hypotheses, regression analysis was used alongside Pearson's correlation to assess the relationships and impacts of dependent variables on mediating variables, as well as the direction of their association (Salman & Aleem, 2024; Kaur et al., 2024). Regression analysis was deemed suitable given the exploratory nature of this

research (Bocianowski et al., 2024; Stern, 2021).

The study employed a mixed-methods approach to data analysis. Quantitative data were the primary focus and were examined using descriptive and inferential statistics. Qualitative data were analysed thematically to support and clarify the quantitative results. Demographic variables were assessed using nominal and ordinal scales. Age group, years of employment, and education level were measured on ordinal scales because their categories are naturally ordered. Conversely, gender, industry, and employment terms were measured on nominal scales because their categories lack inherent order. Data gathered via Likert-scale questions to gauge perceptions of risk management, organisational sustainability, and ERM knowledge were converted into scores ranging from 1 to 5 to enable calculation of the mean and variance.

The analysis was based on descriptive statistics, which confirmed a complete dataset of 384 respondents. Correlation analysis was conducted to assess the direction and strength of relationships between key predictors, such as staff skills and leadership, and ERM implementation. To address the research hypotheses, multiple linear regression was used, and the predictive capacity of each variable was evaluated using unstandardised coefficients and standardised betas (Hair et al., 2019). The model was further tested for regression validity by checking for multicollinearity using the Variance Inflation Factor (VIF), which was within a healthy range at 1.42. A VIF of 1.42 indicates that the variables are distinct and that the model is statistically sound and unbiased. Additionally, Cronbach's alpha was calculated for each research question to assess internal consistency and ensure the results were consistent with the intended analysis.

The dependent variable was organisational performance improvement, as

reflected in respondents' feedback, including effective risk management, resulting from quality risk communication and documentation, and the implementation of ERM, supported by the presence of trained personnel and a competent leadership team. Therefore, the independent variables included risks/challenges faced during the COVID-19 pandemic, the quality of risk communication and documentation, and the availability of skilled personnel and competent leadership within Namibian cSOEs, all of which influenced performance, sustainability, and value creation.

Lastly, qualitative data analysis was conducted to gain a thorough understanding of participants' perceptions, experiences, and opinions regarding ERM implementation in cSOEs in Namibia. This qualitative component complemented the quantitative results by providing contextual insights into the observed patterns and relationships in the survey data. Data was gathered from open-ended questionnaire responses and semi-structured interviews and were analysed using thematic analysis with ATLAS.ti software. The analysis employed a structured coding approach. Initially, the process involved familiarisation with the qualitative data through repeated review to grasp participants' experiences and viewpoints. The coding process was guided by research objective four and question four of the research study, which was flexible enough to capture emerging themes and patterns. For related or similar codes, codes were grouped into categories, and the relationships among these categories were analysed to identify overarching themes related to ERM implementation.

ATLAS.ti helped organise, retrieve, compare, and systematically examine coded data, while allowing the researcher to maintain an organised audit trail of the coding process. Responses sharing similar ideas were grouped in the same category. Attention was paid to themes related to challenges in ERM implementation, leadership roles, resource limitations, technological capacity, stakeholder engagement, and

organisational readiness. These themes were then compared with the quantitative data to find areas of agreement, complementarity, and disagreement. This method supported the mixed-methods approach by allowing qualitative insights to provide context and enhance the interpretation of the numerical data. To enhance the credibility and reliability of the qualitative analysis, detailed records of all decisions made during coding and theme development were saved. This included documenting initial codes, their refinement and merging, category formation, and the final themes identified. Evidence of thematic saturation was acknowledged when additional responses no longer yielded meaningful new ideas or themes related to the research question.

Although the interviews were not audio-recorded, the researcher recorded participants' responses and kept an audit trail of the qualitative analysis. This meticulous process ensured that the qualitative findings were interpreted with a focus on patterns reliably derived from the data. Systematic coding with ATLAS.ti, an iterative review of codes and themes, and comparison with quantitative data provided multiple sources of evidence to validate the qualitative results. Overall, the qualitative analysis enabled the study to go beyond simple numerical correlations and regressions, examining the organisational context underlying these relationships. Combining qualitative and quantitative data offered a fuller understanding of the factors affecting RM effectiveness, ERM implementation, organisational performance, and sustainability in Namibian cSOEs.

Quantitative Data and Analysis

The first data collection phase used a structured survey with closed-ended questions to gather quantitative data. The quantitative study was conducted among all consenting participants across all organisational levels. Participants were aged 25 to

60 years and able to read and write. The quantitative study involved 384 participants from eleven cSOEs in Namibia. Survey questions included demographic items to enable descriptive statistical analysis and were formatted as multiple-choice and five-point Likert scale items, where 1 = strongly disagree (SD), 2 = disagree (D), 3 = not sure (NS), 4 = agree (A), and 5 = strongly agree (SA). Likert scale data captured participants' attitudes towards RM practices at their organisations, awareness of sustainable activities, understanding of ERM concepts, and perceived implementation challenges.

For the correlational analysis, Pearson's correlation was used to examine the direction and strength of relationships among key predictors. For hypothesis testing, multiple linear regression was used to assess the predictive power of each variable, with standardised coefficients. Correlation analysis was performed at a 5% significance level ($\alpha = 0.05$). An association was deemed statistically significant if the p-value was $\leq .05$, whereas a p-value > 0.05 indicated no statistical significance. The direction of the relationship was indicated by the sign of the Pearson correlation coefficient (r): a positive r signified a positive association, whereas a negative r indicated a negative association. The strength of the association was evaluated based on the magnitude of r. Correlations with p-values exceeding 0.05 were considered statistically non-significant, indicating insufficient evidence to confirm a linear relationship between the variables.

Regression analysis was conducted to assess how two or more independent variables jointly influence a dependent variable. The method assessed whether the predictors, individually and collectively, forecast changes in the outcome while accounting for the effects of other variables in the model. The significance of each regression was tested using the F-statistic and its corresponding p-value, with

significance set at the 5% level ($\alpha = 0.05$). The model's explanatory power was evaluated using the coefficient of determination (R^2), which reflects the proportion of variance in the dependent variable explained by all predictors together. The adjusted R^2 was also used to account for the number of predictors in the model. To determine each predictor's unique contribution, we examined the regression coefficient, standardised beta (β), t-statistics, and relevant p-values.

A predictor was considered statistically significant if its p-value was less than or equal to 0.05 ($p \leq 0.05$). The sign of the regression coefficient indicated the direction of the relationship: a positive sign denoted a positive association, while a negative sign indicated an inverse relationship. Multicollinearity among independent variables was assessed using the VIF to prevent high intercorrelation that could bias the regression results. The findings were evaluated alongside effect size and practical significance to distinguish between statistical and meaningful relevance.

RQ1: What was the impact of enterprise challenges on the performance of cSOEs in Namibia during the COVID-19 pandemic?

Pearson's correlation analyses were conducted for this question. The descriptive analysis of the closed-ended survey results was presented in a bar graph showing the frequency and percentages of challenges experienced by the institutions under investigation. Moreover, linking the first question to the first hypothesis, a multiple linear regression analysis was used to assess the significance of the impact of challenges experienced by cSOEs on enterprises' performance. Improved company performance served as the dependent variable, and challenges experienced during the COVID-19 pandemic (supply chain delays, unfavourable working conditions, cash flow shortages, changes in consumer behaviour, regulatory compliance (wearing masks, social distancing, etc.), bankruptcy or closure, mental health-related problems

among employees, acceptance of modern technology, and staff reduction) served as independent variables.

RQ2: To what extent does the effectiveness of the RM process within cSOEs depend on the quality of risk communication and documentation?

Research question 2 was aligned with research objective 2, which was: to examine the impact of risk communication and documentation quality on the risk management process in cSOEs in Namibia. The key to risk management lies not only in the identification and mitigation of risks but also in the quality of the communication and documentation practices that facilitate organisational learning (Teli et al., 2023), transparency, and accountability. The analysis examined the relationship between risk communication and effective RM, and between risk documentation and effective risk management. Although this was one research question, the two independent variables were analysed separately.

RQ3: What is the impact of risk-skilled personnel and a competent leadership team on the successful implementation of ERM in Namibia's cSOEs?

Research question three was linked to research objective (RO3), which was to examine how skilled personnel and competent leadership can contribute to the successful implementation of ERM frameworks in cSOEs in Namibia. ERM effectiveness requires not only organisational structures and processes but also human capital and competent leadership to ensure effective implementation and sustainability. To assess these associations, a Pearson correlation analysis was conducted to determine the strength and significance of the relationships between ERM implementation, qualified staff, and effective leadership in Namibia's commercial SOEs.

At this stage, the impact of skilled employees and competent leadership in cSOEs was investigated, examining how these variables may foster ERM implementation, thereby achieving effective RM, improving performance, and creating value for cSOEs in Namibia. Skilled personnel may include not only those trained in RM but also those with industry knowledge and technical expertise, which may help organisations prosper (Carminati et al., 2024). Moreover, competent leadership, which involves the board of directors, managing directors, chief executive officers and managers in cSOEs in Namibia, may help improve transparency (Eaosinsup & Kulachai, 2025; Dey, Saha & Pandey, 2025) and trust in these entities, thereby helping to regain reputation among stakeholders and the government.

Qualitative Data and Analysis

The qualitative data of this study comprised interview scripts on ERM implementation challenges, solutions, and sustainability mechanisms, from which the codes and themes were derived. The analysis of the interviews involved a thematic analysis of the ERM implementation challenges and a gap analysis. The first step was to develop codes from the interview scripts, followed by organising the codes into categories, and finally developing themes. Thematic analysis entails identifying, analysing, and reporting patterns or themes within qualitative data, thereby uncovering insights and understanding underlying meanings (Aronson, 1995).

In contrast, gap analysis compares current risk performance or practices against desired goals or benchmarks to highlight areas requiring improvement. Conducting thematic analysis alongside gap analysis provides a deeper understanding of the identified gaps by exploring the underlying themes or factors that contribute to them. This combined approach offers a comprehensive view of the current state of the risk management process, areas for enhancement, and potential

actions to address the gaps. The gap analysis identified gaps in organisations that have not implemented ERM and in those that have. The analysis of gaps in the RM process in cSOEs summarised interview participants' responses, showing how they assess the current RM process, the feasibility of ERM implementation, and/or its sustainability.

Thematic Analysis

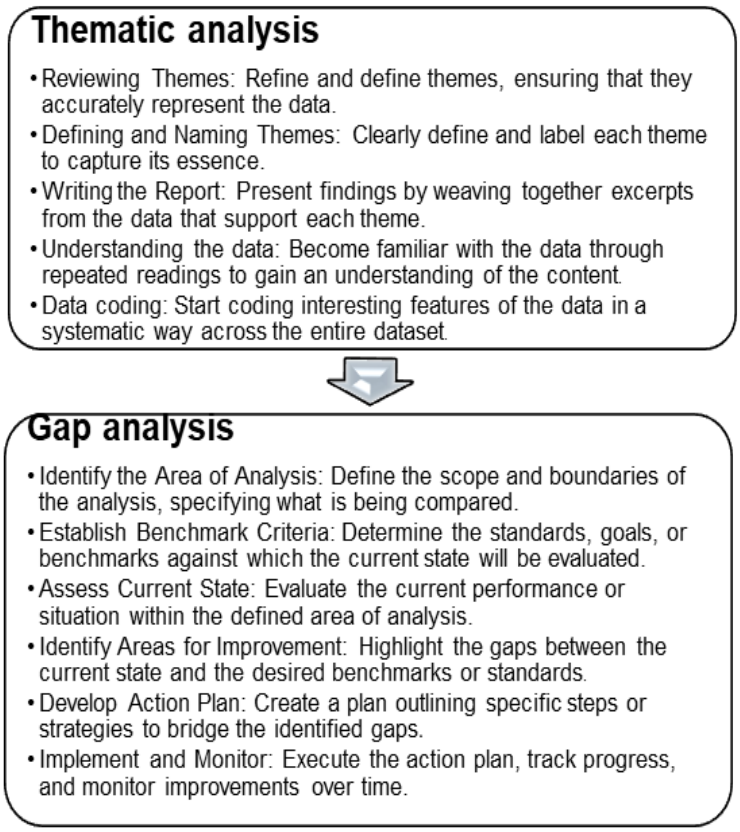
To uncover key themes in the qualitative data, thematic analysis was conducted in Atlas.ti. The analysis involved developing codes, categorising them, developing themes, and identifying gaps in the current risk management process (Figure 12). This enabled comparison of the current state of risk management with desired benchmarks and facilitated the development of improvement strategies through a gap analysis.

The gap analysis examined potential adjustments to facilitate ERM implementation, considering factors such as resource allocation for risk-related activities, the presence of risk policies, and the availability of qualified risk personnel within the organisations. This analysis informed the creation of an improvement plan that outlines steps to enhance risk management in line with international ERM standards, such as those set by COSO. Based on the gap analysis findings, organisations were advised to implement the relevant ERM standards as part of this study’s recommendations.

The study employed a strictly deductive thematic analysis, implemented using ATLAS.ti CAQDAS software. Unlike inductive designs, the coding process was entirely theory-driven, utilising a predefined codebook derived directly from established ERM frameworks and institutional capacity literature.

Figure 12

Thematic and Gap Analysis of the RM Process



Raw data from the Qualitative Data Collection Participant Log were systematically mapped onto these a priori categories (e.g., Knowledge Gaps, Resource Constraints, and Leadership Character). This deductive framework ensured that data analysis remained firmly anchored within the study's theoretical boundaries, providing a highly structured, objective audit trail that directly links the empirical findings to the core ERM literature. This process was carried out systematically using ATLAS.ti CAQDAS software, which helped build organised code networks and convert raw data into clear conceptual groups.

Data Analysis and Coding Procedure via ATLAS.ti

Qualitative data from expanded interview notes and open-ended questionnaires were imported into ATLAS.ti v26 as separate primary documents. In

ATLAS.ti, systematic structural coding was conducted using Computer-Assisted Qualitative Data Analysis (CAQDAS).

First-step Coding (Open Coding): The documents were examined line by line, and meaningful segments were labelled with descriptive codes. For instance, comments indicating a lack of understanding of the importance of risk management were tagged as 'Lack of ERM skills'.

Second-step coding (categorical coding) involved organising individual codes into broader conceptual groups using ATLAS. ti Code Manager. These raw codes were grouped into categories, including Cluster 1: Knowledge of ERM, Cluster 2: Leadership character, and Cluster 3: Use of Technology.

Third step: Thematic Network Analysis (Selective Coding): Using ATLAS. titi Network Tool, links were established between Code Groups to develop meta-themes. Importing all expanded field notes and questionnaires into ATLAS.ti ensured a transparent, system-logged digital audit trail. This organised coding process reduces subjective bias and verifies that the final clusters result from objective, computer-assisted thematic extraction. The ATLAS.ti Code-Document Matrix was extracted in chronological order to track code frequencies; the flattening of new code assignments, as indicated in Appendix A, clearly indicates that saturation was successfully reached within the small number of participants interviewed.

Integration of Quantitative and Qualitative Findings

The study employed an explanatory sequential mixed-methods approach, beginning with the collection and analysis of quantitative data. This was followed by qualitative interviews to explain, clarify, and expand on the quantitative results. The integration of both datasets occurred during the interpretation and discussion phases.

Integration was used to enhance credibility, validity, and comprehensiveness of the findings. Rather than analysing the quantitative and qualitative phases separately, evidence from both was cross-checked to assess whether the results aligned, complemented each other, or provided additional insights into the observed relationships. Quantitative data showed significant statistical associations among the study variables, while qualitative insights explained these relationships in Namibia's cSOEs.

During the discussion of findings, a joint display approach was used. Quantitative results for each research question were presented alongside qualitative evidence from participants to enable direct comparison and interpretation. When both datasets led to similar conclusions, the findings were considered convergent. If qualitative data provided additional insight into underlying organisational practices beyond the quantitative results, they were regarded as complementary. Any disagreements between the datasets were examined to ensure a balanced interpretation. This integration enhanced the study's credibility through methodological triangulation, demonstrating that the conclusions were supported by multiple sources of evidence rather than a single method.

Summary

This mixed-methods study focused on government-owned commercial enterprises in Namibia during the COVID-19 pandemic. Its primary aim was to understand the performance of cSOEs and their risk management processes, given their impact on the national economy. Initially, Namibia had 20 registered SOEs. Consequently, the study targeted all 20 registered and operational SOEs; however, only 11 cSOEs participated. A simple random sampling technique was employed to ensure that all employees of cSOEs in Namibia had an equal opportunity to participate

in the study and that the sample was representative. This approach provided equal opportunities for all commercial enterprises and their employees to participate. For the qualitative component, purposive sampling was used to select managers from the participating SOEs, as they are key decision-makers and could provide detailed insights into risk management practices. This sampling method ensured that employees at all levels and in all forms of employment had an equal chance of inclusion, thereby minimising bias and enhancing the study's reliability and validity.

Given that the Government of Namibia retains full authority over the operation or closure of cSOEs, these entities are the country’s largest producers of goods and services and employ both skilled and unskilled workers. The study examined how risk management processes were applied within these entities and assessed their role in navigating the COVID-19 pandemic. It further explored whether Namibian cSOEs practised ERM, and, if not, the challenges hindering its implementation. Yamane’s formula was used to select 19 SOEs from the total of twenty operational during the pandemic. Participants aged 25–60 were selected for their maturity and ability to provide candid insights into SOE challenges and potential solutions.

For the quantitative component, probabilistic random sampling identified 384 participants across 11 cSOEs. Stratified selection ensured the inclusion of employees and managers at all organisational levels, with 81 at the management level and 303 at the non-managerial level. The study employed both quantitative and qualitative approaches to investigate risk management practices. A key analytical method was SWOT analysis, which identified strengths and weaknesses in current risk management processes.

Permission to conduct the study was obtained from the Ministry of Finance and Public Enterprise, and letters were sent to all twenty operational SOEs. Only eleven

organisations responded positively, granting authorisation for the study. Despite this, the quantitative sample size remained at 384, while the qualitative study included ten participants, all of whom were part of the quantitative sample. Data collection commenced only after approval from the entities' management. Participants were given the option to complete the survey either via printed questionnaires or via an online link. Surveys were distributed to all employees and managers by designated gatekeepers within the organisations.

The qualitative study focused exclusively on management-level participants, using purposive sampling to obtain insights from individuals overseeing organisational operations and risk management performance. Interviews explored the strengths, weaknesses, opportunities, and threats of current risk practices, as well as the challenges experienced during the COVID-19 pandemic. Purposive sampling ensured the inclusion of managers from diverse cSOEs, capturing their expertise in leadership and risk management. The interviews were conducted with managers and supervisors across all fields, since many of the cSOEs do not have risk specialists in place.

Data collection tools included survey questionnaires and interviews. The survey questionnaire comprised eight sections with closed-ended, multiple-choice, and Likert-scale questions, while the qualitative interview guide contained eight open-ended questions. The validity of the questionnaires was confirmed through a pilot study involving 10 participants from the health and telecommunications sectors. Data were then compiled and organised in line with the study's research questions.

Three verified surveys were used to validate data collection tools. The COVID-19 Impact Assessment survey, based on the International Labour Organisation (ILO) survey, assessed operational challenges and support for businesses during the pandemic. Grounded in the ILO's Sustaining Competitive and Responsible

Enterprises (SCORE) programme, the survey captured challenges including supply chain disruptions, unfavourable working conditions, cash flow shortages, shifts in consumer behaviour, regulatory compliance, bankruptcy, mental health concerns, technology adoption, and staff reductions.

The Risk Management Effectiveness Survey (RMEAS) evaluated the effectiveness of current risk management strategies in Namibian cSOEs, assessed sustainability profiles, and facilitated a SWOT analysis. The ERM Feasibility Assessment Survey, adapted from Perera (2020), examined the feasibility of implementing ERM as part of risk and performance control mechanisms in cSOEs and addressed key research questions on the requirements for ERM implementation.

Demographic data collected included company name, rank or position, gender, employment duration, age, industry, and educational level, which enabled identification of risk management expertise. Only participants aged 25–60 who were capable of independent judgement were included. Employment duration was used to determine whether participants were permanent or contractual. Organisational sustainability was evaluated using Likert-scale questions, focusing on obstacles, risk management processes, and the effectiveness of risk communication. A SWOT analysis identified strengths and weaknesses in risk documentation and mitigation mechanisms.

Given the exploratory nature of the study, attention was also given to integrating ERM into organisational strategic plans and to participants' perceptions of this integration. Both surveys and interviews assessed the appropriateness of current risk management procedures during the pandemic. Participants' insights, particularly from interviews, were documented to identify performance disparities between organisations effectively managing the crisis and those still facing challenges. The

study further examined the potential positive impact of ERM on organisational sustainability and performance. Clearance for the study was obtained from the Minister of Public Enterprises, and authorisation letters from cSOEs confirmed voluntary participation. All participants provided informed consent, confirming their eligibility and willingness to participate. Organisations that did not respond were not compelled to participate; willing employees were included to ensure an adequate and representative sample.

The study employed an explanatory sequential mixed-methods approach, integrating data during the interpretation and discussion phases. First, quantitative data were analysed to identify significant relationships among variables. Then, qualitative findings were used to explain, contextualise, and broaden these statistical results. Integration involved joint display tables and cross-validation of evidence, which helped identify points of convergence and complementarity between the datasets. This method led to meta-inferences that offered a deeper understanding of ERM implementation than either dataset alone could provide. The results and interpretations are presented in Chapter 4.

CHAPTER FOUR: FINDINGS

Chapter overview

This study was conducted within commercial state-owned enterprises in Namibia, which are government-established companies designed to generate profit for the state. These enterprises operate commercially to create jobs and provide essential services to the Namibian population. Namibia currently has twenty operational cSOEs, directly overseen and regulated by the Ministry of Finance and Public Enterprises to ensure they fulfil their mandates effectively. Unlike other state entities, these enterprises are subject to closer government control, with the government appointing their top leadership and board members.

Commercial SOEs operate across a range of sectors, including telecommunications, agriculture, healthcare, mining, aviation, energy, tourism, and transport. This study examined 11 cSOEs across 10 industries. The primary objectives were to understand the challenges posed by the COVID-19 pandemic to these entities, to evaluate their current risk management processes by identifying strengths, weaknesses, opportunities, and threats, and to explore strategies to facilitate ERM implementation.

Focusing solely on cSOEs was deliberate, as these profit-driven entities provide vital public services. The study sought to identify how these organisations could improve performance, sustain operations, and create additional value. ERM was highlighted for its integrated approach to risk management, which, if implemented effectively, can enhance organisational performance and sustainability (Anton & Nucu, 2020).

Previous research, such as Khan et al. (2016, as cited by Korkmaz, 2022), describes ERM as a prominent framework that helps organisations identify, assess,

and control risks at the enterprise level. Motivators for ERM adoption include the risk of financial distress, cost pressures, poor profitability, and challenges to board autonomy. In the Namibian commercial SOE context, poor profitability and limited growth prospects have been significant concerns, with many SOEs struggling to sustain themselves without government intervention.

Understanding the current state of these entities remains critical for government budget planning, as funds must be appropriately allocated to other national priorities, such as housing, education, and poverty alleviation. Furthermore, the study examined ERM implementation strategies that could serve as effective risk management plans, providing cSOEs with competitive advantages and enhancing their growth potential (Blanco-Mesa et al., 2019, as cited in Korkmaz, 2022). The study was prompted by findings that a shift in risk management focus is occurring from traditional economic and financial risks to broader natural and social concerns, reflecting evolving business dynamics shaped by factors such as climate change and growing societal interdependence (Korkmaz, 2022). Consequently, enterprises must adopt proactive, modern management strategies to manage escalating risks effectively.

Sustainability, recognised as a key management concept, was emphasised for its role in improving risk management effectiveness (Anton & Nucu, 2020). The global economy's recent expansion (Perera et al., 2020) has heightened organisations' awareness of the need to integrate risk management into strategic planning, particularly in response to rising unforeseen threats driven by intense competition, rapid technological change, and unpredictable customer behaviour (Perera et al., 2020). This is why the current study identified several challenges experienced during the COVID-19 pandemic and evaluated their effects on company performance. The three hypotheses examined the impact of these challenges on company performance,

risk communication, effective risk management, and the integration of ERM into strategic planning. According to Karaka and Senol (2017, as cited by Perera et al., 2020), ERM is a comprehensive process designed to address all potential risks organisations might face, aiming to reduce or eliminate them. Additionally, ERM improves top management's understanding of risk factors and supports more informed decision-making (Beals et al., 2015, as cited in Perera et al., 2020). These prior research studies have shown that efficient decision-making enhances business performance and lowers capital costs.

Enterprise risk management has evolved into an integrated approach that supplants traditional risk management, emphasising the need for an effective system that enables timely decision-making and improves overall organisational performance. In today's business landscape, companies cannot afford financial losses caused by unforeseen events, operational disruptions, reputational harm, or a decline in market presence, making risk management critical to strategic planning. The researcher recognises that implementing effective ERM enables organisations to refine decision-making during strategy formulation by thoroughly analysing strategic options and applying risk-adjusted tactics.

The severe impact of COVID-19 on Namibian businesses revealed a lack of preparedness and the absence of mitigating measures. Therefore, adopting ERM helps identify potential disruptive events and minimise their likelihood, thereby reducing losses. Using the COSO risk framework, ERM best practices can enhance compliance by proactively addressing regulatory and customer requirements and mitigating compliance-related risks (Sthipolvanichgul, 2016, as cited in Perera et al., 2020).

This study examines the implementation of ERM to improve performance in

Namibia’s commercial state companies. A key focus of the qualitative phase was exploring the complexities of ERM implementation. Open-ended survey questions and face-to-face interviews sought to gain deep insight into these challenges. ERM adoption is known to enable organisations to manage diverse risks, including compliance, financial, operational, and strategic risks. The lessons from the 2008–2009 global fiscal crisis further underscore the importance of effective risk management, particularly within the financial sector.

Recognising ERM's capacity to manage risks, many organisations view it as a pathway to organisational sustainability. While the significance of ERM in managing organisational risks is widely acknowledged, empirical evidence of its direct benefits remains limited. Several studies have reported non-significant correlations between ERM and performance (Alawattegama, 2018 & 2017; Karaka & Senol, 2015; Barac, 2015, as cited in Perera et al., 2020), highlighting the need for further research to validate existing theories on ERM and organisational factors.

Observations suggest that few Namibian entities practise ERM to its full extent, owing to the process’s complexity and implementation challenges identified in prior studies (Perera et al., 2020). However, this does not diminish the need to examine ERM implementation in Namibian cSOEs, given their critical role in the government’s fiscal health. The study was conducted among eleven of Namibia’s 20 commercial state companies. Data collection involved two main processes: a quantitative survey with closed-ended questions and a qualitative survey with open-ended questions, both accompanied by interviews. The research received prior approval from the Ministry of Finance and Public Enterprises. Invitations to participate were sent to nineteen companies, yielding 384 survey respondents for the quantitative phase and ten interview participants for the qualitative phase.

Qualitative analysis complemented the quantitative data to test the three research hypotheses of this study, which were examined using multiple linear regression. Independent variables included challenges arising from the COVID-19 pandemic, the quality of risk documentation and communication, and the presence of trained personnel and competent leadership. The dependent variables were improved organisational performance, effective risk management, and ERM implementation, and these were correlated with the independent variables. The data analysis procedure is shown in Figure 13.

This study outlined several challenges encountered during the COVID-19 pandemic and assessed their effects on company performance. The three hypotheses examined how these challenges affected company performance, risk management effectiveness, and the integration of ERM into strategic planning. According to Karaka and Senol (2017, as cited in Perera et al., 2020), ERM is a comprehensive process for identifying, assessing, and controlling all types of risks that organisations may encounter, with the aim of reducing or eliminating them. ERM also enhances top management's understanding of risk factors and supports better decision-making (Beals et al., 2015, cited by Perera et al., 2020).

ERM represents an evolved, integrated approach to risk management, replacing traditional methods and emphasising the need for an effective system that supports timely decisions and improves organisational performance. In modern business, companies cannot afford financial losses from unforeseen events, disruptions, reputational damage, or declines in market share, making risk management central to strategic planning. The researcher recognises that an effective ERM system enables organisations to improve decision-making during strategy development by thoroughly analysing strategic options and implementing risk-

adjusted tactics. The severe impact of COVID-19 on Namibian businesses revealed a lack of preparedness and measures, reinforcing the value of ERM in helping organisations identify and mitigate potential operational disruptions, thereby reducing losses. According to the COSO risk framework, implementing ERM best practices can improve compliance by proactively addressing regulatory and customer requirements, thereby reducing compliance risks (Sthipolvanichgul, 2016, cited by Perera et al., 2020).

The study examines ERM implementation as a means of improving performance in Namibian commercial state companies. The qualitative phase sought deeper insights into ERM implementation challenges through open-ended survey and interview questions. ERM is known for helping organisations manage various types of risk, including compliance, financial, operational, and strategic risks. The 2008–2009 global fiscal crisis underscored the importance of effective risk management, particularly in the financial sector. While ERM's role in organisational risk control is widely recognised, empirical evidence linking ERM to performance is limited.

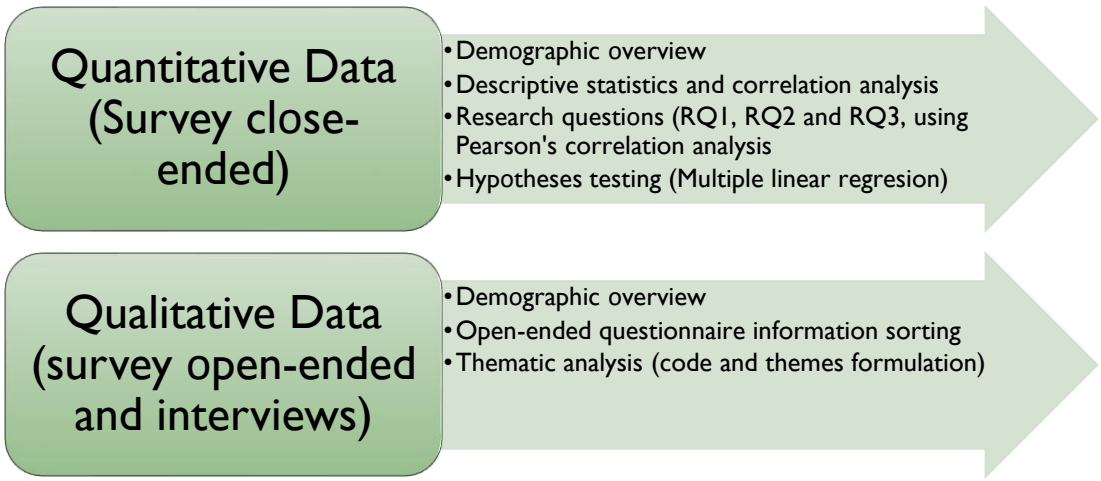
Some studies report no significant correlation (Alawattegama, 2018 & 2017; Karaka & Senol, 2015; Barac, 2015, cited by Perera et al., 2020), prompting further research to validate existing theories on ERM and organisational dynamics. Observations suggest that few Namibian entities fully practise ERM because of process complexity and implementation challenges (Perera et al., 2020). Nevertheless, examining ERM in Namibian cSOEs remains essential given their key role in government finances.

The study involved 11 of Namibia's 20 commercial state companies. Following approval from the Ministry of Finance and Public Enterprises, data collection comprised a quantitative survey with closed-ended questions and a qualitative

component comprising open-ended questions and interviews. Invitations were sent to 19 companies, resulting in 384 survey participants and 10 interviewees. Quantitative analysis evaluated the three hypotheses using multiple linear regression and Pearson's correlation tests. Independent variables covered COVID-19 challenges, the quality of risk documentation and communication, and the availability of trained personnel and competent leadership. Dependent variables included improved organisational performance, and mediating variables were effective risk management and ERM implementation. The data analysis procedure is illustrated in Figure 13.

Figure 13

Data Analysis Workflow



The current chapter presents the results obtained from both surveys. The chapter begins by outlining the trustworthiness of the collected research data. The section on the trustworthiness of the data explains what data was collected, how it was collected, and when it was collected. To establish the truthfulness of the data, the section on trustworthiness highlights how researchers collected the data, ensuring that the data is reliable and provides a true reflection of the status of ERM in commercial entities in Namibia.

The preceding section focused on the reliability and validity of the study data,

examining the quality and quantity of the collected data and how well it reflects the current situation. The results section outlines the findings obtained after data analysis. The first section presents the quantitative results, followed by the qualitative results that answer the research questions, and then the hypothesis analysis. The other section of this chapter includes the discussion and evaluation of the study findings, the chapter summary, implications and recommendations, and, lastly, the conclusion.

Trustworthiness of Qualitative Data

This study utilised a mixed-methods approach, recognised for its enhanced reliability through the integration of qualitative and quantitative data and analyses. Mixed-methods research provides a deeper understanding of the topic and aims to clarify the study itself. In qualitative research, establishing trustworthiness is crucial to ensure the credibility and reliability of empirical results. Within a qualitative paradigm, data quality must be sufficiently high to allow other researchers to transparently audit the inquiry process and understand how conclusions were derived. Here, trustworthiness specifically pertains to establishing the credibility and dependability of the data, rather than aiming for statistical replication or numerical similarity. Maintaining a high standard of trustworthiness ensures that the final thematic findings accurately and consistently reflect the participants' institutional experiences (DeJonckheere et al., 2024; Haq et al., 2023).

DeJonckheere et al. (2024) argue that establishing methodological dependability in qualitative research requires grounding open-ended inquiry tools in credible frameworks and tailoring them to the study's scope. In this study, the qualitative questionnaire items and semi-structured interview prompts were modelled on key dimensions of prominent institutional frameworks. Although derived from authoritative sources, these questions were systematically rephrased and adapted to

align with the specific research context and goals. To ensure comprehensive coverage, the prompts were mapped to three thematic pillars: the institutional impact of COVID-19, the effectiveness of local risk management, and the organisational feasibility of ERM.

Because a purely qualitative, deductive approach was used, the semi-structured interview guide was created by directly translating validated survey constructs into thematic questions. These constructs included COVID-19 impact scales, ERM maturity matrices, and sustainability frameworks. Rather than developing ungrounded questions, open-ended prompts were designed to examine the core aspects of these validated metrics. This structural alignment enhances the instrument's reliability, ensuring that qualitative discussions remain firmly rooted in established, scientifically validated concepts while still enabling participants to share rich, contextual insights. This careful grounding enhances the overall trustworthiness of the data, as assessed by the criteria of credibility, transferability, dependability, and confirmability.

Credibility

Credibility indicates how much trust can be placed in the accuracy of research findings. Although essential to all empirical research, it is especially vital in qualitative studies, where it is a key element that supports the overall reliability of naturalistic results (Fernández-Cásseres & Russi-Pulgar, 2023). Tobin and Begley (2004, as cited in Nowell et al., 2017, p. 3) note that credibility concerns the fit between respondents' views and the researcher's representation of those views (Gray, Curley & Sime, 2026). In this study, credibility was established through rigorous member-checking, ensuring that the expanded notes from the unrecorded sessions aligned perfectly with participants' authentic testimonies.

A member-checking protocol was used in this study to maintain participant anonymity while fostering open discussion of institutional issues, given that interviews were unrecorded. According to Rose and Johnson (2020), as cited in Kakar et al. (2023), member checking involves sharing data in report form and collecting feedback from participants. Member checking provides a valuable opportunity to validate research results, interpretations, and cultural connections (Davis & Lachlan, 2017, as cited by Kakar et al., 2023). During this process, participants evaluate the accuracy of the data and the researcher's interpretations (Riazi & Ghanbar, 2023, as cited by Kakar et al., 2023). Kakar et al. (2023) note that this step can be taken at various points during planning, during data collection, after data collection, or at any other stage. Different approaches can be employed for this technique, depending on the study's requirements (Eryilmaz, 2022).

Therefore, a rigorous member-checking process was used to ensure data accuracy. Within 48 hours, raw field notes were expanded into detailed narrative summaries. These summaries were then emailed or sent via messaging platforms to participants for validation. Participants reviewed the summaries, corrected any misunderstandings, and formally approved the transcripts. This approach ensured that participants' perspectives were accurately aligned with the researcher's thematic analysis (Nowell et al., 2017).

The open-ended prompts were aligned with the core dimensions of established institutional risk frameworks, ensuring that the qualitative exploration accurately reflected the empirical realities of cSOEs that have implemented ERM systems, as well as those using traditional frameworks. The study ensured credibility through an in-depth, contextual qualitative analysis of risk management practices in Namibian cSOEs. The research focused on strategic organisational staff, capturing genuine,

first-hand perspectives on institutional governance. Data were collected via open-ended questionnaires emailed to managers and via telephone interviews, with careful coordination through organisational gatekeepers. This qualitative approach gave participants two weeks to share detailed, unrestricted narratives, yielding rich insights into current operational workflows, aspects of ERM implementation and challenges, and organisational sustainability (Allana & Clark, 2018).

Because ERM is still developing within Namibia's corporate landscape, a qualitative approach was essential to investigate institutional barriers, leadership influences, and gaps in structural implementation. Although some cSOEs have integrated advanced risk systems, quantitative feedback indicated that conventional risk management practices remain prevalent, and clear knowledge gaps persist across operational levels.

To protect the study from subjective bias and enhance its analytical credibility (Lalumera, 2024), the qualitative tools were carefully crafted in clear, accessible English to minimise interpretive ambiguity. Credibility was further strengthened by grounding the open-ended questions in the conceptual areas of well-established institutional risk frameworks. This ensured that the qualitative data directly reflected the real experiences of cSOEs that have implemented ERM systems, as well as those that rely on traditional risk frameworks. As a result, this approach created strong alignment between participants' actual organisational views and the researcher's thematic analysis.

Transferability

Transferability in this study refers to how well the findings can be applied to similar situations, emphasising rich description over statistical generalisation (Nowell et al., 2017). Kakar et al. (2023) further note that transferability concerns how well

research findings can be applied to different but similar contexts, including settings, people, and groups of various kinds. This study was limited to Namibian cSOEs, employed stratified purposive sampling, and focused on management-level employees to gain expert insights into risk management. Open-ended surveys and interviews provided detailed contextual information, enabling future researchers to assess whether these results are relevant to other comparable organisational settings.

To establish a strong basis for transferability, this study was confined to the specific ecosystem of cSOEs in Namibia and deliberately excluded non-commercial or purely social state entities. This boundary ensures that the thematic data directly reflect organisations governed by commercial corporate mandates. The qualitative phase employed a stratified purposive sampling strategy to gather high-utility data on similar corporate structures. This approach focused solely on management-level employees within the participating cSOEs, as they possess the strategic oversight, institutional memory, and operational expertise necessary to provide detailed insights into ERM feasibility, gap analysis, and sustainability measures.

To strengthen the descriptive richness necessary for effective qualitative transferability, data collection combined telephonic semi-structured interviews with self-administered open-ended questionnaires. This mixed-methods approach yielded a range of management perspectives, including three detailed interview narratives and seven comprehensive survey responses. Participants were restricted to professionals aged 25 to 60 and were selected from the 384 participants in the prior study. Although the national workforce includes individuals from age 15 (NSA, 2023), those under 25 were excluded because they were less likely to have the specialised, long-term administrative experience required to manage complex institutional risks. By clearly defining these institutional boundaries, participant profiles, and operational

parameters, this study offers a transparent and richly detailed qualitative framework. This thorough description provides future researchers with essential contextual details to transfer these strategic risk management insights to similar state-owned or corporate settings in developing economies.

Dependability

Tobin and Begley (2004, as cited in Nowell et al., 2017) contend that research dependability arises from a process rooted in logical reasoning, accountability, and careful record-keeping. According to Kakar et al. (2023), data dependability, the third criterion of trustworthiness, concerns the consistency of data across similar contexts. Polit and Black (2012), as cited in Kakar et al. (2023), define dependability as data consistency across comparable settings. In addition, Koch (2006), as cited in Kakar et al. (2023), states that when a study's findings are replicated in a similar population, condition, or context, they are deemed dependable.

Therefore, all research data should be reproducible and show a certain level of consistency to establish trustworthiness. In qualitative research, dependability reflects the reliability of the study as perceived by the researcher. In this study, dependability was demonstrated through a transparent, disciplined qualitative methodology focused on the risk management practices of Namibian commercial state entities. Rather than unstructured, informal inquiries, the open-ended questions and semi-structured interview prompts were deliberately aligned with established frameworks on institutional risk, leadership, and sustainability. This conceptual consistency helped ensure the qualitative research remained coherent, rational, and uniform across organisations. Furthermore, accountability and thorough documentation were maintained through a comprehensive Qualitative Data Collection Participant Log, which tracked the research process and created an auditable trail for future

verification.

The selection of commercial state entities was based on the government's mandate as the principal employer, with these entities entrusted with creating jobs and providing public services. The Namibian government can only address key socio-economic issues such as unemployment, housing, poverty, drought, and inequality by strengthening its commercial state enterprises alongside other organisations.

While ideally the study would have included all commercial state entities, time and resource constraints limited participation to those willing to engage and recognise the study's importance. For the qualitative phase, only 10 participants could be secured. The sample of 10 participants was adequate to complement the quantitative findings and consistent with the Hennink & Kaiser (2022) guidelines, which state that 9 to 17 qualitative participants suffice, especially when quantitative data is the primary focus.

Confirmability

According to Kakar et al. (2023), confirmability or neutrality is "the degree of fairness of results, which consists of the purity of original responses of the study participants and free from every kind of biases". Confirmability ensures that the final findings are based solely on the informants' experiences rather than the researcher's preferences (Kakar et al., 2023). It protects the study from subjective biases, emotions, or opinions that could distort the research's core. Confirmability, as defined by other scholars, refers to ensuring that a researcher's interpretations and conclusions are directly grounded in the collected data (Tobin & Begley, 2004, as cited in Nowell et al., 2017). This requires the researcher to demonstrate clearly how they arrived at their findings. In this study, confirmability was implemented through a clear, software-logged deductive coding process in ATLAS.ti, establishing a robust digital audit trail.

Confirmability addresses the qualitative need for operational objectivity, ensuring that final interpretations accurately reflect participants' testimonies rather than researcher bias or assumptions (Gunbayi, 2024). In this explanatory sequential mixed-methods approach, establishing dependability was particularly important to ensure that the qualitative results in Phase 2 accurately depicted participants' institutional realities, rather than being tailored to align with the statistical models and hypotheses from Phase 1.

To ensure this level of objectivity, confirmability was implemented using two rigorous internal structural mechanisms.

CAQDAS Digital Audit Trail: All phases of qualitative data analysis were conducted systematically in ATLAS.ti. This included importing detailed field narratives and open-ended questionnaires, assigning codes, creating code groups, and generating final network themes, with each step automatically logged with date and time stamps. This built-in chain of custody provides a reliable audit trail, enabling external evaluators to trace a final theme, such as Institutional Barriers to ERM, directly back to the original quote in the text.

Strict reflexivity and paradigm bounding: To minimise confirmation bias, deductive coding in ATLAS.ti was conducted transparently. The researcher documented analytical decisions using descriptive ATLAS.ti Memos throughout the coding process. This approach maintained a clear separation between quantitative trends, such as satisfaction scores, and qualitative narratives highlighting core issues, including outdated IT infrastructure and knowledge gaps. By ensuring transparency and a software-supported link between the textual data and the final conceptual clusters, the study guarantees that its conclusions are fully grounded in the data.

Reliability and Validity of Quantitative Data

Validity and reliability have different meanings depending on whether the research is quantitative, qualitative, or mixed methods (Gunbayi, 2024). It is crucial to understand these differences clearly while strictly adhering to the chosen methodology and the validity and reliability principles it demands (Cohen, Mannion & Morrison, 2018, as cited by Gunbayi, 2024). In the quantitative phase of this explanatory sequential mixed-methods design, ensuring data validity and reliability is crucial for the accuracy, consistency, and statistical robustness of the results.

Reliability in quantitative research refers to the internal consistency and stability of findings over time, reflecting mathematical equivalence and reducing random measurement errors (Riazi & Ghanbar, 2023; Taherdoost, 2016). In contrast, validity concerns how well a closed-ended instrument measures the specific theoretical constructs it aims to assess (Ahmed & Ishtiaq, 2021). Positivists view reliability as a means of ensuring consistency; if the study were repeated with the same methods, participants, and conditions, similar results should emerge, thereby confirming reliability (Kakar et al., 2023).

Rather than asserting that the general mixed-methods framework inherently ensures rigour, this research demonstrated quantitative validity and reliability through defined sampling boundaries, alignment of constructs with established scales, and systematic pre-testing of instruments (Taherdoost, 2022). Bergström and Baviskar (2021) emphasise the need for strict, consistent participant inclusion criteria to enhance the reliability of quantitative results and control for confounding factors. Consequently, the study focused specifically on individuals employed in cSOEs in Namibia. This targeted approach helped ensure that the results accurately reflected the corporate governance landscape of Namibia's public sector.

Gill and Johnson's (2010) pre-calculated table was used to determine the required sample size for a population of 25,000 employees in government public enterprises, with a 95% confidence level and a 5% margin of error. This sample size was set to minimise sampling error and ensure sufficient statistical power for robust parametric analyses, such as Pearson correlation tests and multiple linear regression models. This approach ensures that the results can be appropriately generalised to the broader cSOE ecosystem in Namibia.

To address low initial response rates during the two-month data collection period, a multi-channel strategy was implemented through organisational gatekeepers. A total of 340 responses were collected digitally via a Google Forms link. To reach workers with limited digital access or who preferred paper, 89 hardcopy questionnaires were distributed, yielding 48 returns. Following an inventory check, four questionnaires were excluded for incomplete data, leaving 44 valid responses. The combined sample size from both methods was n=384, a 1.6% (6) increase over the precalculated table sample size of 378; however, it met the statistical criteria for population representation and model assessment.

Measurement validity was confirmed by developing closed-ended survey items based on previously validated quantitative scales from peer-reviewed sources, including diagnostic tools developed during the COVID-19 pandemic. Using pre-validated frameworks provided strong construct validity, ensuring that the operational variables aligned with established theories of organisational crisis management and resilience (Ahmed & Ishtiaq, 2021). To preserve the structural integrity of the original instruments while adapting to the local context, the quantitative items were reworded into clear, straightforward English to reduce interpretive ambiguity. The final questionnaire was carefully organised into separate psychometric sub-scales to

measure the independent and dependent variables required to test the study's two main hypotheses. Two categories were assessed:

Risk Management Effectiveness Matrix: Assesses the frequency and quality of risk communication and documentation for effective RM to test Hypothesis 2.

Enterprise Risk Management Feasibility Scale: Assesses leadership capability and staff training for ERM implementation to test Hypothesis 3.

To ensure the modified questionnaire was clear, fit for purpose, and administratively manageable, a small-scale pilot test was conducted with ten (n = 10) respondents from the target cSOEs before full deployment. The pilot served primarily as a pre-test to refine question phrasing and assess format accessibility, rather than to measure test-retest reliability, as no full secondary longitudinal test was performed to determine a stability coefficient. The pilot test demonstrated that the instructions were clear and that the items worked reliably across various commercial sectors, indicating that sectoral differences did not affect understanding of the construct.

Targeting the final survey to a professional adult group aged 25 to 60 improved data reliability, as this group generally constitutes a stable workforce with sufficient exposure to assess complex corporate risk protocols. The favourable pre-test results increased confidence in the measurement process, confirming that the survey followed the four key principles of quantitative research: systematic sampling, objective questionnaire design, standardised administration, and controlled data analysis (Sukamolson, 2007, as cited in Taherdoost, 2022).

Moreover, SPSS, a widely trusted data analysis software, was employed for the quantitative analysis. Multiple logistic regression was used to assess the statistical significance of the effects of independent variables on the dependent variables. This approach was selected because of the Likert scale data and the need to analyse

complex causal relationships involving multiple factors. The pilot study used the same linear regression and Chi-square analysis, yielding similar results; given the pilot's reliability, this validated the use of these methods for the main study. For validity purposes, multicollinearity was assessed using the variance inflation factor, which was within a healthy range at 1.42. These data quality checks assessed how similar the independent variables were to each other and their potential to confound the model.

Construct Reliability Analysis

To assess the reliability of each construct, Cronbach's alpha (α) was computed separately for all multi-item constructs associated with Research Questions Two and Three, using Likert-scale items. This approach provided a more detailed assessment of each measurement scale's internal consistency than a single overall reliability score for the entire questionnaire. The results of the construct-level reliability analysis are presented in Table 4.

Table 4

Construct-level Reliability Analysis

Categories	Constructs	Number of items	Cronbach's α	Decision
Risk Management Effectiveness Matrix	Risk Communication	5	**0.757**	*Acceptable*
	Risk Documentation	5	**0.765**	*Acceptable*
Enterprise Risk Management Feasibility Scale	Skilled Personnel	5	**0.874**	*Acceptable*
	Competent Leadership	5	**0.836**	*Acceptable*

For Research Question Two, the Risk Communication construct had a Cronbach's alpha of α = 0.757, and the Risk Documentation construct had α = 0.765 (Table 4). For Research Question Three, the Trained/Skilled Personnel construct recorded α = 0.874, while the Competent Leadership Team construct showed α = 0.836. All four constructs exhibited Cronbach's alpha values above the accepted

threshold of 0.70, confirming reliable internal consistency across their items (Hair et al., 2019; Nunnally & Bernstein, 1994, as cited in Tavakol & Dennick, 2011).

The reliability coefficients calculated using SPSS's Reliability Analysis are based on respondents' answers to questionnaire items associated with each construct. These coefficients indicate how consistently the items within each dimension measure the same underlying concept. The results demonstrate that the measurement items for Risk Communication, Risk Documentation, Trained/Skilled Personnel, and Competent Leadership Team exhibited sufficient reliability for subsequent statistical analysis.

According to Tavakol and Dennick (2011), Cronbach's alpha of 0.70 or higher generally indicates acceptable internal consistency, while 0.80 or above usually suggests good reliability. Nevertheless, very high alpha values, especially near or above 0.90, should be reviewed carefully, as they might suggest that some items are very similar or redundant, rather than indicating better measurement quality (Tavakol & Dennick, 2011). In this study, the coefficients ranged from 0.757 to 0.874, with none exceeding levels typically indicative of problematic item redundancy.

Overall, the construct-level reliability findings indicate that the questionnaire items demonstrated acceptable to good internal consistency across the dimensions examined. The highest reliability was observed in the Trained/Skilled Personnel construct ($\alpha = 0.874$), indicating very strong internal consistency among its items, while the Competent Leadership Team scored $\alpha = 0.736$, which remains above the minimum acceptable level. These results support the methodological validity of subsequent correlation and multiple regression analyses, as the constructs used in Research Questions Two and Three showed adequate measurement reliability.

Results

The results section is divided into two parts. The first presents quantitative data analysis addressing the first three research questions and hypotheses. The second presents qualitative analysis, including thematic and gap analyses, to synthesise findings from the two study approaches. Given the explanatory nature of this study, the qualitative phase was designed solely to complement and enhance the findings from the quantitative phase, which is why it was conducted afterwards. Qualitative results involve identifying and clustering themes, coding them, and highlighting gaps in the current risk management process, based on data gathered from SWOT and thematic analyses.

The first section primarily addresses the first three research questions and hypotheses, while the fourth research question is examined using qualitative data, with some quantitative data also contributing. This is because the fourth question not only identifies challenges in ERM implementation but also seeks recommendations to facilitate the ERM process within Namibian cSOEs. The analysis followed a sequential flow aligned with the study design and research questions. Multiple linear logistic regression was appropriate for analysing the data, as it models a dependent variable measured on a scale (such as Likert scale responses) with one or more independent variables (e.g., the impact of COVID-19 challenges on SOE performance).

The analysis began by answering the quantitative study's research questions (RQ1, RQ2, and RQ3), followed by evaluating the hypotheses, with statistical analysis determining whether they were accepted or rejected. The hypotheses' testing session was followed by the qualitative study data analysis.

Quantitative Data Analysis: Demographic Information

Quantitative data analysis included a total sample of 384 participants from eleven commercially registered state organisations in Namibia. The first stage of data analysis involved collecting demographic information on the participants (Figure 14), followed by analysis of the study's research questions and hypotheses.

Figure 14

Gender Composition of Respondents

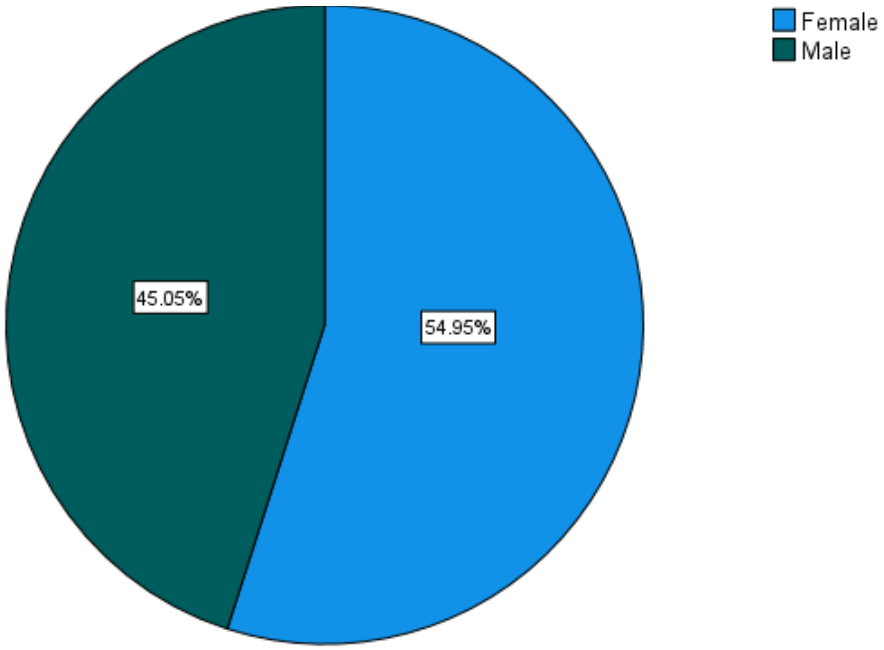
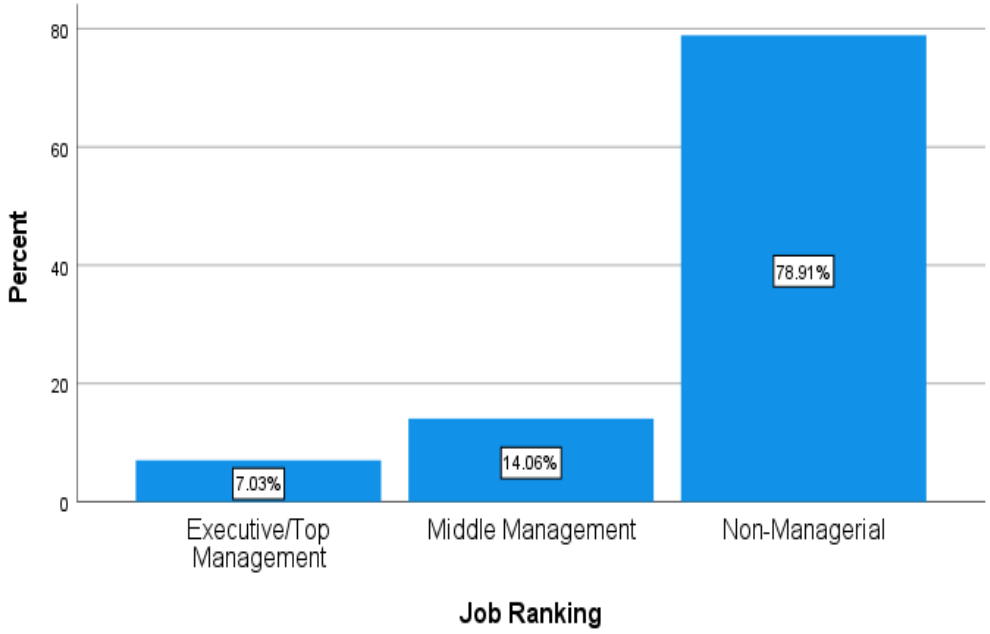


Figure 14 is a pie chart showing the gender distribution of the study sample, with males and females. The chart shows that females were the majority, at 54.95%, compared with 45.05% for males, giving a female-to-male ratio of 1.22:1. The proportion of female participation is higher in the research on Namibia's cSOEs, or at least among the respondents to the questionnaire. This demographic balance implies that women play a crucial role in the organisational set-up of cSOEs, especially in non-managerial and frontline roles, where most of the workforce is concentrated, as indicated by Figure 15.

Figure 15

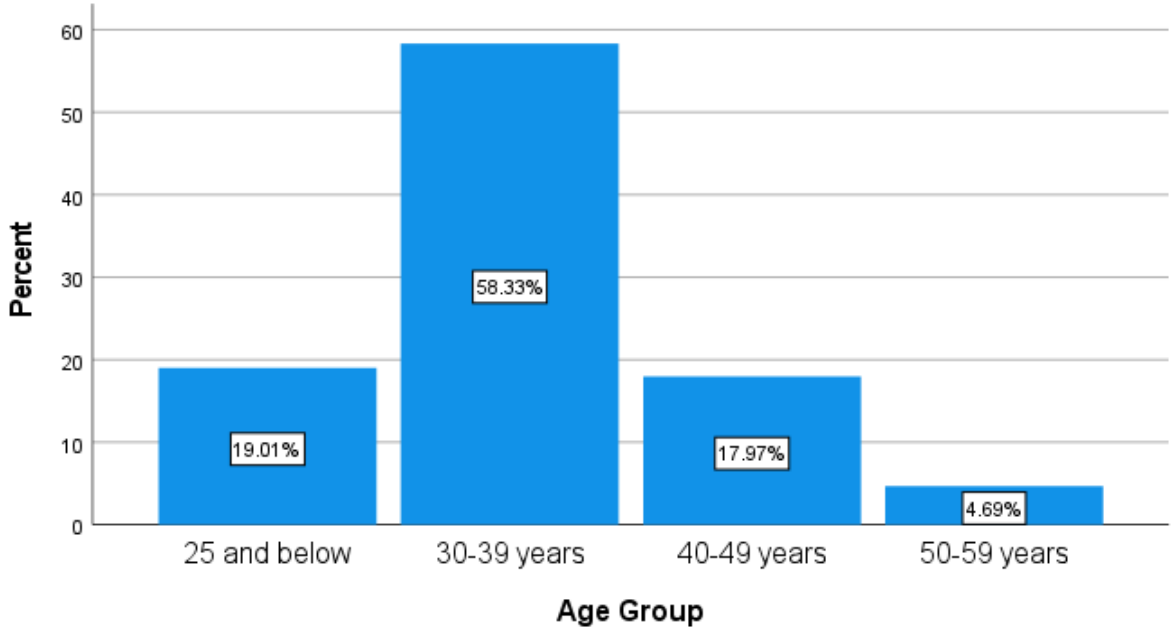
Respondents Job Ranking



The distribution of respondents' positions within the organisations is shown in Figure 15 above. The sample is composed mostly of non-managerial employees (78.91%), with operational/frontline employees being the most common. Middle management represents 14.06%; a moderate percentage of these respondents are in charge of teams and projects and act as connectors between top management and non-managerial staff. The executive and top management group represents the smallest segment of the sample at 7.03%. This indicates that a significant percentage of respondents hold formal positions, compared with those in managerial positions.

Figure 16

Age of Respondents



The age structure of respondents at Namibia's cSOEs is shown in Figure 16. Employees are mainly clustered in the prime working-age groups. The 30-39 age group leads with 58.33%, the 25-and-below group comes second with 19.01, and the 40-49 group is third with 17.97%. Senior professionals aged 50-59 years account for just 4.69%. Together, 76.30% of the sample falls within the 30-49 age bracket, indicating a mature, experienced, pre-retirement workforce. This suggests that most workers are at the peak of their working years and can develop and refine skills, progress to leadership positions, and engage effectively in risk management. However, the low proportion of older professionals may signal inadequate institutional memory and succession planning issues, such as an inability to sustain resilience over the long term.

Figure 17

Respondents Employment Tenure

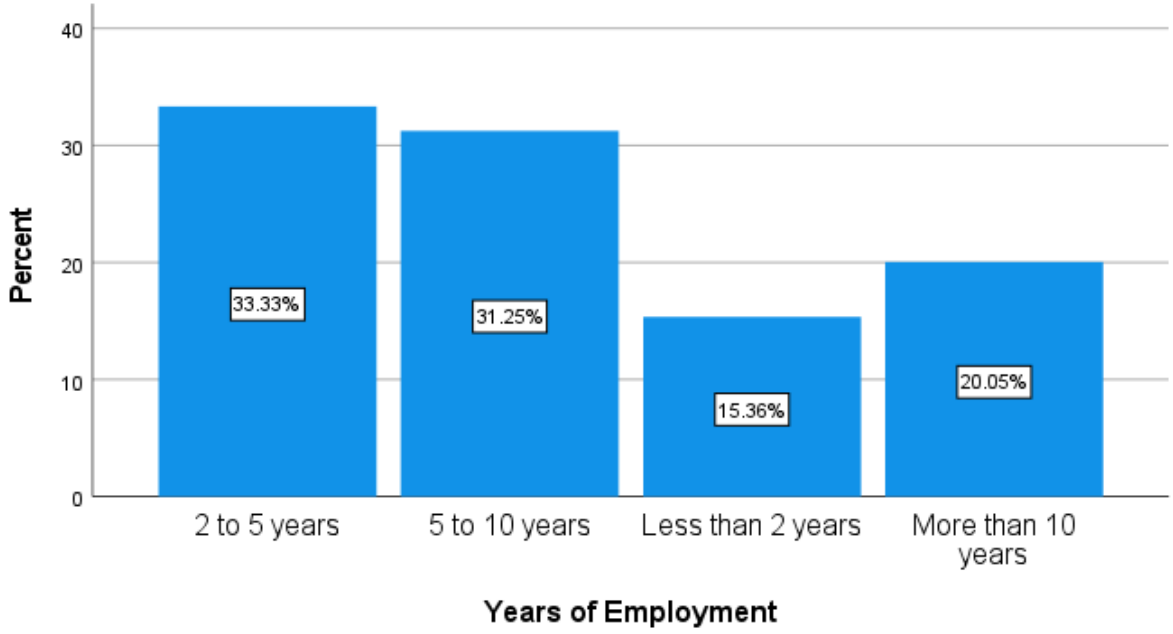


Figure 17 shows the employment duration of respondents working in the cSOEs in Namibia. The bar chart shows that the distribution of tenure categories is relatively even. The largest group is employees with 2-5 years' tenure (33.33%), followed by those with 5-10 years' tenure (31.25%). Tenure of 10 years or less accounts for 20.05%, and tenure of less than 2 years accounts for 15.36%. It is important to note that 51.31% of the sample has 5 or more years of experience, indicating a highly experienced workforce, alongside a significant number of newer employees (48.69% with less than 5 years of experience) (Figure 17).

From an ERM perspective, this team combines experienced and new employees, providing stability and flexibility. Nevertheless, it also underscores the necessity of ongoing training and knowledge transfer to ensure that risk management practices are consistently understood and implemented across tenure groups.

Figure 18

Respondents' Level of Education

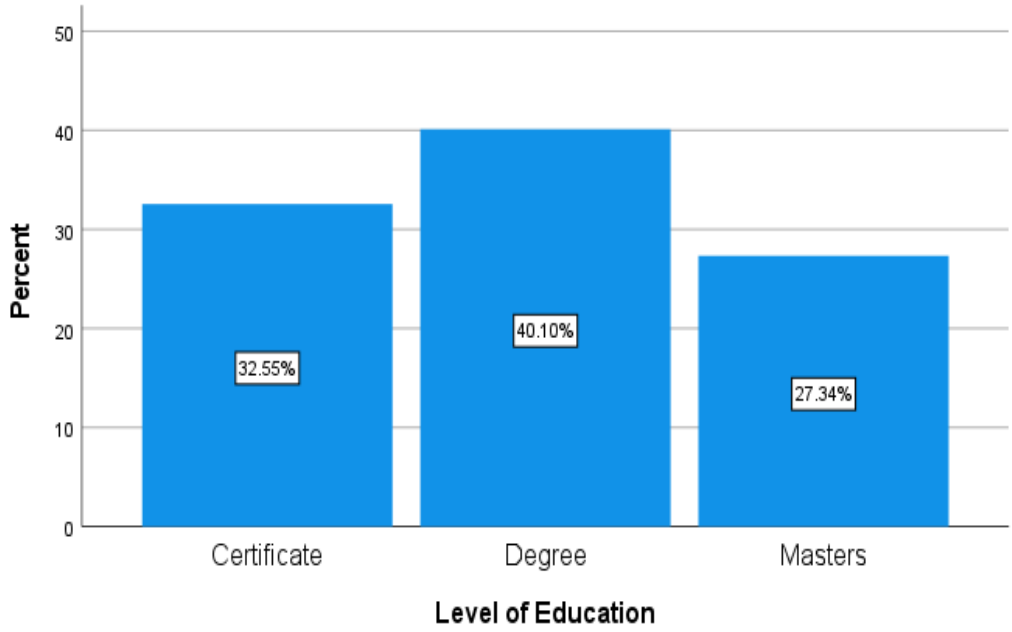


Figure 18 shows the educational levels of respondents employed in Namibian cSOEs. The bar chart indicates a very high level of educational qualification. Respondents with tertiary education make up 67.45% of the total sample. Those with a bachelor's degree are 40.10%, followed by postgraduate (Master's) degrees at 27.34%. Certificate-level qualifications account for 32.55%. This prevalence of tertiary education suggests recruitment into knowledge-intensive sectors or organisations that prioritise credentialed expertise.

The profile indicates that cSOEs are staffed by people with strong academic backgrounds, which is very important when deploying complex systems such as ERM. Regarding risk management, the presence of degree and postgraduate graduates provides a robust basis for developing analytical capability, informed leadership, and evidence-based government. Nevertheless, there is also a percentage of certificate holders, which points to the necessity of including training programmes to ensure that all employees, irrespective of their educational level, are prepared to operate

successfully within ERM processes.

Figure 19

Respondents Industry Type

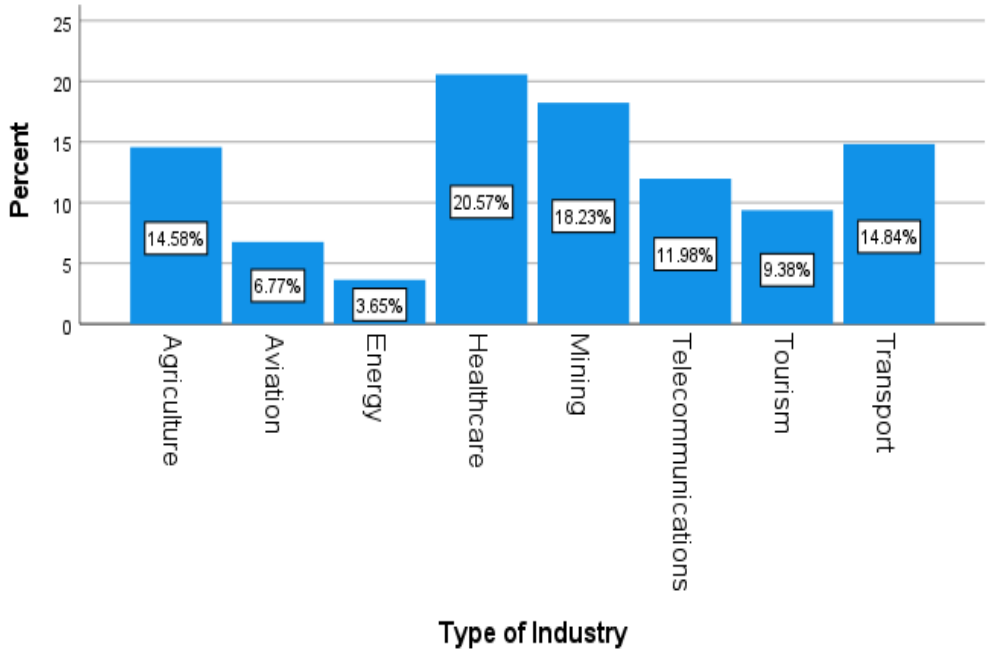


Figure 19 shows the distribution of respondents across the industry sectors of the Namibian cSOEs. The bar chart covers eight sectors, reflecting economic diversity. The health sector ranks first with 20.57%, the mining industry second with 18.23, the transport sector third with 14.84%, and the agricultural sector fourth with 14.58. The proportions for telecommunications, tourism, aviation, and energy are 11.98%, 9.38%, 6.77%, and 3.65%, respectively. The focus on the contemporary economic structure, with 53.38% of the sample comprising service- and resource-based sectors (healthcare, mining, agriculture), reflects a modern economy.

This industrial makeup indicates high rates of service-intensive and resource-based sectors, which are very important to Namibia's economy. The dominance of healthcare and mining implies that risk management practices and enterprise resilience are especially critical in labour-intensive sectors prone to external shocks, such as pandemics and commodity price fluctuations.

Figure 20

Respondents Employment Status

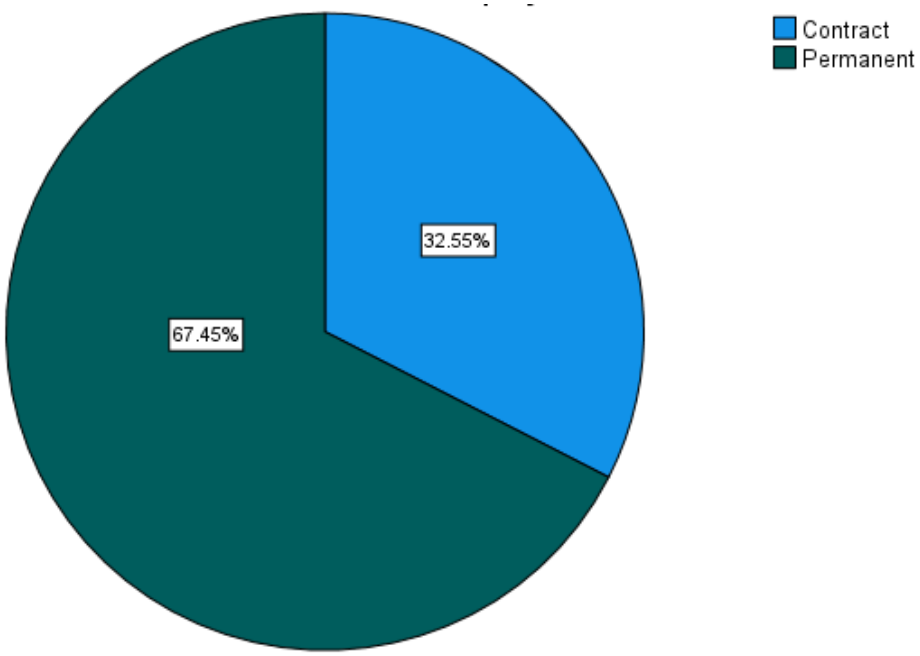


Figure 20 shows the distribution of employment types among respondents to Namibia's cSOEs. Permanent employment is the most prevalent, at 67.45%, while contract-based employment stands at 32.55%. This allocation indicates high levels of employment security among most people, with only a third involved in contingent arrangements, reflecting current trends towards flexibility in organisations. Nevertheless, the high proportion of contract workers also demonstrates the flexibility and mobility of staffing in cSOEs, which may be affected by budgetary limitations, project-oriented positions, or strategic restructuring during and after the COVID-19 pandemic.

Quantitative Results: Research Questions and Hypotheses Analysis

This section outlines the empirical analysis used to assess the research questions and test the hypotheses. The Pearson correlation coefficient (r) quantifies

the strength and direction of linear relationships between variables. To clarify these relationships, the coefficient of determination (R^2) indicates the proportion of variance in the dependent variable explained by the independent variable. Statistical significance is assessed using p-values, while statistical precision is indicated by 95% confidence intervals (CIs). The p-value is the probability of obtaining the observed sample results, or more extreme results, assuming the null hypothesis is true. A p-value below 0.001 indicates that the relationship is highly statistically significant, with less than a 0.1% chance that the result is due to random sampling variation. The 95% CI provides a plausible range that, with 95% confidence, contains the true population correlation coefficient.

To assess practical significance beyond formal statistical tests, effect sizes were categorised using established standards. According to Cohen's benchmarks, effect sizes of 0.10 to 0.29 indicate a small effect, 0.30 to 0.49 a medium effect, and 0.50 or above a large effect (Pallant, 2020). Standard decision rules were followed: when effect sizes exceeded the threshold, the null hypothesis was rejected in favour of the alternative. The questionnaire's reliability was evaluated to assess the internal consistency of items measuring different constructs. Cronbach's alpha (α) was used as the reliability coefficient, given that multiple Likert-scale items captured each construct. The analysis was performed separately for each construct, rather than using a single overall coefficient for the entire questionnaire. This approach allowed for an independent assessment of internal consistency within each construct.

The Reliability Analysis in IBM SPSS Statistics assessed the internal consistency of each construct's items, entered separately. Results indicated that the items for Risk Communication had a Cronbach's alpha of $\alpha = 0.757$, while Risk Documentation scored $\alpha = 0.765$. For Research Question 3, the Trained/Skilled

Personnel items reached α = 0.874, and Competent Leadership had α = 0.748. All four reliability coefficients were above the acceptable threshold of 0.70, confirming sufficient internal consistency for each construct. These results support the use of these questionnaire items for further analysis, as they exhibit adequate reliability.

Research Questions Analysis

Correlation Analysis

Pearson's correlation coefficient (r) was used to assess the strength and direction of linear relationships among the study variables. The coefficient ranges from -1 to +1, with values near +1 indicating a strong positive relationship, values near -1 indicating a strong negative relationship, and values near 0 indicating little or no linear relationship. The practical importance of these relationships was evaluated using Cohen's (1988) guidelines, in which r values of approximately 0.10, 0.30, and 0.50 correspond to small, medium, and large effect sizes, respectively.

The statistical significance of the correlation was assessed using the p-value at the $\alpha = 0.05$ significance level. Correlations with p-values ≤ 0.05 were deemed statistically significant, providing sufficient evidence to reject the null hypothesis. Conversely, correlations with p-values > 0.05 were considered not statistically significant.

The results showed a strong positive correlation between competent leadership and ERM implementation ($r = 0.75$, $p < 0.001$), followed by a strong positive correlation between skilled personnel and ERM implementation ($r = 0.68$, $p < 0.001$). Both correlations are considered large effects according to Cohen's (1988) standards, suggesting that higher leadership competence and personnel skills are associated with greater ERM adoption. Conversely, negative relationships, such as that between supply chain delays and organisational performance, indicate that greater delays are

associated with lower organisational performance. Positive relationships were observed between risk communication ($r = 0.68$, $p < 0.001$) and RM effectiveness, and between documentation ($r = 0.52$, $p < 0.001$) and RM effectiveness. Both correlations indicate large effect sizes, showing that improvements in risk communication and documentation are associated with greater RM effectiveness. In contrast, variables such as cash flow shortages ($p = 0.16$) were not statistically significant, providing little evidence to reject the null hypothesis.

RQ1: What was the impact of enterprise challenges on the performance of cSOEs in Namibia during the COVID-19 pandemic?

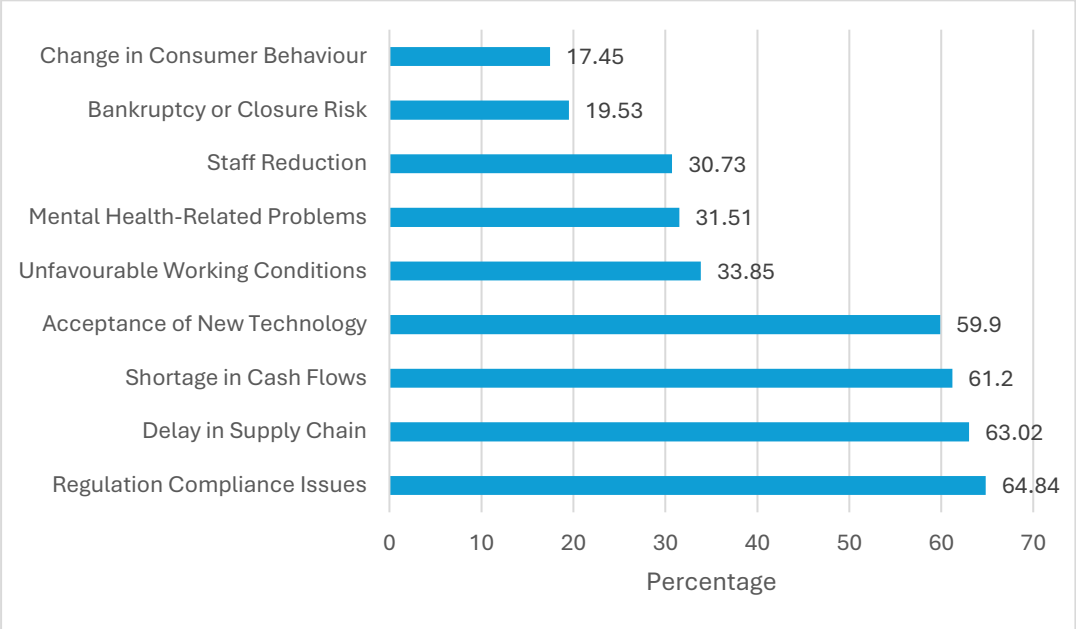
Enterprise challenges faced by cSOEs in Namibia during the COVID-19 pandemic

This section focuses on Research Objective 1 (RO1), which assesses how enterprise challenges affected the performance of cSOEs in Namibia during the COVID-19 pandemic. It presents empirical evidence on the specific challenges faced by cSOEs across industries and examines their impact on organisational performance. The section concludes by testing Hypothesis 1 (H1), which posits that enterprise challenges had a significant effect on cSOE performance during the pandemic.

Figure 21 highlights nine major enterprise challenges identified by respondents during the COVID-19 pandemic. The most common issue was regulatory compliance, cited at 64.84%, encompassing the burden of adhering to health guidelines such as social distancing, mask-wearing, and workplace safety. Next were supply chain delays at 63.02% and cash flow shortages at 61.20%, both of which hampered operational continuity and financial stability.

Figure 21

Enterprise Challenges Faced by cSOEs in Namibia during the COVID-19 Pandemic



Technological adaptation remained a notable challenge, with 59.90% of respondents reporting difficulties in adopting new digital tools and systems essential for remote work and digital service delivery. Human resource issues were also prominent, with respondents citing unfavourable working conditions (33.85%) and mental health concerns (31.51%) experienced during the pandemic. Cost-management strategies led to staff reductions, with 30.73% reporting this. Fewer respondents considered the risk of bankruptcy or business closure (19.53%) and shifts in consumer behaviour (17.45%) as major challenges, indicating that operational, financial, and regulatory issues were more dominant among the participating cSOEs.

Figure 21 also shows that the main challenges faced by cSOEs during the COVID-19 pandemic were regulatory compliance, supply chain disruptions, cash flow shortages, and technological adaptation. These descriptive results laid the groundwork for the subsequent analysis, which examined how these challenges

affected the performance of cSOEs in Namibia.

Correlation analysis between enterprise challenges and organisations' performance

This subsection focused on Research Objective 1, which sought to assess how enterprise challenges affected the performance of cSOEs in Namibia during the COVID-19 pandemic. Initially, Pearson's correlation analysis was used to evaluate the strength, direction, and significance of relationships between nine specific challenges and organisational performance Table 5). Subsequently, multiple linear regression analysis was conducted to examine the combined impact of these challenges and to identify the most influential predictors.

Table 5

Pearson's Correlation Analysis on Enterprise Challenges and Performance

Challenge	Pearson_r	P_Value	Significance	Effect Size
Delay in Supply Chain	-0.40065	**3.07E-16**	***	Medium
Acceptance of New Technology	-0.25893	**2.67E-07**	***	Small
Unfavourable Working Condition	-0.16798	**0.000952**	***	Small
Bankruptcy or Closure	-0.09217	0.071228	ns	Negligible
Mental Health Problems	-0.08757	0.086583	ns	Negligible
Shortage in Cash Flows	-0.0713	0.163168	ns	Negligible
Change in Consumer Behaviour	0.051456	0.314554	ns	Negligible
Staff Reduction	0.110248	**0.030776**	*	Small
Regulation Compliances	0.153575	**0.002548**	**	Small

The Pearson correlation analysis revealed that several enterprise challenges were significantly related to organisational performance (see Table 5). Supply chain delays exhibited the strongest negative correlation ($r = –0.401$, $p < 0.001$), indicating a medium effect size and suggesting that greater supply chain disruptions were linked to reduced organisational performance during the COVID-19 pandemic. Likewise, difficulties in adopting new technology negatively correlated with performance ($r = –$

0.259, $p < 0.001$), meaning that organisations struggling with digital transformation tended to perform worse. Additionally, unfavourable working conditions showed a statistically significant negative relationship ($r = –0.168$, $p < 0.001$), but with a smaller effect size, reflecting a weaker connection. In contrast, factors such as bankruptcy or closure risk, mental health issues, cash flow shortages, and shifts in consumer behaviour did not show statistically significant associations with organisational performance ($p > 0.05$). These results imply that, within the study sample, there is insufficient statistical evidence to confirm that these challenges directly affect organisational success.

Surprisingly, staff reductions ($r = 0.110$, $p = 0.031$) and regulatory compliance issues ($r = 0.154$, $p = 0.003$) showed weak but statistically significant positive associations with organisational performance. Although these correlations were small, they suggest that organisations with greater workforce restructuring and better regulatory compliance tended to report marginally higher performance during the study period. This may reflect organisational efforts to improve resilience and ensure business continuity amid COVID-19; however, these findings should be interpreted with caution, as correlation does not imply causation.

Overall, the results indicate that supply chain disruptions, difficulties adapting to technology, and poor working conditions were the primary enterprise challenges associated with decreased organisational performance. In contrast, the positive links between regulatory compliance and staff restructuring suggest that organisational actions during the pandemic may have contributed to improved performance. These connections are examined in more detail in the regression analysis in the next section.

RQ2: To what extent does the effectiveness of the RM process within cSOEs depend on the quality of risk communication and documentation?

This section focused on Research Objective 2, examining how risk communication and documentation quality affect the effectiveness of the RM process in Namibia's cSOEs. Effective risk management depends not only on identifying and mitigating risks but also on maintaining high standards of communication and documentation, which support organisational learning, transparency, accountability, and better decision-making.

To achieve this objective, correlation and regression analyses were conducted to examine the relationships between risk communication, documentation quality, and RM effectiveness. These analyses tested Hypothesis 2 (H2), which proposed that the success of the RM process in Namibia's cSOEs was strongly influenced by the quality of risk communication and documentation. The results provided empirical evidence to assess whether the alternative hypothesis was supported.

Correlation analysis between risk communication and documentation quality and the effectiveness of the risk management process

Pearson's correlation analysis was performed to evaluate the strength, direction, and significance of the relationships among RM effectiveness, risk communication, and documentation quality.

The results in Table 6 show a strong positive association between risk communication and the effectiveness of the RM process ($r = 0.68$, $p < 0.001$) (Table 8). According to Cohen's (1988) guidelines, this is considered a large effect size. The R^2 value of 0.46 indicates that about 46% of the variance in RM effectiveness can be explained by risk communication in the simple regression analysis.

Table 6

Pearson's Correlation on Risk Communication and Documentation

Relationship	r	p-value	r²	95% CI	Effect
RM Effectiveness ↔ Risk Communication	0.68	<0.001***	0.46	[0.62], [0.74]	LARGE
RM Effectiveness ↔ Risk Documentation	0.52	<0.001***	0.27	[0.44], [0.59]	LARGE

Additionally, the narrow 95% confidence interval (0.62–0.74) indicates a precise estimate of the population correlation. Overall, these findings imply that more effective risk communication is associated with improved RM effectiveness.

Similarly, a positive relationship was observed between risk documentation quality and RM effectiveness ($r = 0.52$, $p < 0.001$). This relationship also indicated a large effect size and explained approximately 27% of the variance in RM effectiveness ($R^2 = 0.27$) (Table 6). The corresponding 95% confidence interval (0.44–0.59) indicated a reasonably precise estimate of the population correlation coefficient. The findings suggest that higher-quality risk documentation was associated with improved RM effectiveness, highlighting the importance of systematic documentation practices in supporting consistent risk assessment, informed decision-making, organisational accountability, and effective risk management.

RQ3: What is the impact of skilled personnel and a competent leadership team on the successful implementation of ERM in Namibia's cSOEs?

This section focuses on Research Objective 3 (RO3), which examined how skilled personnel and strong leadership influence the successful deployment of ERM frameworks in Namibia's cSOEs. Effective ERM implementation requires not only adequate organisational structures and processes but also skilled staff and capable leadership to ensure effective execution and sustainability. Pearson's correlation

analysis was conducted to assess the strength, direction, and significance of the relationships among ERM implementation, skilled personnel, and competent leadership. This analysis tested Hypothesis 3 (H3), which posited that the effective adoption of ERM frameworks in Namibia's cSOEs is influenced by skilled personnel and capable leadership.

The Pearson correlation analysis in Table 7 shows a strong positive association between skilled personnel and ERM implementation ($r = 0.68$, $p < 0.001$), indicating a large effect size by Cohen's (1988) standards. The coefficient of determination ($r^2 = 0.46$) indicates that about 46% of the variance is explained by the relationship between skilled personnel and ERM implementation (Table 7). The 95% confidence interval {0.62, 0.74} further confirms the accuracy of this estimate. Overall, these results imply that organisations with more skilled and competent staff tend to have higher levels of ERM implementation.

Table 7

Pearson's Correlation on Skilled Personnel and Competent Leadership

Relationship	r	p-value	r^2	95% CI	Effect Size
Skilled Personnel ↔ ERM Implementation	0.68	<0.001*	0.46	[0.62], [0.74]	**LARGE**
Competent Leadership ↔ ERM Implementation	0.75	<0.001*	0.56	[0.70], [0.80]	**LARGE**

A stronger positive correlation was found between competent leadership and ERM implementation ($r = 0.75$, $p < 0.001$), indicating a large effect size. The coefficient of determination ($r^2 = 0.56$) indicates that about 56% of the variance is explained by these factors (Table 7). The narrow 95% confidence interval {0.70, 0.80} provides a precise estimate of the population correlation. This suggests that higher leadership

competence is associated with more effective implementation of the ERM framework.

Overall, the correlation analysis revealed that skilled personnel and capable leadership are both strongly and positively linked to ERM implementation in Namibia's cSOEs. While both factors had substantial effect sizes, competent leadership showed a stronger connection, emphasising its greater impact on the successful adoption of ERM frameworks.

Regression Analysis

Regression analysis was conducted to assess how well the independent variables explained variation in the mediating and dependent variables, thereby testing the study's three hypotheses. For Research Question 1, multiple linear regression was used to assess the combined influence of nine organisational resilience enhancement dimensions on performance improvement. The model explained 56% of the variance in performance ($R^2 = 0.56$), indicating that these predictors collectively accounted for over half of the observed variation, with the remaining 44% possibly attributable to factors outside the model.

For Research Questions 2 and 3, simple linear regression was used to assess the individual impact of each predictor. For instance, risk communication accounted for 46% of the variance in RM effectiveness ($R^2 = 0.46$), indicating that nearly half of the variation in RM effectiveness was associated with differences in risk communication. The significance of the regression models and coefficients was evaluated using p-values, t-statistics, and 95% confidence intervals. Both models yielded p-values below 0.001, indicating significant relationships between predictors and outcomes. The 95% confidence intervals were narrow and did not include zero, confirming precise estimates and that the coefficients differed significantly from zero.

Standardised regression coefficients (β) were used to assess the relative

influence of predictors for hypotheses 2 and 3. Risk communication had a coefficient of β = 0.58, indicating that a one-standard-deviation increase in risk communication was associated with a 0.58-standard-deviation increase in RM effectiveness. Documentation had a smaller coefficient (β = 0.18), indicating a weaker yet significant association with RM effectiveness. The t-statistic for risk communication (t = 12.80) confirmed that this coefficient was significantly different from zero, establishing risk communication as the more robust predictor of RM effectiveness.

Enterprise Challenges with Performance

This subsection presents the results of the inferential statistical analysis examining the relationship between enterprise challenges and organisational performance among cSOEs in Namibia during the COVID-19 pandemic. Building on the descriptive and correlation analyses in Section 4.2.1, multiple linear regression was used to assess the combined effect of the identified challenges on performance. These findings were used to evaluate the study hypothesis and determine whether the empirical data supported the alternative hypothesis, which was stated as follows:

H1: *There is a statistically significant negative association between enterprise-related challenges and the performance of commercial state-owned enterprises in Namibia during the COVID-19 pandemic.*

Multiple linear regression was chosen to analyse how various enterprise challenge variables jointly affect organisational performance. To evaluate the alternative hypothesis that enterprise challenges had a significant impact on the organisational performance of cSOEs in Namibia during the COVID-19 pandemic, a multiple linear regression model was developed. The dependent variable was organisational performance, and the independent predictors were nine enterprise challenge variables. The regression model was specified as follows:

Composite Performance = $\beta_0 + \beta_1 (X_1) + \beta_2 (X_2) + \beta_3 (X_3) + \beta_4 (X_4) + \beta_5 (X_5) + \beta_6 (X_6) + \beta_7 (X_7) + \beta_8 (X_8) + \beta_9 (X_9) + \varepsilon$

Where:

- (X_1) = Delay in Supply Chain
- (X_2) = Unfavourable Working Conditions
- (X_3) = Shortage in Cash Flows
- (X_4) = Change in Consumer Behaviour
- (X_5) = Regulatory Compliance Challenges
- (X_6) = Bankruptcy or Closure Risk
- (X_7) = Mental Health Problems
- (X_8) = Acceptance of New Technology
- (X_9) = Staff Reduction

In the model, β_0 is the intercept, β_1 to β_9 are the regression coefficients for the corresponding predictors, and ε is the random error term.

Table 8

Enterprise Challenges Multiple Regression Model Fit Summary

Statistic	Value
R-squared	0.2913 (29.13% variance explained)
Adjusted R-squared	0.2743
F-statistic	17.08
Prob (F-statistic)	1.20e-23*** (highly significant)
Sample Size (N)	384
Degrees of Freedom	9 predictors

The multiple linear regression model utilised nine predictor variables representing the enterprise challenges identified in the study. As shown in Table 8, the

model explains 29.13% of the variance in organisational performance ($R^2 = 0.2913$). This indicates that these nine challenge variables collectively account for about 29% of the variation in the performance of cSOEs during the COVID-19 pandemic, with the remaining variation likely influenced by factors outside the model. The adjusted coefficient of determination (Adjusted $R^2 = 0.2743$) indicates that the model explains about 27.43% of the variance in organisational performance, after accounting for the number of predictors. The small gap between R^2 and adjusted R^2 suggests that adding the nine predictors did not substantially inflate the model's explanatory power. The overall regression model was statistically significant ($F = 17.08$, $p < 0.001$). This suggests that the enterprise challenge variables, taken together, strongly predicted organisational performance. Consequently, the results support the alternative hypothesis (H_1) that enterprise challenges had a significant impact on the performance of cSOEs in Namibia during the COVID-19 pandemic.

The regression coefficients in Table 9 indicate that several enterprise challenges significantly affected organisational performance during the COVID-19 pandemic. Supply chain delays were the most significant negative predictor ($B = -0.495$, $p < 0.001$), indicating that greater supply chain disruptions were associated with lower performance. Additionally, poor working conditions had a significant negative effect on performance ($B = -0.387$, $p < 0.001$), indicating that difficulties with workplace conditions were linked to reduced organisational success.

Table 9

Multiple Regression Analysis on Enterprise Challenges and Performance

Predictor	Coefficient B	Std_Error	t_statistic	P_Value	Significance
Delay in Supply Chain	-0.49544	0.095086	-5.21051	**3.12E-07**	***
Unfavourable Working Condition	-0.38679	0.094662	-4.08599	**5.37E-05**	***
Shortage in Cash Flows	-0.08816	0.084794	-1.03974	0.299132	ns
Change in Consumer Behaviour	0.147457	0.107045	1.377524	0.169174	ns
Regulation Compliances	0.435385	0.091798	4.742859	**3.00E-06**	***
Bankruptcy or Closure	0.18532	0.11416	1.623342	0.105359	ns
Mental Health Problems	-0.10352	0.084522	-1.22476	0.221435	ns
Acceptance of New Technology	-0.33923	0.095395	-3.55607	**0.000425**	***
Staff Reduction	0.55032	0.0944	5.829646	**1.20E-08**	***

The estimated multiple linear regression model was specified as follows:

Composite Performance = beta_0 + -0.49544(Delay in Supply Chain) + -0.38679(Unfavourable Working Conditions)
+ - 0.08816(Shortage in Cash Flows) + 0.14746(Change in Consumer Behaviour)
+ 0.43539(Regulatory Compliance) + 0.18532(Bankruptcy or Closure Risk)
+ - 0.10352(Mental Health Problems) + - 0.33923(Acceptance of New Technology)
+ 0.55032(Staff Reduction) + varepsilon

Acceptance of new technology was strongly negatively associated with performance (B = -0.339, $p < 0.001$). This suggests that challenges in adopting technology and digital transformation contributed to lower performance among cSOEs during the pandemic. In contrast, staff reduction showed a significant positive association with organisational performance (B = 0.550, $p < 0.001$). This does not necessarily mean that cutting staff directly enhanced performance; instead, it suggests that organisations employing strategic workforce adjustments and cost-containment strategies were better prepared to sustain performance during the crisis. Likewise,

regulatory compliance had a significant positive relationship with performance (B = 0.435, $p < 0.001$), indicating that organisations with stronger adherence to regulations and governance were likely more resilient during the pandemic.

The regression coefficients for factors such as cash flow shortages, shifts in consumer behaviour, bankruptcy or closure risk, and mental health issues were not significant predictors of organisational performance. This suggests that, in the presence of other challenges in the regression model, these factors did not provide sufficient statistical evidence to independently affect performance outcomes. Their effects might have been indirect, operating through other organisational mechanisms, or moderated by the company's responses and resilience strategies.

Overall, the regression results showed that enterprise challenges collectively explained variations in cSOEs' performance during the COVID-19 pandemic. The statistically significant model supported the alternative hypothesis (H1), confirming that enterprise challenges had a significant impact on the organisational performance of cSOEs in Namibia during the pandemic. Although unstandardised coefficients indicate the change in performance for a one-unit increase in each predictor, standardised coefficients (β) were analysed to compare the predictors' relative importance.

Quality Risk Communication and Documentation with effective RM

The second hypothesis, ***H2:*** *There is a statistically significant positive association between the quality of risk communication and documentation and the effectiveness of the RM process.*

To further explore these relationships, a multiple linear regression analysis was conducted to assess how risk communication and risk documentation jointly influence the effectiveness of the RM process. RM effectiveness served as the mediator, with

risk communication and risk documentation included simultaneously as predictors. The regression model was defined as follows:

RM Effectiveness = $\beta_0 + \beta_1 (X_1) + \beta 2 (X_2) + \varepsilon$

Where:

- (X_1) = Risk Communication
- (X_2) = Risk Documentation

These results were supported by the overall model fit statistics (Table 10). The regression explained 50% of the variance in RM effectiveness ($R^2 = 0.50$), indicating that risk communication and documentation quality together accounted for half of the observed variation.

Table 10

Risk Communication and Documentation Regression Model Fit Summary

Statistic	Value
R-squared	0.50 (50% of variance in RM effectiveness explained by risk communication and documentation)
Adjusted R-squared	0.49
F-statistic	189.5, $p < 0.001$*
Prob (F-statistic)	**1.20e-23*** ** (highly significant)
Sample Size (N)	384
Degrees of Freedom	2 predictors

The adjusted R^2 (0.49) was close to the R^2, indicating that the model retained strong explanatory power after accounting for the two predictors (Table 10). Additionally, the regression was statistically significant ($F = 189.50$, $p < 0.001$), indicating that the predictors jointly explained RM effectiveness. These findings further support the alternative hypothesis (H1), suggesting that in Namibia's cSOEs, the effectiveness of the RM process is significantly affected by the quality of risk communication and documentation.

The results of the multiple linear regression in Table 11 indicate that both predictors significantly influence the success of the RM process. Of the two, risk communication proved the more influential predictor, with a standardised regression coefficient $\beta = 0.58$ ($t = 12.80$, $p < 0.001$) and a 95% confidence interval of {0.50, 0.66). This suggests that, when controlling for risk documentation, higher levels of risk communication are associated with improved RM effectiveness. Additionally, the magnitude of the standardised coefficient indicates that risk communication has the greatest relative impact on the model.

Table 11

Risk Communication and Documentation Multiple Regression Analysis

Predictor	Standardized β	t-statistic	p-value	95% CI
Risk Communication	~0.58	~12.8	<0.001***	[0.50], [0.66]
Risk Documentation	~0.18	~4.2	<0.001***	[0.09], [0.27]

The model can now be written as follows:

RM Effectiveness = beta_0 + 0.58 (Risk Communication) + 0.18 (Risk Documentation) + e

Risk documentation also significantly enhances RM effectiveness ($\beta = 0.18$, $t = 4.20$, $p < 0.001$), with a 95% confidence interval of {0.09, 0.27}. Although its impact was smaller than that of risk communication, the positive coefficient indicates that stronger documentation practices are associated with higher RM effectiveness, even after accounting for the effect of risk communication. These results emphasise the supportive role of systematic risk documentation in effective risk management.

The multiple regression analysis showed that risk communication and risk documentation, taken together, significantly predicted the effectiveness of the RM

process in Namibia's cSOEs. The higher standardised coefficient for risk communication indicates a greater influence, while risk documentation also made a meaningful contribution to the model. These results support Hypothesis 2 (H2), which stated that the quality of risk communication and documentation significantly affects the effectiveness of the RM process in Namibia's cSOEs.

Skilled Personnel and Competent Leadership with ERM implementation

This subsection evaluated the study's third alternative hypothesis, focusing on how skilled personnel and effective leadership influence the successful implementation of ERM frameworks in Namibian cSOEs.

H3: *There is a statistically significant positive association between the presence of skilled personnel and competent leadership within the organisation and the implementation of ERM.*

This subsection examined the third alternative hypothesis (H3), which proposed that skilled personnel and strong leadership significantly influence the implementation of ERM frameworks in Namibian cSOEs. To investigate this, a multiple linear regression analysis was conducted, with ERM implementation as the dependent variable and skilled personnel and effective leadership as the independent variables, entered simultaneously.

The regression model demonstrated strong explanatory power, with skilled personnel and effective leadership both playing key roles in predicting ERM implementation. The overall multiple regression model fit the data well (see Table 12). The R^2 of 0.67 indicated that these two factors together explained 67% of the variation in ERM implementation. The adjusted R^2 of 0.65 confirmed that the model retained substantial explanatory power, indicating that the results are stable and not significantly affected by the model’s complexity.

The model was specified as follows:

ERM Implementation = $\beta_0 + \beta_1 (X_1) + \beta 2 (X_2) + \varepsilon$

Where:

- (X_1) = Skilled Personnel
- (X_2) = Competent Leadership

Table 12

Skilled Personnel and Competent Leadership Regression Model Fit Summary

Statistic	Value
R-squared	0.67 (67% of variance in ERM implementation explained)
Adjusted R-squared	0.65
F (2, 337)	314.28, p < 0.001*
RMSE	0.51
Sample Size (N)	384
Degrees of Freedom	2 predictors

Additionally, the overall regression model was statistically significant (F = 314.28, p < 0.001), indicating that skilled personnel and effective leadership together significantly contributed to predicting ERM implementation. The Root Mean Square Error (RMSE = 0.51) represents the model's average prediction error and indicates acceptable predictive accuracy. The regression results show that both predictors are significant (Table 12).

ERM implementation when predictors are constant. Skilled personnel emerged as a significant positive predictor, with an unstandardised coefficient B of 0.28, a standard error of 0.047, a standardised coefficient β of 0.29, a t-value of 5.98, and a p-value less than .001 (see Table 13). The 95% confidence interval [0.19, 0.38] excludes zero, confirming the estimate's significance and reliability. The VIF was 1.42, indicating that multicollinearity was not problematic. Overall, the results indicate that

higher levels of skilled personnel are associated with greater implementation of ERM frameworks, emphasising the importance of technical expertise in effective risk management.

Table 13

Regression Results Summary

Predictor	Unstandardized B	Standardized β	SE	t-statistic	p-value	95% CI	VIF
Constant	0.42	—	0.18	2.33	0.020*	[0.06], [0.77]	—
Skilled Personnel	0.28	0.29	0.05	5.98	<0.001***	[0.19], [0.38]	1.42
Competent Leadership	0.42	0.45	0.06	7.21	<0.001***	[0.30], [0.54]	1.42

The model can now be written as:

ERM Implementation = 0.42 + 0.290.29Skilled Personnel+ 0.45Competent Leadership + ε

The regression intercept was 0.42 (p = 0.020), indicating that the estimated level of Effective leadership was the strongest predictor of ERM implementation. The unstandardised coefficient was B = 0.42, with a standard error of 0.058, a standardised coefficient β = 0.45, a t-statistic of 7.21, and a p-value less than 0.001 (Table 13). The 95% confidence interval [0.30, 0.54] did not include zero, confirming a statistically significant and accurately estimated effect. As with skilled personnel, the VIF of 1.42 indicated no problematic multicollinearity. The higher standardised coefficient suggests that competent leadership contributed more uniquely to ERM implementation after accounting for skilled personnel.

Overall, the multiple regression analysis showed that skilled personnel and competent leadership jointly and significantly predicted the implementation of ERM frameworks in cSOEs in Namibia. Although both variables made significant positive contributions, competent leadership had the stronger relative influence. These findings

provided empirical support for Hypothesis 3 (H3), which proposed that the successful implementation of ERM frameworks in cSOEs in Namibia is significantly influenced by skilled personnel and competent leadership.

Qualitative Results: Research Question Four Analysis

RQ4: What are the key challenges faced by cSOEs in Namibia in implementing ERM frameworks?

This section presents qualitative findings from semi-structured interviews and open-ended questionnaire responses. The analysis aimed to deepen understanding of how ERM frameworks are implemented in cSOEs in Namibia, the challenges faced, strategies to overcome them, and the approaches organisations use to ensure sustainability. In addition to pinpointing implementation challenges and possible solutions, a gap analysis was conducted to compare existing ERM practices with the targeted implementation outcomes. The main goal was to identify key areas for improvement and prioritise actions to enhance ERM deployment and boost organisational sustainability in cSOEs.

Thematic Analysis

Thematic analysis was used to analyse the qualitative data, identifying common patterns, concepts, and meanings in participants' responses. This approach enabled systematic coding and organisation of interview and open-ended questionnaire data into relevant categories and themes aligned with the research questions. The resulting themes provide meaningful insights into participants' experiences, perceptions, and suggestions regarding ERM implementation in Namibia's cSOEs.

Question 1: What are the challenges of ERM implementation?

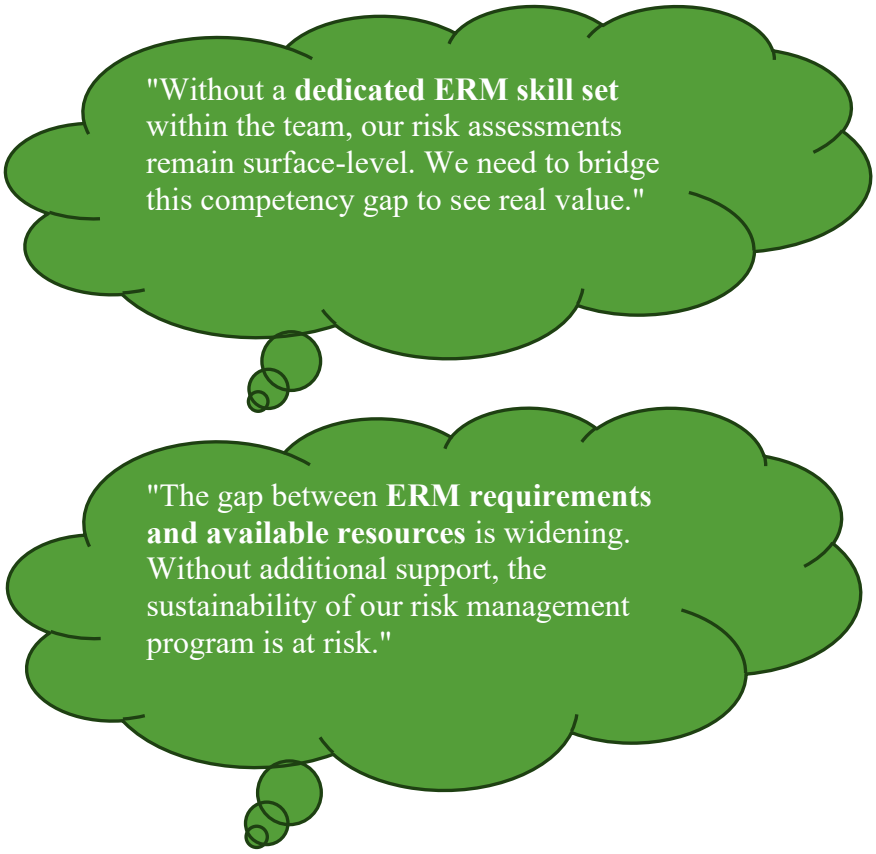
Thematic analysis was used to analyse qualitative data collected through semi-structured interviews and open-ended questionnaires. Responses were initially coded

and grouped into three categories based on conceptual similarity, as outlined in Table 14. These categories were then merged into main themes that emphasise the key challenges in ERM implementation within Namibian cSOEs. To illustrate and support these themes, selected verbatim quotes from participants are presented in Figure 22.

Figure 22 presents verbatim quotes from participants illustrating some of the themes identified through thematic analysis. These quotes directly demonstrate participants' experiences and perceptions of ERM status and the challenges of implementing ERM within cSOEs in Namibia. Notably, the excerpts emphasise issues such as limited ERM skills, insufficient organisational resources, and the widening gap between ERM implementation demands and available capacity.

Figure 22

Interview Verbatim on ERM Implementation



These participant stories complement the quantitative data by offering contextual insights into the practical barriers that impede effective ERM deployment and the long-term sustainability of risk management efforts.

The thematic analysis for question 1 (Q1) identified three primary clustering categories, from which key themes and sub-themes were extracted as indicated in Table 14.

Table 14

Challenges of ERM Implementation

Cluster 1: Knowledge on ERM	**Cluster 2: Resource and Training**	**Cluster 3: Use of Technology**
• Insufficient knowledge • Lack of skills in ERM • Lack of understanding of what ERM is	• Lack of Resources • Lack of training funds • Staff training	• Lack of technological advancement • Obsolete IT infrastructure

Question 2: What can be done to improve ERM implementation?

The thematic analysis conducted to address question 2 explored participants' perspectives on potential solutions to improve ERM implementation in cSOEs in Namibia. The qualitative data from the interviews and open-ended questionnaire responses were initially coded and then organised into four main coding categories based on conceptual similarity, as presented in Table 14. From these coding categories, key themes were identified to represent the principal strategies proposed by participants to strengthen ERM implementation.

The thematic analysis of question 2 identified four primary clustering categories, from which key themes and sub-themes were extracted, as shown in Table 15.

Table 15

ERM Implementation Solutions

Cluster 1: Risk training	Cluster 2: Leadership characteristics	Cluster 3: Stakeholder engagement	Cluster 4: Improvement plan
• Allocate funds for RM • Need for staff training • Staff awareness on RM • Staff trained on RM	• Competent leadership team • Employ change managers • Good Leadership • Need for visionary leaders • Transformational leadership • Good governance	• Conduct customer satisfaction survey • Establish stakeholders' information session • Involve all stakeholders in planning	• Develop contingency plans • Improve service delivery • Embrace new technologies and business models • Invest in Research and development • Upskilling and reskilling

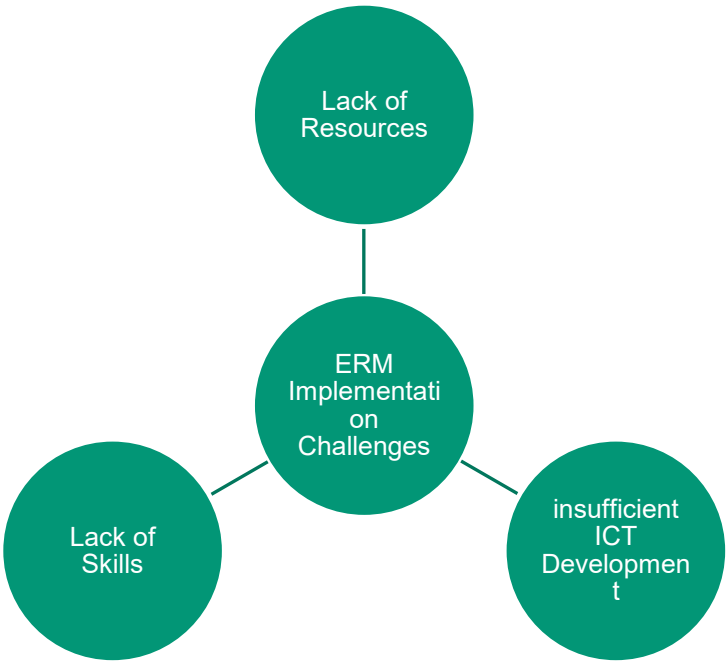
This thematic analysis examined the challenges encountered when implementing ERM in cSOEs. As shown in Figure 23, three main themes emerged from interviews and open-ended questionnaires: limited organisational resources, insufficient ERM skills and competencies, and ongoing technological development. Across all three industries, participants consistently identified these issues as key barriers to effective ERM implementation. Additionally, the results revealed that none of the organisations had fully adopted ERM frameworks at the time of the study, underscoring significant gaps in ERM implementation.

Participants across all three industries consistently stressed that effective ERM implementation depends heavily on people-oriented leadership. They emphasised that such leaders should promote teamwork, motivate staff towards organisational goals, and possess strong change-management skills. Additionally, participants highlighted the importance of leaders who demonstrate empathy, integrity, and the

ability to enhance organisational capacity. These leaders should also inspire employees to perform at a high level and actively support ERM initiatives. Overall, these insights underscore the vital role of leadership in shaping a culture that enables the successful adoption and ongoing sustainability of ERM frameworks.

Figure 23

ERM Implementations Challenges



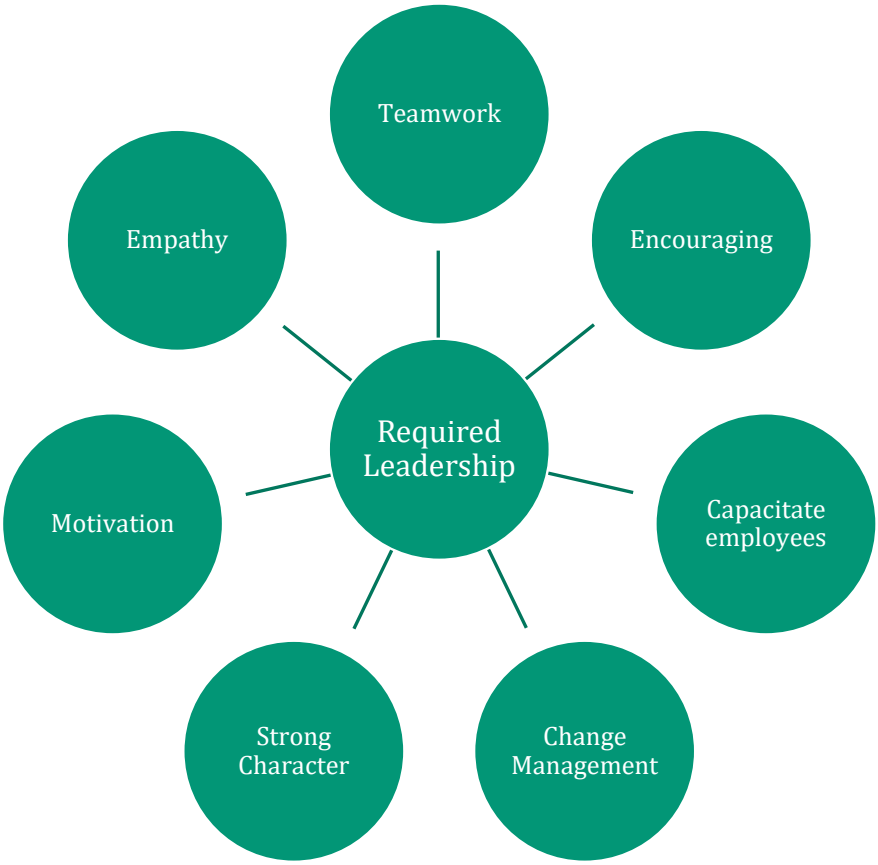
Question 3: What kind of leadership would you want to see in your organisation?

Participants across all three organisations consistently emphasised the importance of people-oriented leadership for successful ERM implementation. They stressed that effective leaders should promote teamwork, motivate staff towards organisational goals, and possess management skills for change (Figure 24). They also emphasised the need for leaders who demonstrate empathy, integrity, and the ability to build organisational capacity, while inspiring high performance and actively

supporting ERM initiatives. These insights reveal the vital role of leadership in shaping an organisational culture that supports the successful adoption and sustainability of ERM frameworks.

Figure 24

Required Leadership Characteristics for ERM Implementations



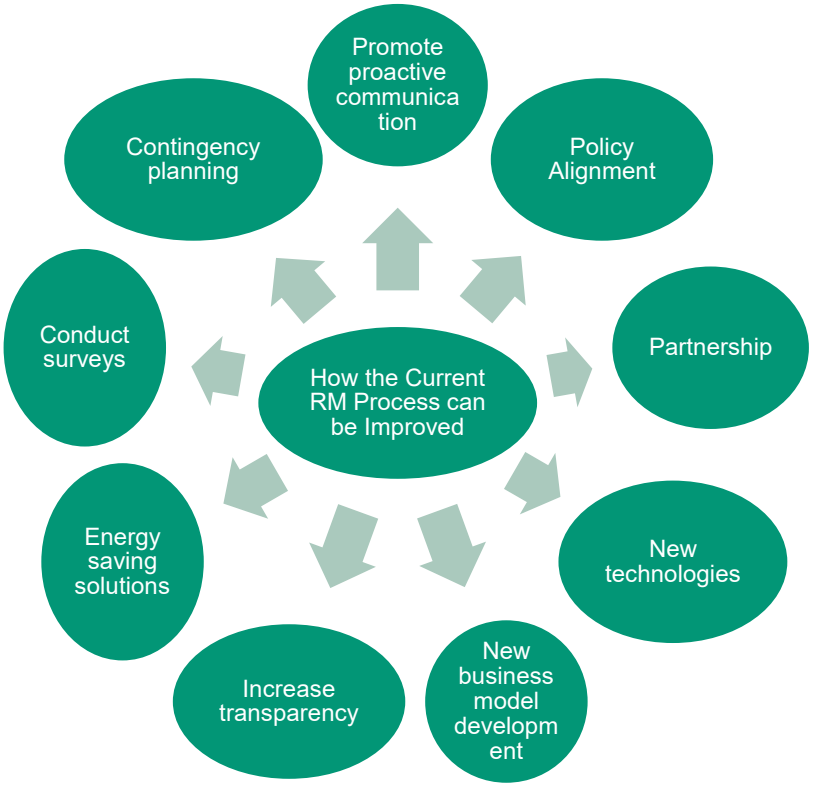
Question 4: What are the potential areas for improvement in the existing risk management process?

The thematic analysis highlighted several key practices that participants deemed vital to enhancing the existing risk management process, as shown in Figure 25. A common theme was the importance of encouraging proactive risk communication and increasing organisational transparency. Participants noted that open, timely, and transparent communication channels support the efficient sharing of risk information, which in turn boosts accountability, trust, and informed decision-

making. They also noted that greater transparency helps organisations better identify and respond to emerging risks, promoting a culture of ongoing improvement, learning, and stakeholder confidence.

Figure 25

Approaches to Improving the Current RM Process



Participants emphasised the need to align organisational policies with strategic goals and to promote innovative business models to strengthen ERM and resilience, as shown in Figure 25. They recommended conducting customer satisfaction surveys regularly to improve transparency, stakeholder engagement, and strategic partnerships. For long-term sustainability, participants also endorsed adopting modern technologies and eco-friendly practices, such as solar energy, to increase efficiency and achieve sustainability goals.

The thematic analysis identified three main themes that addressed the qualitative research questions. A key theme was people's development, with a focus on leadership qualities essential to successful ERM implementation. As shown in Figure 24, participants emphasised that effective ERM requires leaders who are people-oriented, capable of leading organisational change, and committed to developing employee skills.

A second key theme focused on strategic planning and setting sustainability goals, with participants emphasising the need for organisations to develop comprehensive contingency plans, align ERM with strategic objectives, and involve stakeholders in decision-making. Overall, qualitative insights from interviews and open-ended questionnaire responses informed the gap analysis, pinpointing priority areas to improve ERM implementation and shaping future research and practice in Namibia.

Gap Analysis

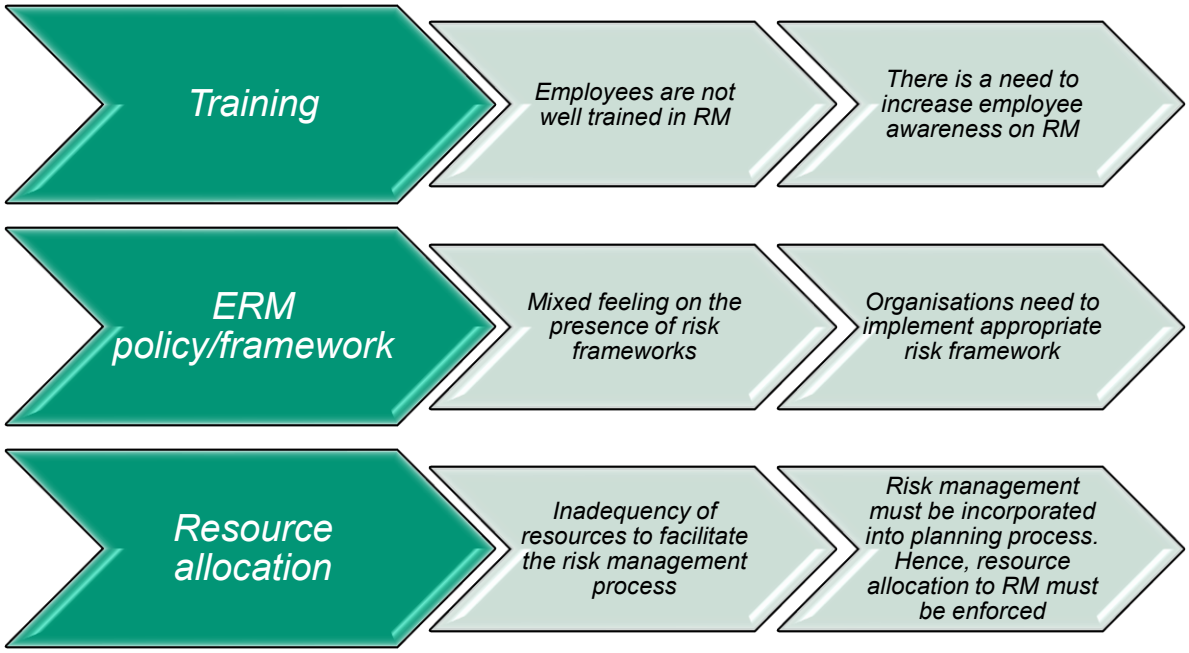
The gap analysis integrated findings from both quantitative and qualitative aspects of the study. Quantitative data gathered through a closed-ended questionnaire revealed shortcomings in the current risk management practices of cSOEs. Qualitative insights from interviews and open-ended responses provided context for these deficiencies. In this context, gap analysis systematically compares existing risk management practices with the capabilities required for effective ERM implementation.

The analysis identified three primary gaps in the existing risk management processes (see Figure 26). A significant concern raised by participants was the inadequate ERM training and capacity development within commercial state-owned enterprises. They observed that a lack of understanding of ERM principles impeded

effective risk management and reduced awareness of ERM's benefits for organisational performance and sustainability. Figure 26 summarises the key gaps identified in the analysis and offers recommendations to address them. These proposed interventions provide a practical framework to enhance ERM implementation, improve organisational performance, and strengthen risk management practices within commercial state-owned enterprises in Namibia.

Figure 26

Gap Analysis Summary



The findings revealed that many organisations lack formal risk management policies, procedures, or ERM frameworks to guide their risk activities. This gap leads to inconsistent practices and a limited understanding of risk's broader purpose, with many viewing risks primarily as a negative threat rather than as a dual concept of threat and opportunity. Participants also noted that organisational commitment is insufficient, with inadequate allocation of financial, human, and technological

resources to risk management. This shortfall is seen as a major obstacle to the successful implementation of ERM.

Evaluation of the Findings

Participants' Information

The research findings were evaluated using evidence from both the quantitative and qualitative phases. Initially, the discussion reviews the quantitative results in relation to the research objectives and hypotheses. Subsequently, it incorporates the qualitative findings to provide contextual insights and a more comprehensive understanding of ERM implementation in Namibian cSOEs.

The demographic details of the respondents provide important context for interpreting the study results. The study involved 384 participants, of whom 211 (54.95%) were women, indicating a slight overrepresentation of women. Most respondents had between two and five years of work experience and were aged 30 to 39, suggesting they likely had sufficient organisational experience to offer informed perspectives on ERM practices.

Although 58.4% of participants held non-managerial roles, their operational positions enabled them to provide valuable insights into the practical implementation of risk management within their organisations. They came from various cSOEs, primarily in the health sector. Most participants held bachelor's degrees and were employed on a permanent basis, indicating that the study reflects the views of a knowledgeable and experienced workforce familiar with organisational processes and risk management.

By including participants from diverse organisational levels, industries, educational backgrounds, and years of experience, the study broadened the range of perspectives. Consequently, the findings provided a comprehensive evaluation of

ERM implementation in Namibian cSOEs and established a strong basis for assessing research objectives, analysing empirical results, and understanding the factors influencing organisational performance, risk management, and ERM success.

Research Questions' Findings Evaluation

RQ1: What was the impact of enterprise challenges on the performance of cSOEs in Namibia during the COVID-19 pandemic?

The initial research question examined the key enterprise challenges faced by cSOEs in Namibia during the COVID-19 pandemic and assessed their impact on organisational performance. Results showed that government regulations, supply chain disruptions, cash flow issues, and technological adaptation were among the most reported challenges. These findings highlighted the unprecedented operational disruptions caused by the pandemic and provided a foundation for analysing how these enterprise-level challenges affected organisational performance.

Multiple regression analysis showed that enterprise challenges together accounted for a significant share of the variation in organisational performance. The results indicated that operational disruptions, particularly supply chain delays, technological adaptation issues, and poor working conditions, were more strongly associated with organisational success than financial or market factors. This pattern suggests that maintaining internal processes was more crucial during the pandemic than external pressures. From a Contingency Theory perspective, organisations with higher regulatory responsiveness and adaptability were better equipped to sustain operations amid environmental uncertainty. The study also indicated that organisational resilience during crises relies more on the ability to quickly adjust structures, the workforce, and governance, rather than on resource abundance. These results empirically support the idea that organisational adaptability is key to resilience

in enterprises.

Government regulations were the most frequently cited challenge, with many participants noting that restrictions such as curfews, travel bans, social distancing, and reduced operating hours disrupted their organisational activities. These findings align with Obrenovic et al. (2020), who observed that containment measures markedly affected business operations across various countries. While necessary for public health, these measures also constrained organisational productivity and service delivery, particularly in sectors that depend on continuous operations.

The analysis showed that various enterprise challenges are strongly linked to organisational performance. Supply chain delays had the most significant negative effect, as disruptions in procurement, production, and delivery directly led to poorer outcomes. Difficulties in adopting new technologies and subpar working conditions also negatively affected performance. These findings suggest that maintaining operational continuity depends not only on resource availability but also on an organisation’s capacity to adapt quickly to changing circumstances in uncertain environments (Bayrakdar & Guveli, 2020).

The regression analysis indicated that the enterprise challenges included in the model significantly explained variation in organisational performance. However, the model captured only a small fraction of the total variance, suggesting that other organisational and environmental factors beyond those analysed probably influenced performance during the COVID-19 pandemic. As a result, these findings should be considered evidence of statistically significant associations rather than definitive proof of causation.

The results on supply chain disruptions align with earlier studies from the COVID-19 pandemic period. Researchers such as Bukhari and Zafar (2023), Mishra

et al. (2023), and Obrenovic et al. (2020) also found that border restrictions, transport delays, and disruptions to global supply networks limited organisations' capacity to operate normally. The alignment of these findings with prior research indicates that supply chain resilience remains a key factor influencing organisational performance during major disruptions.

While participants often reported cash flow shortages, the statistical analysis showed no significant independent effect on organisational performance once other enterprise challenges were accounted for. Nevertheless, the emphasis on this issue in responses aligns with previous studies by Drissi et al. (2023) and Ionescu and Neghina (2021), which found that increased working capital needs and financial uncertainty reduced organisational flexibility during the pandemic. The discrepancy between the descriptive observations and the inferential results might be due to cash flow shortages affecting organisational performance indirectly, through other factors included in the regression model.

Participants identified technological adaptation as a significant operational challenge. As in the study by Cruz-Cárdenas et al. (2021), organisations that had greater difficulty adopting digital technologies typically reported lower performance. This contrasts with Obrenovic et al. (2020), who found that organisations with advanced digital capabilities were able to maintain operations during the pandemic. A probable reason is that many Namibian commercial state-owned enterprises began the pandemic with lower digital readiness, making the rapid transition to remote work and technology-based operations considerably more challenging.

Similarly, poor working conditions had a clearly adverse effect on organisational performance. Participants reported that increased workloads, staff shortages, work-related stress, and health and safety concerns reduced employee morale and

productivity. These findings align with those of Nieuwenhuis and Yerkes (2021), who observed that the pandemic heightened labour market pressures and adversely affected employee well-being. Overall, the results emphasise the need to create supportive work environments to sustain organisational performance during crises.

Conversely, the regression model did not identify any statistically significant independent relationships between organisational performance and factors such as bankruptcy risk, mental health issues, changes in consumer behaviour, or cash flow shortages. Although participants encountered these challenges, their effects may have been mitigated by other organisational factors or reduced when additional predictors were included. These findings highlight the complexity of organisational performance during crises and suggest that multiple organisational and environmental factors interact, as other researchers have argued (Cai et al., 2023; Khayru, 2021; Zwanka & Buff, 2021).

Interestingly, reductions in staffing and regulatory compliance were associated with improved organisational performance when other enterprise challenges were taken into account. However, this does not imply that workforce reductions or regulatory pressures directly enhance performance, as Agba et al. (2020) indicated. Rather, it indicates that organisations adept at strategic workforce management and regulatory responses demonstrated greater adaptability amid the pandemic. This interpretation supports Contingency Theory, which asserts that organisational effectiveness depends on the ability to adapt structures, resources, and management practices to changing environmental conditions.

Based on the theoretical framework of this study, the results indicated that organisational resilience during the COVID-19 pandemic depended more on organisations' ability to adjust their governance, operations, and workforce structures

to rapidly changing situations than on resource availability. These results reinforce the idea that adaptability is a key trait of resilient commercial state-owned enterprises functioning amidst environmental uncertainty.

The findings showed that operational challenges, such as supply chain disruptions, technological adaptation, and poor working conditions, were more strongly linked to organisational performance than many financial or market challenges. Consequently, the results supported the first alternative hypothesis (H_1), suggesting that enterprise challenges were significantly associated with the performance of commercial state-owned enterprises in Namibia during the COVID-19 pandemic. However, given the study's cross-sectional design and the limited explanatory power of the regression model, these results should be viewed as indicating statistically significant associations rather than proving causality.

The findings revealed an interesting pattern: external challenges, particularly supply chain disruptions, negatively affected organisational performance, whereas internal responses, such as workforce restructuring and regulatory compliance, had a positive effect. This suggests that organisations that could adapt their internal structures and meet evolving regulatory demands were better placed to sustain performance during the COVID-19 pandemic. Nevertheless, these relationships should be treated cautiously and not taken as proof of a causal link.

These findings support Contingency Theory, which holds that organisational success depends on aligning practices with external conditions. During the COVID-19 pandemic, organisations operated in a volatile, rapidly changing environment that demanded flexible management rather than rigid procedures. The positive relationships observed for workforce restructuring and regulatory compliance indicate that cSOEs that adapted their internal processes and governance to the situation were

better able to sustain performance. This underscores that resilience stems from adaptability and tailored management strategies, rather than a universal risk management solution.

Overall, the findings indicate that the COVID-19 pandemic created a mix of operational, financial, technological, and workforce challenges for commercial state-owned enterprises in Namibia, with varying effects on organisational performance. Supply chain disruptions, challenges in adopting technology, and poor working conditions were significantly associated with lower performance. Conversely, regulatory compliance and workforce restructuring were positively associated with improved performance.

Participants viewed challenges such as cash-flow shortages, bankruptcy risk, mental health issues, and shifts in consumer behaviour as significant consequences of the pandemic. However, these did not show a statistically significant independent association with organisational performance in the regression model. The results indicated that pandemic performance was influenced not only by external disruptions but also by how organisations adjusted their internal governance and operational practices.

From a Contingency Theory perspective, the results suggest that organisational effectiveness depends on aligning internal management practices with evolving external conditions. Commercial state-owned enterprises that modified their governance, compliance procedures, and organisational structures appeared better equipped to handle the uncertainties caused by the pandemic. However, these results should be treated as statistical correlations rather than evidence of causality, given the study's cross-sectional design. Overall, the data supported the first hypothesis (H1), showing that enterprise-related challenges were significantly associated with the

performance of commercial state-owned enterprises in Namibia during COVID-19.

The quantitative data showed that challenges faced by enterprises during the COVID-19 pandemic, such as supply chain disruptions, poor working conditions, and technological hurdles, were significantly associated with the performance of commercial state-owned enterprises. The qualitative results supported these findings by providing practical insights into the organisational problems encountered during this period. Participants highlighted insufficient financial resources, limited ERM skills, and technological limitations as key obstacles to resilience. They explained that these shortages hindered their ability to respond effectively to operational disruptions and to adopt comprehensive risk management strategies.

Together, the quantitative and qualitative findings suggest that organisational performance during the pandemic was shaped not only by external shocks but also by internal preparedness and resource availability. While the quantitative analysis demonstrated significant statistical relationships, the qualitative data provided contextual insights into how these challenges affected the daily operations of Namibian state-owned commercial enterprises.

RQ2: To what extent does the effectiveness of the RM process within cSOEs depend on the quality of risk communication and documentation?

The second research question examined how the success of the RM process in Namibian cSOEs depended on the quality of risk communication and documentation. Findings indicated that although participants considered their organisations' RM processes operational and understood organisational risks, notable gaps remained in risk communication, documentation, and staff training. Responses also revealed differences in the maturity of RM practices across organisations, with some cSOEs possessing more advanced and structured RM systems than others.

Some participants expressed uncertainty about their current practices, highlighting a lack of consistency in risk documentation across surveyed organisations. Effective documentation provides a clear record of risks, mitigation actions, and responses, thereby supporting organisational learning, accountability, and decision-making. These findings align with Fraser and Simkins (2021), who noted that systematic documentation enables organisations to anticipate emerging risks and develop more effective mitigation strategies.

The analysis indicated that risk communication was most strongly associated with RM effectiveness, accounting for about 46% of its variance. These results imply that prompt, transparent, and thorough risk communication helps build a shared understanding of organisational risks at all levels. This kind of communication can enhance coordination between management and staff, ultimately boosting the overall success of the RM process. However, this finding shows a statistically significant correlation, not proof of a direct cause-and-effect relationship.

Risk documentation showed a notable positive correlation with RM effectiveness, explaining roughly 27% of the variance in RM success. Although less influential than risk communication, it was associated with organisations that had more structured documentation practices, which excelled at safeguarding organisational memory, ensuring regulatory compliance, and sustaining risk management activities during uncertain periods. Overall, these findings highlight that communication and documentation are integral components of a robust RM framework.

These qualitative results underscored perceived communication gaps among boards, senior management, and employees. Participants reported inconsistent communication of organisational risks across levels and limited risk-related training. This points to opportunities to enhance employee awareness, engagement, and

organisational readiness, even with existing RM structures. Similar perspectives were expressed by Bensaid et al. (2021), emphasising the importance of effective board oversight, transparent reporting, and active communication channels for successful enterprise risk management. Likewise, Gurtu and Johny (2021) highlighted that clear communication and comprehensive documentation bolster organisational responsiveness, particularly in managing supply chain disruptions and operational risks.

The regression analysis showed that risk communication and documentation jointly explained a significant share of the variation in RM effectiveness. The model was statistically significant, indicating that these two factors together played a meaningful role in explaining differences in RM effectiveness across the cSOEs. However, the findings also suggest that other organisational factors not included in the model may affect RM effectiveness.

The results showed that the success of risk management in commercial state-owned enterprises in Namibia depends on the quality of risk communication and risk documentation, with communication the more influential factor. Risk documentation also supports organisational learning, accountability, and continuity in risk practices. While both elements significantly explained differences in RM effectiveness, the model indicates that other organisational factors not studied here are likely to impact the RM process as well.

From a Contingency Theory perspective, these findings show that organisations in uncertain environments recognise the need to adapt internal communication and information management, thereby enhancing their effectiveness by aligning with external changes. Effective communication fosters a sense of control and responsiveness, supporting informed decision-making, while systematic

documentation reinforces organisational memory and confidence in handling risks. Thus, the results affirm that organisational effectiveness improves when internal management practices are tailored to environmental conditions, making the research more relevant to practitioners' real-world challenges.

Overall, the findings highlight that risk communication and documentation are crucial organisational capabilities that significantly enhance the effectiveness of the RM process in Namibian commercial state-owned enterprises. Although risk communication emerged as the more influential predictor, both factors contributed significantly to the variation in RM effectiveness. These findings support the second alternative hypothesis (H2), indicating that the success of the risk management process is strongly linked to the quality of risk communication and documentation. Nonetheless, it is essential to recognise that these are statistical correlations and do not imply causation, especially given the study's cross-sectional design.

The quantitative analysis showed that both risk communication and risk documentation were significantly associated with the effectiveness of risk management processes in commercial state-owned enterprises. These findings were reinforced by qualitative data, in which participants repeatedly emphasised the importance of transparent communication, consistent documentation, and organisation-wide awareness of risk management practices through training. Participants also highlighted weaknesses in communication between senior management and employees, inadequate documentation of organisational risks, and insufficient risk-related training as factors limiting the effectiveness of existing risk management processes.

The qualitative results provided valuable insights into the statistical relationships identified in the quantitative analysis. The quantitative results highlighted

how communication and documentation practices influence effective risk management. The consistency between the two datasets strengthened confidence in the conclusion that strong risk communication and comprehensive documentation are essential organisational skills that enhance risk management processes.

RQ3: What is the impact of skilled personnel and a competent leadership team on the successful implementation of ERM in Namibia's cSOEs?

Research Question Three examined how skilled personnel and effective leadership influenced the successful adoption of ERM in Namibian state-owned commercial enterprises. The analysis assessed whether ERM was integrated into strategic planning, whether employees recognised its significance, whether formal ERM frameworks were in place, and the role of personnel skills and leadership in ensuring successful ERM implementation.

The findings indicated that ERM implementation was widely accepted across many of the participating organisations. Additionally, most respondents reported that employees had received risk management training, reflecting organisational efforts to build necessary competencies. However, a significant number of respondents remained neutral or disagreed, suggesting that ERM adoption was not yet uniform across all commercial state-owned enterprises. Moreover, this study's findings suggest differences in leadership effectiveness across organisations and indicate that commitment to ERM implementation may vary among enterprises. The substantial neutral response also implies that some employees may have limited awareness of leadership's role in enterprise risk management.

The inferential analysis provided stronger support for these relationships. Pearson correlation results showed significant positive links between skilled personnel and ERM implementation ($r = 0.68$, $p < 0.001$), and between competent leadership

and ERM implementation ($r = 0.75$, $p < 0.001$). These results suggest that organisations with more skilled staff and effective leadership tend to have higher levels of ERM implementation. However, while the correlations are strong, they do not imply causality, only that relationships exist.

The regression analysis revealed that skilled personnel and effective leadership both independently influence ERM implementation. The model explains approximately 65% of the variation in ERM adoption. These findings suggest that human capital and leadership are crucial factors in successful ERM deployment. The model's strong fit indicates that including both variables yields a better understanding of differences in ERM adoption across organisations.

Among the two predictors, competent leadership emerged as the more influential factor. The regression analysis showed that competent leadership had a higher standardised coefficient ($\beta = 0.45$) than skilled personnel ($\beta = 0.29$), indicating that leadership exerts a stronger influence on ERM implementation when personnel skills are held constant. This highlights that, although technically skilled employees are essential for carrying out ERM tasks, effective leadership plays a vital role in establishing governance structures, promoting organisational commitment, allocating resources, and integrating ERM into strategic decision-making.

Likewise, skilled personnel greatly improve ERM implementation. Organisations with well-trained staff are more likely to formalise ERM frameworks, integrate risk management into strategic planning, and maintain systematic practices. These findings emphasise that technical skills enable organisations to identify, assess, monitor, and mitigate risks effectively. However, the results also suggest that staff competence alone is insufficient without strong leadership support and organisational commitment.

The descriptive findings support these points. Most respondents reported that their organisations have formal risk management frameworks. Over 85% believed that ERM should be integrated into strategic planning, underscoring its recognised strategic importance. However, the high proportion of neutral responses regarding formal risk policies and leadership skills indicate that implementation maturity varies significantly across commercial state-owned enterprises. These findings align with prior research. For instance, Naik and Prasad (2021) suggested that effective ERM helps leadership and boards make better strategic decisions while enhancing resilience and value. Likewise, Anton and Nucu (2020) found that integrating ERM into strategic planning usually leads to better governance and performance. This study adds to that evidence by showing that, in Namibia's public enterprises, respondents view skilled staff and strong leadership as key factors for successful ERM.

The results also support the core ideas of Contingency Theory that underpinned this study. According to this theory, organisational success depends on aligning internal capabilities with external circumstances, rather than adopting a one-size-fits-all management approach. Therefore, the findings suggest that effective ERM implementation requires more than formal risk management systems; it also relies on skilled personnel and leadership able to adapt organisational responses to changing risk environments. While these organisational capabilities alone do not guarantee success, they can improve an organisation’s ability to implement ERM effectively across operational settings.

However, these findings should be considered in light of the study's methodological constraints. The highlighted relationships are statistical associations based on respondents' perceptions and do not establish causality. Moreover, ERM implementation is likely influenced by other organisational factors, such as governance

structures, culture, resources, regulations, and technology, which were not fully captured in the current regression model.

In summary, Research Question Three revealed that skilled personnel and effective leadership are essential to successful ERM implementation in Namibian state-owned commercial enterprises. Strong leadership had a notably greater independent impact, though skilled staff also contributed significantly. These findings suggest that enhancing leadership skills and providing ongoing staff training can help organisations better integrate ERM into their strategic planning and decision-making. However, consistent with Contingency Theory principles, these factors should be regarded as critical organisational conditions that support ERM adoption rather than as guaranteed success factors.

The quantitative results showed that skilled personnel and effective leadership are critical to successful ERM implementation. This finding aligns with the qualitative data, in which participants consistently emphasised leadership commitment, employee training, capacity building, teamwork, and change management as key factors. They also stressed that leaders should possess strong interpersonal skills, a strategic outlook, and the ability to foster a culture of continuous learning and resilience. The quantitative data corroborated these qualitative insights by providing practical explanations for the relationships identified in the regression analysis. In summary, both data sources suggest that successful ERM implementation depends not only on formal policies and structures but also on leadership competence and the presence of skilled staff.

RQ4: What are the key challenges faced by cSOEs in Namibia in implementing ERM frameworks?

Research Question Four examined the primary challenges that Namibian state-

owned commercial enterprises face in adopting ERM frameworks. While quantitative data indicated that many organisations had established risk management elements, qualitative findings showed that transitioning from traditional risk approaches to a full ERM framework remained hindered by organisational, financial, and human resource limitations. The results showed that although many respondents recognised the existence of risk policies and generally found their risk management processes effective, these elements alone do not constitute a complete ERM implementation.

Previous studies emphasise that successful ERM requires more than formal policies; it also depends on appropriate governance structures, including internal audit functions, dedicated risk officers, active risk committees, board oversight, adequate financial resources, and organisational capacity (Sakrabani & Ping, 2022). Consequently, standalone risk management practices should not be taken as evidence of mature ERM implementation.

Participants often cited limited financial and organisational resources as a significant challenge. They highlighted insufficient funding, a lack of personnel, and limited overall capacity as major obstacles to implementing ERM. These findings align with Ching et al. (2021), who observed that public sector organisations, especially in developing countries, frequently face resource shortages that hinder governance initiatives such as ERM. Therefore, these results suggest that resource limitations will likely persist as barriers to the full adoption of ERM practices within many Namibian state-owned enterprises.

A second challenge was limited knowledge of and organisational understanding of Enterprise Risk Management. While respondents generally grasped traditional risk management concepts, many were less aware of ERM's broader strategic importance. Although these results should be treated with caution, they suggest that ERM's

strategic role is not widely recognised across many state-owned enterprises. This interpretation aligns with qualitative findings, in which participants frequently cited inadequate ERM training and organisational awareness as key barriers to implementation.

The findings also show that the absence of comprehensive risk policies and formal ERM frameworks continues to impede effective implementation. Although some organisations have risk policies, qualitative feedback indicates that these policies are not consistently integrated into decision-making or underpinned by appropriate governance mechanisms. This echoes earlier findings in Chapter Four, where respondents highlighted issues with risk communication, documentation, and organisational coordination. Overall, these results suggest that many organisations remain at the early stages of ERM maturity.

Technological capacity also posed a significant implementation obstacle. Participants noted that the rapid pace of development in information and communication technologies (ICTs) compelled organisations to continually invest in digital infrastructure, systems, and staff training. However, many organisations reported that financial constraints limited their ability to keep pace with technological progress. Consequently, insufficient ICT infrastructure could undermine the effectiveness of risk identification, monitoring, reporting, and communication, all of which are vital to successful ERM implementation.

Contingency Theory holds that successful ERM implementation requires aligning an organisation’s capabilities with external environmental demands. Rather than merely adopting formal ERM frameworks, organisations must possess sufficient financial resources, knowledgeable staff, effective leadership, appropriate governance structures, and robust technological infrastructure to respond to evolving risk

environments. The absence of these organisational factors can lead to partial or unsuccessful ERM efforts, even when formal risk policies are in place.

Overall, the findings highlight that major challenges to adopting ERM in Namibian commercial state-owned enterprises include resource constraints, insufficient ERM awareness, weak governance structures, inadequate training, and technological challenges. These interconnected organisational issues collectively hinder effective ERM implementation. Addressing these barriers could improve organisational readiness for ERM adoption. However, the results show correlations rather than definitive causation, and other contextual factors may also play a role.

Study Hypothesis Results Evaluation

H1: There is a statistically significant negative association between enterprise-related challenges and the performance of commercial state-owned enterprises in Namibia during the COVID-19 pandemic.

The findings provided sufficient statistical evidence to reject the null hypothesis and support the alternative hypothesis. The regression analysis indicated that several enterprise-related challenges experienced during the COVID-19 pandemic were significantly associated with the performance of commercial state-owned enterprises in Namibia. Supply chain disruptions, unfavourable working conditions, and limited technological readiness were statistically significantly and negatively associated with organisational performance. These findings suggest that the challenges experienced during the pandemic were associated with reduced organisational performance, although the magnitude of these relationships varied across the factors examined.

Not all challenges, however, showed statistically significant associations. Variables such as cash flow shortages, bankruptcy or closure risk, mental health concerns, and changes in consumer behaviour did not emerge as significant

predictors in the regression model. This suggests that, although these factors were experienced by many organisations, their relationship with organisational performance may have been influenced by other organisational or contextual factors not captured in the present study.

Overall, the findings support the alternative hypothesis that enterprise-related challenges were significantly associated with the performance of commercial state-owned enterprises during the COVID-19 pandemic. These results broadly align with previous studies documenting widespread organisational disruptions during the pandemic, including operational interruptions, supply chain constraints, and technological challenges that affected organisational performance across countries (Obrenovic et al., 2020). Nevertheless, the findings should be interpreted as evidence of statistical associations rather than direct causal relationships, given the study's cross-sectional design.

H2: There is a statistically significant positive association between the quality of risk communication and documentation and the effectiveness of the RM process.

The findings provided sufficient statistical evidence to reject the null hypothesis and support the alternative hypothesis. The correlation and multiple regression analyses indicated a statistically significant positive association between the quality of risk communication and documentation and the effectiveness of the risk management process ($p < 0.001$). Both predictors significantly explained variation in RM effectiveness, with risk communication emerging as the stronger predictor and risk documentation making an additional significant contribution.

These findings suggest that organisations characterised by timely and effective risk communication, together with systematic risk documentation practices, tended to

report more effective risk management processes. Although respondents' perceptions varied across organisations, reflecting differences in organisational practices and levels of RM maturity, the overall statistical evidence indicated that both factors were positively associated with RM effectiveness.

The findings align with previous empirical studies, which have emphasised that effective risk communication promotes informed decision-making and organisational coordination, while comprehensive risk documentation strengthens organisational learning, accountability, and continuity of risk management activities (Gurtu & Johny, 2021). Nevertheless, these findings should be interpreted as evidence of statistically significant associations rather than direct causal relationships, as other organisational and contextual factors may also influence the effectiveness of the risk management process. Overall, the findings support the alternative hypothesis that the quality of risk communication and documentation was positively associated with the effectiveness of the risk management process in Namibian state-owned commercial enterprises.

H3: There is a statistically significant positive association between the presence of skilled personnel and competent leadership within the organisations and the implementation of ERM.

The findings provided sufficient statistical evidence to reject the null hypothesis and support the alternative. The correlation and multiple regression analyses indicated a statistically significant positive association between skilled personnel, competent leadership, and ERM implementation ($p < 0.001$). Both predictors significantly explained variation in ERM implementation, with competent leadership emerging as the stronger predictor, while skilled personnel also made a significant independent contribution.

These findings suggest that organisations with competent leadership and

appropriately skilled personnel were more likely to report higher levels of ERM implementation. Competent leadership appeared to facilitate strategic direction, governance, and organisational commitment to ERM, whereas skilled personnel provided the technical expertise required for effective risk identification, assessment, and mitigation (Anton & Nucu, 2020). Together, these organisational capabilities were positively associated with successful ERM implementation.

The findings align with previous empirical studies, which have emphasised the importance of leadership commitment and employee competence in strengthening organisational governance and facilitating the successful adoption of ERM. Nevertheless, the findings should be interpreted as evidence of statistically significant associations rather than direct causal relationships, as other organisational and contextual factors may also influence ERM implementation. Overall, the findings support the alternative hypothesis that the presence of skilled personnel and competent leadership was positively associated with the successful implementation of ERM frameworks in Namibian state-owned commercial enterprises.

Integration of Quantitative and Qualitative Findings

The qualitative findings largely confirmed the quantitative results, showing strong agreement between the two datasets. The statistical analyses revealed significant links between enterprise challenges, risk communication, documentation quality, skilled personnel, competent leadership, and ERM implementation. Meanwhile, the qualitative evidence provided insights into the organisational mechanisms that explain these connections.

For example, although the regression analysis showed that workforce restructuring and regulatory compliance positively influenced organisational performance during the COVID-19 pandemic, interviewees attested that these

connections may reflect adaptive organisational responses rather than actual benefits of downsizing or regulatory constraints. Similarly, participants' accounts echoed the notable quantitative effect of risk communication on RM effectiveness, emphasising that timely communication, leadership engagement, and employee awareness helped organisations respond more quickly to emerging risks.

The qualitative findings complemented the quantitative results by identifying implementation barriers not captured in the survey. Participants consistently cited financial constraints, limited ERM expertise, insufficient training, ICT challenges, and a weak organisational risk culture as key obstacles to effective ERM implementation. These insights explain why some organisations exhibited weaker documentation, inconsistent leadership backing, and lower ERM maturity, despite valuing risk management. Combining both datasets provided clearer evidence that successful ERM implementation in Namibia's cSOEs depends not only on formal risk procedures but also on organisational capability, leadership commitment, communication effectiveness, and resource availability.

Summary

This chapter outlined the study's findings in line with its objectives, questions, and hypotheses. Given the mixed-methods approach, the quantitative and qualitative results worked together to provide a thorough understanding of ERM implementation in Namibian cSOEs. The quantitative phase addressed Research Questions 1, 2, and 3 and tested the three hypotheses. Data were analysed using descriptive and inferential statistics, including correlation and regression analyses, to examine relationships among variables. To assess the robustness of the quantitative results, an ordinal regression was conducted alongside the primary regression analyses. The consistent parameter estimates and statistical significance across both models

indicate that the observed associations are not dependent on the specific analytical method used, thereby enhancing confidence in the study's conclusions.

The qualitative phase addressed Research Question 4 through interviews and open-ended questionnaire responses. Thematic analysis identified key challenges in ERM implementation, as well as participants' proposed solutions and recommendations to enhance risk management practices. These qualitative insights complemented the quantitative data by providing contextual explanations and practical perspectives on organisational factors that affect ERM adoption in Namibian cSOEs.

The research was conducted exclusively in commercial state-owned enterprises in Namibia, with organisational approval secured through signed gatekeeper consent. Participation was voluntary, and informed consent was obtained from all participants before data collection. Organisations and individuals who declined to participate were excluded, while non-respondents were contacted multiple times over two weeks to increase response rates without compromising voluntary participation.

The study's quantitative component comprised 384 participants from commercial state-owned enterprises, while the qualitative component comprised 10 participants. Although a larger qualitative sample was initially expected, the final count depended on employees' willingness to participate. Despite this, the data gathered provided sufficient depth to highlight recurring themes aligned with the study's goals. Participants came from a wide range of organisational roles, industries, educational levels, and years of experience, offering a diverse set of perspectives on risk management practices. The demographic diversity of respondents strengthened the credibility of the results by incorporating insights from employees with different levels of responsibility and professional backgrounds.

The overall results showed that enterprise-related difficulties during the COVID-19 pandemic were strongly linked to organisational performance. The quality of risk communication and documentation was also crucial to the success of existing risk management processes. Skilled personnel and effective leadership were significantly associated with successful ERM implementation. Qualitative insights further indicated that resource limitations, gaps in ERM skills, lack of organisational support, and technological issues remained major obstacles. In contrast, leadership development, employee training, improved communication, strategic alignment, and enhanced governance structures were identified as key focus areas for organisational improvement.

This chapter consolidates the study's main findings, explores their theoretical and practical implications, highlights its contributions, recognises limitations, and offers recommendations for policy, practice, and future research. The quantitative results addressed Research Questions One to Three and tested the three hypotheses using correlation and multiple regression analyses. The qualitative results addressed Research Question Four by examining participants' experiences and perceptions of the challenges in implementing ERM. Collectively, both sets of findings provided a comprehensive understanding of ERM implementation in commercial state-owned enterprises in Namibia.

The study used a convergent mixed-methods approach, collecting quantitative data first, then qualitative data, analysing each separately, and finally merging the results. Quantitative analysis revealed statistical relationships between variables, while qualitative insights provided context and explanations for these links and their practical significance. Combining both types of data enhanced the reliability of the findings and provided a more complete understanding than relying on a single method

(Taherdoost, 2022). The integration shown in Appendix L illustrates how qualitative and quantitative results support and enrich each other. When the datasets align, they bolster confidence in the conclusions. Additionally, qualitative insights explained organisational practices that the statistical data alone could not fully reveal.

CHAPTER FIVE: IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSIONS

The study's implications span theoretical, practical, policy, and future research domains. It particularly advances the application of Contingency Theory to ERM implementation in Namibia's cSOEs. These implications are grounded in this study's findings and pertain to the participating cSOEs in Namibia. The findings indicate that organisational and environmental factors influence ERM effectiveness, especially amid major disruptions such as COVID-19. This aligns with Contingency Theory's fundamental premise that no one-size-fits-all management approach exists; instead, strategies should be adapted to current circumstances.

The implications are specific to the COVID-19 context under study. However, the study's implications are relevant not only during COVID-19 but also in future pandemics or periods of economic instability. While the COVID-19 pandemic affected organisations worldwide across various sectors, the results reflect the experiences and perceptions of respondents from the eleven cSOEs involved. Therefore, these implications are most relevant to organisations with similar governance structures, institutional setups, and resource constraints.

The findings showed that the organisations involved faced a range of operational issues during the COVID-19 pandemic, including regulatory compliance challenges, supply chain disruptions, adaptation to new technology, cash flow issues, and workforce challenges. Although similar challenges are noted in other studies, their impact varied depending on each organisation's context and operational setting. Consequently, the practical advice offered here aims to guide policy and management in similar public-sector organisations, rather than to provide universal solutions for all state-owned enterprises.

The findings further highlighted opportunities to strengthen risk management

practices, improve organisational resilience and support the implementation of ERM. Accordingly, the implications discussed in the following sections focus on three key areas identified by this study: (i) the influence of enterprise challenges on organisational performance; (ii) the role of risk communication and documentation in enhancing the effectiveness of the risk management process; (iii) the contribution of skilled personnel and competent leadership to the successful implementation of ERM; and (iv) implications for ERM implementation and organisational sustainability. These implications provide an evidence-based interpretation of the study findings and serve as the foundation for the recommendations presented later in this chapter.

Assessing the significance of enterprise challenges faced by cSOEs in Namibia during the COVID-19 pandemic.

The findings indicated that the participating cSOEs faced a range of operational challenges during the COVID-19 pandemic, which affected organisational performance in different ways. While respondents identified regulatory compliance issues, supply chain disruptions, technological adjustments, and difficult working conditions as particularly disruptive, the multivariate analysis showed that overall performance was affected by the combination of multiple challenges rather than any single factor. This suggests that organisational resilience within these organisations relies on managing several risks simultaneously, rather than tackling each risk separately.

The importance of regulatory compliance was underscored by the widespread public health measures enacted during the COVID-19 pandemic. Because these regulations affected multiple sectors, respondents from participating organisations reported similar operational experiences, despite differing mandates. These findings suggest that organisations facing similar conditions could improve their business

continuity and crisis planning by accounting for regulatory uncertainty. However, caution is advised when applying these results to other sectors or organisations beyond the cSOEs, given potential differences in organisational structure and context.

Supply chain disruptions also posed a significant operational challenge for the participating organisations. As Namibia depends heavily on imported goods and services, the results imply that these cSOEs could enhance their supply chain resilience by improving contingency planning, diversifying suppliers, managing inventories strategically, and, where possible, sourcing more locally. Additionally, the findings suggest that investing more in digital supply chain management systems could help organisations respond more effectively to future disruptions.

The study emphasised the crucial role of technological readiness. Respondents generally believed that organisations able to adapt to new technologies were better equipped to sustain operations during the pandemic. For participating organisations, this suggested that investing in digital infrastructure, training employees, and adopting new technologies could enhance resilience and improve risk management. However, the practicality of these investments likely dependent on each organisation’s financial and operational capacity.

During the pandemic, human resource challenges such as difficult working conditions, staff reductions, and employee well-being concerns became evident, highlighting the pressures on participating organisations. Although staff reductions appeared to have a statistically significant positive effect on the multivariate analysis, this does not necessarily prove that workforce cuts improve performance. Rather, it could suggest that some organisations engaged in strategic restructuring and resource optimisation, which helped them adapt more effectively during the crisis. The findings indicate that participating organisations might gain greater benefits from strategic

workforce planning, employee well-being programmes, flexible working arrangements, and psychological support, rather than focusing solely on workforce reductions.

Overall, the findings indicated that organisational resilience in the participating cSOEs was more closely linked to proactive preparedness than to reactive crisis management. Integrating business continuity planning, enterprise risk management, and crisis preparedness into organisational planning could enhance resilience for organisations with similar governance and resource settings. However, these conclusions should be viewed within the specific context of the organisations studied and not be broadly applied to all commercial state-owned enterprises in Namibia or other regions.

Implications of Risk Communication and Documentation for Risk Management Effectiveness

Among the participating cSOEs, results indicated that both risk communication and documentation are crucial for improving the RM process. However, communication had a greater impact than documentation, highlighting that simply recording risks is insufficient without effectively disseminating risk information within the organisation. While many respondents regarded their organisations' RM processes as generally effective, neutral and negative feedback on risk documentation and communication revealed inconsistencies across organisations. These findings imply that some cSOEs have relatively mature RM systems, while others still struggle to document, communicate, and monitor risks.

Practically, the results indicate that organisations could benefit from strengthening enterprise-wide risk-communication protocols, supported by thorough documentation practices. Enhancing communication can lead to better decision-making by ensuring risk information is delivered promptly to boards, executives,

managers, and operational staff. Similarly, improving risk documentation can boost accountability, organisational learning, and ongoing risk monitoring.

The findings indicate that integrating RM into organisational decision-making, rather than viewing it primarily as a compliance task, could make the RM process more effective. For the organisations involved, increased board participation, improved communication, and ongoing risk management training are likely to boost resilience and enhance overall risk management performance.

Implications of Skilled Personnel and Competent Leadership for ERM Implementation

The results indicated that skilled personnel and strong leadership were key factors in the effective implementation of ERM in the cSOEs involved. This implies that successful ERM adoption relies not only on formal policies and frameworks but also on the ability of organisational leaders and staff to implement them effectively. While most respondents stated that ERM had been integrated into organisational planning, fewer expressed confidence in leadership skills and the adequacy of staff training. This indicates that simply embedding ERM structurally may not ensure successful implementation. Instead, ongoing leadership development, staff training, and organisational capacity building are likely necessary to translate ERM policies into effective operational practices.

For participating organisations, these findings underscored key governance considerations. Visible commitment from boards and executive management appears essential to ensure adequate financial investment, strengthen risk management frameworks, and promote a culture of accountability. Leadership commitment also plays a vital role in supporting the organisational changes required for ERM implementation, particularly when introducing new governance structures and

practices. The findings also indicated that organisations could benefit from investing in specialised risk management training, hiring qualified risk professionals, and enhancing succession planning. These measures can support the long-term sustainability of ERM programmes and strengthen organisational resilience and governance efficiency.

Implications on ERM Implementation and Organisational Sustainability

The findings suggested that respondents generally recognised the strategic value of ERM and its potential to contribute to organisational sustainability. Nevertheless, ERM implementation within the participating organisations appeared constrained by limited financial resources, inadequate institutional capacity, insufficient risk expertise, and, in some cases, the absence of comprehensive ERM frameworks. These findings indicated that successful ERM implementation depends on more than organisational willingness alone. For the cSOEs involved, effective implementation appeared to require robust governance structures, active risk committees, well-documented ERM frameworks, adequate financial resources, and ongoing support from leadership. Without these key elements, realising the expected organisational benefits of ERM may be difficult.

The findings also confirm the validity of the study's conceptual framework. Challenges faced by enterprises directly affected their performance. At the same time, clear risk communication and proper documentation enhanced the RM process, leading to improved outcomes. Additionally, skilled personnel and strong leadership were vital to successful ERM implementation, which, in turn, boosted organisational resilience, overall performance, and long-term sustainability across the participating organisations.

These findings suggest that strengthening RM capabilities can help cSOEs

better manage uncertainty and operational risks. However, the practical implications should be considered within the scope of this study. Because the data were collected from eleven Namibian commercial state-owned enterprises, they reflect the experiences and perceptions of respondents from those organisations. Consequently, these implications are most applicable to organisations operating under similar governance, institutional, and resource conditions. While they may offer valuable insights for other public enterprises, caution is warranted when applying these findings beyond this specific context.

Recommendations for application

The recommendations in this chapter were informed by the study's findings and are intended to support the participating cSOEs in strengthening their risk management practices and enhancing ERM implementation. They should be interpreted in the context of the eleven participating cSOEs and the organisational environment in which the study was conducted. The results revealed that participating organisations faced a range of operational, governance, and resource challenges during the COVID-19 pandemic. While the pandemic affected organisations globally, the study indicated that variations in organisational preparedness, leadership quality, and the development of risk management practices affected how effectively the cSOEs could respond to the crisis. These insights underscore the need to shift from reactive risk management to a more proactive, integrated strategy that enhances organisational resilience to future disruptions.

The study also showed that although the organisations generally had risk management practices in place, several areas required improvement to support integrated ERM. Specifically, enhancements were needed in risk communication, documentation, leadership commitment, staff training, governance, and resource

allocation. The following recommendations are based on the study's key findings and offer practical strategies to enhance the existing risk management process and ensure the successful adoption of ERM within participating cSOEs. Where appropriate, they specify responsible stakeholders and measurable actions to support implementation and oversight.

Commercial SOEs must establish proactive risk identification and evaluation strategies.

This study found that participating cSOEs could benefit from enhancing their current risk identification, assessment, and treatment procedures to promote more proactive risk management. Implementing a structured method for pinpointing, evaluating, and prioritising risks would help organisations respond more efficiently to emerging threats and strengthen resilience during uncertain times.

To implement this recommendation, each participating cSOE should develop a standardised risk assessment framework aligned with recognised Enterprise Risk Management standards, such as ISO 31000 or the COSO ERM Frameworks. The organisational risk framework should set out uniform procedures for risk identification, assessment of likelihood and potential impact, selection of appropriate response strategies, and oversight of mitigation efforts across all business units.

Implementation should include the following actions:

- Conduct formal, organisation-wide risk assessments at least twice a year and after any major organisational or external changes.
- Create and continuously update a central risk register that classifies risks by their strategic, operational, financial, compliance, and reputational impacts.
- Implement a standard risk-rating matrix to assess the likelihood and impact of identified risks, promoting uniform prioritisation throughout the organisation.

- Develop explicit risk treatment plans for all high- and medium-priority risks, specifying risk owners, mitigation measures, timelines, and required resources.
- Review and update the organisational risk register every quarter to accurately record new risks and complete mitigation measures.

Effective implementation will require investment in staff training, appropriate risk assessment tools, and digital systems to support risk reporting and monitoring. The Board of Directors, the Risk Committee, Executive Management, and the organisational Risk Management Unit should oversee this process, while departmental managers are accountable for identifying and reporting risks within their areas.

The impact of these recommendations can be assessed using specific performance metrics, such as:

- the proportion of departments that complete scheduled risk assessments;
- the percentage of organisational risks recorded in the central risk register
- the proportion of high-risk items with approved mitigation plans;
- the schedule for reviewing the risk register; and
- decreases in recurring or uncontrolled risk incidents across successive reporting periods.

Implementing these measures will enhance the quality and consistency of risk management practices across the participating cSOEs, providing a more solid operational foundation for the effective execution of ERM. An effective and proactive RM process must include the establishment of risk-elimination strategies to enhance performance (Figure 27).

Risk identification: this process involves various methods of discovering risks within the organisation.

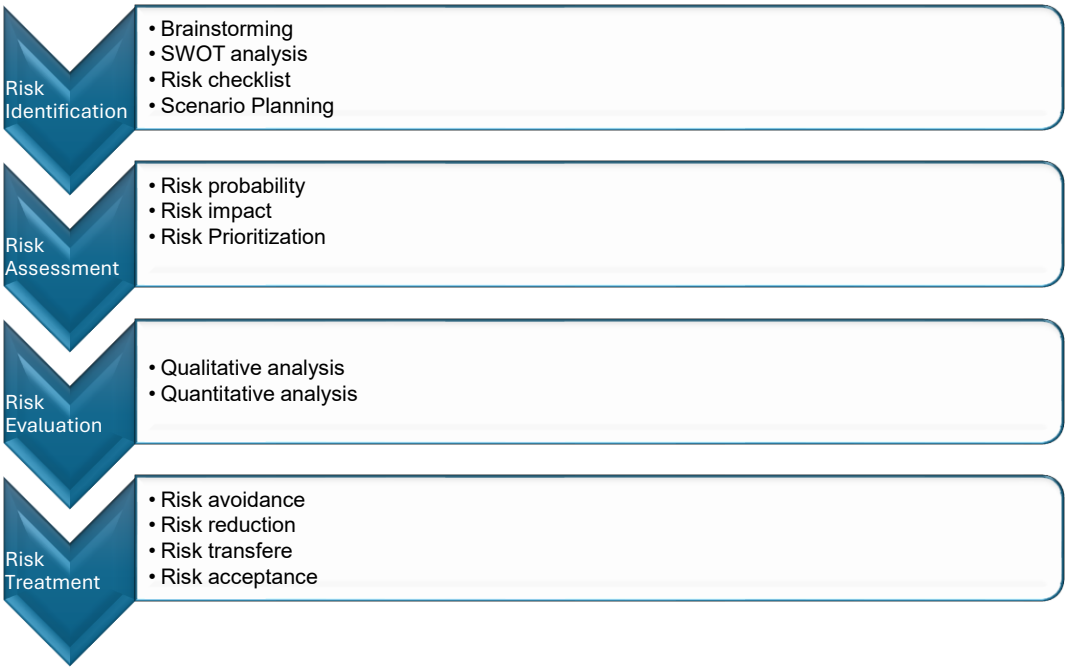
Risk assessment that involves different stages of rating the severity of the risk. At this stage, risks are categorised and treated according to their severity.

Risk evaluation: this involves analysing different risk analysis methods, such as qualitative and quantitative risk analysis, using the available approaches.

Risk treatment: this process determines how to handle risks based on their severity category.

Figure 27

Stages of an Effective Risk Management Process



A proactive risk management approach improves risk identification and evaluation, supporting better decision-making. Proactivity in RM helps organisations enhance their readiness for unexpected events. By applying risk mitigation or avoidance strategies, organisations can reduce financial losses and operational disruptions, protect their reputation, and gain a competitive edge. Establishing a robust, proactive risk detection and assessment system boosts an organisation's resilience and promotes long-term sustainability.

Enhance Risk Management and Business Continuity Strategies

The findings of this study indicated that the participating cSOEs would benefit from strengthening their risk mitigation processes to improve organisational resilience and reduce vulnerability to future disruptions. Although many respondents perceived that risk mitigation measures and risk assessment practices were already in place, the findings also revealed shortcomings in risk management capacity, particularly the availability of skilled personnel and adequate resources. These findings suggest that existing mitigation practices should be strengthened to ensure that risks are managed proactively rather than reactively.

To address these gaps, participating cSOEs should develop comprehensive risk-mitigation strategies that are integrated into their organisational strategic plans and underpinned by formal Business Continuity Plans (BCPs) and contingency plans. These plans should identify critical organisational functions, prioritise high-risk areas, define mitigation actions, allocate responsibilities, establish recovery procedures, and specify the financial, technological and human resources required to maintain essential operations during emergencies. Particular emphasis should be placed on allocating sufficient resources for risk-management training, maintenance and replacement of critical equipment, digital technologies for risk monitoring, and emergency preparedness programmes.

Management should implement enterprise-wide risk mitigation plans for all high-priority risks identified in the organisational risk register and ensure these plans are reviewed and updated regularly. Business continuity simulation exercises and emergency response drills should be conducted at least annually to assess organisational preparedness and identify weaknesses requiring corrective action. In addition, management should conduct quarterly reviews of mitigation measures and

submit progress reports to the Board Risk Committee to ensure ongoing oversight and accountability.

Implementation of this recommendation should be led by Executive Management, in collaboration with the Risk Management Unit, Departmental Managers and the Risk Committee. The Risk Committee should provide strategic oversight, ensuring that adequate financial and human resources are allocated to support implementation and ongoing improvement of risk mitigation initiatives.

Progress should be monitored using measurable performance indicators, including:

- the percentage of high-priority risks with approved and implemented mitigation plans
- the frequency of business continuity and emergency response exercises held each year;
- the percentage of employees who receive risk management and emergency preparedness training each year;
- the frequency of reviews and updates to the organisational risk register and contingency plans;
- the time taken to respond to and recover from significant operational disruptions
- reductions in the recurrence and impact of previously identified organisational risks.

Implementing these measures may strengthen risk mitigation across participating cSOEs, improve organisational preparedness for future crises, enhance operational continuity, and reduce reliance on emergency government financial support during periods of significant disruption. Commercial SOEs in Namibia also need to adopt risk mitigation strategies to ensure efficient allocation of resources for

staff training, equipment updates, and services. To enhance current risk management processes, cSOEs should develop comprehensive plans that include contingency measures and business continuity protocols. This approach will help firms better manage economic challenges without resorting to government bailouts or reducing their workforce due to severe financial losses.

Strengthen Risk Communication and Documentation

Participated cSOEs could benefit from strengthening their risk communication and documentation to improve the effectiveness of their risk management. While many respondents acknowledged that risk management practices are in place, the findings revealed inconsistencies in how risk information is communicated across organisational levels and indicated that documentation practices need improvement. These issues could reduce employee awareness of organisational risks and hinder prompt decision-making and mitigation efforts.

To enhance the current risk management process, cSOEs involved should implement formal risk-communication protocols that clearly set out how risks are identified, reported, communicated, and escalated across the organisation. This process should be ongoing and embedded in the organisational culture, not limited to activities by senior management or the Board. All employees should be encouraged to report emerging risks via well-defined channels, free from fear of retaliation.

Risk communication must be supported by standardised risk documentation. Each cSOE should maintain a centralised electronic risk register that records risks, causes, potential impacts, likelihood, impact ratings, mitigation strategies, responsible owners, deadlines, and review dates. Using uniform templates across all departments promotes consistency and supports organisational learning.

Implementation should include regular risk-awareness programmes and

mandatory risk-management training for employees, supervisors, and managers. Risk management must be a standing agenda item at departmental meetings, management discussions, and Board Risk Committee meetings to enable prompt discussion of emerging risks and consensus on mitigation actions. Furthermore, management should communicate major organisational risks and updates on mitigation efforts to relevant stakeholders via quarterly risk reports. The responsibility for implementing this recommendation rests with Executive Management, the Risk Management Unit, departmental managers, and the Risk Committee. Management must ensure sufficient financial and technological resources are allocated to support effective communication systems, electronic risk documentation, and continuous staff development. The effectiveness of this recommendation should be tracked using specific performance metrics, such as:

- the proportion of organisational risks recorded in the central risk register;
- the proportion of departments that submit risk reports on time, according to the scheduled periods;
- the number of risk awareness and training sessions held each year;
- rates of employee participation in risk management training programmes;
- the percentage of high-priority risks reported to management and the Board by the agreed reporting deadlines;
- reductions in delays between identifying risks, reporting them, and implementing mitigation measures
- Results of the annual employee survey on awareness and understanding of organisational risk management processes. Implementing these measures can strengthen communication, improve the quality of risk documentation, increase employee involvement in risk management, and enable more informed, timely

decisions across participating cSOEs.

Investing in Digital Technologies to Enhance RM Process

This study suggests that participated cSOEs can strengthen their risk management by increasing investment in digital technologies. The COVID-19 pandemic demonstrated that organisations with robust technological infrastructure are better equipped to monitor risks, communicate with stakeholders, maintain business continuity, and adapt quickly to changing circumstances. However, the findings also indicate that some organisations are still struggling to adopt new technologies, underscoring the need for strategic investment in digital transformation.

To strengthen organisational resilience, participating cSOEs ought to develop digital transformation strategies aligned with their risk management objectives. These strategies should emphasise the adoption and deployment of technologies, including real-time risk monitoring tools, electronic risk registers, automated reporting systems, business continuity plans, cybersecurity measures, and data analytics, to improve decision-making. When budgets are constrained, organisations should prioritise technologies that address their most critical operational risks and implement them gradually.

Implementation should involve ongoing investment in employees' digital skills. Management must offer regular training programmes to enhance staff proficiency with digital risk management systems and other new technologies within the organisation. Furthermore, each participating cSOE should establish an IT support structure to maintain digital infrastructure, ensure system reliability, and provide technical support to employees.

Executive Management should lead the implementation of this recommendation in collaboration with the Information Technology Department, the

Risk Management Unit, and the Board Risk Committee. Organisational budgets should include annual technology investment plans to ensure the ongoing maintenance and enhancement of digital infrastructure. Where appropriate, participated cSOEs should consider forming strategic partnerships with technology providers, higher education institutions, and government agencies to foster innovation, share knowledge, and build capacity. The success of this recommendation should be tracked using specific performance indicators, such as:

- the proportion of risk management processes supported by digital systems;
- the annual number of employees trained in digital risk management tools;
- system availability and uptime of risk management platforms
- fewer minutes required to identify, report, and address organisational risks;
- the regularity of cybersecurity assessments and system updates; and
- enhancements in user satisfaction with digital risk management systems.

Implementing these measures can increase organisational responsiveness, enhance risk monitoring and reporting, facilitate better decision-making, and strengthen the resilience of some cSOEs to future disruptions. However, adopting digital technologies should be accompanied by continuous staff training and regular assessments to ensure that technological investments remain aligned with organisational needs and deliver tangible benefits.

Implementation of ERM Frameworks

According to this study's findings, introducing ERM in Namibian cSOEs should focus on enhancing the current RM process rather than replacing it entirely. These suggestions are intended for organisations operating in conditions similar to those examined in this research and should be understood within that specific context. To align with internationally recognised practices such as COSO and ISO 31000, cSOEs should adopt a phased implementation approach comprising the following actions:

1. Enhance governance frameworks.

- Establish or strengthen independent risk committees, making sure their roles and reporting structures are well-defined.
- Assign the Board to oversee overall ERM, with executive management responsible for executing it.
- Conduct an annual review of risk governance structures to evaluate their effectiveness.

2. Develop a tailored ERM Procedure for the organisation.

- Develop or update formal ERM frameworks and risk policies to ensure they align with each organisation's strategic goals.
- Clearly specify the organisation's risk appetite, tolerances, reporting procedures, and escalation steps.
- Review and update these documents annually or whenever significant organisational changes occur.

3. Incorporate ERM into the strategic planning process.

- Integrate enterprise risk assessments into the yearly strategic planning and budgeting processes.

- Mandate that all major projects and investment proposals include documented risk assessments before they are approved.
- Make sure that strategic objectives, performance indicators, and risk registers are reviewed collectively during management meetings.

4. Enhance organisations' ability to operate effectively.

- Provide thorough ERM training for board members, executives, managers, and operational staff.
- Provide refresher training at least once a year and include ERM awareness in employee onboarding programmes.
- Hire or train qualified risk management professionals to assist with implementation.

5. Enhance risk monitoring and reporting processes.

- Establish risk registers across the organisation, updating them quarterly.
- Create standardised reporting templates to ensure consistency across all departments.
- Monitor key organisational risks through established indicators and inform executive management and the Boards of any major changes.

6. Enhance technology infrastructure and data management systems.

- Invest in digital risk management systems to enable effective risk identification, monitoring, and reporting.
- Upgrade ICT infrastructure to enable quick collection and analysis of organisational risk data.
- When resources are limited, implement a phased strategy for technology upgrades, prioritising organisational goals.

The results showed that while many respondents believed ERM could enhance

organisational sustainability, some organisations still faced challenges, including limited resources, poor ICT infrastructure, a lack of risk expertise, and weak governance. These insights imply that effective ERM implementation depends on ongoing management commitment, proper resource allocation, and continuous organisational learning, rather than merely adopting an ERM framework.

The study emphasises the crucial role of leadership in ERM implementation. Boards and executive management need to demonstrate clear commitment by providing adequate funding, supporting employee training, promoting ethical leadership, and tracking progress against specific milestones. Effective leadership should cultivate a culture of accountability, transparency, and collaboration, encouraging participation across the organisation in risk management efforts. Stakeholder engagement must be integrated into the implementation process. Ongoing communication with employees, regulators, customers, and other stakeholders can be achieved through organised consultation forums, satisfaction surveys, and consistent feedback channels. This approach enhances organisational transparency and boosts stakeholder confidence.

Given the financial constraints faced by participating organisations, cSOEs should explore additional revenue sources to enhance their financial stability. Before pursuing new streams of income, they need to conduct feasibility studies to assess financial viability, implementation costs, and potential risks. Reducing reliance on government funding would strengthen organisational resilience and enable greater investment in risk management activities.

Progress in ERM implementation should be tracked using quantifiable performance indicators, such as:

- Creation of operational risk committees;

- Track the percentage of employees annually receiving ERM training.
- Review how often the risk register is examined.
- The percentage of strategic projects that undergo formal risk assessments.
- Conduct a yearly tally of the Board risk reports produced; and
- Improvements in audit findings related to risk management.

Recommendations for future research

This study explored the challenges faced by cSOEs in Namibia during the COVID-19 pandemic, evaluated the effectiveness of current RM practices, and considered the potential of implementing ERM to improve organisational sustainability. Although it met its goals, the findings revealed several areas that warrant further research. Future research should investigate how risk management evolves in Namibian cSOEs over the long-term following the COVID-19 pandemic. A longitudinal study could demonstrate whether these organisations have improved their risk management capabilities, integrated lessons from the pandemic into their procedures, and become more resilient over time. The results of this study highlighted weaknesses in risk communication and documentation, despite their critical role in effective risk management.

Future research should examine organisational factors, including leadership styles, culture, governance, and employee awareness, that contribute to poor communication and documentation. Such studies could explain why some organisations maintain formal risk records yet still struggle to implement effective risk management. Additional research is also needed to assess risk management knowledge and awareness among Boards of Directors, executive management, and employees in cSOEs in Namibia. Qualitative studies with these groups could provide deeper insight into how leadership commitment, governance practices, and

organisational culture affect ERM implementation and organisational resilience.

This study focused exclusively on commercial SOEs in Namibia. Future research should examine non-commercial SOEs and other public sector organisations to determine whether they face similar enterprise risk management challenges. Comparative analyses of commercial and non-commercial SOEs could yield meaningful insights into how organisational mandates, governance frameworks, and funding arrangements influence the effectiveness of risk management. Despite both being government-owned, they differ significantly in their mandates, governance frameworks, funding approaches, and performance standards. Such analyses could reveal whether these differences affect ERM adoption, pose specific implementation challenges, or influence organisational outcomes.

It is also recommended that comparative studies be conducted between high- and low-performing SOEs. Such research can determine whether performance differences are linked to the maturity of risk management, governance and leadership. These insights could reveal best practices that organisations with persistent operational challenges can adopt. Future research should assess the effectiveness of globally recognised ERM frameworks, such as COSO ERM and ISO 31000, in the Namibian public sector. Analysing their practical implementation, along with the contextual factors that support or hinder adoption, would provide valuable insights for policymakers and organisational leaders.

The relationship between ERM implementation and organisational sustainability over an extended period can also be investigated. A longitudinal mixed-methods approach would enable researchers to assess whether improvements in risk management practices lead to sustained improvements in organisational performance, governance and resilience.

This research found that ERM remains in the early stages of adoption among cSOEs in Namibia. While it highlighted ERM's potential to enhance organisational resilience and sustainability, the study primarily focused on the feasibility of adoption rather than the outcomes of a fully integrated ERM framework. Therefore, additional empirical studies are needed to develop evidence-based strategies for effective ERM implementation in the Namibian public enterprise sector. Enterprise RM implementation across different sectors of commercial SOEs, including transport, energy, fisheries, mining, finance and manufacturing, can also be investigated. Sector-specific investigations would provide evidence on whether implementation requirements, barriers and success factors differ across industries, and would support the development of more context-specific implementation strategies rather than adopting a uniform approach for all enterprises.

Moreover, future research can investigate organisational factors that influence the successful implementation of ERM, which were beyond this study's scope. These include leadership commitment, organisational culture, governance practices, employee risk awareness, and stakeholder involvement in risk management. Such studies could help identify the organisational conditions necessary for effective ERM adoption in Namibian cSOEs. Longitudinal studies are recommended to assess how ERM implementation affects organisations over time. Future research should move beyond perceptions of readiness and instead measure changes in organisational performance, operational resilience, financial sustainability, decision-making quality, service delivery, and risk maturity before and after ERM adoption. Such evidence would provide stronger empirical support for the long-term advantages of ERM.

The relationship between ERM implementation and financial performance can also be examined. Specifically, studies should compare organisations that have

adopted recognised ERM frameworks, such as COSO ERM or ISO 31000, with those still using traditional risk management approaches. Using performance metrics such as profitability, operational efficiency, service quality, governance effectiveness, and sustainability can help determine whether ERM contributes to improved organisational outcomes. Future research should explore the specific capacity-building interventions required for successful ERM implementation. Given that managers and employees currently have limited ERM knowledge and skills, experimental or quasi-experimental studies could assess the effects of different training programmes, certification efforts, and professional development initiatives on these areas. Such research should measure changes in ERM knowledge, implementation skills, and organisational risk maturity before and after the interventions.

Furthermore, future research should examine the role of external stakeholders, such as universities, professional bodies, consultants, and regulatory agencies, in supporting ERM implementation in commercial SOEs. Understanding how external technical assistance influences successful implementation could help organisations develop sustainable capacity-building programmes. Although this study focused on Namibian commercial SOEs, similar research should be conducted in other developing nations to assess whether the results generalise. Comparative international studies would help develop ERM implementation models tailored to different contexts for State-Owned Enterprises facing comparable governance and resource constraints.

A key limitation of this study was that, due to time constraints and delays in organisational responses, it was not possible to develop a customised ERM implementation framework for Namibian commercial SOEs. This remains an important area for future research. Future studies should aim to design, validate, and test an

ERM framework tailored to Namibian commercial SOEs. The framework should align with international standards such as COSO ERM and ISO 31000, and account for the governance, financial, operational, and institutional environments of Namibian public enterprises. Once established, implementation studies should evaluate its practical application through pilot projects with specific commercial SOEs. These studies should examine factors such as costs, organisational preparedness, potential obstacles, staff acceptance, governance requirements, and tangible organisational outcomes. The results will provide important insights for policymakers and practitioners responsible for deploying ERM across commercial SOEs.

Although Pearson correlation and multiple regression analyses examined relationships among the study constructs, the data were drawn from Likert-scale questionnaire responses, which are ordinal. Composite scores derived from multiple items were treated as approximately interval-level variables, a standard practice in social science research, particularly with large samples and reliable scales. However, this assumption may not fully satisfy the statistical requirements for Pearson correlation and linear regression. As a result, the reported relationships should be interpreted with this limitation in mind. Future studies could strengthen these findings by employing non-parametric techniques, such as Spearman's rank correlation, or by using structural equation modelling designed for ordinal data to confirm the robustness of the results.

Furthermore, because the study employed composite Likert-scale measures and analysed them using Pearson correlation and multiple linear regression, the results should be interpreted as indicators of linear relationships rather than conclusive evidence of causality. Future research could compare these findings with analyses using ordinal regression or other more robust techniques to determine whether similar

outcomes are observed.

Future research should consider the context of this study. Since this research was limited to cSOEs in Namibia during the COVID-19 pandemic, exploring different organisational settings, sectors, or countries could offer additional insights to validate, refine, or extend these findings.

Conclusion

This section summarises the study's main conclusions by integrating key findings across the research objectives, theoretical framework, and practical context. It examines the challenges faced by cSOEs in Namibia during and after the COVID-19 pandemic, assesses the effectiveness of current RM communication and documentation practices, and considers the potential of adopting ERM as a strategic approach to enhance RM for organisational performance and long-term sustainability. The conclusions are organised around each research objective to show how the study achieves its aims and answers the research questions. Rather than merely restating the empirical results, this chapter interprets their significance in the context of cSOEs in Namibia, highlighting the distinction between statistical significance and practical implications for governance, resilience, and sustainability.

This study draws on Contingency Theory, which holds that organisational effectiveness depends on the alignment of structures, management practices, and environmental factors. The COVID-19 pandemic provided a unique opportunity to examine how Namibian commercial state enterprises responded to an unexpected external crisis. Findings indicate that effective ERM requires organisational preparedness, strong leadership, good governance, clear communication, and sufficient resources to make informed risk decisions. This research extends the application of Contingency Theory to ERM, particularly within Namibian state-owned

enterprises. In addition to its theoretical contributions, this study provides empirical data on current risk management practices in commercial state-owned enterprises. It highlights organisational factors that influence the successful implementation of ERM. These findings contribute to the limited body of knowledge on ERM in Namibia's public sector and offer practical insights for policymakers, regulators, boards, executives, and stakeholders seeking to improve organisational resilience and sustainability.

Conducted during the COVID-19 pandemic, the study highlights significant weaknesses in organisational readiness, governance, operational resilience, and strategic risk management across many Namibian public enterprises. Although the pandemic's immediate effects have diminished, the findings show that lingering structural vulnerabilities from the crisis continue to threaten their long-term sustainability and competitiveness. The study’s findings reveal that risk management in many cSOEs is largely reactive and operational rather than strategic and integrated. While most organisations recognise the importance of managing risks, this awareness has not been translated into comprehensive ERM practices. Many rely on fragmented methods characterised by poor documentation, inconsistent communication, limited staff engagement, weak leadership support, and the absence of formal ERM frameworks. Consequently, risk management is often seen as merely a compliance requirement rather than a crucial element of strategic decision-making and governance.

The quantitative results revealed significant statistical associations between organisational factors and effective risk management. Beyond these statistics, the study highlights how these relationships affect organisational performance and sustainability. For instance, supply chain disruptions had a highly significant negative effect on performance ($p < 0.001$). In practice, this suggests that cSOEs should

enhance supply chain resilience by diversifying suppliers, planning for contingencies, and managing inventory strategically. The COVID-19 pandemic demonstrated that organisations lacking contingency plans faced extended disruptions, whereas those adaptable in procurement and operations were better at maintaining service levels.

Likewise, the strong impact of risk communication on successful risk management goes beyond mere statistical correlation. In practice, effective communication enables the timely detection, reporting, and mitigation of organisational risks. As a governance tool, risk communication fosters transparency, accountability, and coordinated decision-making among boards, executives, and staff. Organisations lacking effective communication channels are less able to identify emerging risks early, hampering their ability to implement appropriate mitigation measures. The findings highlight that strong leadership and capable staff are crucial to successful ERM. While these links are statistically significant, their real-world importance depends on leaders fostering a culture that promotes proactive risk management, strategic thinking, and continuous learning. Good leadership embeds risk management within the organisation's culture rather than treating it as a separate administrative task. Similarly, well-trained employees enhance resilience by spotting operational risks early and actively supporting decision-making.

The study highlighted that risk documentation is a major weakness in many cSOEs' risk management systems. Although respondents generally recognised organisational risks and the importance of mitigation strategies, inadequate documentation undermines organisational memory, hinders learning, and impairs monitoring and evaluation. This suggests that organisations should establish formal systems to record, monitor, and review risks to maintain continuity, accountability, and informed decision-making. Without thorough documentation, these organisations risk

repeatedly encountering the same problems and failing to develop long-term mitigation solutions. A key practical insight from this study is that ERM cannot be adopted by simply introducing a new policy. Its success depends on robust traditional risk management practices, sound governance, organisational commitment, and adequate resources. Consequently, organisations should first strengthen their current risk management systems before moving towards a full ERM framework. This step-by-step strategy helps reduce resistance to change, secure stakeholder support, and increase the likelihood of a successful organisational shift.

This study significantly advances practical understanding of Contingency Theory in the context of cSOEs in Namibia. Contingency Theory holds that organisational effectiveness hinges on aligning management practices with specific internal and external environmental conditions, rather than on universal management principles. The study's results empirically support this view, showing that risk-management success depends on organisational factors such as leadership commitment, organisational culture, risk communication, skilled staff, documentation routines, and resource availability. These elements collectively influence whether organisations can respond successfully during unpredictable periods, such as the COVID-19 pandemic.

Additionally, the research broadens the application of Contingency Theory in ERM by showing that effective ERM requires organisations to adjust their governance, strategic planning, and culture in response to environmental changes. The COVID-19 pandemic introduced unprecedented operational, financial, and regulatory challenges that demanded swift, strategic responses. The results show that organisations that adapted their management practices were better able to maintain performance and ensure long-term sustainability. This study thus provides new empirical support for the

idea that Contingency Theory is a suitable framework for understanding ERM implementation, especially in cSOEs in developing economies.

Beyond its theoretical contributions, this study offers practical guidance for policymakers, boards of directors, executive management, and regulators overseeing cSOEs in Namibia. It identifies key organisational areas that require strategic intervention, including strengthening leadership commitment, improving stakeholder communication, formalising risk documentation, expanding employee training, integrating risk management into strategic planning, and establishing formal EMR frameworks. These recommendations provide an evidence-based roadmap to enhance organisational governance, strengthen operational resilience, and support sustainable performance across Namibia's public enterprise sector.

This study contributes to the limited empirical research on ERM implementation in cSOEs in developing countries. Although numerous international studies examine ERM in private firms, few address its applicability to government-owned commercial entities that face unique governance, financial, and political challenges. Therefore, this research bridges an important knowledge gap by providing context-specific insights from Namibia and highlighting the organisational factors essential to successful ERM implementation.

Overall, the results indicate that ERM is a practical strategic approach to enhancing the sustainability of cSOEs in Namibia. Its effectiveness depends on improving risk management systems, strengthening governance, developing capable leadership, investing in organisational capacity, fostering a risk-aware culture, and integrating risk management into strategic decision-making. Enterprises that successfully undertake this transformation are likely to become more resilient and competitive, better equipped to handle future uncertainties. Therefore, the study

concludes that strengthening traditional risk practices provides a solid foundation for successful ERM, thereby boosting the long-term sustainability, accountability, and performance of Namibian SOEs.

This study shows that strengthening the current risk management process is essential to the effective implementation of ERM in Namibian commercial cSOEs. Risk management should be seen not only as a compliance or operational task but as a strategic capability that enhances sustainability, resilience, and long-term value. The evidence suggests that organisations that embed risk management into their strategic planning, governance, and decision-making are better equipped to anticipate, manage, and recover from crises. Therefore, cSOEs need to move from reactive approaches to more proactive, integrated strategies focused on prevention, preparedness, and ongoing organisational learning.

A key lesson from the COVID-19 pandemic emphasises the importance of organisations preparing for rare yet impactful events. Commercial SOEs should create comprehensive contingency and business continuity plans to maintain essential services amid uncertainties. These plans should outline organisational roles, communication procedures, resource allocation, and recovery strategies to minimise operational interruptions. Evidence shows that organisations with robust contingency plans are better able to manage emerging risks effectively, thereby safeguarding performance and stakeholder confidence.

The study emphasises that effective ERM depends on strengthening organisational governance and actively engaging stakeholders. Commercial SOEs should improve transparency and accountability by communicating more effectively with stakeholders and promptly, accurately, and consistently sharing risk-related information. These practices support governance principles set out in the Namibian

Public Enterprises Governance Act (PEGA), 2019; the Access to Information Act, 2022; and the Namibia Code of Corporate Governance (NamCode), all of which align with the King IV Report's principles. Implementing these governance standards can enhance public trust, increase stakeholder involvement in decision-making, and improve the credibility of commercial SOEs.

The study highlights the importance of investing in technological infrastructure to improve modern risk management. Digital tools, integrated systems, and risk management software significantly enhance risk identification, assessment, monitoring, and reporting, and support real-time decision-making. Improving IT infrastructure not only increases ERM effectiveness but also boosts operational efficiency, organisational agility, and data-driven decision-making. In today's digital and uncertain environment, investing in technology must be regarded as a strategic necessity rather than merely an operational expense.

Successful ERM implementation depends on sustained investment in organisational resources. Commercial SOEs must allocate sufficient funds, technology, and personnel to develop and maintain effective risk management systems. This includes investing in specialised risk staff, ongoing staff training, technological upgrades, monitoring tools, and capacity building. Without adequate resources, even well-designed ERM frameworks are unlikely to achieve their goals. Enhancing organisational capacity will help commercial SOEs adopt risk management practices more effectively, thereby boosting their resilience and sustainability.

In summary, this research demonstrates that effective risk management and ERM implementation can significantly transform Namibia's cSOEs into more resilient, transparent, and sustainable entities. Based on the study's conceptual framework, organisations must adopt ERM as a foundational step towards effective risk

management. This, in turn, leads to improved performance and greater sustainability for cSOEs in Namibia. Beyond ERM adoption, successful risk management also depends on clear communication, thorough documentation, and the availability of trained personnel and strong leadership to support ERM efforts. Realising this transformation requires committed leadership, sound governance, proactive stakeholder engagement, adequate resource allocation, modern technological systems, and embedding risk management within organisational culture. By adopting these strategic measures, cSOEs will not only manage uncertainty more effectively but also improve performance, build public trust, and contribute more effectively to Namibia's socio-economic progress.

Statistical and Measurement Limitations

A methodological limitation of this study concerns the handling of Likert-scale data in the quantitative analysis. The questionnaire employed Likert-scale items to assess the constructs, and individual responses are inherently ordinal, as the response categories reflect an ordered ranking rather than equal intervals. Nonetheless, composite scores derived from several Likert-scale items were analysed using Pearson correlation and multiple linear regression. Although composite scores and parametric methods are frequently used in social science research, the assumption that these scores behave as approximate interval-level measurements may not always hold. Therefore, the reported statistical relationships should be interpreted with caution. This limitation does not undermine the validity of the findings but is an important methodological consideration when interpreting the quantitative results.

Pearson correlation and multiple linear regression were chosen because the analysis used composite construct scores, and the constructs showed good internal

consistency. The author assessed reliability, and the sample size was substantial at 384 respondents. However, the study did not formally compare these parametric analyses with methods tailored for ordinal data. Future research could replicate this analysis using non-parametric methods, such as Spearman's rank-order correlation, and other techniques appropriate for ordinal or categorical data. Comparing results across these methods would help determine whether the direction, strength, and significance of the relationships remain consistent when accounting for the data's ordinal nature. Moreover, future studies might consider using structural equation modelling designed for ordinal data, assuming the research design and measurement model support it.

Another limitation concerns the scope of the reliability assessment. Internal consistency was assessed using Cronbach's alpha for the independent-variable constructs. However, reliability was not separately evaluated at the construct or dimension level for all dependent-variable measures. Although the reliability coefficients for the independent constructs demonstrated satisfactory internal consistency, the absence of specific reliability estimates for all dependent variables limits the ability to verify the measurement consistency of those constructs independently. Future studies should assess the reliability of both independent and dependent constructs at the construct or dimension level. Further studies may also appropriately report Cronbach's alpha alongside other reliability measures, such as composite reliability, to provide a more complete understanding of the measurement properties of the research instrument.

The study used qualitative interviews to inform the interpretation of the quantitative results. During the analysis, the quantitative findings aligned with the qualitative findings. When the qualitative and quantitative findings aligned, this

strengthened credibility and provided additional context. However, qualitative data should complement, and not replace, the quantitative analysis, especially given the limitations of ordinal data. Therefore, interpretations should account for both the methodological constraints of the quantitative approach and the contextual insights from the qualitative data. The chi-square analysis was used primarily for comparison rather than as the main method for examining relationships. Even though the results of both the chi-square and regression analyses yielded comparable outcomes, the researcher ensured that the chi-square results were not reported in this document.

The main findings came from quantitative methods, namely Pearson's correlation and multiple linear regression, with qualitative evidence also supporting these results. Due to time and resource constraints, this study could not employ more advanced statistical analysis. Therefore, future studies should consider a more comprehensive analytical strategy, selecting statistical techniques suited to the measurement level of each variable and carefully assessing the assumptions underlying each method.

Survivorship Bias as a Study Limitation

Commercial SOEs that failed or ceased operations before the pandemic were not included; therefore, their reasons for discontinuing operations were not investigated. To the researcher's knowledge, no commercial state-owned entities closed or became unavailable during the study period, and every active organisation had an equal opportunity to participate. Because organisations that had already ceased operating were no longer active, data on them were unavailable. Consequently, this study did not address the sustainability challenges of non-operational commercial state organisations. Instead, it focused on the sustainability mechanisms adopted by organisations that remained operational during the study

period, particularly the measures of their risk management effectiveness and improvement strategies.

Consequently, the sustainability levels reported in this study may be higher than those that would have been observed had failed or liquidated commercial state organisations been included. The findings should therefore be interpreted as representing only the experiences of the operational cSOEs during the COVID-19 pandemic and those that participated in the study. Findings of this study should not be generalised to cSOEs that had ceased operations or were no longer operational during the study period. Future studies could address this limitation by examining historical data or other available evidence relating to cSOEs that ceased operations before or after the pandemic.

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APPENDICES

Appendix A: Thematic Analysis Quotes

Questions	Illustrative Quotes	Direct Quotes	Respondents
1. What are the potential areas for improvement in the existing risk management process?	Create proper risk reporting channel ITC development Training Raise awareness Policy alignment	These is a feel to conduct regular trainings Educate people more about risk management Establish a risk culture in the organisation Create a proper risk reporting channel	Males and females Agriculture Healthcare Telecommunication
2. What kind of leadership would you want to see in your organisation?	Leader that shows empathy and change tolerant Innovative and adaptable, prioritize the well-being and development, fosters a supportive environment, employs feel valued and motivated, Encouraging Innovation and Change, increases performance	increases performance open to new ideas and willing engage in continuous learning and improvement fosters a supportive environment prioritize the well-being and development of their team members *to encourage innovation to improve efficiency and service delivery*	Males and females Agriculture Healthcare Telecommunication
3. Have you implemented ERM? If yes, what were the challenges?	*lack of skills and resources,*	lack of resources lack of skills in ERM	Males and females Agriculture Healthcare Telecommunication
4. What is your organisation doing to improve its reputation?	*Capacitates employs, carry out surveys to determine, Proactive communication strategies, Increasing transparency*	making sure that all stakeholder in the organisation is well informed regular updates to the public needs and areas of intervention *upskilling and reskilling*	Males and females Agriculture Healthcare Telecommunication
5. What is your organisation doing to maintain its sustainability and create value?	*Invest in research and development, embrace new technologies and business models, develop contingency plan, implement energy saving solutions, Efficient Financial Practices, Diversifying Revenue Streams,*	*to innovate and stay competitive* *identify and manage risks proactively* Implement the use of solar power establishment of cost-effective practises ensure efficient use of resources and maintaining a balanced budget save resources and	Males and females Agriculture Healthcare Telecommunication

		remain sustainable handle potential disruptions	
6. Where do you see your organisation in years to come and if you could change one thing in your organisation, what would that be?	*will thrive through good leadership, strengthening partnerships, establish cross-functional teams, promote a culture of collaboration and innovation, Possible increased Revenue*	Organisation is growing and will be able to each another level, different departments to work one common goals, become a premier training ground for future researchers,	Males and females Agriculture Healthcare Telecommunication

Appendix B: Quantitative Data Collection Tool

Topic: Managing Enterprise Risks: A Namibian Study on Commercial State-Owned Enterprises (SOEs) During the COVID-19 Pandemic

Survey Questionnaire

My name is Ndahafa Frans, a postgraduate student at Unicaf University, Malawi. As part of my degree, I'm conducting the above study that aims to ascertain the challenges faced by commercial state firms in Namibia during the COVID-19 pandemic and to do a comprehensive analysis of the strengths, weaknesses, opportunities, and threats associated with the existing risk management practices. The objective of this analysis is to identify potential challenges that may arise in the implementation of enterprise risk management, considering the efficacy of risk management in supporting organisations during the COVID-19 pandemic. You have been selected to participate in the survey because you are an employee of a commercial state-owned enterprise in Namibia. You can provide independent responses to the survey questions, and you are between the ages of 25 and 60 years old.

Informed Consent

I have read the foregoing information about the study. I have had a chance to ask questions, and I have received enough information about the study. I understand that I am free to withdraw from this study at any time without giving a reason for withdrawing and without negative consequences. I consent to the use of multimedia and audio recordings for my participation in this study. I understand that my data will remain anonymous and confidential unless stated otherwise.

I consent voluntarily to be a participant in this study by ticking this box. ☐

1. Demographic Information

1.1. Company Name										
1.2. Rank/ Position	a) Executive/Top Management			b) Middle Management			c) Frontline Employee			d) Other (please specify)
1.3. Gender	Male						Female			
1.4. Years of Employment	Less than 2 years			2 to 5 years			5 to 10 years			10 and above years
1.5. Age (years)	25	Above 25	30	Above 30	40	Above 40	50	Above 50	60	
1.6. Industry	Transport	Aviation	Energy	Tourism	Education	Healthcare	Fishing	Mining	Agriculture	Telecommunications
1.7. Education	High School certificate		Certificate		Degree		Masters		PhD	
1.8. Term of employment	Contract						Permanent			

2. Challenges encountered during the COVID-19 pandemic? (More than one answer can be selected)

2.1. Delay in Supply chain

2.2. Unfavourable working conditions

2.3. Shortage in cashflows

2.4. Changes in consumer behaviour

2.5. Regulation compliance (wearing of masks, social distancing, etc)

2.6. Bankruptcy or closure

2.7. Mental health-related problems among employees

2.8. Acceptance of modern technology

2.9. Staff reduction

3. Risk Management Process: Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis.

On a scale of 1 to 5, with 1 being "Strongly Disagree" and 5 being "Strongly Agree," please rate the following statements:

	Strongly Agree (SA)	Agree (A)	Not sure (NS)	Disagree (D)	Strongly disagree (SD)
3.1. The current risk management process is not effective.					
3.2. Our risk management process is working well.					
3.3. Everyone understands what risk is.					
3.4. There is an effective risk documentation process.					
3.5. There are risk mitigation mechanisms in place.					

4. Organisational risk communication and knowledge

On a scale of 1 to 5, with 1 being "Strongly Disagree" and 5 being "Strongly Agree," please rate the following statements:

	Strongly Agree (SA)	Agree (A)	Not Sure (NS)	Disagree (D)	Strongly disagree (SD)
4.1. Management and board timely discuss possible organisational risks.					
4.2. Management makes sure that all staff understand possible operational risks.					
4.3. Risks are well communicated					
4.4. Staff are trained in risk management					
4.5. Risk process management is discussed with everyone					
4.6. There is a risk officer in place					

5. Organisational sustainability

On a scale of 1 to 5, with 1 being "Strongly Disagree" and 5 being "Strongly Agree," please rate the following statements:

	Strongly Agree (SA)	Agree (A)	Not sure (NS)	Disagree (D)	Strongly disagree (SD)
5.1. More funds will be needed to keep the organisation running.					
5.2. There are clear sustainability goals and objectives.					
5.3. The organisation regularly monitors its environmental impact.					
5.4. There are stakeholders' engagement platforms.					
5.5. Overall Performance is satisfactory.					
5.6. There is a commitment to sustainable practices such as environmental, urban, Agricultural, Economic, Social and Individual.					
5.7. The organisation is led by a competent leadership team.					

6. Enterprise Risk Management (ERM)

On a scale of 1 to 5, with 1 being "Strongly Disagree" and 5 being "Strongly Agree," please rate the following statements:

	Strongly Agree (SA)	Agree (A)	Not sure (NS)	Disagree (D)	Strongly Disagree (SD)
6.1. There is a connection between organisational sustainability and effective risk management.					
6.2. ERM is integrated into the organisation's strategic planning process.					
6.3. Effective risk management can positively influence performance					

6.4. ERM promotes organisational value					
6.5. There is a formalised enterprise risk management framework/policy.					

7. Choose the correct answer on how you understand Enterprise Risk management. More than one answer is applicable.

7.1. Is a risk framework that looks at the process of risk management from the perspective of the entire firm.

7.2. Is a holistic approach to risk management that involves the whole organisation.

7.3. It is a process of identifying and monitoring risks.

7.4. All above

8. Choose the correct answer on what enterprise risk management offers to organisations. More than one answer is applicable.

8. It helps organisations control risks effectively.

9. It puts measures in place before risks occur.

10. The process involves everyone in the organisation especially, the management and the board.

11. It allows an integrated approach to dealing with risks.

12. All the above

THANK YOU FOR YOUR PRECIOUS TIME!

Appendix C: Qualitative Data Collection Tool

Interview

Topic: Managing Enterprise Risks: A Namibian Study on Commercial State-Owned Enterprises (SOEs) During the COVID-19 Pandemic

My name is Ndahafa Frans, a postgraduate student at Unicaf University, Malawi. As part of my degree, I'm conducting the above study that aims to ascertain the challenges faced by commercial state firms in Namibia during the COVID-19 pandemic and to do a comprehensive analysis of the strengths, weaknesses, opportunities, and threats associated with the existing risk management practises. The objective of this analysis is to identify potential challenges that may arise in the implementation of enterprise risk management, considering the efficacy of risk management in supporting organisations during the COVID-19 pandemic. You have been selected to participate in the survey because you are an employee of a commercial state-owned enterprise in Namibia. You can provide independent responses to the survey questions, and you are between the ages of 25 and 60 years old.

Informed Consent

I have read the foregoing information about the study. I have had a chance to ask questions, and I have received enough information about the study. I understand that I am free to withdraw from this study at any time without giving a reason for withdrawing and without negative consequences. I consent to the use of multimedia and audio recordings for my participation in this study. I understand that my data will remain anonymous and confidential unless stated otherwise.

I consent voluntarily to be a participant in this study by ticking this box. ☐

1. Demographic Information

1.1. Company Name									
1.2. Rank/Position	a) Executive Management		b) Middle Management		c) Low-level Management		d) Others (please specify)		
1.3. Gender	Male				Female				
1.4. Years of Employment	Less than 2 years		2 to 5 years		5 to 10 years		Above 10 years		
1.5. Age (years)	25	Above 25	30	Above 30	40	Above 40	50	Above 50	60
1.6. Industry	Transport	Aviation	Energy	Tourism	Education	Healthcare	Fishing	Mining	Agriculture	Telecommunications
1.7. Education	High School certificate		Tertiary Education Certificate		Degree		Masters		PhD
1.8. Term of employment	Contract						Permanent		

2. What are the potential areas for improvement in the existing risk management process?.....

.....

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3. What kind of leadership would you want to see in your organisation? .....

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4. Have you implemented ERM? If yes, what were the challenges?.....

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5. What is your organisation doing to improve its reputation?.....

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6. What is your organisation doing to maintain its sustainability and create value?

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7. Where do you see your organisation in years to come and if you could change one thing in your organisation, what would that be?

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.....

.....

THANK YOU FOR YOUR PRECIOUS TIME!

Appendix D: Informed Consent Part

UU_IC - Version 2.1

Informed Consent Form

Part 1: Debriefing of Participants

Student's Name: Ndahafa Frans

Student's E-mail Address: ndahafaj@gmail.com

Student ID #: R2104D12112149

Supervisor's Name: Dr O.S. Fadun

University Campus: Unicaf University Malawi (UUM)

Program of Study: PhD Doctorate of Philosophy - Business Administration

Research Project Title: MANAGING ENTERPRISE RISKS: A NAMIBIAN STUDY ON COMMERCIAL STATE OWNED ENTERPRISES (SOEs) DURING THE COVID-19 PANDEMIC

Date: 09-Nov-2023

Provide a short description (purpose, aim and significance) of the research project, and explain why and how you have chosen this person to participate in this research (maximum 150 words).

The main objectives of this study are to ascertain the challenges faced by commercial state firms in Namibia during the COVID-19 pandemic and to do a comprehensive analysis of the strengths, weaknesses, opportunities, and threats associated with the existing risk management practises. The objective of this analysis is to identify potential challenges that may arise in the implementation of enterprise risk management, taking into account the efficacy of risk management in supporting organisations during the COVID-19 pandemic.

You have been selected to participate in the survey because you are an employee of a commercial state-owned enterprise in Namibia. You are able to provide independent responses to the survey questions, and you are between the ages of 25 and 60 years old.

The above named student is committed to ensuring participant's voluntarily participation in the research project and guaranteeing there are no potential risks and/or harms to the participants.

Participants have the right to withdraw at any stage (prior or post the completion) of the research without any consequences and without providing any explanation. In these cases, data collected will be deleted.

All data and information collected will be coded and will not be accessible to anyone outside this research. Data described and included in dissemination activities will only refer to coded information ensuring beyond the bounds of possibility participant identification.

I, Ndahafa Frans **, ensure that all information stated above is true and that all conditions have been met.**

Student's Signature: N.Frans

UU_IC - Version 2.1

Informed Consent Form

Part 1: Debriefing of Participants

Student's Name: Ndahafa Frans

Student's E-mail Address: ndahafaj@gmail.com

Student ID #: R2104D12112149

Supervisor's Name: Dr O.S. Fadun

University Campus: Unicaf University Malawi (UUM)

Program of Study: PhD Doctorate of Philosophy - Business Administration

Research Project Title: MANAGING ENTERPRISE RISKS: A NAMIBIAN STUDY ON COMMERCIAL STATE OWNED ENTERPRISES (SOEs) DURING THE COVID-19 PANDEMIC

Date: 09-Nov-2023

Provide a short description (purpose, aim and significance) of the research project, and explain why and how you have chosen this person to participate in this research (maximum 150 words).

The main objectives of this study are to ascertain the challenges faced by commercial state firms in Namibia during the COVID-19 pandemic and to do a comprehensive analysis of the strengths, weaknesses, opportunities, and threats associated with the existing risk management practises. The objective of this analysis is to identify potential challenges that may arise in the implementation of enterprise risk management, taking into account the efficacy of risk management in supporting organisations during the COVID-19 pandemic.

You have been selected to participate in the survey because you are an employee of a commercial state-owned enterprise in Namibia. You are able to provide independent responses to the survey questions, and you are between the ages of 25 and 60 years old.

The above named student is committed to ensuring participant's voluntarily participation in the research project and guaranteeing there are no potential risks and/or harms to the participants.

Participants have the right to withdraw at any stage (prior or post the completion) of the research without any consequences and without providing any explanation. In these cases, data collected will be deleted.

All data and information collected will be coded and will not be accessible to anyone outside this research. Data described and included in dissemination activities will only refer to coded information ensuring beyond the bounds of possibility participant identification.

I, Ndahafa Frans **, ensure that all information stated above is true and that all conditions have been met.**

Student's Signature: N.Frans

UU_IC - Version 2.1

Informed Consent Form

Part 2: Certificate of Consent

This section is mandatory and should to be signed by the participant(s)

Student's Name: Ndahafa Frans

Student's E-mail Address: ndahafaj@gmail.com

Student ID #: R2104D12112149

Supervisor's Name: Dr O.S. Fadun

University Campus: Unicaf University Malawi (UUM)

Program of Study: PhD Doctorate of Philosophy - Business Administration

Research Project Title: MANAGING ENTERPRISE RISKS: A NAMIBIAN STUDY ON COMMERCIAL STATE OWNED ENTERPRISES (SOEs) DURING THE COVID-19 PANDEMIC

I have read the foregoing information about this study, or it has been read to me. I have had the opportunity to ask questions and discuss about it. I have received satisfactory answers to all my questions and I have received enough information about this study. I understand that I am free to withdraw from this study at any time without giving a reason for withdrawing and without negative consequences. I consent to the use of multimedia (e.g. audio recordings, video recordings) for the purposes of my participation in this study. I understand that my data will remain anonymous and confidential, unless stated otherwise. I consent voluntarily to be a participant in this study.

Participant's Print name: _____

Participant's Signature: _____

Date:

If the Participant is illiterate:

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had an opportunity to ask questions. I confirm that the aforementioned individual has given consent freely.

Witness's Print name: _____

Witness's Signature: _____

Date:

Appendix E: Gatekeeper Letter

UU_GL - Version 2.0

Gatekeeper letter

Institution / Organization : 19 cSOEs in Namibia

Address: 7 Feld Street Private Bag 13369

Date: 03-Nov-2023

Subject: Permission to conduct a study

Dear Sir/Madam

I am a postgraduate doctoral student at Unicaf University, Malawi. As part of my degree, I am carrying out a study on Managing Enterprise Risk Management: A Namibian Study on Commercial State-Owned Enterprises (SOEs) During the COVID-19 pandemic.

I am writing to inquire whether your organisation would be interested in participating in this study and to offer permission to your employees to take part in this research. Subject to approval by the Unicaf Research Ethics Committee (UREC), this study will use a Google Form to capture the questionnaire, which will be shared with your office to disseminate to your staff members considering your agreement to participate in this research. I will then need your office to dispatch a questionnaire to employees in your organisation that can read and write, do not require assistance when answering the questionnaire, and are able to provide their own consent.

Filling out the questionnaire will require 10 minutes of their time. This study intends to investigate the challenges faced by commercial state companies in Namibia during the COVID-19 pandemic as well as conduct a strengths, weaknesses, opportunities, and threats analysis of the current risk management practices for the possible implementation of enterprise risk management.

Thank you in advance for your time and for your consideration of this project. Kindly let me know if you require any further information or need any further clarifications.

Yours Sincerely,

Ndahafa Frans

Student's Name: Ndahafa Frans
Student's E-mail: ndahafaj@gmail.com
Student's Address and Telephone: P.O.Box 61735, Katutura, Windhoek
Supervisor's Title and Name: Dr O.S. Fadun
Supervisor's Position:
Supervisor's E-mail: o.fadun@unicaf.org

Gatekeeper Letter
Part 1: Approval Request

To this end, I would be grateful if you would grant your approval for conducting this research. I wish to assure you that all data and personal information will be processed according to the code of Ethics of Unicaf University, which ensures the anonymity and confidentiality of participants. During the entire research process, no personal information of participants will be revealed, thus maintaining scientific confidentiality and anonymity.

I wish to clarify that the organization's participation will be voluntary. For any further clarifications, please do not hesitate to contact me.

Thank you in advance for your time and for your consideration of this project.

Yours Sincerely, Dr O.S.Fadun

Student's Name: Ndahafa Frans

Student's E-mail: ndahafaj@gmail.com

Student's Address and Telephone: +264814507159

Supervisor's Name: Dr O.S.Fadun

Supervisor's E-mail: o.fadun@unicaf.org

University Campus/Program: Unicaf University in Malawi: PhD Doctorate of Philosophy - Business Admi

Research Project Title: MANAGING ENTERPRISE RISKS FOR SUSTAINABILITY: A STUDY ON COMMERCIAL STATE-OWNED ENTERPRISES (SOEs) DURING THE COVID-19 PANDEMIC IN NAMIBIA

UNICAF | UNICAF UNIVERSITY

UU_GL - Version 3.0

Gatekeeper Letter
Part 2: Approval

This section is mandatory and should to be signed by the Gatekeeper

Student's Name: Ndahafa Frans

Student's E-mail: ndahafaj@gmail.com

Student's Address and Telephone: +264814507159

Supervisor's Name: Dr O.S.Fadun

Supervisor's E-mail: o.fadun@unicaf.org

University Campus/Program: Unicaf University in Malawi: PhD Doctorate of Philosophy - Business Adm

Research Project Title: MANAGING ENTERPRISE RISKS FOR SUSTAINABILITY: A STUDY ON COMMERCIAL STATE-OWNED ENTERPRISES (SOEs) DURING THE COVID-19 PANDEMIC IN NAMIBIA

I have read the foregoing information about this study, or it has been read to me. I have had the opportunity to ask questions and discuss about it. I have received satisfactory answers to all my questions and I have received enough information about this study. I consent to the provision of access as per the letter above for the period from _____ to _____

Gatekeeper's Name:

Gatekeeper's Position:

Gatekeeper's Signature:

Date:

Appendix F: UREC pre-approval

UNICAF UNIVERSITY

UREC Desision, Version 2.0

Unicaf University Research Ethics Committee Decision

Student's Name: Ndahafa Frans

Student's ID #: R2104D12112149

Supervisor's Name: Dr Solomon Olajide Fadun

Program of Study: UUM: PhD Doctorate of Philosophy - Business Administration

Offer ID /Group ID: O45799G47245

Dissertation Stage: 1

Research Project Title: MANAGING ENTERPRISE RISKS: A NAMIBIAN STUDY ON COMMECIAL STATE OWNED ENTERPRISES (cSOEs) DURING THE COVID-19 PANDEMIC

Comments: The student should ensure that access to participants and data is enabled upon the approval of appropriate persons in the focused area of the study. A clarification or a link driving to information related to the need or not have the need for further approvals could help.

Decision*: A. Provisionally approved without revision or comments

Date: 07-Nov-2022

*Provisional approval provided at the Dissertation Stage 1, whereas the final approval is provided at the Dissertation stage 3. The student is allowed to proceed to data collection following the final approval.

Appendix G: UREC Final Approval

UNICAF UNIVERSITY

UREC Decision, Version 2.0

Unicaf University Research Ethics Committee Decision

Student's Name:	Ndahafa Frans
Student's ID #:	R2104D12112149
Supervisor's Name:	Dr Olajide Solomon Fadun
Program of Study:	UU-PhD-BA-900-3
OfferID / GroupID:	O59550G67697
Dissertation stage:	DS3
Research Project Title:	Managing Enterprise risks: A Namibian study on Commercial State-Owned Enterprises (SOEs) During the COVID-19 Pandemic
Ethical conditions for approval:	No comments.
Methodological recommendations:	
Decision*:	A. Approved without revision or comments
Date:	December 5, 2023

*Provisional approval provided at the Dissertation Stage 1, whereas the **final** approval is provided at the Dissertation stage 3. The student is allowed to proceed to data collection following the final approval.

Appendix H: Local Ethics Approval

NCRST
NATIONAL COMMISSION ON RESEARCH, SCIENCE & TECHNOLOGY

Head Office
Cnr Louis Raymond and Grant Webster Street
Olympia, Windhoek, Namibia
Private Bag 13253 Windhoek, Namibia
Tel: +264 61 431 7000
Email: info@ncrst.na
Website: www.ncrst.na

Ms Ndahafa Joseph

P.O.Box 61735

Katutura

Windhoek

Namibia

10 April 2025

Dear Ms Joseph

Re: REQUEST FOR RESEARCH APPROVAL.

The National Commission on Research, Science and Technology (NCRST) is mandated by the Research, Science and Technology (RST) Act, 2004 (Act No. 23 of 2004) to ensure the coordination, monitoring and supervision of research, science, technology and innovation in Namibia.

However, the NCRST only processes applications for authorisation of environmental related research and scientific research that involves collecting specimens from people and animal subjects. On the contrary, the social science research projects only require clearance of the research and ethics committee of the institution of affiliation

Therefore, your research, titled: "*Managing Enterprise Risks: A Namibian Study on Commercial State Owned Enterprises (SOEs) during the COVID-19 Pademic*" does not require NCRST approval. The ethical clearance from UNICAF University is sufficient to facilitate consent from the institutions where you will be conducting the study.

If you have any query, do not hesitate to contact Mr. Junias Shangala, Program Officer at jshangala@ncrst.na or 061-431 7075.

Yours sincerely,

National Commission on Research Science & Technology
14 APR 2025
Windhoek, Namibia
CEO Office

Prof. Dr. Anicia Peters

Chief Executive Officer

Appendix I: Permission to Conduct the Study

REPUBLIC OF NAMIBIA

MINISTRY OF FINANCE AND PUBLIC ENTERPRISES

Tel.: (00 264 61) 209 9111
Fax: (00 264 61) 230 179

Enquiries: A.Ileka

Head Office,
Moltke Street,
Private Bag 13295,
WINDHOEK

Our Ref.: ..... Your Ref.: .....

28 February 2024

Ms Ndahafa Frans
Student
UNICAF University

Dear Ms Frans,

RE: PERMISSION TO CONDUCT RESEARCH AT THE MINISTRY OF FINANCE AND PUBLIC ENTERPRISES

We acknowledge with appreciation receipt of your letter on the above subject.

We support your request and authorize you to conduct the research study within the Ministry of Finance and Public Enterprises.

In this regard, you are advised to act in accordance with the Ministry of Finance and Public Enterprises' policies and procedures, and all information obtained remains the property of this Ministry and be used for study purposes only.

Finally, we would like to wish you all the best in your studies, and we look forward to receiving a copy of your final thesis.

Yours sincerely,

Titus Ndove
EXECUTIVE DIRECTOR

Appendix J: REAF DS Form

REAF_DS - Version 3.3 AP

UNICAF UNIVERSITY RESEARCH ETHICS APPLICATION FORM DOCTORAL STUDIES	UREC USE ONLY: Application No: Date Received:

Student's Name: Ndahafa Frans

Student's E-mail Address: ndahafaj@gmail.com

Student's ID #: R2104D12112149

Supervisor's Name: Dr O.S.Fadun

University Campus/Program: Unicaf University Malawi: PhD Doctorate of Philosophy - Business Administration

Research Project Title: Managing Enterprise Risks: A Namibian Study on Commercial State-Owned Enterprises (SOEs) during the COVID-19 Pandemic.

1. **Please state the timelines involved in the proposed research project:**

Estimated Start Date: 01-Jan-2023 Estimated End Date: 31-Jul-2024

2. **External Research Funding (if applicable):**

2.a. Do you have any external funding for your research?

☐ YES ☒ NO

If YES, please answer questions **2b** and **2c**.

2.b. List any external (third party) sources of funding you plan to utilise for your project. You need to include full details on the source of funds (e.g. state, private or individual sponsor), any prior / existing or future relationships between the funding body / sponsor and any of the principal investigator(s) or co-investigator(s) or student researcher(s), status and timeline of the application and any conditions attached.

2.c. If there are any perceived ethical issues or potential conflicts of interest arising from applying for and/or receiving external funding for the proposed research then these need to be fully disclosed below and also further elaborated on, in the relevant sections on ethical considerations later on in this form.

3. The research project

3.a. Project Summary:

In this section fully describe the purpose and underlying rationale for the proposed research project. Ensure that you pose the research questions to be examined, state the hypotheses, and discuss the expected results of your research and their potential.

It is important in your description to use plain language so it can be understood by all members of the UREC, especially those who are not necessarily experts in the particular discipline. To that effect ensure that you fully explain/define any technical terms or discipline-specific terminology (use the space provided in the box).

The current study aims to outline the challenges experienced by commercial state-owned enterprises in Namibia during the COVID-19 pandemic and explore the current risk management process. The study would like to provide evidence of how ERM implementation may assist commercial SOEs' performance and maintaining them in a long run.
The project will answer four research questions:

RQ1: What challenges did the cSOEs face during the COVID-19 pandemic?
RQ2: Which components of the current RM process are effective and which are ineffective?
RQ3: What are the main requirements for implementing ERM?
RQ4: How can cSOEs be helped to implement ERM more easily?

In addition to the four research questions, the study investigated three:

Hypothesis 1: Effective risk management practises have no positive relationship with organisational performance.
Hypothesis 2: There is no positive relationship between ERM implementation and organisational sustainability.
Hypothesis 3: There is no positive relationship between ERM and organisational value creation.

Answering the four study questions will help determine the main challenges affecting commercial state entities' operation.
The study expects to see commercial SOEs without a well-established risk management process as the ones not doing well. Hence, this study will explore the strengths, weaknesses, challenges, and opportunities of the current risk management process that will enable proper recommendations for adjustments for the implementation of the risk framework. The study will establish a step-by-step risk guide that will assist these entities and others in implementing effective risk management for improved performance and sustainability.

3.b. Significance of the Proposed Research Study and Potential Benefits:

Outline the potential significance and/or benefits of the research (use the space provided in the box).

Establishing ways to overcome challenges such as those encountered during the COVID-19 pandemic will assist businesses, not only in Namibia, in navigating challenging economic climates.

This study encourages the implementation of enterprise risk management (ERM) as a gold standard framework for risk management that is recommended to businesses of all sizes. ERM is known to promote performance, sustainability, and company value. Therefore, this study will come up with a national risk framework that will help cSOEs and, most probably, other enterprises in Namibia easily implement ERM.

The suggested national risk framework will function as a guiding instrument in the areas of risk assessment, process management, and the establishment of preparedness for unpredictable circumstances. Having this risk-guiding document will also be able to help with ERM implementation strategies in firms that are not only state owned. Adoption of risk standards such as ISO 31000 is what organisations fail to adhere to, resulting in challenges that will not make business possible. Hence, this study will pave the way for Namibian state entities to easily implement ERM strategies by providing this quick guide.

4. Project execution:

4.a. The following study is an:

- [4] experimental study (primary research)
- [ ] desktop study (secondary research)
- [ ] desktop study using existing databases involving information of human/animal subjects
- [ ] Other

If you have chosen 'Other' please Explain:

4.b. Methods. The following study will involve:

- [ ] a Quantitative methodology
- [ ] a Qualitative methodology
- [4] a mixed methods approach

If you have chosen mixed methods please state below whether you are going to proceed with triangulation or not.

[4] YES [ ] NO

4.c. Please state below which tools you are going to use:

A **Select the tools to be used in your study**	B **Select how the tools selected in column A will be administered (select one or more)**	C **Select what types of questions will be included in the tools previously selected in column A (select one or more)**
Interviews [4]	[4] Face-to-face [ ] Online with camera (synchronous live discussion with camera) [4] Audio only (synchronous live discussion without camera, i.e., via phone)	[4] Open-ended questions [ ] Close-ended questions [4] Includes section related to demographics
Focus Groups [ ]	[ ] Face-to-face [ ] Online with camera (synchronous live discussion with camera) [ ] Audio only (synchronous live discussion without camera, i.e., via phone)	[ ] Open-ended questions [ ] Close-ended questions [ ] Includes section related to demographics
Questionnaire [4]	[ ] Face-to-face self – administered questionnaire [ ] Online, i.e., via phone or any other platform. The researcher reads the questions to the participants [4] Online asynchronous self-administered questionnaire (i.e., via email)	[ ] Open-ended questions [4] Close-ended questions [4] Includes section related to demographics

A Select the tools to be used in your study	B Select how the tools selected in column A will be administered (select one or more)	C Select what types of questions will be included in the tools previously selected in column A (select one or more)
Experiments ☐	☐ Face-to-face ☐ Online with camera (synchronous live discussion with camera) ☐ Audio only (synchronous live discussion without camera, i.e., via phone) ☐ Asynchronously via any online platform	☐ Open-ended questions ☐ Close-ended questions ☐ Includes section related to demographics
Tests ☐	☐ Face-to-face ☐ Online with camera (synchronous live discussion with camera) ☐ Audio only (synchronous live discussion without camera, i.e., via phone) ☐ Asynchronously via any online platform	Provide a brief description of the test in the box 'Other' below.
Other		

5. Participants:

5 a. Does the Project involve the recruitment and participation of additional persons other than the researcher(s) themselves?

☒ 4 YES **If YES, please complete all following sections.**

☐ NO **If NO, please directly proceed to Question 7.**

5 b. Relevant Details of the Participants of the Proposed Research

State the number of participants you plan to recruit, and explain in the box below how the total number was calculated.

Number of participants: 400

The study will involve 19 of the 20 commercial state-owned companies in Namibia, obtained by using Yamane's (1967) formula . Because the overall number of employees within the said entities is not known, Conray's table was used to select the 400 participants appropriate for this study based on the population above 5000 employees within the respective cSOEs. For the qualitative study, any number from 5 participants will be relevant for this study.

Describe important characteristics such as: demographics (e.g. age, gender, location, affiliation, level of fitness, intellectual ability etc). It is also important that you specify any inclusion and exclusion criteria that will be applied (e.g. eligibility criteria for participants).

Age range From 25 To 60

Gender
4 Female
4 Male

Eligibility Criteria:

☐ Inclusion criteria: Participants are those employed in commercial SOE in Namibia who can read and write and are between the ages of 25□60. These are managers and employees of commercial SOEs, regardless of their term of employment or years of employment.

☐ Exclusion criteria: Managers and employees of commercial SOEs below or above the specified age limit, or those who cannot read or write and are unable to make their own decisions,

Disabilities/Disorders: You should only include the participants who can provide informed consent for themselves. Individuals who have a mental disability and are not in a position to provide their own consent should not participate in the study. Please provide information for any other disabilities/disorders the participants may have:

People with mental disability will not participate in the study

Other relevant information (use the space provided in the box):

5 c. Participation & Research setting:

Clearly describe which group of participants (described in 5b) is completing/participating in the material(s)/tool(s) described in 4c above (use the space provided in the box)

The 400 participants in the survey will be employees and managers of commercial state-owned enterprises in Namibia. Participants consist of people who can read and write and are able to make their own decisions.

For the qualitative study, participants will be those at the management level. The researcher will email the gatekeeper to inform the management of the interview sessions. Appointments to meet the managers and obtain their consent will be made through the gatekeepers of the respective organisations.

5 d. Recruitment Process for Human Research Participants:

Clearly describe how the potential participants will be identified, approached and recruited (use the space provided in the box).

The researcher will seek permission to contact the study through the gatekeeper letter from the entity's management. In the letter, the researcher will seek permission to send online questionnaires to the gatekeeper, who will be disseminating the questionnaire through emails to eligible employees and managers.

The appointment of the managers of the participating organisation will also be done through the gatekeeper. An email will be sent to the management through the gatekeeper to obtain the consent of those who would like to participate in the interview. The researcher will explain the study and obtain a suitable time and mode of interview from the participants.

5 e. Research Participants Informed Consent.

Select below which categories of participants will participate in the study. Complete the relevant Informed Consent form and submit it along with the REAF form.

Yes	No	Categories of participants	Form to be completed
4		Typically Developing population(s) above the maturity age *	Informed Consent Form
	4	Typically Developing population(s) under the maturity age *	Guardian Informed Consent Form

* Maturity age is defined by national regulations in laws of the country in which the research is being conducted.

5 f. Relationship between the principal investigator and participants.

Is there any relationship between the principal investigator (student), co-investigators(s), (supervisor) and participant(s)? For example, if you are conducting research in a school environment on students in your classroom (e.g. instructor-student).

☐ YES ☒ 4 NO

If YES, specify (use the space provided in the box).

6. Potential Risks of the Proposed Research Study.

6 a. i. Are there any potential risks, psychological harm and/or ethical issues associated with the proposed research study, other than risks pertaining to everyday life events?

☐ YES ☒ 4 NO

If YES, specify below and answer the question 6 a.ii.

6 a.ii Provide information on what measures will be taken in order to exclude or minimise risks described in 6.a.i.

6 b. Choose the appropriate option

		Yes	No
i.	Will you obtain a written informed consent form from all participants?	4	
ii.	Does the research involve, as participants, people whose ability to give free and informed consent is in question?		4
iii.	Does this research involve participants who are children under maturity age? **If you answered YES to question iii, complete all following questions.** **If you answered NO to question iii, do not answer Questions iv, v, vi and proceed to Questions vii, viii, ix and x.**		4
iv.	Will the research tools be implemented in a professional educational setting in the presence of other adults (i.e. classroom in the presence of a teacher)?		4
v.	Will informed consent be obtained from the legal guardians (i.e. parents) of children?		4
vi.	Will verbal assent be obtained from children?		4
vii.	Will all data be treated as confidential? If NO, explain why confidentiality of the collected data is not appropriate for this proposed research project, providing details of how all participants will be informed of the fact that any data which they will provide will not be confidential.	4	
viii.	Will all participants/data collected be anonymous? If NO, explain why and describe the procedures to be used to ensure the anonymity of participants and/or confidentiality of the collected data both during the conduct of the research and in the subsequent release of its findings.	4	

		Yes	No
ix.	Have you ensured that personal data and research data collected from participants will be securely stored for five years?	4	
x.	Does this research involve the deception of participants? If YES, describe the nature and extent of the deception involved. Explain how and when the deception will be revealed, and who will administer this debrief to the participants:		4

6 c. i. Are there any other ethical issues associated with the proposed research study that are not already adequately covered in the preceding sections?

☐ Yes ☒ 4 No

If YES, specify (maximum 150 words).

6.c.ii Provide information on what measures will be taken in order to exclude or minimise ethical issues described in 6.c.i.

6 d. Indicate the Risk Rating.

☐ High ☒ 4 Low

7. Further Approvals

All researchers are advised to check the regulations pertaining to research and General Data Protection Regulation (GDPR) of the country in which the research will take place as each country may have different restrictions on conducting research. **Are there any other approvals required (i.e., from a ministry or public agency in the country, in addition to ethics clearance from UREC) in order to carry out the proposed research study?**

☐ YES ☒ NO If YES, specify.

8. Application Checklist

Mark √ if the study involves any of the following:

☐ Children and young people under 18 years of age, vulnerable populations such as children with special educational needs (SEN), racial or ethnic minorities, socioeconomically disadvantaged persons, pregnant women, elderly, malnourished people, and ill people.

☐ Research that foresees risks and disadvantages that would affect any participant of the study such as anxiety, stress, pain or physical discomfort, harm risk (which is more than is expected from everyday life) or any other act that participants might believe is detrimental to their wellbeing and/or has the potential to / will infringe on their human rights / fundamental rights.

☐ Risk to the well-being and personal safety of the researcher.

☐ Administration of any substance (food / drink / chemicals / pharmaceuticals / supplements / chemical agent or vaccines or other substances (including vitamins or food substances) to human participants.

☐ Results that may have an adverse impact on the natural or built environment.

9. Further documents

Check that the following documents are attached to your application:

		ATTACHED	NOT APPLICABLE
1	Recruitment advertisement (if any)	☐	☒
2	Informed Consent Form / Guardian Informed Consent Form	☒	☐
3	Research Tool(s)	☒	☐
4	Gatekeeper Letter	☒	☐
5	Any other approvals required in order to carry out the proposed research study, e.g., institutional permission (e.g. school principal or company director) or approval from a local ethics or professional regulatory body.	☐	☒

10. Final Declaration by Applicants:

(a) I declare that this application is submitted on the basis that the information it contains is confidential and will only be used by Unicaf University for the explicit purpose of ethical review and monitoring of the conduct of the research proposed project as described in the preceding pages.

(b) I understand that this information will not be used for any other purpose without my prior consent, excluding use intended to satisfy reporting requirements to relevant regulatory bodies.

(c) The information in this form, together with any accompanying information, is complete and correct to the best of my knowledge and belief and I take full responsibility for it.

(d) I undertake to abide by the highest possible international ethical standards governing the Code of Practice for Research Involving Human Participants, as published by the UN WHO Research Ethics Review Committee (ERC) on http://www.who.int/ethics/research/en/ and to which Unicaf University aspires to adhere.

(e) In addition to respect any and all relevant professional bodies' codes of conduct and/or ethical guidelines, where applicable, while in pursuit of this research project.

4	**I agree with all points listed under Question 10**

Student's Name: Ndahafa Frans

Supervisor's Name: Dr O.S.Fadun

Date of Application: 11-Nov-2023

Important Note:
Save your completed form (we suggest you also print a copy for your records) and then submit it to your UU Dissertation/project supervisor (tutor). **In the case of student projects, the responsibility lies with the Faculty Dissertation/Project Supervisor.** If this is a student application, then it should be submitted via the relevant link in the VLE. Please submit only electronically filled in copies; **do not** hand fill and submit scanned paper copies of this application.

Appendix K: Qualitative Data Collection Participant Log

Participant ID	Role	Date and time	Duration	Interview context	Verification/Consent
Participant1	Senior Human Resource Officer	3/12/2024	N/A	Self-completed	Signed consent
Participant2	Chief Medical Technologist	27/11/2024, 14H00	15 minutes	Telephone Interview	Signed consent
Participant3	Bench supervisor	27/11/2024, 14H00	20 minutes	Telephone Interview	Signed consent
Participant4	Bench supervisor	27/11/ 2024, 14H00	15 minutes	Telephone Interview	Signed consent
Participant5	Chief Medical Technologist	18/11/2024	N/A	Self-completed	Signed consent
Participant6	Chief Public Relation officer	05/12/2024	N/A	Self-completed	Signed consent
Participant7	Human Capital Development	09/12/2024	N/A	Self-completed	Signed consent
Participant8	Chief Medical Technologist	22/11/2024	N/A	Self-completed	Signed consent
Participant9	Chief Medical Technologist	20/12/2024	N/A	Self-completed	Signed consent
Participant10	Senior Organisational Development Officer	18/12/2024	N/A	Self-completed	Signed consent

Appendix L: Joint Display of Quantitative and Qualitative Findings

Research Question	Quantitative Findings	Qualitative Findings	Integrated Interpretation
RQ1: To what extent did enterprise-related challenges affect organisational performance during COVID-19?	Multiple regression showed that supply chain disruptions and poor working conditions significantly reduced organisational performance, whereas workforce restructuring and regulatory compliance were positively associated with it.	Participants explained that organisations had to restructure operations, reduce unnecessary costs, digitise services and comply with government regulations to remain operational during the pandemic.	The qualitative findings explain the unexpected positive regression coefficients by showing that workforce restructuring and regulatory compliance reflected organisational adaptation rather than beneficial crises. Organisations that adapted more rapidly demonstrated greater resilience.
RQ2: To what extent does RM effectiveness depend on risk communication and documentation?	Risk communication ($r = 0.68$) and risk documentation ($r = 0.52$) were both significantly associated with effective RM ($p < 0.001$).	Participants reported inconsistent communication from management, limited employee training and varying documentation practices across organisations. They emphasised that communication and documentation improved awareness and decision-making.	Qualitative evidence explains why communication emerged as a stronger predictor. Effective communication enables organisation-wide risk awareness, while documentation institutionalises knowledge and supports consistent risk responses. Together, these practices strengthen RM effectiveness.
RQ3: What is the impact of skilled personnel and competent leadership on ERM implementation?	Skilled personnel and competent leadership were significant predictors of ERM implementation ($R^2 = 0.65$, $p < 0.001$).	Interview participants highlighted that leadership commitment, staff competence, continuous training and management support were essential for successful ERM implementation. They also noted that leadership	Both datasets converge to demonstrate that ERM implementation depends not only on formal structures but also on leadership capability and employee competence. The qualitative findings explain differences in implementation by highlighting variations in leadership

		commitment varied among cSOEs.	commitment and organisational culture.
RQ4: What challenges do cSOEs face in implementing ERM?	*(Explored qualitatively.)*	Participants consistently identified limited financial resources, insufficient ERM expertise, inadequate training, ICT limitations, weak risk culture and inconsistent management commitment as the principal barriers to ERM implementation.	The qualitative findings identify the organisational constraints that help explain the quantitative relationships observed in RQ2 and RQ3. Resource constraints and limited capability undermine effective communication, documentation, leadership effectiveness and ERM implementation.