



**Developing an operational excellence implementation model for the
insurance industry in South Africa**

By

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GLOSSARY OF ACRONYMS

ADKAR Model	Awareness, Desire, Knowledge, Ability, and Reinforcement
AI	Artificial Intelligence
BPM	Business Process Management
CMMI	Capability Maturity Model Integration
CRM	Customer Relationship Management
EFQM	European Foundation for Quality Management
ESG	Environmental, social, and governance
FSCA	Financial Sector Conduct Authority
GE	General Electric
GenAI	Generative AI
IoT	Internet of Things
JIT	Just-in-Time
OE	Organizational effectiveness
KPI	Key Performance Indicators
LSS	Lean Six Sigma
NPS	Net Promoter Scores
POPIA	Protection of Personal Information Act
RBV	Resource-Based View
RPA	Robotic Process Automation
SOP	Standard Operating Procedures
TCF	Treating Customers Fairly
TQM	Total Quality Management
WCM	World Class Manufacturing

ABSTRACT

Introduction: The South African insurance industry is perceived as a volatile, uncertain, complex, and ambiguous (VUCA) environment, which is driven by factors such as technological developments and demands. It is a widely accepted notion that, although Operational Excellence (OE) is a fundamental concept in a company's efficiency and competitiveness in a given market environment, its strategy in a complex and volatile environment such as this one is not well understood. It is in light of these factors that the aim of the study was to design a model for implementing a strategy related to operational excellence in order to ensure its applicability in a VUCA environment in which the South African insurance industry is situated.

Methods: The pragmatic exploratory sequential mixed-method design was used in the study, where the first level of a mixed-method design involved in-depth individual interviews with a total of eight industry experts in the South African insurance industry, followed by a quantitative study that made use of a structural equation model, which then aimed to validate and explore fundamental OE construct associations with a total of 311 respondents who answered a questionnaire.

Results: From the results, it is evident that digital transformation, communication, employee engagement, and leadership are some of the most important factors that can ensure success in OE. The challenges that were experienced in OE were a lack of skills among employees and change resistance. The proposed framework for OE integrates change management and technology incorporation concepts, which are aimed at inculcating a spirit of innovation and sustainability in organisations. Statistical results revealed a degree of success in OE, and leadership and communication are two areas that need improvement.

Conclusion: In order for OE to be achieved in the insurance industry, a flexible leadership style and a culture that adopts technological innovations, as well as a proactive leadership structure, are necessary in order to mitigate VUCA complexities. The proposed framework for OE is a theoretical platform for achieving OE in organizations, and insurance companies can invest in AI-based analysis, training, and development of their staff, as well as in agile methodologies and risk management. This proposed model can be tested in other industries, and its effect on OE in the long term, considering digitalization, can be studied in the future.

Key words: Digital transformation, Effective communication, Employee engagement leadership and Sustainable development

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CHAPTER 1: INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Operational Excellence (OE) is a management philosophy to align people, processes, and technology to ensure long-term growth, competitiveness, and superior performance (Tidd & Bessant, 2018). Though the term became widely popular recently, its principles—efficiency, quality, and incremental improvement—have guided organizations over decades, especially where precision and productivity are critical.

Essentially, OE is about continuous improvement, accountability, and waste elimination across all operations. Businesses embracing OE not only internally optimize effectiveness but also ensure consistent customer value by enhancing retention and competitiveness. Toyota Production System (TPS) is an exemplary manifestation of OE being an integrative strategic and cultural philosophy that fosters creativity, quality, and sustainability (Liker, 2004; Ohno, 1988).

OE also needs to be strong on alignment between corporate strategy and day-to-day operations with the help of best-in-business practices, performance indicators, and feedback processes (Oon Fok-Yew, Kamaruddeen, & Osman, 2013). Practitioners and academics define OE as an organizational paradigm to achieve exemplary performance with the alignment of human resources, streamlined processes, and technological developments.

Industry 4.0 technologies embedded within the paradigms of OE also boost performance and sustainability (Rathi & Kaswan, 2024; Ozbiltekin-Pala et al., 2024). Although OE has been widely implemented in production, its application within the service sector is not well investigated. Most recently, with the emergence of Service 4.0, there has increased potential to expand the principles of OE to the service sector.

1.2 BACKGROUND

The insurance industry worldwide is undergoing a period of profound change in response to economic uncertainty, rapid technological advancement, and increased competition. The need for enhanced operational efficiency is becoming a necessity for insurance firms while at the same time addressing changing customer needs and technological disruptions. In many countries, the returns from investments have been low, and the high level of competition coupled with stagnating revenue growth have all resulted in a negative impact on the financial performance of insurance firms (KPMG, 2019; Vigia et al., 2022). The high costs associated with running an insurance firm and distribution costs remain a major concern for the insurance industry. Industry reports have indicated that 25% of premium revenue is spent on

operating costs. On the other hand, premium revenue growth for life and property insurance has experienced a low rate of growth in recent times. The growth rate for premium revenue in the insurance sector has only experienced growth in low single digits (Spokes & Modrzyński, 2020).

In light of these challenges, innovation and operational excellence (OE) have increasingly become recognized as key drivers of competitiveness in the global insurance industry. Operational excellence is a holistic process aimed at changing an organisation's processes and operational systems. Stoyanova and Iliev (2017) assert that operational excellence calls for inclusive leadership that fosters organisational performance through processes and systems that help organisations to perform better and satisfy customers. Despite the importance that innovation and operational excellence have in the insurance sector, the adoption and implementation of innovation in the insurance sector remain low. For instance, only a third of insurance firms identify themselves as innovators. Only a small number of organisations have a structured innovation strategy in place in their operations (KPMG, 2015). The gap between recognising the importance and need for innovation and successfully implementing innovation in an organisation highlights the need for a structured approach that can help organisations achieve operational excellence.

On the regional front, these challenges are more prevalent in emerging or developing economies, which face economic, regulatory, and technological challenges. The insurance industry, therefore, has become a challenging sector for insurance companies operating in these economies. The challenges for the insurance industry are multifaceted, as the business of insurance involves a contract between the insurer and the insured, wherein the insurer provides financial security against premiums paid (Beck & Webb, 2021). The contract, therefore, outlines the rights and obligations of both the insurer and the insured, which are intended to ensure transparency and financial security (Bierman & Lategan, 2021; Iddris, Dogbe, & Kparl, 2023). In order to ensure the scalability of the business, the insurer often enters into a contract with the insured, which outlines the general conditions of the insurance policies, including the coverage, the period of the contract, and the claim settlement procedures. However, for the efficient operation of the business, the insurer must have efficient operational systems and governance structures.

In the context of the South African economy, the insurance industry is a major contributor to the country's economic stability. However, the industry is not immune to the operational challenges that the industry globally is facing, which include low growth in premiums, increasing operational expenses, and the rise of competition from both traditional and digital insurance platforms. Distribution and operational expenses are a major cost for the industry, which accounts for a substantial portion of the premiums received, thereby requiring the industry to improve operational efficiency as well as internal processes (KPMG, 2019; Viglia et al., 2022). The industry is also characterized by the use of outdated systems, which are affecting the operational structures of many organisations.

With all these challenges facing the South African insurance industry, there is an increasing recognition of the importance of operational excellence to the sustainability of the South African insurance industry. By incorporating leadership commitment, technological innovation, operational efficiency, and employee engagement, the South African insurance industry can benefit from the incorporation of operational excellence. However, the successful implementation of operational excellence necessitates a strategic and integrated approach to the South African insurance industry. Therefore, the development of a comprehensive framework or model to guide the implementation of operational excellence in the South African insurance industry is essential to support the long-term operational efficiency of the South African insurance industry in a complex and technology-driven environment.

1.3 PROBLEM STATEMENT

The modern-day organisations operate in a complex and dynamic environment that is characterised by economic uncertainty, changing stakeholder demands, and technology shifts (Jansen et al., 2020). In such an environment, organisations need to innovate and develop new technologies to remain competitive and sustainable (Mason, 2015; Metaxas et al., 2018). Within the insurance sector, achieving operational excellence (OE), which is a combination of quality, efficiency, and effectiveness in operations, has become a necessity for achieving organisational performance and competitiveness (Molloy & Ronnie, 2021; Moodley & Govender, 2020).

Despite the importance of achieving OE in the insurance sector, many organisations still face numerous challenges in achieving operational excellence. The challenges include a lack of process standardisation, poor strategic direction, and the use of outdated technology. The challenges make it difficult for organisations to effectively address the demands of a volatile, uncertain, complex, and ambiguous (VUCA) business environment. The impact of these challenges is widespread for the insurance sector. The inefficient operational processes affect the competitiveness of insurance organisations. The lack of a clear operational process can have a negative impact on the experiences of key stakeholders in the insurance sector. According to KPMG (2023), many insurance organisations in the sector are attempting to address the challenges in achieving operational excellence. The attempts include process redesign, developing a new and low-cost model for distribution, and replacing outdated technology. Despite the attempts by many insurance organisations in the sector to address the challenges in achieving operational excellence, the attempts have been in isolation and do not offer a holistic solution for achieving operational excellence.

In order to bridge the existing gap, what is needed is a structured and integrated framework that would facilitate the successful implementation of operational excellence within the insurance industry. The

successful models of OE are based on lean or agile organisational structures where cost reduction is seen as a byproduct of increased efficiency rather than the driving force. Hence, the purpose of the present study is to develop a model for the implementation of operational excellence strategies that would encompass some of the important organisational dimensions such as leadership, communication, employees, digitalisation, and continuous improvement. The proposed model would be a systematic framework to enable insurance companies to achieve increased efficiency, cost reduction, minimisation of risk, and enhanced competitive advantage in a changing business environment driven by technological advancements (Molloy & Ronnie, 2021; Moodley & Govender, 2020; KPMG, 2023).

1.4 RESEARCH AIM

By using a mixed method research strategy that will integrate in-depth interviews with surveys in order to support OE implementation in the insurance industry, the study aims to develop an OE strategy implementation model for organisational growth in a VUCA environment.

1.5 RESEARCH QUESTIONS

The primary research question for this study is:

- i. How can an OE strategy implementation model deliver desired growth in a VUCA environment, and contribute to organisational growth in the insurance industry?

This research question leads to the following secondary research questions to be addressed.

- a) What are the current challenges to the implementation of such models in the insurance industry?
- b) How effective is the OE strategy in driving vision, mission and values for insurance industry?
- c) How can OE strategy implementation in a VUCA environment be sustainable in the future for the insurance industry?

1.6 RESEARCH OBJECTIVES

The research objectives are as follows:

- a) To investigate the challenges of OE strategy implementation in a VUCA environment.
- b) To determine the extent to which OE strategy implementation differs between a VUCA and a regular environment in terms of design and implementation in the insurance industry.

- c) To explore the impact of OE strategy implementation on organisational growth.

1.7 RATIONALE FOR THE STUDY

While prior research discusses difficulties and inefficiencies encountered by OE and few discuss how organizations sustain growth amidst volatile, uncertain, complex and ambiguous (VUCA) environments, the success of OE is bolstered by aligning strategy, operations and services (Chen et al., 2017) and developing systematic ways to sustain growth and agility (Duggan, 2014).

Even though research from South Africa has approached strategies within complex and mature industries (Sarkar, 2016; Sheth, 2021), little complete analysis has been provided regarding OE strategies within VUCA settings. The scope of this research is to cover this gap by exploring the means through which the principles of OE can be employed to enhance growth and resilience within uncertain settings and thereby make theoretical understanding and practical application of OE within dynamic business settings more effective.

1.8 SIGNIFICANCE OF THE STUDY

The significance of the study can be evaluated on the basis of the conceptual, methodological, empirical, and policy contributions to the body of knowledge.

1.8.1 Conceptual Contribution

From a conceptual perspective, the study can be considered significant to the body of knowledge on operational excellence. Operational excellence is a relatively widely discussed concept in the context of the manufacturing industry. However, the application of the concept of operational excellence to the insurance industry, especially to a volatile environment, is not well represented. By conceptualising the implementation of the concept of operational excellence to a volatile environment, the study can be considered significant to the body of knowledge on the concept. Additionally, the integration of the concept of operational excellence into the volatile, uncertain, complex, and ambiguous environment can be considered significant to the body of knowledge on the concept. This is mainly because the existing body of knowledge on the concept of operational excellence is mainly focused on the volatile and uncertain environments. By incorporating the volatile, complex, and ambiguous environments into the concept of operational excellence, the study can be considered significant to the body of knowledge on the concept.

1.8.2 Methodological Contribution

From a methodological perspective, the study also contributes to the broader literature on organisational transformation by employing an exploratory sequential mixed-methods design. The juxtaposition of qualitative data derived from industry experts with quantitative data analysis via structural equation modeling presents a robust approach to investigating the inter-relationship between key constructs of organisational efficiency. The study therefore demonstrates the efficacy of combining qualitative and quantitative methodologies to investigate organisational models within complex industry settings.

1.8.3 EMPIRICAL CONTRIBUTION

From an empirical perspective, the study offers valuable evidenced-based knowledge on key drivers and barriers to OE implementation within the South African insurance industry. By conducting data collection with industry experts and practitioners, the study reveals key drivers of OE implementation such as leadership commitment, digital transformation, employee engagement, communication, and process standardisation. The study also reveals key barriers to OE implementation such as organisational resistance to change and skills shortages. The empirical contribution of the study offers valuable knowledge for practitioners seeking to improve operational efficiency within the insurance industry.

1.8.4 POLICY AND PRACTICAL CONTRIBUTION

From a practical point of view, the research contributes to a structured model which can serve as a guide for insurance organisations seeking to develop operational excellence strategies. The suggested framework can offer practical insights for industry leaders, managers, and policymakers who are interested in improving operational efficiency, service quality, and competitiveness within the industry. The model can serve as a guide for insurance organisations to ensure that leadership, operational, and technological innovation strategies are aligned to ensure sustainable growth. Furthermore, better operational processes and structures can improve communication between insurance organisations, brokers, and broker consultants, which can lead to better operational relationships, reducing conflicts, and improving service quality for customers. The research findings can contribute to the development of policies, strategies, and operational models aimed at improving the competitiveness of the insurance industry in South Africa, as well as the resilience of the industry as a whole.

In this study, operational excellence is defined as a holistic organisational transformation methodology

that focuses on the execution of tasks in a consistent manner, accuracy, and efficiency while promoting a culture for continuous improvement. Operational excellence can only be achieved through the commitment and support of the organisation's leadership, organisational performance measures, and the organisational culture itself.

1.9 DELIMITATIONS OF THE STUDY

In order to ensure the success of the research and to maintain the delimitations of the research, the following were applied:

Firstly, the research focused on the development of an implementation model for operational excellence in the insurance industry of South Africa. Even though the insurance industry faces various operational excellence challenges across the world, the research focused on the insurance industry of South Africa due to the unique nature of the regulatory environment. Therefore, the research developed a model that is applicable to the insurance industry of South Africa. However, the model may require modifications for the implementation in the insurance industry of other countries.

Secondly, the research focused on the organisational factors that impact the implementation of an operational excellence model. The factors that were considered in the research include the commitment of the top management team to the implementation of the model, communication to the workforce, employee engagement, digital transformation, and process improvement. The research did not consider the impact of the national economic policies of the country, the global financial changes that affect the insurance industry, and the international insurance regulations due to the scope of the research.

Thirdly, the empirical part of the study was based on industry experts and employees within the insurance industry. The study is based on the views of the selected participants who took part in the study. Even though the study tried to ensure that the participants had different organisational positions within the industry, it is possible that the study does not represent all possible views within the insurance industry.

Lastly, the study was based on the creation of a conceptual model for the implementation of operational excellence. Therefore, the study was not based on measuring the long-term organisational performance results of the implementation of the conceptual model created. As a result, the study did not evaluate the effectiveness of the conceptual model created for implementation within organisations.

Despite the above limitations of the study, it is based on valuable insights regarding the key drivers and barriers to achieving operational excellence within the South African insurance industry. The study also presents a framework for the implementation of operational excellence within organisations.

1.10 BRIEF RESEARCH DESIGN AND METHODS

The research design takes an overarching exploratory, sequential mixed-methods approach, which is typified by an initial qualitative phase of data collection via expert interviews. This phase seeks to explore and obtain insights into organizational strategies, particularly, in volatile, uncertain, complex and ambiguous (VUCA) contexts. After this qualitative phase, the research moves to a second phase of quantitative data collection based on surveys to validate the insights collected from the initial interviews and to test the validity of the structural equation model developed. This carefully crafted mixed-method design is grounded in the academic works. It allows for systematic and rigorous construction of both the research questions and the respective model to be examined.

Data were collected from eight experts from the South African insurance industry for the qualitative phase of the study. quantitative data were collected from 311 participants.

Exploratory research is mainly used to make initial observations and determine the main issues that are present within areas that have not been well researched, enabling a wider understanding of these topics. Conversely, descriptive research is mainly used to assist in measuring different variables such as organizational effectiveness performance, awareness levels, and barriers present. Moreover, through the use of interviews, depth and flexibility in terms of gaining a thorough understanding of the individual participant's unique views are achieved, adding qualitative value. Finally, statistical analysis is used in order to properly describe and explain the quantitative findings that are obtained from the research carried out.

1.11 THESIS STRUCTURE

This doctoral thesis is organized into nine chapters, each contributing to the development and presentation of the research process, findings and implications. The structure is designed to guide the reader, logically, through the stages of the study.

Chapter 1: Overview of the study

This chapter offers an overall background of the research, and includes the contextual background, problem statement, research questions, objectives and significance of the study. It also provides a brief explanation of the methodology framework used in the study.

Chapter 2: Theoretical Framework

The chapter discusses theoretical foundations for OE. It addresses the conceptual underpinnings and practical application of OE. The strengths and weaknesses of models are discussed, with focus on technology and sustainability of organizational excellence.

Chapter 3: A perspective of operational excellence implementation in the South African insurance industry

The literature review, thoroughly, examines the dominant scholarship that is relevant to the research subject. It reviews important theoretical frameworks, models and empirical findings related to organizational effectiveness (OE), strategic management in VUCA contexts and the use of mixed-methods research. The chapter emphasizes the current knowledge gaps that the current study aims to address.

Chapter 4: Research Methodology

This chapter outlines the research design and methodology, explains the rationale for the use of an exploratory, sequential mixed-methods design. It discusses the qualitative and quantitative phases, sampling, data collection methods (including interviews and surveys), data analysis methods and the ethical considerations relevant to the study.

Chapter 5: Findings from Qualitative Data

In this chapter, the qualitative data from the interviews are reported and analysed. The patterns and themes that emerged in the data are analysed in concert with the research questions and relevant literature. These findings are used to create the structural model that is to be tested in the next phase.

Chapter 6: Findings from Quantitative Data

This chapter outlines the quantitative phase's findings, including statistical analysis and the structural equation model's validation. The chapter interprets these findings in the theoretical framework of strategic responses and organizational effectiveness, thus supporting or complementing the qualitative phase's findings.

Chapter 7: Discussion on Quantitative and Qualitative findings

This chapter integrates quantitative and qualitative findings into a single discussion. Included in the discussion are themes and information from surveys allowing a detailed understanding of OE in the South African insurance sector.

Chapter 8: Integrated operation excellence model

The current chapter outlines the practically functional template for operational excellence implementation

in the insurance industry of South Africa. It discusses the integration of Lean Six Sigma tools, strategy planning, employee engagement and digitalization.

Chapter 9: Conclusion and Recommendations

The final chapter synthesizes the findings from both stages of the study, discusses their implications for theory, policymaking and practice as well as outlining the contributions to literature. The study's limitations are also acknowledged, and recommendations for future research activities are made.

1.12 SUMMARY OF THE CHAPTER

Chapter 1 initiates the inquiry by outlining the background context and setting within which organizational effectiveness (OE) is examined, specifically in the context of volatile, uncertain, complex, and ambiguous (VUCA) environments. The chapter highlights the imperative for organizations to adopt adaptive strategies in order to sustain their viability and performance amidst such challenging environments. The problem statement identifies a lack of comprehensive understanding of how organizations navigate OE in complex contexts, especially where empirical research is limited. In response, the research questions and objectives are presented to guide the investigation.

The chapter offers a full explanation of the exploratory, sequential mixed-methods approach, starting with qualitative interviewing followed by the use of quantitative surveys to validate the findings through a structural equation model. The methodology ensures holistic and multidimensional analysis.

The relevance of this study is highlighted by the fact that it contributes both academically and practically to the organization. The thesis outline is presented in detail at the end of the chapter, guiding the flow of the study across the six chapters.

The next chapter presents an extensive critique of the existing literature relevant to organizational effectiveness, strategic management in VUCA contexts, and the use of mixed-methods research. It explores major theories, empirical studies, and conceptual frameworks that inform the study while facilitating the determination of the gaps to be addressed by the research.

CHAPTER 2: THEORETICAL FRAMEWORK

2.1 INTRODUCTION

This chapter introduces the underlying theoretical foundations for OE and execution in contemporary organizations. It describes how OE evolved from original industrial efficiency initiatives to sophisticated methods such as: Just-in-Time (JIT), Six Sigma, Lean Manufacturing, and Total Quality Management (TQM). It reveals how OE programs are created, implemented, and perpetuated to maximize productivity, quality and customer satisfaction. Through a critical analysis of seminal OE blueprints such as those by Crawford, Oakland, Duggan, and Shingo, the chapter reveals their strengths, shortcomings, and transferability in volatile, uncertain, complex, and ambiguous (VUCA) business environments. Further to the above, it also reveals an enhanced conceptual framework relating leadership, processes and competitiveness highlighting culture, communications, technological adaptability and stakeholder involvement. By description of theoretical foundations and user-centric models in succession, the chapter concludes with appreciation for OE as an ongoing improvement project customized for purpose-designed organizational contexts.

2.2 OPERATIONAL EXCELLENCE

Businesses began focusing on efficiency and productivity to improve customer satisfaction in the 18th century, when operational excellence originated. As approaches to achieving the defined goals, system architects presented time and motion studies and scientific management. A number of productive methods were based on Toyota systems during the 19th century. They include JIT, Six Sigma, TQM and lean manufacturing (Liker & Convis, 2012). Throughout the study of waste reduction at Toyota, Kaizen became the core of the production system by integrating continual improvement processes.

2.3 OPERATIONAL EXCELLENCE STRATEGIES

In order for an organization to succeed, a visionary strategy is essential (Crawford, 2013). Organisations use strategy to make decisions and give direction for sustainability and profitability (Veriwee, 2014). It is less likely that a business strategy will be successful if it is broken down into multiple functional strategies. Departments are at great risk of ignoring each other over resources and operations enablers are not working together without conflict.

Global organizations fail to implement change management strategies, 70% of the time, as a result of a lack of strategy (Burnes, 2014). As defined in this study, strategy is a process of selecting the right tactics and methodologies to achieve a set goal through the most effective execution of tasks. In this way, a multivariate of "systems of systems" can be used to produce quality work and choices for meeting goals and ambitions.

By identifying external or internal pressures that need mitigating and capitalizing opportunities, key activities include understanding the aspirations of the business and identifying changes that need to be made to the strategy. Tovstiga (2013) identifies these key activities for prioritization, in accordance with the strategy, and in order to drive tactical portfolio changes. OE implementation evolves to accelerate growth. Implementing an OE strategy correctly is one of the most important factors for driving organizational growth (Stverkova & Pohludka, 2018). Pohludka and Stverkova (2018) elaborate that for an organization to succeed, it must focus on promoting a set of values in its strategy and culture that align global sustainability with organizational performance.

2.4 STRATEGY IMPLEMENTATION

A culture of productivity is enhanced by aligning the needs and values of employees (Burke 2013). Shingo (2014) avers that, the strategy deployment should align with organisational principles. Performance measurement and management are essential parts of strategy implementation. This is relevant for translation of strategies in order to translate strategies into key performance indicators that can cascade down the organization. Creating an organizational culture that supports strategy implementation is another approach to implementing strategy.

As Shingo (2014) argues, organizations with difficulty implementing OEs also face difficulties in formulating interconnected processes. The processes are a set of activities and tasks that produce outputs from inputs (Varweirie, 2018). According to this researcher, the implementation of strategy is a process of aligning all of the organization's activities with its goals and objectives. To build a team-based culture, leaders must create a conducive environment for employee dialogue.

Gębczyńska (2016) delved into a less explored area of strategy, which resulted in insufficient outcomes in the implementation scope, creating less efficient task management. Observation dictates that implementing strategy requires models and frameworks that are harder to find than formulation strategies such as: strategic planning, SWOT analysis, Porter's generic strategies industry and competitive analyses. This scholar further adds that a vision for the strategy must be matched by the structures and processes. Various

factors may prevent effective execution across multiple channels which inter alia include: clearly defined strategies, fragmentation of departments, poor organizational structure, disparate technology and systems as well as responsibility and ownership of campaigns. Developing an effective multichannel program requires a holistic strategy, which is outlined by Hoogveld and Koster (2016). Hughes (2016) corroborates the above by stating that a customer contact strategy that incorporates all customer contact channels are strongly recommended. Pentina and Hasty (2016) also buttress the idea by adding that a multidisciplinary approach for competitive advantage must be centred on strategy, alignment, and commitment to the strategy, according to.

2.5 OPERATIONAL EXCELLENCE STRATEGY FUNDAMENTALS

There have been a few traditional approaches to operational improvement that have emerged from methodologies developed in the 1980s and 1990s. The authors discussed the relevance of aligned quality management approaches to modern competitive environments in Waddock and Bodwell (2017). Among seminal names in the creation of quality management systems are: Feigenbaum, Ishikawa, Deming, Juran, and Crosby. In addition to these quality management systems, JIT, six sigma, lean and TQM form the foundation of operational excellence strategy implementation.

2.6 JUST-IN-TIME MANUFACTURING

The JIT manufacturing method, as described by Oakland (2014), is a method of ordering raw materials when they are needed. According to Marinkovic, Bekcic, Pejovic, Sibalija, Majstorovic and Tasic (2016), holding large stocks of raw materials and spare parts would be prohibitively expensive under the JIT system. As a result, waste can be eliminated since the right amounts are provided at the right time. In addition, an approach to TOM evaluation in pharma business suggests that JIT makes a good basis for TQM, due to its systematic approach to identifying operational problems and solving them through serial technological solutions.

In addition to batch or lot size reductions, Oakland (2014) posits that, Kanban or cards with material visibility, mistake proofing, pull scheduling and standardized containers as practices directly associated with JIT. Moreover, this scholar emphasizes the importance of providing sufficient tools for the monitoring of management methods, including; process analysis, preventive maintenance, plant layout, standardised design, statistical process control, value analysis and value engineering. defines JIT as a system for producing goods and services in a cost-effective manner. Bortolotti, Boscari and Danese (2015) attribute the success of a JIT implementation to the increased flexibility, simplification of processes and ease of

inventory management. Using a JIT framework, Hill, Thomas and El-Kateb (2018) demonstrate that order-to-receipt times are stabilized and late material calls are reduced simultaneously. In order to unlock potential economic benefits, Ngambi (2019) argues that material movements, accumulations and process flexibility must all be complemented by value-addition efforts. If the supply chain is disrupted, JIT methodology is susceptible to loss of production opportunities, leading to customer disappointment and revenue loss.

2.7 THE SIX SIGMA CONCEPT

Developed by Motorola in the 1980s and adopted by General Motors in the US, Six Sigma is an operational improvement method. In order to improve performance, this method focuses on reducing variation and defects. As a result of Sigma yield principle, 99,999% of the time, initial attempts are successful. The result is an increase in profits while reducing waste and costs. In their study, Stankalla, Koval and Chromjakova (2018) argue that Six Sigma is effective when top management holds a commitment to establishing strong links between business strategy and a good communication plan all the way to fulfilling customer needs. Delivering quality goods and services is key to maximizing customer satisfaction (Zheng, 2015). It is imperative for companies to strive to be better than their competitors in terms of quality and cost within this competitive environment. The OE strategy implementation should embed Six Sigma in a VUCA business environment.

Six Sigma is implemented using a five-step process defined by Worlitz, Noack and Woll (2016). These are: scope definition, implementation, measurement, analysis and deviation redress. Kaizen continuous improvement strategy is integrated throughout all of these efforts. A high risk of losing money exists if employees fail to meet the quality standards required by Ravasi (2016) for keeping revenues up and increasing operation margins.

2.8 THE LEAN APPROACH TO MANUFACTURING

A lean approach to productivity was defined as a way to eliminate waste. A set of lean guiding principles must be driven by organizations to achieve lean. These principles are defects, overproduction and waiting, inefficiency, non-utilization of human talent, transportation, inventories, motion and excess processing. According to Gisi (2018), lean is an efficiency improvement technique that employs proven methods and tools to eliminate waste and improve process flow. In order to eliminate waste, it is important to understand the relationship between process flow and waste elimination. As parallel and independent activities, they all aim to optimize the value stream, which is the ultimate objective.

Gisi (2018) further elaborate that structured approaches lead to incremental efficiency improvements and improvements in quality processes. A lean manufacturing system that anchored on four fundamentals was developed by Lung et al. (2018) based on methods used in Toyota production systems. Below are the fundamentals and comments on them.

- a) Enhance processes through an interconnected system of sociotechnical practices. Organizational culture has been the focus of recent debates (Shingo, 2014).
- b) Kanban pull system adoption is governed by the flow and pull value principle (Shingo, 2014).
- c) Customer requirements are understood and continuous value is created (Buckley et al., 2017).
- d) A product and process that embraces lean thinking, which focuses on reducing waste and increasing value, is more consistent and repeatable (Thomas, Mason-Jones & El-Kateb, 2018).

In order to implement lean-sigma, Stankalla, Koval and Chromjakova (2018) advocate for the integration of lean and six sigma. By overcoming substantial obstacles, this improvement approach ensures effectiveness. These traditional manufacturing systems, however, have been criticized by Nicolas (2018) as impeded by resonance, which hampers delivery. This is implicated on internal constraints such as: policy, human resources, finance, or systems and external constraints (PESTLE). Several barriers can be overcome by managers through digging deeper into transformational processes, as Tortorella, Vergara and Ferreira (2017) argue. For visionary leaders to look competitive, Shrut, Raval and Ravi (2018) stress the importance of providing financial support and resources to overcome the challenges of the environment. The management and leadership community must, therefore, be provided with all dimensions of tools and techniques which include training, culture, performance, resources, strategy, projects, relationships with suppliers and customers, networking and communication, knowledge management and human resources (Bortolotti, Boscari & Danese, 2015). To achieve holistic improvement, soft practices and appropriate systems must also be adopted beyond Lean (Bortolotti, Boscari & Danese, 2015). One of the biggest weaknesses of the Lean system is the lack of soft practices.

2.9 TOTAL QUALITY MANAGEMENT

In Oakland (2014), TQM refers to a set of activities performed by the organization as a whole in order to achieve its objectives effectively and efficiently. Providing high-quality products and services at an appropriate price and on a timely basis is the objective of TQM. Adapted from ISO 8402, TQM involves employees taking ownership of their assignments and continuously improving the performance of the organization. Management and quality techniques aim to reduce wastage, inefficiency and runaway costs and improve business excellence. Using Oakland's (2014) framework, he categorizes TQM into three Cs (culture, communication and commitment), forming the soft necessities, while four Ps (planning, people,

process, performance) form the hard principles. At all levels and across all departments, there must be a culture of trust and integrity.

Ngambi and Nkemkiafu (2015), list the multiple benefits of Quality Management, beyond improving product quality and service quality. TQM majors are defined as quality control and quality assurance, respectively, by Ngambi and Nkemkiafu (2015). Below, these are elaborated on:

- a) A product, process, or service's quality is controlled through quality control activities and techniques.
- b) QA is the process of preventing quality problems through a systematic and planned approach including documentation. An effective quality management system will be established, periodic audits performed, and the systems will be reviewed. As a basis for enhancing product quality, inspections, employee training, customer focus and benchmarking should be included.

TQM stresses the importance of employees taking responsibility for 'doing the right thing right the first time', or 'accepting the responsibility for quality'. Mitchell (2015) emphasizes the importance of implementing TQM across all enterprises as a foundation for OE so as to secure value. In order to build customer loyalty and market competitiveness, organizations need to be delighted and exceed their customers' needs.

Masa'deh, Obeidat and Tarhini (2016) acknowledge that knowledge management is an important process for gathering, organizing, storing and distributing knowledge across an organization. In order to conquer competition, complex operations, and a phenomenon that may arise, the best combination of linked information and intellectual resources is necessary. To display and analyze TQM data, data collection is imperative.

Toward a philosophy that meets all organizational purposes, Kiran (2016) suggests incorporating all organisational departments. Marketing (Obeidat, Al-Suradi, & Tarhini, (2016) emphasizes the importance of customer needs and the company's objectives in the following departments: finance, design, engineering and production.

According to Koehler (2017), the purpose of brainstorming is to generate solutions for problems. Through open-mindedness or "free thinking," all ideologies can be "cross-pollinated" and synchronized in one direction without being criticized. As advocated by Ross (2017), an organisation's quality can be continuously improved through the integration of all functions and processes.

As noted by Androwis et al. (2018), TQM philosophy may not be effectively formulated or implemented without the commitment, involvement and support of top management. . Performance towards customer satisfaction is also driven by the motivation of human capital. Managing fiscal and operational expenses, religiously, is paramount when it comes to strategic planning and implementation of turnkey projects. Accordingly, a holistic continuous improvement system that is applicable to all productivity improvement methodologies is necessary to guarantee sustainable organisational excellence (Sony, 2019).

For continuous improvement in processes, Gisi (2018) argues that TQM principles are the foundation. Leading with strategy and planning, focusing on customers, gathering information and analysis, managing people, and managing processes make up quality practices. This researcher opines that providing excellent customer service is the foundation for TQM. Both customers and suppliers often experience poor communication and feedback which leads to dissatisfaction. Furthermore, this scholar emphasizes that knowledge transfer should be completed through gatekeepers as well as internal cross-functional teams.

According to Jimoh, Oyewobi and Waziri (2019), high priority should be placed on TQM practices, strategies, and continuous improvement by organizations seeking competitive advantage,. In contrast, TQM has the potential weakness of consuming too much employee time due to its paperwork requirements. A productivity improvement programme defeats its purpose by reducing time to deliver real tangible results.

2.10 OPERATIONAL EXCELLENCE MODELS

There are a variety of OE implementation models which have been developed.. The following models were reviewed in this study:

2.10.1 The Crawford model

Crawford (2013) states that the SWOT analysis which refers to strengths, weaknesses, opportunities, and threats is regarded as a crucial component of OE strategy implementation according to . Crawford suggests that improving upon any weaknesses should not be done at once, rather it should be done by identifying the most significant weaknesses and ensuring that they are eliminated. A major part of the argument by Hutchins (2018) was making sure that the strategy was fully reliable, delivering superior quality, and providing a high level of service, as well as building the underlying capabilities to achieve excellence. According to this model, the benefits of OE strategy implementation include improved business trust,

enhanced customer service, and enhanced supplier capability. As Crawford (2013) points out, vision, mission, OE strategy, and organization objectives must all be aligned. Ng and Kee (2013) have shown that this arrangement facilitates organizational growth, effective management and good governance. This can be accomplished by identifying and promoting enablers of OE strategy implementation, such as people skills, shared values, communication, and commitment.

According to Crawford (2013), the implementation of OE strategies should not be viewed as an event, but as an ongoing process that involves continuous improvement of enablers, frameworks, and principles. By doing this, operations seven-step route planner need to be checked, holistically, to ensure that all aspects are in order. According to Crawford (2014), organisational vision and needs should be able to align with the business benefits attained via OE strategy implementation.

- a) To create and deliver quality products and services on time and in full to delight customers, understanding focal areas such as service capability building, skills, and competencies is critical.
- b) Campus defines a destination for an organization's vision and strategy. Creating value for the business is the purpose of an effective strategy.
- c) A performance-centric approach requires defining the desired outcomes for the implementation of the OE strategy.
- d) A leverage enabler is an aspect, policy, approach, or attribute necessary for synchronising outcomes across organisational divisions. As an organisation, leverage enablers are responsible for defining and driving the organization's management and staffing modus operandi.

By implementing OE policies, approaches and key aspects from a business perspective, objectives can be achieved more efficiently and effectively. Ability, people, process, aims and inhibitor mitigation are the enablers that influence change in modus operandi. This is complemented by creating a transformational culture that requires extraordinary leadership capable of articulating the directional vision to the entire organization's staff and management. While extending the OE strategy focus to supply partners, communication should bridge the interests and expectations of stakeholders. Crawford (2018) states that successful implementation of OE strategies leads to reduced costs and revenue growth, which leads to business growth. The following benefits can be realized from such a program: streamlined processes, people engagement, recruitment and employee retention. As a result of these benefits, quality management systems are supported in achieving diverse attributes such as performance improvement, deviation correction, cost savings and budget adherence, as well as balancing equilibrium along the value chain through capacity levelling (Yao et al., 2019). According to Issar and Navon (2016), successful OE contributes to better quality, greater efficiency and lower costs in addition to improving return on investment (ROI). Crawford (2013) describes OE as an emphasis on doing things right the first time.

However, this researcher did not emphasize continuous improvement, which is one of the most important pillars of OE (Rising, 2014). Being open to the idea that OE is a magically simple and not complicated journey. All personnel involved in the process must understand OE holistically. Change, success, and achieving goals, primarily driven by everyone, require excellence in creativity, problem-solving and teamwork. Carvalho et al. (2019) contest that OE does not promote change but provides tools and framing for the people in an organization. This is in conflict with the narrative. To ensure stability of the whole value chain, managers pay close attention to the operational environment. Paramount in this study was to address the complexity and variability in the environment in which OE is implemented. Crawford's model does not acknowledge these factors.

2.10.2 The Oakland model

OE strategy is a jigsaw puzzle that incorporates recent models of Sigma, lean and TQM to achieve 'excellent' growth. To Oakland (2013), it is a comprehensive and pragmatic approach to implementing OE strategies. Oakland (2014) advocates TQM as a means of achieving excellence in leadership rather than as a comprehensive approach to managing businesses. In the Oakland Model, the constructions that drive change include: TQM, planning, performance, processes, people, customers, commitment, culture and communications. As Oakland (2014) notes, organizations face constant pressure to enhance their performance during the implementation of OE strategies. This forces them to compare their performance with world-class standards. This, eventually, translates into a weakness because such organisations lose sight of their local customers' concerns. The European Foundation for Quality Management (EFQM) Excellence Model and assessment frameworks such as Capability Maturity Model Integration (CMMI), the Japanese Deming Prize and the US Baldrige Criteria for Performance Excellence, have been used by many organizations to implement total quality models. Consequently, local people whose meanings are totally different do not necessarily benefit from this idea. A model that resolves such gaps is the focus of this study. Customer satisfaction can be achieved through partnerships, resource management, processes, and products, as presented by Oakland (2014).

Oakland (2014) illustrates that good organizational results require a commitment to people, time, training, recognition and a change in culture. This is despite the fact that, Oakland (2013) concedes that OE strategies do not fit all businesses. Neither the model nor the environment which, naturally, affects the success or failure of an organization's initiatives, are considered during the design process based on the European Foundation for Quality Management.

A study by Jaegera, Matyasb and Sihb (2014) stresses the importance of understanding industry-specific

language and specific requirements for OE implementation. The preparation and execution of the EFQM model did not include critical implementation attributes such as team communication, systems and monetary budgets. However, the model does not provide any guidelines for organizations on how to use it (Jaegera, Matyasb & Sihn, 2014).

The Oakland Model (2014), which was adopted by the European Foundation for Quality Management (EFQM), presents a framework that emphasizes the interconnectedness of key organizational elements such as customer satisfaction, business objectives, safety and environmental considerations. However, according to Oakland (2014), the model falls short as a reliable and robust tool for quality management. He critiques the model for its broad applicability, arguing that these elements are universally interdependent and relevant to all organizations. His stance is that it lacks the specificity and contextual adaptability needed to address the unique challenges and operational dynamics of individual organizations. This generalization, in his view, undermines the model's practical utility and effectiveness as a targeted management strategy. As reported in Alshitri (2014), generic EFQM assessments are not sufficient to suit all organizations. There is a lack of flexibility or wideness in the EFQM model to incorporate various firm-specific characteristics. Particularly, in VUCA environments, this model presents a gap in its suitability for driving growth

2.10.3 The Duggan model

Duggan (2014) posits that efficiencies and profits can be improved through operational excellence rather than lean management or Six Sigma. This model propagates that development of OE implementation strategies enables organizations to continue to grow and attain sustenance. Through OE strategy implementation, management is able to focus their attention from running the business to growing the business, providing them with criteria and guidelines. According to Duggan (2014), OE is a journey where everyone in the organization sees how value is being delivered to customers and fixes it before it breaks. In order to get to the next level, you must execute your business strategy more consistently and reliably than your competitors.

In contrast with Duggan (2014), Jaegera, Matyasb and Sihn (2014) argue that assessments must integrate cause-effect relationships and interdependencies with adjacent fields in order to ensure transparency. The following are steps in the journey of taking employees along the value stream according to Duggan (2014):

- 1) Engagement and commitment of employees,
- 2) Recognizing OE as a method, not as a concept, and
- 3) Achieved leadership and management support

Additionally, Duggan (2018) proposed the following principles:

- 1) Creation of a value stream based on lean principles
- 2) Creation of a value stream that flows with lean
- 3) Establishment of a flow of standard work
- 4) Development of a standard work procedure for abnormal flow situations
- 5) Improvement of the flow of work by having employees involved
- 6) Engagement in offense-related activities

According to Duggan (2018), OE is about continuous improvement within an organization. Among the tenets of this model are that customer needs should be prioritized, employees should feel empowered and positive, and business processes should be continually improved. OE continuous improvement assessment designs however, according to Jaegera, Matyasb and Sihn (2014) identify and review the cause-and-effect relationships of enablers and results criteria rather than measuring and evaluating them individually. Duggan and Civelek disagree with the view that ethically good strategies should guide organizational governance in the long run if sustainability is driven entirely by continuous improvement. Kanbur and Kanbur (2020) lament that in today's ruthless competitive business world, Duggan (2014) has failed to cover key elements.

By using this illustration, Duggan implied that levels of improvements will increase over time and as a result of step changes. Once the OE achievements have been arrived at, they become curial. In addition to stating that programs, projects, and personalities cannot generate lasting change, Matyas and Sihn (2014) point out that tools and projects are insufficient. OE principles must be embraced and adopted in order to create real change. The implementation of the OE strategy is successful if it reduces operation risks and costs and increases revenues relative to competitors. This is what execution excellence means for customers and shareholders.

Unlike the traditional evidence-based approaches such as lean thinking, six sigma, JIT, TQM, and scientific management of improvement, the Duggan approach does not offer further explanations. Therefore, organizations must invest in developing the appropriate organizational culture to effectively pursue OE, according to this study.

To meet and exceed customer expectations: Carvalho, Sampaia, Rebentisch, Carvalho and Saraiva (2019) argue that culture and agility can be integrated for the promotion of long-term, sustainable OE initiatives while managing revenue, cost and risk. This argument highlights the deficiency in the Dugan model of

continuous improvement, along with the culture of the organization, by which it is impossible to achieve organizational excellence alone.

The Duggan (2014) study found that successful OE implementations exhibit success when profits for businesses go up. Chauhan, Pranav, Darji, Qureshi and Desai (2017), created a business strategy that does not contradict ethical conduct despite pursuing organizational objectives. In modern-day VUCA environments, monetary fiscal governance is critical. Integrating revenue, cost and risk is an effective way to demonstrate OE. Based on Block and analysis of individuals and machines, systems engineering focuses on designing, modeling and analyzing technological systems. The "big picture" of excellence can only be achieved when these systems interact with the environment. As a result of the lack of full-scale engineering, manufacturing and component acquisition coordination (Chapman, 2018), holistic OE does not have a positive impact (Duggan Model).

2.10.4 The Shingo Model

As a catalyst of cultural transformation, the Shingo institute seeks to award prizes to global organizations that implement the Shingo OE model. Using the principles of lasting enterprise excellence, this institute guides the award-awarding process (Gisi, 2018). Successful implementation is recognized with the Shingo Prize Award.

In a 2014 study by this institute, five key fundamental paradigm shifts were identified, and these include:

- a) For behavioural and culture change to succeed, OE is essential.
- b) Influencing desired outcomes through the manifestation of ideal behaviour.
- c) In order to build long-term sustainable principles, it is important to have strong cultural foundations.
- d) Behaviours that align with ideals and principles are managed in a positive way.
- e) Achieving six sigma, Lean, TQM and JIT are strategy enablers.

As part of the Shingo Institute's (2014) focus area, the organization educates, assesses milestones, and recognizes achievement of excellence targets and benchmarks. The Shingo Prize recognizes exceptional achievements of excellence, while medallions of the coveted silver and bronze are awarded for positive leaps. This is rewarded for using JIT, Six Sigma, and Lean tools as the foundation for Shingo Model systems improvement.

Further to the above, the model depicts principles that ensure that everyone has an equal voice and information is shared transparently between the top and the bottom. Trust and responsibility are fostered by clear communication. Therefore, everyone becomes responsible for the areas in which they work. Through continuous improvement, worthless activities can be removed, giving way to: invention, new ideas which are faster, easier and cheaper. Consequently, all process improvements are unilaterally "result driven".

2.10.5 Summary on discussed models

OE models, although developed on the common basis of sustained improvement, efficiency, and customer value, differ from each other in emphasis, application and contextual flexibility. While the Crawford version focuses on strategic alignment and people-oriented enablers such as communication, shared values, and leadership dedication (Crawford, 2013; Hutchins, 2018), it downplays environmental complexity and sustained improvement as processes-in-motion (Rising, 2014). Conversely, the Oakland version subsumes the principles of Lean, Six Sigma and TQM within an overarching framework and advocates for systematic quality management (Oakland, 2013; 2014). Nevertheless, its generic, one-size-fits-all structure—mirrored by its heavy dependence on EFQM and Baldrige models—precludes flexibility to different industries and by VUCA settings (Jaegera, Matyasb, & Sihh, 2014; Alshitri, 2014). While the Duggan version provides an applicable value-stream-driven perspective with an emphasis on employee involvement, leadership and sustained improvement (Duggan, 2014; 2018), critics portray it as superficial in its discussion about organizational culture and ethical governance critical to sustained excellence (Kanbur & Kanbur, 2020; Carvalho et al., 2019). While the Shingo version is characterized by its strong cultural transformation and behavioural alignment emphasis and its integration of the principles of Lean and Six Sigma tools as enablers and not terminal points (Shingo Institute, 2014; Gisi, 2018), compared to other versions, its coverage is the most complete aided by embedding the OE within organizational culture and behaviours to induce long-term sustainability. All things considered, although each version brings unique insights—Crawford on strategic alignment, Oakland on system integration, Duggan on process delivery, and Shingo on culture—none by itself can cope with the dynamic and uncertain settings of the modern industries. A merged and contextualized framework embracing strategic alignment, culture transformation, and adaptive process innovation; hence, is imperative to operational excellence within complex and volatile settings.

2.11 THE ENHANCED CONCEPTUAL FRAMEWORK

OE Strategy implementation literature review reveals a number of variable themes. OE implementation success is described briefly for each variable theme. Below is a discussion on how each theme contributes to successful OE implementation in terms of its links with other themes. Accordingly, the framework applies to free business environments since the authors of the OE models have not specified whether their models can be used in stable, variable, or VUCA business environments.

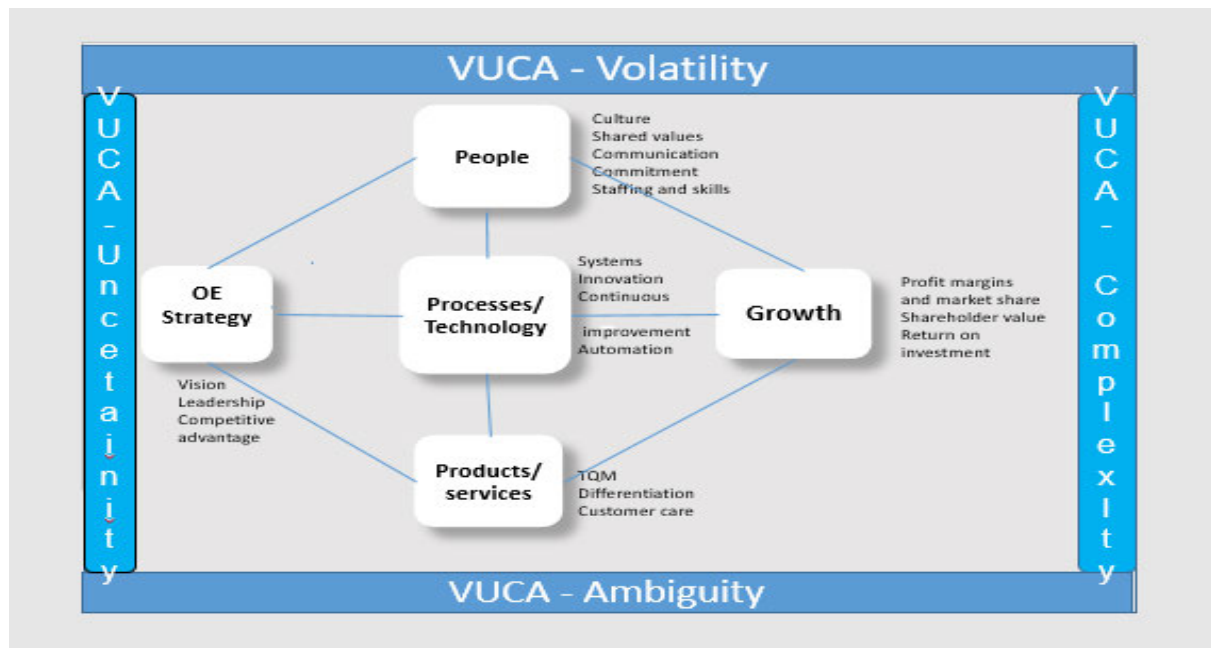


Figure 2.1 Authors Construct

2.12 VARIABLE'S LINKAGES

Several ties between leadership, process and competitive advantage can be found in the enhanced conceptual framework.

2.12.1 Leadership /people

Leadership is enabled by five different enablers; namely: culture, shared values, management style, communication and commitment. A leader influences individual and group behaviour to achieve the organisation's goals (Deters, 2018). According to Hossain and Saleh (2016), organizations must reengineer and manage their processes in order to achieve sustainable achievement. According to Graban and Swartz

(2018), situational interaction between leaders and followers is a natural process of sharing visions and values. In order to exercise power, charismatic leaders must have good traits, behaviours and intellect. A blend of interpersonal, task-oriented and autocratic leadership styles is necessary to implement OE successfully. Additionally, OE's approach to transformation, transactional, and principle-centered approaches inspire confidence beyond embracing modern-day styles. Organizational structures and systems are defined and directed by leadership styles. Values, culture and human capital are influenced by leadership.

For the successful implementation of the OE Strategy, Turner (2018) recognized synergistic links. According to Turner (2018), leaders should demonstrate commitment to and communication about the OE program in order to achieve growth through asymmetries between strategic fit and communication. It is also important to note that leadership style influences communication across the entire organization regarding OE strategy implementation. Communicating with levels, departments and employees is one of the key functions of OE strategy implementation. The weakest link in any chain can make or break its strength; the same is true of the OE strategy implementation. To achieve one goal of growth, the OE strategy needs to be communicated with trust, common beliefs, a common culture, and common values across the entire organization. In order for OE strategy to drive growth, people must be committed at least as much as leadership. Shao, Feng and Hu (2017) define culture and values as the identity of organizations derived from leadership styles. Ravasi (2016) defined culture as its identity, which is derived from leadership styles.

It is essential for the implementation of the OE strategy to have a culture that is, strategically, aligned with its environment and nurtured so that it cascades down to the employees of the shop floor. Until the culture is strategically fit, it should be communicated well. To achieve OE strategy, here, growth and culture must be linked to human capital in order to drive commitment. OE strategies rely heavily on communication, since they foster interdepartmental and employee collaboration. As Christoffel and Axelsson (2017) lamented, communication is a key component of the process of implementing OE strategies. The goals of the OE strategy should be communicated clearly throughout the organization throughout the implementation process. Employees (internal stakeholders) along with strategic partners, suppliers, and external stakeholders all depend on effective communication. The commitment of top management is crucial to the implementation of OE strategies. It is only when the management and organizational structures allow shared values and cultures that OE can be effective.

Verweire (2018) opines that taking action within the limits set by the strategy cultivates commitment spirit. In order for OE strategy implementation to be effective, top management must be directly involved in all specific and critically important aspects, including safety, quality, environment, and security policies and procedures. OE strategy implementation requires commitment by the OE strategy leadership in terms of

resources, time and financial support. Leadership is responsible for defining a company's vision, mission, strategic fit, and intent regarding OE implementation. OE strategies must be implemented by shop floor workers with middle management's commitment (Carvalho et al., 2019). People, processes and customer service are all related to OE implementation and commitment.

2.12.2 Process

Technology investments are made based on the process, and world-class operations are adopted to improve efficiency. Having a lean, efficient, cost-effective, and flexible manufacturing practice is very important for an organization in the current globalized and competitive environment. Production and manufacturing standards set by world-class manufacturing are comprised of a series of concepts. World Class Manufacturing (WCM) has been described in a distinctive manner by De Carlo and Simioli (2018) as having the potential to improve product quality and customer service while keeping costs low. A new set of disruptive digital technologies known as 4IR has emerged recently to tackle complexity and improve productivity, as noted by Nunes, Pereira, and Alves (2017). It is prudent to embrace 4IR, since it may lead to the next wave of OE.

Adapting to new technology is key to successful OE strategy implementation. Through cameras and computers, quality management systems are designed, monitored, and statistically analyzed easily in the digital age. A high repeatability process combined with accuracy and speed enabled by technology enables the manufacture of quality goods that are competitively advantaged in the marketplace. OE strategy implementation sustainability is determined by organisational relationships and practices. A study by Dubey and Singhal (2016) analyzed the structures of organisations that determine the way that organisations communicate, both in a literary and vertical manner. Effective OE strategy implementation requires well-communicated structures and systems while leadership style and technology level determine how these structures are implemented. The organizational structure and system affect people in terms of their career paths, promotions and reporting systems. Doz (2016) identified the communication matrix as a result of organisational relationships and practices. Organizational structures and systems play an important role in effective OE implementation. Pawar and Jambhekar-Inamdar (2020) provide an etymological the definition of the word Japanese word “Kaizen”. They explain that KAIZEN is the term used to describe continuous improvement. KAI - means change, and ZEN - means good. As a result, KAIZEN means change for the better. Only leaders with a 360-degree perspective can drive quality improvement, since it is a top-down process. It is essential to measure metrics such as capacity, closure rate, quality, and system up-time when implementing OE. In order to implement OE successfully, TQM practice and organization performance are critical.

Manufacturing processes and technology are interconnected in quality management systems. The OE

strategy implements quality management systems, enables quality control, and ensures quality assurance in order to drive the best quality at the world-class level. The moment all employees embrace quality as a culture and a shared value, excellence becomes the norm in the organization. By achieving goals, and continuing to grow, the organization maintains a competitive edge.

2.12.3 Competitive advantage

Quinn (2018) and Sonny (2019) assert that organizations ramp up their implementation of OE strategies to leverage competitiveness because of the globalisation phenomenon. They argue that in order to achieve this, organisations must benchmark their: technology, structures, quality management systems and employees against the best in the world. Consequently, it remains imperative that organizations implementing OE match the standards and operating procedures of other global players. The strategy must be effective for organizations entering a growth phase. The new competitive advantage is speed and quick turnaround. Businesses in the 4IR compete not only at speed, but on the ability to innovate.

Implementation of an OE strategy that uses big data, artificial intelligence, and a "smart everything" approach is vital to its success. In order for a strategy to be executed effectively, three principal ingredients must be present: namely, speed, perfection and champions. A technology-driven product provides the organisation with a competitive advantage. By using smart technologies, organisations can gain comparative advantage when their operations are world-class and enable efficiency throughout their value stream. This is achieved by leveraging synergies with suppliers' supply chains and ensuring global availability to customers. To remain competitive, organisations are focusing on retaining their best skills and talent in the midst of global OE implementation acceleration. As lean organizations implement OE programs, multitasking (job enrichment) and job enlargement (more responsibility) are key foundations.

2.13 SUMMARY OF CHAPTER

This chapter addresses the conceptual underpinnings and practical application of OE, tracing its evolution from early industrial efficiency practices to modern-day methods like JIT, Six Sigma, Lean Manufacturing and TQM. It compares four of the leading OE models—Crawford, Oakland, Duggan, and Shingo—on each of their strengths, weaknesses, and usability but again reiterating that no one model fits all organizations. The chapter stresses strategic, cultural, process and technological alignment as being key to sustainable growth, competitiveness, and customer delight. A larger conceptual model is put forward, linking leadership, process tuning and competitiveness in which leadership is couched as the umbrella driver for culture, information sharing and employee engagement. The chapter concludes that OE is evolutionary in nature where responsiveness to environmental pressures is cardinal, where stakeholders

must be managed cost-effectively, where state-of-the-art technology must be harnessed, and where sustainable organizational excellence must be perpetuated.

CHAPTER 3: A PERSPECTIVE OF OPERATIONAL EXCELLENCE IMPLEMENTATION IN THE SOUTH AFRICAN INSURANCE INDUSTRY

3.1 INTRODUCTION

The South African insurance industry forms a substantial component of the economy, offering basic financial protection and insurance product to individuals as well as companies. Despite its importance, the insurance business is facing a series of challenges that include changing regulations, over-saturation of markets, technology, as well as changing customers. In order for OE to compete as well as remain viable over a period, has to represent a strategic imperative for insurance companies. Theoretical underpinnings as well as practical applications of operational excellence in South African insurance business have been addressed in a literature review.

OE entails continuous excellence in processes and organizational performance, focusing on efficiency, effectiveness and flexibility. It is the reflection of a set of established methods, e.e., Lean, Six Sigma, and TQM, —that aim to reduce waste, reduce variation, and improve overall quality. The implementation of these methods; however, has widely been documented in production industries as well as in services, but in insurance industries, especially, in developing economies like South Africa, it is relatively less studied.

The South African insurance arena presents a distinct set of challenges, and prospects, for operational excellence programs. Economic, cultural, as well as regulatory factors all impact the implementation and adoption of such programs. In addition, the pace at which digital technologies continue to evolve, coupled with customers still demanding more personalized insurance offerings, is forcing insurers to reconsider traditional operational practices. Knowledge of these contextual dynamics needs to exist to create a truly functional, bespoke operational excellence program to suit the South African context. This review of the literature provides a comprehensive overview of extant research and conceptual developments in operational excellence. It begins by tracing operational excellence's conceptual development over time, prior to describing key methodologies with a focus on their application to insurance. The review continues to identify unique challenges and opportunities inherent in the South African context, in a bid to identify existing research gaps. It ends by integrating these findings to develop a context-relevant implementation framework for operational excellence in the South African insurance context.

Through a systematic review of literature, the survey aims to establish a wide groundwork for developing as well as empirically testing a hypothetical operational excellence model. The review not only provides an academic contribution but also a contribution to practitioners in industries that require better operational performance in a more complicated as well as competitive world

3.2 AN OVERVIEW

The insurance sector is one of bedrock pillars of the international financial system, providing basic protection services enabling people, businesses, and institutions to hedge risk and remain financially resilient. In South Africa, it performs very well in facilitating economic resilience—enabling investment, entrepreneurship, and shock protection—while supporting jobs creation and acting as a component of social protection (Mushunje & Mashasha, 2023). Beyond its economic returns, the sector promotes financial inclusion and alleviates poverty reliance on public redistribution by diffusing reach to previously excluded groups through microinsurance and informal agreements, specifically, designed for low-income earners (Magazi, 2019; Chummun & Bisschoff, 2017). Despite these advantages, however, insurers are confronted with escalating internal and external pressures, including evolving, risk-based regulation—i.e., the Solvency Assessment and Management (SAM) regime as well as the Twin Peaks framework of regulation—aimed at promoting transparency as well as market integrity, but obscuring waters and boosting compliance costs (IMF, 2024; Hagedorn-Hansen, Verhoef & Els, 2019). At the same time, South Africa's macroeconomic problems—weakened growth, high unemployment, as well as currency instability—against mounting technological change as well as evolving consumers' expectations are compelling insurers to invest heavily in digital infrastructure, cybersecurity, as well as data capacity to provide bespoke, effective, as well as transparent services (IMF, 2022; Mushunje & Mashasha, 2023). Against such developments, becoming operationally excellent—through constant process improvement aimed at improving efficiency, agility, as well as service quality—to navigate regulatory change, technological revolution, changing customer demand, developing resilience, competitively positioning oneself, and future-proof insurance industry in South Africa is no longer a choice, but necessity.

3.3 OPERATIONAL EXCELLENCE IN INSURANCE

Operational excellence in insurance is a systematic, strategic pursuit of maximizing business processes in a way that: produces higher value to customers, reduces costs, minimizes waste and maximizes organizational performance. It is not a question of doing things right—but of doing the right things consistently and effectively at all levels of operations. It is combining people, processes, and technology to create a high-performing organization that is agile, customer-centric, and capable of sustaining success in a competitive, rapidly evolving marketplace.

Essentially, operational excellence draws upon formal process improvement programs such as Lean, Six Sigma and TQM. Lean involves reducing waste and maximizing value by identifying non-value-adding steps and leaner processes. Six Sigma involves reducing process variation, fact-based decision-making to realize quality and predictability. TQM involves company-wide commitment to quality and continuous

improvement, often triggered by customer feedback as well as a performance measure (Antony, 2014. Dahlgaard-Park, Reyes & Chen, 2018) Taken collectively, these philosophies instill fact-based management, innovation and accountability culture.

For insurers, operational excellence initiatives deliver strategic and concrete dividends. To begin with, it significantly improves customer satisfaction by rendering policy issuance, payment of claims and customer servicing more accurately, timely and responsively. In an industry where credibility and reliability matter most, high-quality and timely service fosters customer loyalty and reputation. Secondly, operational excellence assists in reducing operating costs by optimizing internal processes, reducing redundancies, and utilizing resources better. Lean operations enable companies to re-invest cost savings in areas such as innovation, technology improvements, or improved customer offerings. It increases organizational agility overall—enabling quicker action in reacting to regulation overhauls, shifting customer expectations, competitive pressures and technology disruptions.

In addition, operational excellence supports strategic choice with real-time information, continuous monitoring, and systematic problem-solving practices. With information-backed management, insurance companies can identify areas of inefficiency, resolve problems in real time, and sustain improvements in the long run. It also motivates employees by engaging them in improvement processes as well as in building a collective understanding of purpose in value delivery.

3.3.1 Operational Excellence in the Global Insurance Industry

In recent years, OE has emerged as a key strategic imperative for insurance companies across the globe to address a highly dynamic and competitive business environment. In recent years, insurance companies across the globe have faced a number of challenges, such as technological disruptions, rising regulatory demands, rising operational costs, and changing customer demands for faster and more personal service. These challenges have forced insurance companies to become more efficient and to invest in digital transformation to enhance service delivery and sustain competitive advantage (Zinyoro & Aziakpono, 2024).

In recent years, operational excellence within the insurance industry has become closely related to the ability of insurance organisations to improve process efficiencies, decision-making, and organisational resilience. Recent research has indicated that operational efficiency plays a critical role in building the financial resilience and strength of insurance companies. Recent research on non-life insurance companies within South Africa indicated that improved operational efficiencies are closely related to improved financial performance and organisational resilience within the insurance industry (Ige-Gbadeyan & Swanepoel, 2025).

In recent years, a key driver for operational excellence within the insurance industry has been the digital

transformation imperative. In recent years, digital technologies such as artificial intelligence, big data analytics, cloud computing, and process automation have become critical for transforming the operational efficiencies of insurance companies. These digital technologies enable insurance companies to automate complex processes such as underwriting, claims management, and fraud detection to enhance operational efficiencies. These digital technologies reduce the time required for these complex processes. In addition, insurance organisations are increasingly leveraging advanced data analytics to analyse large volumes of customer and operational data to identify patterns and enhance decision-making (Nyambane, 2025).

Closely linked to this is the emergence of InsurTech, which has dramatically changed the way traditional insurance businesses operate. InsurTech is the application of innovation and technology to the insurance sector. With the emergence of InsurTech, insurance businesses have been able to transform their operations. InsurTech innovations have enabled insurance businesses to become more efficient, improve customer experience, and design new insurance products that suit the changing market environment. InsurTech innovations use technologies such as artificial intelligence, blockchain, and advanced data analytics to transform the insurance value chain and facilitate the operational transformation of insurance businesses (Borges, Laurindo & Spínola, 2024).

An important aspect of OE is investment in technology and the use of digital technologies. Research studies have shown that insurance businesses that invest more in technology are able to attain better operational efficiency. Investments in technology facilitate innovation and enable insurance businesses to design modern technologies that facilitate the delivery of services and the operational coordination of the business units of the insurance business (Eling & Lehmann, 2024).

Another important aspect of OE is governance and risk management. Governance and risk management play a critical role in the achievement of operational excellence. Research studies have shown that the effectiveness of the enterprise risk management system and the presence of good governance structures have a positive impact on the operational and financial performance of insurance businesses. Good governance enables insurance businesses to become more accountable, transparent, and compliant with regulations. These factors play a critical role in the achievement of operational stability, particularly in the insurance sector, which is highly regulated (Kırkbeşoğlu, Ergüner & Sönmez, 2025).

Additionally, organisational enablers like leadership commitment, internal communication, and employee engagement are key aspects that define operational excellence in an organisation. For example, research carried out in the insurance industry in South Africa indicates that internal organisational practices like employee engagement and internal marketing strategies are key drivers that enhance employee satisfaction and organisational performance, hence improving operational effectiveness (Storey, Roberts-Lombard & Lubbe, 2024).

3.3.2 Drivers of Operational Excellence in Insurance

There are various structural forces that strongly highlight the importance of OE in the insurance markets. Firstly, insurers are currently seeing rising pressures emanating from and associated with marketplace and profit margins dynamics, taking various forms, such as an inflationary-driven increase in claims costs, a deceleration in the rate at which premiums grow, and a rise in competition between companies battling for parts of the marketplace. All these various threats make operational enhancements more crucial and constitute a leading value-generation means in the marketplace, claims a 2024 report by McKinsey & Company. Other than these marketplace-driven imperatives, the complexity ingrained in current insurance businesses—encompassing a wide range of issues ranging from cyber risks, more fluid regulations becoming increasingly dynamic, and fast-evolving customer expectations—also necessitates the building of robust and agile operational strategies, 2023 report by the (International Association of Insurance Supervisors (IAIS) (2023). As a point of extra ref, regulators in most authorities now expressly mandate that insurers must both realize and demonstrate their capability for providing robust operational resilience. This requirement is, particularly, relevant to their management regarding their third-party threats, their cyber preparedness, and reportedly providing continuity for core services that are essential for their operations (IAIS,2023).

3.3.3 Core Dimensions of OE in Insurance

T Four core dimensions of OE for insurance are presented in the literature:

The push for automation implementation and process excellence: Robotic process automation (RPA), alongside workflow automation techniques, is increasingly being adopted for facilitating and enforcing a whole redesign of the processes involved in underwriting, claims and policy management. There are various pieces of evidence and studies that prove that insurance companies that adopt such contemporary techniques witness significant reductions in their cycle times, and a significant reduction in error rates as well. There is also a possibility for the liberation of valuable resources that can be redeployed for value addition to customer interaction and engagement (International Society of Six Sigma Professionals [ISSSP], 2022; Bhatnagar & Patel, 2023).

Data and analytics: Insurance companies are increasingly embedding advanced analytics and artificial intelligence (AI) solutions across various core areas such as claims triage, price strategies, and flagging against fraud. Strategic use is promoted for enhancing the quality of decisions and constructing operational nimbleness in these companies (PwC, 2024a).

Generative AI (GenAI) has also proved to be an influential transforming force on document processing, customer service interactions, and underwriting procedures. Despite its promise, however, some important governance and lack of explainability for these AI systems remain a matter of concern (PwC, 2024b).

Operational resilience has gained traction from being a concept that extended beyond efficiency to one that now necessitates the application of proactive techniques for risk management and entire systems for constructing resilience. Therefore, supervisory advice strongly recommends outlining at a granular level crucial functions at an institution, strenuous testing across scenarios to predict potential disruptions, and managing dependencies that exist between a series of suppliers and cloud services efficiently (IAIS, 2023).

People and culture: Sustainable OE is based on engaged employees, aligned leadership, and continuous improvement cultures. Deloitte (2024) stresses that insurers frequently miss value from their investments in technology when they overlook reskilling the workforce and change management.

3.3.4 Methods and Evidence on OE Impact

Lean and Six Sigma remain fundamental and core methodologies that are central to instilling discipline at the process level within the insurance sector. Several case studies that have been conducted within the service domain present compelling evidence for drastic rework reduction, greater precision, and a sizeable reduction in operational expenses if and when these methodologies are adopted in a specific context to claims adjudication and billing processes (ISSSP, 2022; Bhatnagar & Patel, 2023). Recent studies also highlight the vast advantages that are available with the coexistence of digital tools and Lean techniques, a notion that has been termed "lean digital transformation." This revolutionary approach utilizes automation to expedite efficiency while at the same time making use of judicious process design to efficiently reduce technical debt (Sharma & Rao, 2022).

3.3.5 Technology Trends and OE

Three important technological trends have been highlighted by global analyses that are actively transforming the operational ecosystem, or OE, for insurers. One trend that stands out strongly is fast take-up of Generative AI across various customer interactions and operational work-flow areas. Insurers are hopeful that the transformative value that technology could deliver to their operations would be massive, yet they are at the same time struggling with massive regulatory and ethical governance issues that arise alongside the use (PwC, 2024b).

3.3.6 Measuring OE Success

Another shift that is also fundamental to providing insurers with swifter product launches and supporting greater operational scalability is the movement to use cloud services and the building out of API ecosystems. Unfortunately, to the insurer, this shift also leads to greater concentration of risk and exposure to more third-party risks that must be aggressively managed and addressed (McKinsey & Company, 2024). The focus on automation at scale is increasingly taking hold—moving on from conducting single, isolated pilot programs to building out complete enterprise-wide automation platforms. The movement is seen as a key stimulus that could deliver sustainable organizational-wide operational impact and quality (Sharma & Rao, 2022).

3.3.7 Assessing the Effectiveness of Organizational Success

In recent years, diverse frameworks have appeared that propose balanced measurement strategies that efficaciously draw a correlation between Operational Excellence (OE) and both strategic and financial performance. One contribution towards such discussion comes from McKinsey & Company (2024), which recommends the maintenance of a comprehensive operational set of Key Performance Indicators (KPIs), such as cycle time and first time-right rates. Nonetheless, McKinsey insists that unless customer-related measures, which include the Net Promoter Score and claims-settlement time are tracked alongside strategic indicators such as digital-originating revenue, they are important, nonetheless. Similarly, Deloitte (2024) supports the notion that operational gains need to be translated into concrete results that benefit both top-line and bottom-line development.

3.4 CHALLENGES IN THE SOUTH AFRICAN CONTEXT

The South African insurance sector operates in a distinct but intricate context that is guided by a mix of economic, regulatory, as well as socio-cultural drivers. The dynamics have a deep impact on South African insurance companies' strategies, behaviour, as well as financial performance. At a regulatory level, the sector operates under a robust and evolving set of regulations designed to promote consumer protection, accountability, as well as transparency. The conduct of insurance companies, among other financial companies, is regulated by the Financial Sector Conduct Authority (FSCA) established under the Financial Sector Regulation Act (2017). The focus of its regulation revolves around ensuring that there is fair delivery of financial services, as well as in customers' interests. The FSCA insists on strict compliance with product design, disclosure, claims handling, safeguarding of personal information, as well as governance standards (FSCA, 2019). Insurers, however, operate under extra requirements, such as

solvency requirements from the Prudential Authority, as well as Treating Customers Fairly (TCF) guidelines. While as vital as these rules help to ensure integrity in the sector as well as consumer matters, they also bring in a great deal of complexity as well as expense in terms of compliance for insurers, particularly, smaller ones with limited resources. At an economic level, South Africa also remains beset by structural challenges that impact insurance business behaviour. Unemployment among the youth, along with slow economic growth paired with escalating living costs, limits consumer disposable incomes as well as insurance product affordability (Chisasa & Zingwevu, 2021). The inequality in incomes still pervades the South African economy, with an overwhelming majority of society enjoying no access to completed financial services. The market, therefore, becomes polarized, with formal insurance offerings more accessible to middle- and high-income groups, but low-income earners underserved or reliant upon informal risk-pool arrangements. These economic circumstances necessitate new, more inclusive insurance paradigms to ensure flexible, affordable, as well as relevant insurance offerings to serve diverse South African consumers. In addition to economic and regulation drivers, insurance purchasing behaviour as well as consumer behaviour can also be significantly driven by socio-cultural factors. South Africa is a multi-cultural society with 12 official languages, varying traditions, values as well as beliefs, which can determine how individuals think as well as behave towards financial services.

Varying levels of financial literacy compound the issue. The majority of consumers lack in-depth understanding of insurance terms, benefits, as well as processes, which can lead to distrust, underinsurance, or abuse of products (Nkuna, 2016). Cultural notions of risk, death, as well as money in rural or peri-urban areas can significantly impact take-up of funeral or life insurance. Traditional support systems in communities at a communal level can also determine insurance choice over formal advice. These economically, socially, and regulative interconnected challenge, yet also offer opportunity, to insurers in South Africa. The insurers must deal with compliance with complicated regulations, product innovation in light of affordability challenges under conditions of economic constraint; they must also develop culturally appropriate strategies that promote financial literacy as a way of establishing trust. This contextual awareness forms a central element of operational-model design, customer engagement, and policy interventions that resonate with the needs and context of the South African insurance marketplace.

3.4.1 Technological Disruptions and Opportunities

Technological developments undeniably are redefining the future of the insurance industry, bringing with them immense possibilities along with complex challenges in pursuit of operational excellence. Emerging technologies such as artificial intelligence (AI), big data analytics, robotic process automation (RPA), Internet of Things (IoT), and blockchain technology are redefining traditional insurance processes, making companies more efficient, precise, as well as responsive along the value chain (Cappiello, Gupta, &

Sharma, 2020; Gupta, Rana, & Dwivedi, 2022). For instance, they make it possible for insurers to use chatbots and machine learning to drive automated underwriting, triage and customer support. Such solutions not only reduce operation expenses, but also raise speed as well as reliability, which in turn equates to greater customer satisfaction. For its part, big-data analytics provides insurers with the ability to extract meaningful intelligence from large amounts of structured as well as unstructured information, resulting in better risk assessment, dynamic pricing, as well as customized product offerings. Blockchain technology, however, promises greater transparency, protection from fraud as well as secure sharing of information, more especially in applications such as claims validation as well as smart contracts.

However, such adoption involves a level of organizational as well as infrastructural challenges. The digital technologies require substantial initial investments in technology infrastructure, information management systems, information security, as well as employee training. The majority of insurers, as well as smaller insurers or insurers in economies that are in emergence such as South Africa, have a hard time keeping up with limited fiscal as well as technological capacities, and therefore struggling to match global digital transformation velocity. Tech adoption also requires a fundamental organizational cultural shift—away from hierarchical and silo-oriented organizations to adaptable, innovation-oriented organizations that make use of continuous learning as well as inter-functional collaboration. Optimization of digital technology usage in South African insurance can serve as an operational excellence as well as a differentiation enabler. With social-economic diversity as well as infrastructure disparities in South Africa, technology can fill gaps in proposition by facilitating mobile interfaces, online onboarding as well as remote processing of claims—extremely convenient in rural areas that have limited coverage. For example, big data as well as artificial intelligence can facilitate developing low-income individual client needs-based microinsurance, while digital platforms can facilitate higher reach as well as lower administrative expense.

Additionally, South African insurtech start-ups have introduced new digital-first business models that force incumbent insurers to innovate as well as to operate more agile, operationally. Incumbent insurers are investing in or entering into partnerships with digital start-ups to stay competitive as well as relevant. To make complete use of technological innovation, however, insurers must make investments in change management, digital capability, as well as reskilling employees in terms of aligning employees to new ways of working.

3.4.2 The Need for a Tailored Implementation Model

While the application of the principles of Operational Excellence (OE) is quite widespread across various sectors, including the manufacturing sector, logistics management, and supply chain management, the applicability of the principles of OE directly to the insurance sector, specifically the context of the South

African insurance sector, necessitates the formulation of a tailored implementation model. This is because the insurance sector is quite distinct from the manufacturing sector with regard to the service-based approach, the regulatory requirements, the customer interaction process, and the use of information technology. As discussed earlier, the application of the principles of OE is more relevant to production-based sectors rather than service-based sectors. Therefore, the application of the principles of OE may not be fully applicable to the insurance sector. As discussed earlier, recent studies have highlighted the importance of the formulation of sector-specific implementation models with regard to the application of the principles of operational excellence. Specifically, recent studies have highlighted that the application of the principles of operational excellence should be tailored to suit the operational structures and strategic approaches of service-based sectors, including the insurance sector. In addition to the sector-based complexities, the insurance sector in the context of the South African market is influenced by the complex socio-economic and regulatory environment. Specifically, the South African market is characterized by a wide range of complexities with regard to the diversity of the culture, the complexity of the regulations, and the financial literacy of the consumers. Therefore, the application of the principles of operational excellence should take into consideration the institutional context, the regulatory complexities, and the socio-economic complexities.

Operational excellence has emerged as a strategic organisational capability that encompasses technology innovation, operational efficiency, and service quality. Operational excellence in an organisational context calls for strategic alignment in operational improvement strategies. Strategic alignment in an organisational context refers to the process in which operational improvement strategies are aligned with organisational objectives. Strategic alignment in an organisational context is important in that it enables operational improvement strategies to have a direct impact on organisational objectives, such as customer satisfaction, operational efficiency, innovation, and competitiveness (Storey, Roberts-Lombard & Lubbe, 2024).

The role of leadership in the successful implementation of OE strategies cannot be overstated. Operational excellence in an organisational context calls for effective leadership in the implementation of operational improvement strategies. Effective leadership in an organisational context refers to the process in which leaders in an insurance firm foster a culture of innovation, operational improvement, and organisational transformation. Research on organisational transformation has indicated that leadership commitment is one of the most important factors that influence the success of operational improvement strategies in the service industry (Kırkbeşoğlu, Ergüner & Sönmez, 2025).

The rising VUCA factors such as volatility, uncertainty, complexity, and ambiguity in today's business environment are another factor that supports the need for tailored OE implementation models. Insurance organisations need to adapt to technological disruptions, changing regulatory requirements, and fluctuating customer demands. In such a dynamic environment, operational excellence frameworks should be flexible, resilient, and innovative to help organisations counter the rising challenges.

Thus, the need to develop a tailored model of implementing OE for the South African insurance industry arises to ensure that the operations of the insurance companies are aligned to the contextual, technological, and organisational factors of the sector. By incorporating strategic alignment, leadership, digitalisation, and regulatory factors, a model for the implementation of OE could offer a framework for the improvement of the operations of insurance companies in the country.

3.4.3 Strategic Alignment

The term strategic alignment refers to the extent of alignment of an organisation in terms of strategies, resources, processes, and operational activities with the organisational strategic objectives. According to Venkatraman (1989), strategic alignment was conceptualised as the level of fit of organisational strategies, structures, and operational capabilities that provide the basis for firms to achieve competitive advantage. Additionally, Kaplan and Norton (2006) state that operational initiatives and improvement activities should be well aligned with the organisational strategic objectives in order to achieve organisational performance. Strategic alignment thus ensures that improvement initiatives are not carried out in isolation but are well embedded in the overall strategic objectives of the organisations. Strategic alignment in the context of Operational Excellence (OE) is thus of critical importance in ensuring that improvement initiatives are directly linked with the overall objectives of the organisations. According to Hrebiniak (2006), organisations that are successful in strategic alignment of operational activities with strategic objectives are likely to achieve successful strategy implementation and organisational performance. Strategic alignment thus enables the prioritisation of improvement initiatives, the allocation of resources, and the establishment of performance measurement systems in the overall strategic objectives of the organisations. The operational excellence initiatives are thus well embedded in the strategic objectives of the organisations rather than being carried out as operational activities.

However, the process of achieving strategic alignment becomes more complicated in VUCA environments. In this regard, the fast pace of technological advancements, changing customer demands, and fluctuating market conditions necessitate organisations regularly review and adjust their strategic direction. In this respect, Lawrence (2013) asserts that organisations operating in VUCA environments have to increasingly adopt adaptive strategic approaches that enable them to respond adequately to the dynamic environmental conditions. In this case, the process of strategic alignment becomes more complicated as the traditional strategic planning process may limit the effectiveness of the organizational response to the changing environmental conditions. In addition, the process of achieving strategic alignment is complicated by the unpredictable and interconnected nature of the organizational operating environment. In this respect, Bennett and Lemoine (2014) describe VUCA operating environments as situations where traditional forecasting and long-term strategic planning approaches become inadequate due to the unpredictable and dynamic environmental conditions. In this case, Snowden and Boone (2007)

assert that the unpredictable organizational operating environment necessitates that organizational decision-making approaches become flexible to allow the strategy to change as the conditions dictate. In this respect, the process of achieving strategic alignment becomes more complicated as it is a dynamic process.

Recent studies have established the importance of strategic alignment in the process of achieving organizational objectives. In this case, the emergence of digital technologies has revolutionized the way organizational strategies are developed and executed. In this respect, the process of strategic alignment becomes more important as the application of digital technologies enables organizations that successfully align their digital transformation strategies with their organizational strategies to improve their organizational performance. In this case, the application of digital innovation in the insurance sector has enabled organizations to redesign their operational processes to improve their strategic responsiveness to the changing environmental conditions.

Strategic alignment is also closely associated with organisational resilience and sustainability. For organisations in highly dynamic industries such as insurance, it is essential to ensure that operational improvement activities are aligned to regulatory needs, risks, and customer needs. Recent studies revealed that organisations that are able to maintain high levels of alignment between operational activities and organisational objectives are better positioned to respond to environmental disruptions to ensure sustained organisational performance (Ige-Gbadeyan & Swanepoel, 2025).

In terms of operational excellence, strategic alignment, therefore, represents an important facilitator in ensuring that operational excellence initiatives make a significant contribution to organisational objectives. Through strategic alignment, organisational processes, digital transformation strategies, and management practices are better positioned to respond to environmental dynamics, thereby ensuring operational efficiency and sustainability. Strategic alignment, therefore, represents an important driver of organisational resilience, flexibility, and operational excellence in an increasingly dynamic and complex business environment.

3.4.4 Leadership in Implementing Operational Excellence

Leadership has been cited to play an important role in the successful implementation of Operational Excellence (OE). In this context, it has been noted that Operational Excellence can be successfully implemented in environments characterised by volatility, uncertainty, complexity, and ambiguity (VUCA). In this regard, it has been noted that the style of leadership adopted by an organisation has a significant impact on the success of Operational Excellence initiatives. In this context, transformational leadership has been cited to be the most effective style of leadership in addressing complex and uncertain organisational environments. Transformational leaders are noted to motivate employees to work for the

general interest of the organisation, encouraging innovation, creativity, and cooperation among employees. Transformational leaders are noted to encourage employees to actively participate in organisational change initiatives. According to Bass & Riggio (2006), transformational leadership has been noted to promote adaptability, innovation, and organisational commitment, which are important organisational values that can be beneficial to organisations that are implementing Operational Excellence initiatives in uncertain environments.

In this context, it has been noted that transactional leadership, which focuses on structured processes, supervision, and reward systems, may not be effective in uncertain environments. According to Burns (1978), transactional leadership may not be beneficial to organisations that are facing complex and uncertain environments since it may limit the organisational ability to adapt to changes in the environment. In this context, it has been noted that overreliance on transactional leadership may limit the organisational ability to adapt to emerging issues in the environment.

The other leadership style that has received recognition in relation to operational excellence is servant leadership. The main idea behind servant leadership is to empower employees by developing trust among them to ensure a collaborative culture within an organisation. This type of leadership style is important in operational excellence programs because it helps to develop a culture within an organisation that ensures employee engagement in operational improvement programs. The above-mentioned leadership styles are important in ensuring that an organisation achieves operational excellence in a VUCA environment. However, to successfully execute operational excellence in a VUCA environment, a leader must be equipped with a number of skills that enable them to successfully lead an organisation in a dynamic environment. For instance, a visionary leadership style is important in ensuring that an organisation achieves its strategic objectives (Kotter, 2012). This type of leadership style helps to develop a clear strategic vision that aligns operational improvement programs with an organisation's strategic objectives. This type of leadership style helps to empower employees to develop a sense of purpose within an organisation. This type of leadership style motivates employees to actively participate in an organisation's transformation programs. Adaptability is also an important leadership style in a dynamic environment. This type of leadership style helps an organisation to respond to changes in a dynamic environment (Heifetz et al., 2009). This type of leadership style helps an organisation to remain effective in a dynamic environment. Decision-making in a dynamic environment also requires a leader to develop a balance between analytical thinking and experiential thinking (Kahneman & Klein, 2009).

Effective communication, for instance, represents a key leadership skill for the effective implementation of operational excellence initiatives. Effective communication enables the achievement of greater alignment between organisational and operational activities, as well as fostering greater organisational transparency and trust. When organisational leaders effectively communicate the organisational strategy, for instance, the workforce becomes more aware of the contribution of their activities to the achievement of organisational objectives, thus fostering greater organisational cohesion (Clampitt, DeKoch &

Cashman, 2000).

Recent studies, however, highlight the importance of leadership in the effective implementation of digital transformation and innovation. As more and more organisations adopt digital technologies to achieve greater organisational and operational efficiency, the role of leadership becomes instrumental for the effective implementation of digital transformation initiatives. According to studies, leadership plays a crucial role in the achievement of organisational readiness for digital transformation, as well as fostering a culture of innovation and improvement (Eling & Lehmann, 2024). Moreover, the capability of leadership represents a key attribute of organisational resilience, particularly for industries operating in a highly regulated environment, such as the insurance sector, where the role of leadership must balance the needs for innovation and compliance (Borges, Laurindo & Spínola, 2024).

As a leadership skill, the role of leadership represents a key enabling attribute for the effective achievement of organisational excellence. As a key attribute of organisational culture, leadership demonstrates the ability to guide the organisation through complex and dynamic business environments, as well as the ability to achieve greater organisational cohesion and engagement. Therefore, effective leadership represents a fundamental attribute of organisational excellence and resilience, particularly as the business environment becomes more and more dynamic.

3.4.5 Case Studies and Practical Insights

The implementation of the principles of operational excellence (OE) by globally renowned organisations offers a wealth of insights into the role and contribution of leadership and strategic alignment to the achievement of operational excellence. The case study of many successful organisations across the globe reveals that operational excellence is not just a set of tools for operational improvement; rather, it represents a holistic management philosophy that incorporates leadership, organisational culture, and strategic direction. An analysis of successful organisations that have implemented the principles of operational excellence offers valuable insights into what organisations can learn to promote a culture of continuous improvement and maintain their competitive edge in a dynamic business environment.

The most prominent case study on operational excellence is perhaps the success story of Toyota Motor Corporation, which is largely associated with the implementation of its renowned production system, i.e., the Toyota Production System (TPS). The TPS represents a holistic management system for lean production and continuous improvement, with a particular emphasis on waste elimination, organisational efficiency, and employee engagement to contribute to organisational improvement. Liker (2004) points out that the key to the long-term success story of Toyota Motor Corporation can be largely attributed to its organisational culture.

Leadership has been instrumental in the embedding of these principles into the organisational culture of

Toyota. While organisational leadership plays a crucial role, Toyota promotes distributed leadership at all levels of the organisation. Employees are encouraged to identify inefficiencies and contribute to the problem-solving process. This ensures the embedding of the principles of operational excellence into the organisational culture. Strategic alignment of the organisational processes of Toyota is also achieved through effective internal communication, where employees at all levels of the organisational hierarchy are aware of the strategic objectives of the company and how they contribute to the achievement of the objectives. This has ensured the company's ability to remain agile, innovative, and efficient despite the fluctuations in the global market scenario. Another prominent example of the successful implementation of the principles of operational excellence is the General Electric (GE) group, particularly during the leadership of Jack Welch. Six Sigma was implemented as a key principle of operational excellence to improve the quality of operations, reduce process variations, and improve organisational effectiveness. Welch's leadership style was instrumental in the embedding of Six Sigma principles into the organisational culture of the company. Welch's ability to articulate a clear vision and execute the same to achieve organisational effectiveness was a key factor for the embedding of the Six Sigma principle into the organisational culture of the diverse business divisions of the company (Shruti et al., 2018). GE implemented a comprehensive system of performance management to ensure effective monitoring of organisational outcomes. This ensured the effective tracking of organisational outcomes and the identification of areas of improvement to maintain the desired level of strategic alignment between the organisational activities and the business objectives.

These case studies illustrate the significance of leadership in achieving success in implementing operational excellence programs. The leadership role in both Toyota and GE was not only at the top management level; it permeated all levels of the organisation. This type of distributed leadership facilitated employee participation in operational improvement programs. Strategic alignment ensured that operational excellence programs were not implemented in isolation from other programs; rather, they were well integrated with other programs.

Recent studies have continued to affirm the significance of leadership and strategic focus in operational excellence initiatives, especially in industries that are experiencing rapid technological changes. For instance, the insurance industry has continued to embrace digital innovation technologies to improve operational efficiency. Organisations that are successful in embracing digital innovation with operational excellence are likely to improve their operational efficiency and sustain competitiveness in the ever-changing market environment (Eling & Lehmann, 2024). In addition, recent studies conducted to evaluate the impact of digital transformation in the financial sector revealed that organisations that are strategic in embracing technological changes are likely to improve operational efficiency (Borges, Laurindo & Spínola, 2024).

From the experiences of organisations like Toyota and General Electric, it is evident that operational excellence is not just another management tool or process improvement methodology. Operational

excellence is an organisational philosophy that seeks to promote organisational learning and competitiveness. Operational excellence has the ability to promote organisational learning, which can help organisations to adapt to complex and uncertain business environments. Operational excellence can be achieved by promoting organisational learning, which can be accomplished by encouraging leadership focus and strategic focus between operational excellence initiatives and organisational objectives.

3.5 ORGANIZATIONAL CULTURE

In the current business environment, which is characterized by volatility, uncertainty, complexity, and ambiguity (VUCA), organizations need to develop the ability to adapt quickly to changing conditions to ensure their ability to be competitive and attain operational excellence (OE). In this case, organizational culture and change management are considered critical success factors for the success and sustainability of OE. These two are critical success factors for organizational success, particularly within a dynamic environment where change is a continuous process rather than an episodic process. Therefore, organizations need to develop a culture that encourages adaptability, innovation, and resilience, as well as an effective management process to ensure effective organizational transformation (Minciu et al., 2025; Syamsir et al., 2025).

Organizational culture refers to a set of values, beliefs, assumptions, and norms that are shared by people within an organization and that influence the way people within an organization behave with each other (Schein, 2010). Culture is considered a dynamic intangible force that affects the attitudes of people within an organization toward innovation, collaboration, performance, and change. In the context of operational excellence, a culture that encourages learning, accountability, and quality improvement is considered critical for the success and sustainability of organizational performance. Within a VUCA environment, which is characterized by a high rate of change and uncertainty, a supportive organizational culture encourages employees to be innovative and learn from failure without fear of negative consequences (Esenyel, 2024; Minciu et al., 2025).

Organizations with cultures that are too rigid, hierarchical, or resistant to change are less likely to successfully execute OE programs. Conversely, organizations with cultures that are adaptive, participatory, and learning-focused are more likely to accept and internalize OE philosophies. Such cultures are also more likely to encourage employee participation, engagement, and collaboration—key elements in driving continuous improvement and innovation. Research has shown that organizational agility and cultures of learning are critical factors in helping firms recover from disruption and maintain a competitive advantage in a rapidly changing world (Kruger & Barkhuizen, 2024; Santa et al., 2025). Moreover, organizations with cultures that are focused on learning, empowerment, and decentralized management are more likely to successfully execute OE philosophies in their day-to-day business rather

than treating them as a management fad (Vishwakarma & Pandey, 2024; Syamsir et al., 2025). Change management is a concept that is closely associated with organizational culture. Change management is a structured process to move individuals, teams, or organizations from a current state to a desired future state. Effective change management helps organizations manage resistance to change, align stakeholder interests, and engage employees to move towards a common strategic objective. Kotter's (1996) model of change management is perhaps the most widely accepted model in this regard. This model highlights the importance of commitment from leadership, communication, employee engagement, and implementation of change management programs in driving organizational transformation. Such a model, when used in concert with other OE tools such as Lean, Six Sigma, and Total Quality Management, ensures that changes are not only implemented successfully but also sustained in an organization.

However, in the VUCA world, the process of change management must undergo a change to become more adaptive and incremental. "Linear" approaches to change, as they have traditionally been understood, may no longer suffice in the context of a world of rapid technological advancements, increased competition, and disruptive uncertainties. Newer studies highlight the role of leadership agility, learning, and dynamic capabilities as key factors for effective adaptation to change (Syamsir et al., 2025; Mhlanga & Dzingirai, 2024). Here, the role of the leader must extend to the "human" aspects of change as well.

In the final analysis, organizational culture and change management are two concepts that work together in tandem. That is to say, having a good organizational culture will definitely improve the effectiveness of change management initiatives, and vice versa. All these aspects come together to lay the foundation for achieving operational excellence in terms of improving process efficiencies, organizational resilience, and quality of services rendered. In today's ever-changing VUCA environment, organizations that are successful in leveraging culture and changing management in their OE strategies will be well positioned to achieve this objective.

3.5.1 Role of Organizational Culture in OE

Operational Excellence (OE) implementation is largely influenced by a number of factors, with a positive organizational culture being one of the most important drivers of successful implementation (Minciu et al., 2025). A positive culture is embedded in a group of values and practices that emphasize continuous improvement, quality outputs, process efficiency, and employee engagement—pillars of Operational Excellence (Cameron & Quinn, 2011). A positive culture in an organization is also a source of creativity, teamwork, personal responsibility, and customer-centricity—conditions that are necessary for Operational Excellence to flourish (Santa et al., 2025).

Evidence from successful organizations around the world shows that a positive culture plays a crucial role in Operational Excellence implementation. For instance, Toyota's culture of Kaizen—continuous

improvement—maximizes employee engagement, emphasizes respect for people, and strives to eliminate waste in all its activities (Liker, 2004). This culture is an integral part of the company's Toyota Production System (TPS), recognized globally as a benchmark for operational and service excellence. Another example is General Electric (GE), where Jack Welch's leadership ensured a culture of performance through Six Sigma methodologies—fact-based management, personal responsibility, and developing leadership skills (Syamsir et al., 2025; Vishwakarma & Pandey, 2024).

On the other hand, organizations with cultures that are not well aligned or are weak may face significant hurdles in implementing an effective OE strategy. This includes cultures that are resistant to change, those that are geared towards short-term results rather than long-term results, low-trust cultures, or those with poor leadership role modeling (Denison et al., 2014). Employees in such cultures may not respond well to new processes, may not participate in improvement programs, or may not take up best practices in their respective departments, leading to a fragmented implementation of OE that may not yield optimum results (Kruger & Barkhuizen, 2024).

Hence, it is important to note that the alignment of culture with an organization's OE strategy is a strategic imperative rather than a consequence of management's efforts. The role of management in developing a culture that supports an organization's OE strategy is very important. This can be done by developing a shared vision of excellence in terms of values that are articulated within an organization's culture (Esenyel, 2024; Mhlanga & Dzingirai, 2024). A culture that is people-centric in its approach to developing an organization's culture will ultimately help an organization improve its performance in a sustained manner, thus helping it to respond to disruptions in a better way to gain a competitive advantage in a rapidly changing market.

3.5.2 Cultural Dimensions in a VUCA Environment

In a VUCA (Volatile, Uncertain, Complex, Ambiguous) world, some cultural dimensions are strategically important, as they have a direct impact on an organization's ability to cope with uncertainty and maintain Operational Excellence (OE). In this context, flexibility is the key cultural dimension. A culture that is open to responsiveness, adaptability, and innovation helps an organization adapt strategies, processes, and products in accordance with changing external environments (Kotter, 2012; Minciu et al., 2025). Such an organization would promote experimentation, where failure is viewed as an opportunity for growth, and would encourage proactive problem-solving, as these are critical in an environment where traditional ways of doing business become obsolete at a rapid pace (Syamsir et al., 2025).

An adaptive organizational culture would promote autonomous decision-making by employees, where every employee would be encouraged to generate ideas from the ground level. Such an approach would promote continuous improvement, an important aspect of Operational Excellence, as it would help

organizations make incremental changes in real-time in response to changing customer demands and dynamics (Santa et al., 2025; Vishwakarma & Pandey, 2024). In this sense, flexibility would not simply be a desirable organizational attribute; it would become a strategic attribute.

Another critical dimension in the VUCA environment is the learning-oriented culture. Learning organizations are those that constantly place priority on the development, sharing, and application of learning and knowledge at all levels (Senge, 1990; Esenyel, 2024). Knowledge plays a crucial strategic role in learning-oriented culture, enabling the organization to forecast disruptions in the environment and consequently adjust the OE strategy in alignment with the new trends (Kruger & Barkhuizen, 2024; Mhlanga & Dzingirai, 2024). According to empirical research findings, learning-oriented organizations are likely to institutionalize best practices, innovate new technologies, and innovate new ideas, all of which are directly linked with long-term operational excellence (Kruger & Barkhuizen, 2024; Mhlanga & Dzingirai, 2024).

Therefore, flexibility and learning orientation provide the cultural platform for operational excellence in the VUCA environment. These cultural attributes enable the organization not only to survive in the VUCA environment but also capitalize on the opportunities provided by the environment for strategic growth and competitiveness (Minciu et al., 2025; Santa et al., 2025). For managers interested in operational excellence, it is imperative that they develop cultural capabilities that are responsive, learning-oriented, and sensitive to the changing business environment (Minciu et al., 2025; Santa et al., 2025).

3.5.3 Change Management

Change management is defined as “a systematic and structured approach that enables individuals, teams, and organizations to progress from their current state to their desired future state.” (Hussain et al., 2018) It is the strategies, tools, and techniques that are employed to deal with the human side of organizational changes, ensuring that people adapt to the new processes, behaviors, and mindsets that are required for organizational changes. In the context of Operational Excellence (OE), change management is not an addendum but an integral part of the organizational process, ensuring that Operational Excellence becomes an integral part of organizational culture, systems, and processes. (Syamsir et al., 2025)

In the modern-day VUCA (Volatile, Uncertain, Complex, and Ambiguous) world, the importance of effective change management cannot be overstated. Organizations are called upon to respond to the dynamics of technological changes, regulatory changes, and market forces, and in the process, they are often required to undergo organizational changes, be it in processes, technology, or cultures. Without an effective management system in place, organizational changes are often bound to fail due to lack of employee engagement, resistance, and poor alignment of changes with organizational goals and objectives.

(Minciu et al., 2025; Vishwakarma & Pandey, 2024)

Effective change management can play an important role in supporting OE by providing guidance and clarity during uncertain periods. It can help employees understand the reasons for change, the benefits to be derived, and their individual contributions to the change process. All this can be very important in developing organizational commitment to change, which can often be a major barrier to successful OE implementation. Techniques like change management, stakeholder management, employee training, and incentives can play an important role in developing an organizational culture that can accept change and development (Esenyel, 2024; Mhlanga & Dzingirai, 2024).

In addition, in today's complex environment where change and adaptability are critical, change management techniques must also change to become more flexible to meet the ever-changing environment. Conventional change management techniques are not very effective in today's complex environment, which is marked by rapid technological changes and uncertainties. According to new perspectives, change management techniques must become more agile to allow for continuous feedback mechanisms. This will allow organizations to change their strategies in real-time to keep their OE initiatives in line with the ever-changing environment (Kruger & Barkhuizen, 2024; Syamsir et al., 2025).

Change management can play an important role in developing an important bridge between strategic intent and actual implementation. It can focus on the human aspects of change to ensure that employees are properly equipped to cope with change. It can help OE go from the realm of theories to actual practices, which can allow organizations not only to cope with change but to use change as an opportunity for growth (Syamsir et al., 2025). In this context, change management can play an important role in transforming OE from a mere change management initiative to an important organizational capability.

3.5.4 Principles of Change Management in OE Implementation

For change management in OE implementation to be successful, a number of core principles are required to enable organizations to manage changes effectively, especially in a VUCA environment. The core principles are required to ensure that not only are changes implemented in an organization, but they are also sustained within the organization's culture. The first principle is a clear strategic vision and direction. A clear strategic vision is essential in ensuring that a compelling vision for OE is articulated by an organization's management to align with the organization's broader mission, values, and strategic objectives (Kotter, 1996). A clear vision is essential in providing guidance in an uncertain environment. A clear vision also serves as a unifying force to ensure that all employees in an organization are able to connect with the reason for change, the expected outcomes from change, and how OE initiatives are

important in ensuring the organization's competitiveness in the future (Syamsir et al., 2025). The absence of a clear vision would mean that OE would only be implemented in an organization as a series of activities without strategic coherence or significance.

The second principle is continuous, transparent, and interactive communication. Communication is a critical success factor in ensuring that change management in an organization is effective (Clampitt, DeKoch & Cashman, 2000). Communication is essential in ensuring that all employees in an organization are able to understand the rationale for change, the rationale for OE initiatives in an organization, and their role in ensuring that changes are implemented in an organization (Esenyel, 2024). The uncertainty in a VUCA environment would also cause anxiety among employees in an organization. Therefore, communication plays a critical role in ensuring that all employees in an organization are able to trust and trust again in a VUCA environment (Minciu et al., 2025).

Third, employee engagement is another important aspect to be considered to guarantee the success of change in the organization. Employees are not only mere recipients of change; they are active participants who play an important role in determining the success of change initiatives. Engaging employees in the change process can result in a sense of ownership, responsibility, and motivation (Saks, 2021). Participatory methods like cross-functional improvement teams, suggestion systems, and collaborative workshops can be used to empower employees to contribute to the change process. In this way, employees can be motivated to participate actively in the implementation of OE practices. Employees are not likely to resist change if they are actively engaged in the change process. Participatory methods can help to reduce change resistance since employees will be actively engaged in the change process (Kruger & Barkhuizen, 2024).

In addition, effective support systems are necessary to facilitate change in the organization. Training and development are important aspects to be considered to empower employees with the necessary knowledge, skills, and competence to effectively implement OE practices. Mentoring can also be an important support strategy to help employees cope with change. In addition, reward systems can be an important strategy to align with the objectives of OE to motivate employees to change (Vishwakarma & Pandey, 2024; Santa et al., 2025).

Collectively, these principles of strategic vision, effective communication, employee engagement, and organizational systems provide a solid foundation that is essential for the successful implementation of OE. When applied appropriately, the principles allow organizations to manage the complexities of the VUCA world while embedding the culture of continuous improvement into the way the organization does business. In this context, change management is a strategic capability that enables organizational performance.

3.6 CHALLENGES IN A VUCA ENVIRONMENT

The implementation of Operational Excellence (OE) in a VUCA (Volatile, Uncertain, Complex, and Ambiguous) environment is a major challenge for organizations seeking to implement change while ensuring continuous improvement and operational excellence. In a VUCA environment, organizations are expected to deal with both organizational and external changes, such as technological changes, customer changes, and competitive changes (Minciu et al., 2025). These changes are expected to make the implementation and sustainability of OE a major challenge for organizations.

The most common challenge facing organizations seeking to implement change or transformation in an organizational context is resistance to change. Employees within an organization are likely to be anxious, insecure, and uncertain about their future within an organization operating within a turbulent and uncertain environment (Kotter, 1996). These changes are likely to be manifested by employees through a negative attitude or behavior towards the implementation of Operational Excellence (OE). Employees are likely to be resistant to change since they might fear losing their jobs or the competence and power they had before the implementation of a new system within an organization. In addition, employees might be resistant to change if they had negative experiences with previous changes within an organization (Burnes, 2004; Kruger & Barkhuizen, 2024).

Therefore, in order to overcome the challenges of change resistance, there is a need for empathetic and transparent management. The management should engage with the employees in such a manner that the employees' concerns are addressed, and their fears are calmed. This can be done by offering the employees an opportunity to express their views, as well as communicating the importance of the OE initiatives to them. This will encourage them to become part of the organizational transformation process. Additionally, the employees should be provided with the appropriate training and resources that will enable them to become competent in handling the new OE framework (Esenyel, 2024; Syamsir et al., 2025).

Another challenge that an organization is likely to face in the implementation of the OE strategy is the sustainability of the improvements that are made in organizational performance. The fact that the organizational environment is constantly disrupted in a VUCA environment may cause the organizational improvements made in the implementation of the OE strategy to dwindle. Therefore, in order to overcome this challenge, the organizational management should put in place mechanisms that will encourage the employees to remain engaged in the organizational improvement process. For instance, the organizational management should communicate the organizational improvements to the employees, as well as celebrating the achievements that the employees have made in the implementation of the organizational improvement initiatives. Organizational management, both at the top and middle management levels, should demonstrate commitment to the implementation of the OE strategy in the organizational operations (Burnes, 2004). The organizational management should ensure that the organizational improvements are not derailed by the employees, as this may cause the organizational performance to return to normal state.

Therefore, the organizational management should ensure that the organizational improvements are sustained in the long term. Organizational improvements should be designed in such a manner that they can be easily adapted in the event of the emergence of new challenges in the organizational operations, while remaining aligned with the long-term organizational strategic objectives (Vishwakarma & Pandey, 2024; Santa et al., 2025).

In addition, organizations need to put in place feedback mechanisms, performance measurement systems, and monitoring processes that help track progress and identify areas that need to be adjusted. This helps organizations improve their OE strategies in response to changing internal and external environments, ensuring that improvement strategies remain relevant. In conclusion, addressing the challenges that come with resistance to change, organizational momentum, and VUCA is crucial in embedding OE strategies in organizational culture for organizational operational success in a VUCA world.

3.6.1 Integrating Organizational Culture and Change Management

For OE initiatives to succeed in a VUCA environment, it is crucial to integrate organizational culture and change management. This integration ensures that cultural values and practices support the changing processes necessary for OE.

3.6.2 Creating a Culture of Change

Creating an organizational culture that thrives on change is an essential facilitator in the successful implementation of OE, particularly in highly dynamic and uncertain environments that are characterized by VUCA. Organizational culture, as an essential element that influences organizational values, beliefs, and practices, is an important facilitator in the successful implementation of organizational changes, where employees' perceptions and responses to organizational changes are often influenced by organizational culture (Schein, 2017). When organizational culture is supportive of OE, organizational changes are likely to be sustained in the long run (Minciu et al., 2025).

Therefore, to develop an organizational culture that is supportive of Operational Excellence, organizational values that are essential in facilitating adaptability and innovation in an organizational setting need to be embedded in the organizational culture. Adaptability enables organizational teams to respond to both external and internal changes, while continuous improvement enables organizational teams to be committed to incremental improvements in processes, products, and services (Senge, 1990; Esenyel, 2024). These are essential facilitators in the successful implementation of OE, particularly in highly uncertain and ambiguous environments.

Leaders play an essential role in the successful implementation and sustainability of an organizational

culture that is supportive of Operational Excellence. Leaders are essential in influencing organizational culture, where their leadership style, communication, and decision-making processes are essential in shaping organizational values and beliefs (Schein, 2017). By being open to feedback, encouraging innovation, and recognizing mistakes as opportunities for learning, organizational leaders are likely to develop a growth-oriented organizational culture, where organizational teams are likely to be inspired and motivated to innovate and learn (Syamsir et al., 2025). However, besides leading by example, organizational leaders need to institutionalize organizational values in the organizational system.

The structure for recognizing and providing incentives plays an important role in reinforcing cultural behaviors. For instance, a program for employee recognition that rewards innovation or process improvement activities can enhance employee engagement with OE programs. Similarly, a performance management system that includes OE-related goals will ensure that continuous improvement is integrated into the organizational culture rather than remaining a theoretical concept (Vishwakarma & Pandey, 2024; Santa et al., 2025).

Another important factor for building a culture that supports transformation is the visible and sustained leadership commitment to organizational change. When organizational leaders actively champion OE programs by communicating organizational vision, engaging with employees, and providing resources to improvement activities, this sends a strong message to employees that transformation is a strategic priority rather than a short-term program. Leaders can demonstrate this by actively participating in OE training programs, engaging with employees on the frontlines, and providing resources to improve activities.

This sends a message to employees that the organization is committed to transformation. This builds credibility and trust within the organization, which are critical for breaking through the cynicism and resistance to change. Employees are more likely to be receptive to organizational change when they perceive organizational leadership as committed to transformation and when the change aligns with the organizational strategic direction (Kotter, 1996; Kruger & Barkhuizen, 2024). Therefore, a culture that encourages learning, adaptability, and visible leadership support for transformation will provide an environment for OE to flourish.

3.6.3 Aligning Cultural and Change Management Strategies

The alignment between organizational culture and change management strategies plays a critical role in the successful implementation of OE strategies. Cultural alignment entails a process where organizational values, beliefs, and behaviors are not only recognized but leveraged for the success of change management. In a VUCA environment, organizational culture and change management are integrated to enhance organizational resilience and adaptability (Minciu et al., 2025).

The fundamental concept for the alignment between organizational culture and change management

entails cultural congruence within the change process. Effective change processes are those that are congruent with organizational culture. Effective change processes should be aligned with the cultural values desired within an organization. For instance, if an organization values continuous improvement, the change process for the implementation of OE should include mechanisms such as iterative experimentation and after-action reviews. These mechanisms will reinforce the cultural values that continuous improvement is a critical part of organizational success (Cameron & Quinn, 2011; Santa et al., 2025).

Furthermore, change management programs that are based on the existing cultural strengths of the organization are likely to gain acceptance and internalization by the employees. For example, when organizational values such as teamwork, individual responsibility, or innovation are incorporated into the change management program, employees are likely to accept the change management program as an extension of the existing organizational culture. Such an acceptance of the change management program by the employees is likely to reduce the level of resistance to change and increase the level of engagement with the OE programs (Kruger & Barkhuizen, 2024). Therefore, in order to align the change management program with the organizational culture, an organizational cultural diagnosis should be carried out during the early phases of the change management process. The cultural diagnosis helps in the identification of the cultural traits of the organization, as well as the cultural barriers that may impede the successful implementation of the change management strategies. For example, in an organizational culture that is based on a strong hierarchical culture, decentralization and employee empowerment may be difficult to implement, as they are crucial in the implementation of agile organizational practices such as continuous improvement (Denison, 1996; Esenyel, 2024).

The alignment of the organizational culture with the change management program is crucial in ensuring the sustainability of the change management program. For example, in an organizational culture where employee empowerment is considered a core organizational value, the implementation of the OE program is likely to be sustained in the long term, as the employees will be involved in the implementation of the organizational improvement programs (Vishwakarma & Pandey, 2024).

Moreover, to attain cultural alignment, it is essential for the leaders to emerge as cultural architects in the organization. This calls for ensuring that cultural attributes are reinforced in an organization through both formal and informal means. Formal means include reward systems, training programs, and performance management systems that encourage behaviors aligned with OE. On the other hand, informal means also include an important role in ensuring that culture is aligned in an organization. This calls for a synergistic effect that enhances the effectiveness of an organization in transformation to ensure success in OE (Syamsir et al., 2025).

3.7 PROCESS OPTIMIZATION

Operational Excellence (OE) has emerged as a strategic necessity for organizations that want to achieve the highest level of efficiency, improve the quality of service delivery, and sustain organizational growth. Operational excellence in the insurance industry is an extremely challenging process, considering the impact of the VUCA (Volatile, Uncertain, Complex, and Ambiguous) factor. Insurance organizations have to adapt to the changing dynamics of the business environment, including regulatory, technological, and economic factors. This makes it extremely important for insurance organizations to achieve operational excellence not just in terms of efficiency but also in terms of adaptability. In this context, process optimization and adaptability emerge as extremely important capabilities for achieving operational excellence in the insurance industry (Minciu et al., 2025; Santa et al., 2025).

Continuous process optimization refers to the process of systematically improving organizational processes to eliminate inefficiencies, reduce operational costs, and improve service quality. In the insurance industry, where products are intangible in nature and service delivery happens through back-end operations, efficient processes are extremely important for maintaining competitiveness. Efficient processes directly improve key performance indicators such as reducing the time required for claim processing, reducing errors in the underwriting process, and reducing the time required for policy issuance. For example, automation of processes such as data entry and claim verification helps eliminate errors, allowing organizations to improve the quality of service delivery. Similarly, efficient processes help organizations improve key performance indicators such as reducing the time required for risk analysis, customer engagement, and innovation in service delivery (Vishwakarma & Pandey, 2024).

Lean process management also helps organizations achieve scalability in the insurance industry. Efficient processes help organizations expand business in new markets and launch innovative products. This is extremely important in the insurance industry, where regulatory changes are extremely frequent. Efficient processes, along with customization capabilities, help organizations maintain consistency in service delivery, meeting the requirements of diverse customer segments in various geographical locations.

Nonetheless, in the VUCA environment, efficiency is not enough. Organizations need to achieve flexibility in responding to unfolding risks, technology disruptions, and market opportunities. While flexibility in decision-making is important, it is also essential to build organizational structures, products, and human resources that are flexible and adaptable. In insurance companies, for instance, it could be building modular products that can be easily changed, setting up cross-functional teams, and developing agile digital technologies that can respond promptly to unfolding changes (Syamsir et al., 2025).

While flexibility complements process optimization, it helps prevent highly optimized processes and systems from becoming rigid and obsolete. The pursuit of efficiency without flexibility could lead to the development of highly optimized processes that are not flexible enough to deal with unfolding disruptions. As such, an effective process optimization and efficiency strategy should be based on dynamic

optimization, where processes are constantly monitored, evaluated, and improved based on real-time data, feedback, and strategic needs (Minciu et al., 2025).

While process optimization and efficiency are essential in modern business environments, there are several challenges that an organization could face in implementing an effective process optimization and efficiency strategy. These include dealing with resistance from employees, high costs in implementing an effective process, and difficulties in integrating traditional systems and technologies with modern technological platforms. These challenges, however, can be resolved through effective leadership, strategic vision, and organizational learning (Esenyel, 2024; Kruger & Barkhuizen, 2024).

Technological innovation is seen to be of significant importance in facilitating process optimization and organizational flexibility. Technologies such as robotic process automation, artificial intelligence, machine learning, and data analytics are seen to be of significant importance in assisting insurance companies in improving their decision-making capabilities, identifying process inefficiencies, and offering customers unique and differentiated experiences. Additionally, technology facilitates organizational processes, thus improving their transparency, enabling insurance companies to track and measure their performance and organizational outcomes, and improving accountability in the organization (Santa et al., 2025; Vishwakarma & Pandey, 2024).

Ultimately, insurance companies are in a position to enhance their ability to deal with the uncertainties of the VUCA environment, thus improving their ability to sustain organizational excellence and offer customers superior value.

3.7.1 Importance of Process Optimization in Insurance

The insurance business operates in a highly interdependent, complicated ecosystem composed of claims management, underwriting, policy servicing, customer engagement, and rigorous regulatory compliance. These basic operations are often bogged down by manual processes, legacy systems, and information silos, thereby inhibiting process efficiency as well as agility. Optimization of processes—systematic process analysis, re-design, and process simplification—offers a way to address these challenges to achieve better organizational performance.

Streamlining processes in areas such as underwriting and claims handling can yield near-term, measurable benefits. For example, rules-based or machine learning automatic underwriting minimizes turnaround time from applications, improves accuracy, and alleviates human mistakes (Deloitte, 2022). This not only improves customer satisfaction by way of quick feedback but frees up underwriters to devote more resources to complex cases that require judgment and experience. Likewise, process streamlining in claims handling in terms of automated fraud detection, real-time status monitoring, and electronic receipt of documents improves efficiency in terms of internal processes as well as customer experience, instilling

confidence and loyalty.

Furthermore, process optimization facilitates improved accuracy in pricing, as well as in assessing risk. With the integration of advanced analytics as well as big data resources, insurers can derive insights from vast amounts of structure as well as unstructured information—from claims history to behavior patterns—for more informed risk profile evaluation. It provides more customized as well as competitively priced insurance solutions, which can drive improved customer loyalty as well as market position. Financially, process efficiency provides cost savings and profitability. Lean principles, standardizing workflows, and automations enable insurers to eliminate redundancies, reduce administrative expense, and reallocate resources to high-margin, higher-return functions (Hammer, 2015). The resulting efficiency gains create financial room for maneuver that can be invested strategically in innovative projects, say, in developing digital self-service portals, upgrading cybersecurity infrastructure, or in InsurTech collaborations.

Further, optimized processes facilitate better compliance with regulations as well as with risk management. Being among the most regulated industries, wherein compliance with regional, national, as well as international regulations can no longer be a choice but a requirement, optimized processes ensure strict compliance with documentation, reporting, as well as information protection methods. Anomaly identification, auditing, as well as enforcement of compliance regulations in real time, can all be done by automated software, reducing chances of fines, penalties, or damage to reputation.

With responsiveness, accuracy, and trust as competitive differentiators in a business, process optimization isn't an efficiency play in a back office, it's a strategic necessity. It equips insurers to respond more swiftly, create more customer value, and adapt to the unpredictability of a VUCA world. Insurers that continue to make investments in process optimization as customer needs evolve and digital disruption gain pace will find themselves better positioned to sustain Operational Excellence and long-term success.

3.7.2 Strategies for Process Optimization

Attaining Operational Excellence in the highly complex and ever-changing insurance industry requires that insurance companies develop effective, flexible, and adaptive strategies for process improvement. In the VUCA environment, insurance companies need to continually improve their operational processes in order to attain greater efficiency, lower costs, and enhance customer value. There are several established management methodologies and technologies that have been found effective in supporting process improvement in modern-day organizations.

One of the most commonly used methodologies in process improvement is Lean Six Sigma, an approach that combines the efficiency-driven principles of Lean Management and the data-driven quality improvement principles of Six Sigma. Lean Management is primarily concerned with eliminating waste and reducing non-value-added activities in an organizational setting, as well as improving efficiency in

work processes, while Six Sigma focuses on reducing variations and defects in processes using statistical analysis and problem-solving methodologies (George, 2019). Lean Six Sigma can be used in the insurance industry to improve key business processes such as underwriting, policy issuance, and claims management in order to eliminate delays, redundancies, and inconsistencies in services. For instance, reducing handoffs in the claims management process can enable insurance companies to attain greater efficiency in their services by providing faster and more consistent services to customers (Santa et al., 2025).

BPM is also an important strategy for the optimization of business processes. BPM is a holistic and continuous approach to designing, modeling, executing, monitoring, and improving business processes (Chang, 2016). By using BPM tools and systems, insurance firms can visualize end-to-end business processes, identify inefficiencies in those processes, and align business processes with strategic objectives (Vishwakarma & Pandey, 2024). BPM also allows firms to achieve agility in their business processes. Business agility is important in a VUCA environment. Through BPM systems, insurance firms can rapidly change their business processes in response to changes in regulatory environments, customer needs, or changes in market conditions (Vishwakarma & Pandey, 2024).

Technology innovations are also important in achieving process optimization in insurance firms. For instance, RPA is an important technology in automating business processes. RPA tools are particularly useful in automating repetitive tasks in an organization. Insurance firms can automate business processes such as data input, policy renewals, document verification, and initial claims processing. By automating these processes, insurance firms can improve processing speeds, increase accuracy in processing claims, and significantly reduce costs (Willcocks, Lacity & Craig, 2017). Insurance firms can also operate around the clock without increasing their workforce by using software ‘bots’ to automate business processes. This allows human employees to focus on high-value tasks such as problem-solving, customer relations, and innovation in services. For instance, insurance firms that use RPA to automate initial claims processing can process claims in a matter of hours rather than days. This allows insurance firms to improve customer satisfaction levels simultaneously with process optimization (Willcocks, Lacity & Craig, 2017). Moreover, RPA can also be integrated with other technologies such as AI and ML to automate complex analytical tasks. For instance, RPA can be used to automate tasks such as fraud detection, predictive modeling of risks, customer communication analysis, and customer recommendation systems (Minciu et al., 2025; Syamsir et al., 2025).

Overall, the management strategies that incorporate Lean Six Sigma and BPM, along with the latest technologies that include RPA, AI, and machine learning, assist insurance organizations in developing highly efficient, flexible, and scalable operating models. All of the above strategies combine to strengthen the organizational capacity to optimize the delivery of services while sustaining the competitive advantage that is characteristic of the uncertain and dynamic operating environment that is the insurance industry.

3.7.3 Flexibility in the Insurance Sector

The ability of an organization to respond quickly and effectively to changes in the external business environment, such as changes in the market, regulations, technology, and customer demands, is called flexibility. Flexibility, therefore, is an important organizational capability that enables an organization to remain competitive in the VUCA business world. In such an uncertain business world, flexibility is an important factor for achieving OE in an organization (Minciu et al., 2025; Syamsir et al., 2025).

Unlike traditional and bureaucratic organizational structures that cannot adapt quickly in an uncertain business world, an organization that is flexible would have an agile structure, decentralized organizational structure, and dynamic operational structure. Such an organizational structure would help an organization to adapt quickly to changes in the business environment. This adaptability would, for example, help an organization in the insurance industry to adapt quickly to changes in the risk pattern, such as those resulting from climate change, pandemics, and economic crises. Similarly, an insurance organization would adapt quickly to an increase in the number of claims resulting from natural disasters and pandemics.

In this context, flexibility has been found to play an important role in organizational resilience and customer-centricity, which are two important factors for the success of an organization. Organizations with resilience are those that can cope with shocks in the environment and sustain their performance during periods of disruption. On the other hand, flexible organizations are those that can understand customer needs. For instance, insurance companies that can respond to new risks by developing new insurance policies can improve customer loyalty and sustain their competitiveness in the market (Vishwakarma & Pandey, 2024).

In this context, it has been noted that operational flexibility can be supported by digital transformation and technological innovation. Technological innovation can play an important role in improving operational flexibility in organizations. Technological innovation can improve the ability of organizations to respond to new opportunities and threats in the environment. For instance, modern technologies such as cloud computing, modular IT, scalable digital platforms, and big data analytics can improve the ability of organizations to respond to new opportunities and threats in the environment. In addition, flexible organizations can promote a learning culture in which employees can respond to new challenges (Esenyel, 2024).

In this context, it has been noted that flexibility should be strategically embedded not only in the operations of the organization but also in the leadership practices and organizational culture. Organizational culture can play an important role in improving the effectiveness of OE initiatives in the organization. Organizational culture can improve the ability of employees to respond to new opportunities and threats in the environment. In this context, it has been noted that strategic management can improve the effectiveness of OE initiatives in the organization. In this context, it has been noted that strategic

management can empower employees to make accurate decisions in the insurance industry (Kruger & Barkhuizen, 2024).

Ultimately, insurance companies are able to remain resilient and competitive in the face of uncertainty due to the integration of flexible organizational structures, technologies, and leadership practices. Insurance companies are thus able to navigate the intricacies of the VUCA environment due to the incorporation of flexibility in their operational and strategic approaches, leading to long-term operational excellence and value creation.

3.7.4 The Need for Flexibility

The insurance environment is a dynamic ecosystem with continuous technological, regulatory, as well as behavioral change. Flexibility, as a result, is not only a driver of competitive differentiation, it's a survival requirement as well as a key to sustaining excellence. One of the most important drivers of change in business is rapid development of digital technologies. The rise of InsurTech startups, which make use of developments in artificial intelligence (AI), blockchain, as well as big data analysis, transformed insurance services creation, delivery, as well as distribution (PwC, 2023). Disruptors force traditional insurers to retrofit legacy systems, re-design customer experience, as well as adopt more adaptable business models.

In the meantime, regulation deepens in scope and sophistication in domains like data privacy, cybersecurity, and consumer protection. The General Data Protection Regulation of Europe (GDPR) and similar regimes elsewhere compel insurers to make ongoing investments in better governance of data, compliance process, and technology infrastructure. Slowing down in these aspects leads to non-compliance, financial fines, as well as damage to reputation.

Besides, flexibility is needed to handle unexpected interruptions, such as natural disasters, economic downturns, and pandemics. The COVID-19 pandemic, for example, provided a tectonic shift to enable insurance companies to operate in a new way, speed up transformation towards in-home work, remote customer experience, as well as electronic settlement of claims. Those who had already set up digital operations and a lean, agile way of working were in a far better place to deal with it. It was possible for them to absorb stress from increased levels of claims, achieve business continuity, as well as preserve customer experience, which are key drivers of OE (McKinsey & Company, 2020). In addition, agility ensures insurance companies have the ability to adapt to changing customer needs, such as more customized products, rapid delivery of services, and omnichannel experience. Customers currently expect seamless digital experiences, coupled with real-time support, which necessitate insurers to exercise agility in reconfiguring their service models, as well as integrating new technology. Agility boosts customer experience, as well as brand loyalty, in addition to competitiveness in markets.

Essentially, it's the ability to adjust strategies, reengineer processes, and realign resources in accordance with outside stimuli that equips an insurer to achieve as well as sustain OE. Flexibility must permeate organizational designs, choice-making, as well as workers' minds. Insurers who create their organizations flexible will prosper more in an uncertain as well as intricate world, making them better able to compete as well as thrive in an increasingly unstable business world.

3.7.5 Strategies for Enhancing Flexibility

As a way of coping with today's VUCA business environment, companies must adopt practices to bring about organizational agility. This agility enables them to respond quickly to market conditions, customer needs, as well as regulations—skills needed in order to achieve OE.

One such basic method is using agile methodologies. Originally developed for software development, agile principles like iterative planning, incremental delivery, and continuous feedback have been widely used outside of software development (Beck, & Webb, 2021). Agile insurance methodologies have the potential to accelerate product development in a bid to reach customers earlier with new offerings as a quick reaction to changing customer needs. Cross-functional agile teams combining marketing, underwriting, IT, and claims experts facilitate collective innovation, as well as superior internal and external event handling. Injecting agility, insurers can break down silos, make quicker decisions, and create more resilience to disruption.

Digital transformation is a primary driver of enhanced flexibility. The adoption of cloud technology provides real-time access to information and scale, minimizing the dependence on inflexible legacy systems and rendering operations more effective. Big data analytics enables insurers to derive insights from vast repositories of structured and unstructured data, enabling more sophisticated risk profiling, fraud detection, and customer segmentation (Fitzgerald, Kruschwitz, Bonnet, & Welch 2014). AI technology—i.e., machine learning algorithms and natural language processing—assist with automation and personalization. For example, AI-powered chatbots can manage routine customer queries in an efficient manner, leaving human agents to focus on more intricate tasks, while predictive analytics can assist insurers in developing customized products to individual customer profiles, which improves satisfaction and retention as well. Equally critical, though, is workforce flexibility. Human capital remains a primary foundation for organisational agility. Creating a workforce able to adapt to evolving functions and duties requires a learning culture (Senge, 2020). Continuous training and reskilling, in particular in digital, customer experience, and analytical skills, makes employees up to date and enables them to support OE goals. Additionally, more agile styles of working, like hybrid or remote working, enable companies to better respond to outside pressures, as was seen with the COVID-19 pandemic. Not only can such styles of working drive higher employee engagement and morale, but they also afford access to bigger talent

pools as well as lower overheads.

Lastly, flexibility is not a matter of structural or technological transformation, it's a way of thinking in a strategic manner that permeates the entire organization. Insurers who adopt agile practices, digitally transform, and cultivate a responsive workforce will be better positioned to anticipate and respond to disruptions, thereby enhancing their operational resilience in addition to staying competitive in an ever-shifting context

3.7.6 Challenges in Implementing Process Optimization and Flexibility

While process optimization and flexibility are essential for OE in a VUCA environment, their implementation in the insurance sector presents several challenges.

3.7.6.1 Resistance to Change

Resistance to change is one of the biggest obstacles to the achievement of process optimization and flexibility, particularly in the insurance industry. Organizational change is often accompanied by feelings of uncertainty, fear, and skepticism among the workforces. These feelings may be more pronounced where the changes involve the implementation of new technologies or significant modifications to traditional organizational work processes. In some instances, the workforce may view the changes as a threat to their job security. They may feel that the implementation of technology, particularly digital technologies, may replace their jobs. In other instances, they may be afraid of the workload that may be associated with the changes or the challenges that may be encountered while adapting to the changes. All these may result in resistance to change, which may hinder the achievement of OE.

To overcome the resistance to change, organizational change management strategies that address the issue of trust, uncertainty, and workforce engagement should be comprehensive and well-structured. In this context, organizational leaders should be able to communicate the organizational changes that they intend to implement. In addition, they should be able to communicate the reasons behind the changes. They should be able to communicate how the changes they intend to implement will help the organization move towards the achievement of organizational goals. Communicating the benefits that may accrue from process optimization, which may include efficiency, reduced repetitive work, improved quality of work, and the opportunity to participate in more strategic work, may help to overcome the skepticism that may be encountered by the workforce.

Another key factor that can be helpful in reducing resistance to change is employee involvement. Employees should be involved in the process of change implementation. This can be achieved by

conducting feedback sessions, conducting pilot programs, and providing collaborative work opportunities. Employees should be involved in the process of change implementation to ensure that they develop a sense of ownership and a sense of responsibility for change implementation. This will help to reduce resistance to change since employees will be committed to the change implementation process (Syamsir et al., 2025).

Organizational support for change implementation is another key factor that can be helpful in reducing resistance to change. Employees should be provided with training programs, technological tools, and mentorship opportunities. This will help to reduce anxiety related to change implementation. When employees are confident enough to implement new technology, they will be less resistant to change (Esenyel, 2024).

The role of leadership cannot be overlooked when discussing the factors that can be helpful in reducing resistance to change. Leaders are responsible for ensuring that employees are not resistant to change. Leaders should be effective enough to communicate the vision for change implementation. Leaders should be effective enough to demonstrate the behaviors that they want to see in employees. Leaders should be effective enough to demonstrate their commitment to change implementation. Leaders should be effective enough to demonstrate transparent communication with employees. Leaders should be effective enough to demonstrate a positive attitude towards change implementation. Leaders should be effective enough to demonstrate a positive attitude towards organizational transformation (Kruger & Barkhuizen, 2024).

To reduce resistance to change, a psychologically safe and inclusive organizational culture should be created. A people-centered approach to change management should be adopted. A people-centered approach to change management will ensure that technological and organizational changes are aligned with employee preparedness and engagement. Such an approach will be helpful for sustaining successful OE implementation and organizational transformation in a VUCA environment.

3.7.6.2 Integration of Legacy Systems

Another key challenge to insurance companies in implementing OE is integrating legacy systems with new digital technology. The majority of insurance companies have IT systems that have been in place for decades, which were not designed to cope with high speed or high velocity of technological change that typify today's VUCA world. Legacy systems lack flexibility, scalability, as well as interoperability to enable advanced digital applications such as big data analytics, artificial intelligence (AI), cloud technology, as well as robotic process automation (Westerman, Tannou, & Bonnet 2021).

Legacy system incompatibility with newer digital solutions produces a chain of operational bottlenecks. It can hinder information visibility and access, slow down real-time decision-making, and make it difficult to deploy customer-facing digital platforms. It can also be expensive to operate, as it requires specialized talent, fails more, as well as lacks vendor support. All of these sap agility to respond to evolving customer

needs and regulation requirements—drivers in the VUCA world.

Legacy system upgrading or replacement is no cakewalk. It involves a huge capital investment, careful planning, and technological sophistication to ensure business continuity as well as minimization of losses. Complete replacement can be disruptive to existing operations, especially if systems in place have been deeply ingrained and have closely interfaced with core processes such as underwriting, policy administration, and claims processing.

In order to counter such challenges, insurance companies are resorting to hybrid or step-by-step approaches to digital transformation. Rather than total substitution of legacy systems, companies can adopt methods such as APIs (application programming interfaces) and middleware solutions, which allow legacy systems to interface with newer systems. This step-by-step integration helps companies preserve key capabilities while acquiring newer features in a step-by-step manner. One such enhanced method involves utilization of cloud-based systems as well as modular IT infrastructures that ensure flexibility, lower infrastructure costs, as well as quicker new application deployment. An example involves cloud-native systems, which can layer over existing systems in order to support customer engagement, analytics, or mobile services, which can create a two-speed IT environment in which innovation can happen without having to overhaul the entire system at once.

Also, there needs to be a risk-managed transformation roadmap. That implies a researched analysis of current IT infrastructure, identifying high-impact areas to modernize, and prioritizing technology advancements by business requirement. Being technically correct and in sync with a strategic vision is ensured by having in place cross-functional units, including IT, operations, risk, and compliance units.

Finally, integrating legacy systems with new age technologies is a delicate balancing act that requires vision, strategic investment, as well as organisational agility. Taking a staged, phased approach, insurance companies can avoid reorganization, facilitate deployment of resources, as well as create a digital platform to achieve OE in a VUCA world in the long term.

3.7.6.3 Regulatory Compliance

Regulatory compliance has been identified as another major challenge for insurance companies to attain OE in an ever-changing VUCA environment. The insurance industry is perhaps the most heavily regulated sector globally, with numerous national and international regulatory frameworks in place. These include various aspects such as data privacy, solvency, anti-money laundering (AML), financial reporting, consumer protection, etc. Some examples include the General Data Protection Regulation (GDPR) for data protection, the Protection of Personal Information Act (POPIA) in South Africa, Solvency II, etc. (Deloitte, 2022). What is important to understand here is that these regulatory requirements are not static; they are constantly changing with new threats, technological advances, financial crises, and changes in

government policies, etc.

As insurance companies strive to optimize their operations to become more agile with digital transformation initiatives, it is important to understand that these new initiatives must always remain in complete compliance with regulatory requirements. Non-compliance can result in serious legal, financial, and reputational damage to the insurance companies. For example, if insurance companies implement new systems to optimize their underwriting or claims processing systems with the help of AI or ML techniques, these systems must also remain in complete compliance with the regulatory requirements to be transparent, unbiased, and non-discriminatory in their decision-making process (Vishwakarma & Pandey, 2024).

The application of advanced technologies such as big data analytics, artificial intelligence, and cloud computing adds further layers of complexity in the regulatory compliance process. For example, the application of cloud computing may generate regulatory risks with respect to the transfer of customer data across different jurisdictions. Additionally, the application of advanced analytics in the pricing of insurance policies or the assessment of risks may require the application of transparent and interpretable models in order to ensure the overall fairness of the regulatory process (Minciu et al., 2025).

In order to overcome the regulatory compliance challenges, the insurance organizations need to take a proactive and integrated approach in managing the regulatory process. This may include monitoring the regulatory changes in the global and local environments and assessing the overall impact of such regulatory changes on the organizational processes and technologies (Esenyel, 2024).

In the recent past, the insurance organizations have been using the application of Regulatory Technology (RegTech) in the management of regulatory compliance. RegTech is the application of advanced digital technologies in the monitoring, reporting, and assessment of regulatory risks. The application of RegTech enhances the overall efficiency of the regulatory process in the insurance industry (Syamsir et al., 2025). Additionally, the application of RegTech enables insurance organizations to anticipate the regulatory risks in the future and take strategic approaches in managing the regulatory process (Syamsir et al., 2025).

In the final analysis, it is important to understand that achieving the right balance between regulatory compliance and OE success requires effective collaboration between various functions, including the law department, compliance department, information technology department, operations department, and executive management. In fact, regulatory compliance can become a major strength rather than a weakness if properly managed. In this context, insurance companies can improve stakeholders' trust, organizational integrity, and sustain growth in extremely volatile and uncertain environments.

3.8 TECHNOLOGICAL INTEGRATION AND INNOVATION

In today's dynamic, high-pace business context—which is marked by VUCA—the insurance sector struggles to achieve as well as sustain OE. The challenge arises in many directions, from fluctuating markets as well as evolving customers to regulations that grow more rigorous by way of regulation, in addition to increasing pressures from InsurTech disruptors as well as traditional entrants. Here, technology integration as well as innovation come to the fore as key drivers of OE, offering robust solutions as well as paradigms to transform traditional insurance operations into lean, agile, as well as customer-centric systems.

Technological integration involves acquisition and assimilation of digital technology such as AI, ML, RPA, cloud computing, blockchain, and big data analytics into insurance companies' business processes. The technology has the potential to enable repetitive processes to run autonomously, support more informed decisions, and enhance speed and accuracy in service delivery (Fitzgerald, Kruschwitz, Bonnet, & Welch, 2014). For instance, chatbots powered by AI enable customers' concerns to be handled with minimal human intervention, while predictive analytics have improved underwriting accuracy as well as fraud detection.

On the other hand, innovation entails bringing to the marketplace new solutions, services, processes, or business models—solving new requirements or derived from new sources of value. For insurance, innovation can manifest as usage-based insurance (UBI), pay-as-you-drive or pay-how-you-drive, tailored risk profiles, or ecosystem partnerships with technology companies and third-party vendors (PwC, 2023). Innovations such as these not only ensure companies' competitiveness, but also drive OE directly through increased operating agility, responsiveness, and customer satisfaction. Technology appropriation for OE, though, isn't always a cakewalk. There are legacy system constraints, integration complexity, cybersecurity threats, talent deficiencies, as well as resistance by organizations (Westerman, Tannou, & Bonnet 2021) that insurers must deal with. Further, regulation imposes additional limitations on what technology to adopt, most strongly in areas of data privacy, risk, as well as compliance.

Despite these challenges, literature provides proof that technological innovation can yield vast dividends. It provides assurance of cost saving, improved compliance, improved visibility in operations, as well as improved customer satisfaction, all of which are key pillars of OE in VUCA. Additionally, technological initiative alignment at a strategic level with organizational goals ensures that innovation activity does not exist in a silo but as a part of a great vision of continuous excellence.

3.8.1 Technological Integration in the Insurance Sector

Technology integration means deliberately integrating new digital technologies into an organisation's major processes, systems, and workflows in order to create effectiveness, efficiency, and agility—ultimately, in support of OE. Insurance technology integration combines a transformational mandate with a competitive requirement, with increasing demands for tailored services, speed in processing, compliance, and cost-effectiveness.

This integration involves complete overhauling of operations, which most often starts with new technologies such as AI, ML, RPA, blockchain, and advanced data analytics (Fitzgerald, Kruschwitz, & Welch 2023). The new technologies have a role to play in optimizing operational performance

They are used to make more informed decisions, better anticipate risk, and automate fraud detection as well as underwriting. Technology enables insurers to review vast quantities of information in real time, which produces more timely, better-informed decisions as well as customized product offerings.

RPA can handle repetitive, rule-based back-office administrative functions such as policy renewals, claim processing, as well as data entry. This not only reduces human error as well as organizational costs but also frees up human resources for more strategic as well as customer-facing roles.

Blockchain technology provides insurance transactions with extra transparency, security, and trust due to decentralized, immutable records. It is particularly applicable to securing and automating the use of smart contracts as well as to increasing auditability and fraud protection.

Advanced analytics allow insurers to glean useful information from big data to support proactive risk management, dynamic pricing, segmentation, and improved customer experience. Efficient integration of these technologies provides end-to-end digitalized insurance services that increase their speed, accuracy, and reliability. It provides more operational agility, as organizations can quickly respond to shifting market conditions, customer needs, and regulations—capabilities necessary in a VUCA world.

However, technological integration, in itself, not only involves buying new technology, but also requires strategic alignment to organizational goals, a willingness to adapt, as well as an investment in digital capabilities. Technological integration, used in a proper manner, returns a catalyst for future enhancement, innovation, as well as future sustainability in terms of actualizing OE.

3.8.1 Importance of Technological Integration

Technology integration plays a central role in organizational agility and operating effectiveness, especially in insurance, which needs to adapt swiftly to shifting marketplace conditions as much as to shifting customer needs. The integration of AI, ML, RPA, and advanced analytics in the OE process provides insurers with a way to simplify their operations, reduce costs, and increase their ability to deal with uncertainty and complexity.

For example, ML, as well as AI, algorithms have revolutionized the underwriting process by way of automated yet intelligent risk analysis (Bode, Bode, & Braun, 2022). The technologies analyze vast amounts of structured data as well as unstructured data—such as behavior, credit score, as well as social media—to make more timely, accurate underwriting decisions. This reduces human mistakes, reduces underwriting cycle time, and enhances pricing accuracy, ultimately resulting in higher profitability as well

as customer confidence.

Similarly, RPA automates rule governed as well as high-volume processes such as issuance of policies, processing claims, billing, as well as compliance reporting (Willcocks, Lacity, & Craig, 2017). It reduces administrative costs, operating delays, as well as increases consistency in services. It also allows employees to focus more on higher value activities such as strategic planning as well as customer relations management, which is necessary in order to spur innovation as well as sustained competitiveness.

Besides operating efficiencies, technology integration also enables data-driven decisions as well as tailored customer experiences. With advanced data analysis, insurers have been able to extract internal as well as external sources of data to generate patterns, forecast future trends, as well as develop tangible findings (Davenport, & Ronanki, 2018). This helps organizations personalize their products, price structures, as well as advertising programs to targeted customer groups, resulting in increased engagement as well as retention. Furthermore, predictive analytics can facilitate proactive risk management by highlighting potential fraud, coverage gaps, or evolving threats in advance before these aggravate. This enhances not only customer satisfaction by way of early interventions but also organizational strategic agility in a VUCA world.

Last, technology alignment to insurance business functions creates a digitally supported ecosystem to drive continuous enhancement, scalability, and innovation. This ability must exist in order to cultivate and develop OE, especially in an industry in which customer expectations, regulation, and technology disruption keep changing.

3.8.2 Strategies for Technological Integration

Successful technology implementation in the insurance industry requires a strategic, purposefully targeted initiative that directly ties technology investments to the company's key objectives, operating agendas, and customers' needs. Insurers should not deploy technology for technology's sake but deploy digital systems and software in a manner that delivers tangible gains in terms of performance, customer satisfaction, as well as competitive differentiation.

One of the keyways to accomplish this is through developing multidisciplinary teams that tap into IT, operations, customer support, compliance, and strategic planning expertise (Westerman, Tannou, & Bonnet 2021). These multidisciplinary teams have a vital role to play in identifying areas in existing practices where workflow can be done more efficiently, assessing organizational readiness, and selecting technologies with pragmatic, scalable advantages. The multidisciplinary teams have a holistic understanding of the way in which technological innovations cut across various aspects of the business, from regulatory compliance to customer interactions.

These kinds of teams can also enable formal analysis through ROI analysis, process mapping, as well as technology fit analysis to ensure solutions chosen not only to resolve immediate pain points but also position an organization to succeed in the future along with addressing challenges in the future. More importantly, engagement by multiple departmental stakeholders ensures ownership as well as accountability is necessary to avoid resistance to change, in addition to ensuring future buy-in. Furthermore, agile practices have served as a key impetus for technology adoption in insurance (Beck, & Webb, 2021). Unlike traditional stage-wise implementation paradigms, agile modes emphasize iterative development, ongoing feedback, and rapid prototyping. This allows insurers to test new technologies on a limited scale, learn from what consumers say and do with them, and evolve solutions before implementing them at scale. Agile practices allow for a responsive and innovative-minded culture as well as allow insurers to respond quickly to evolving customer needs, regulations, and competitive pressures.

For instance, agile strategies can help to accelerate development and productizing customer-facing digital channels, such as mobile applications and self-service interfaces, by passing real-time feedback and marketplace information into each development sprint. Similarly, process refinements internally, e.g., automating underwriting or optimizing fraud detection through applications of artificial intelligence—can be iterated quickly through fine-tuning to outcome and performance metrics.

3.8.3 Innovation in the Insurance Sector

One of the key drivers of competitive advantage as well as one of the key drivers of OE in today's VUCA world, innovation entails designing as well as rolling out new ideas, new products, new services, as well as new processes, which yield immense value to customers as well as to stakeholders (Tidd & Bessant, 2018). For insurers, innovation is not only a force for differentiation but a strategic necessity to keep pace with evolving customer expectations, increased regulation demands, as well as increasing competitive pressures in the marketplace. Encouraging a culture of innovation can make insurers more agile, streamline operations, as well as develop customer-centric solutions to make them more relevant as well as feasible in the long term.

3.8.4 Types of Innovation

Four broad classifications of insurance innovations, namely, product innovation, process innovation, business model innovation, and service innovation (Iddris, Dogbe, & Kparl, 2023), exist. There is a role for each of these in implementing Operational Excellence (OE) as they all have a contribution towards efficiency, customer value, as well as agility in the VUCA world.

Product innovation involves designing new insurance products or modifying existing ones to cater to

evolving customers' needs and desires. A great case in point is usage-based insurance (UBI), which uses telematics technology to adjust premiums in accord with actual behavior in real time instead of traditional demographic factors (Bode, Bode, & Braun, 2022). These innovations make insurance offerings more in accordance with people's risk profile, hence increasing equity as well as customer satisfaction.

Innovation in processes focuses on promoting efficiency, speed, and reliability in processes by implementing new technology, workflows, or organizational practices. It involves automating manual processes, process re-engineering, or infusing data-based decision-making capabilities (Hammer, 2015). For instance, RPA used in claims processing reduces turnaround time as well as human error, which in turn translates directly to cost savings, as well as more excellent delivery of services.

Business model innovation requires a fundamental transformation in value creation, delivery, as well as capture, by the insurer. This can take the forms of insurers moving to platform-based business models, partnership with InsurTechs, or transformation to end-to-end digital customer interactions. This can yield new revenues, expand market reach, as well as make insurers more distinct from traditional rivals. Service innovation addresses more enriching customer experience in terms of new channels of access, personalization, and value added. Some examples involve chatbots powered by artificial intelligence to assist in 24/7 customer support, mobile applications to manage policies, or customized wellness programs tied to health insurance. Nothing builds customer engagement as much as these, yet they also make the insurer a responsive, customer-thinking business (Fitzgerald, Kruschwitz, & Welch, 2023).

Together, these innovative types allow insurance companies to react and compete with OE in an agile way. Insurers are able to continuously transform along with what happens externally, respond to shifting stakeholder expectations, and grow sustainably in a growing complex world. This is possible by investing and balancing these innovative types in a strategic way.

3.8.5 Benefits of Innovation

From a perspective of facilitating insurers to gain a set of strategic benefits in pursuing OE in a more dynamic, turbulent world, innovation allows insurers to cultivate a continuous learning, agile culture (Teece, 2018). There's lesser shelf-life in a VUCA world for static strategies; hence, an innovation culture infuses into business the ability to challenge the given, generate new solutions to problems, and anticipate evolving needs in the marketplace. This cultural emphasis not only builds resilience but also sparks agility in operational as well as strategic delivery.

Second, innovation can serve as a means of differentiation (Iddris, Dogbe, & Kparl, 2023). With a commoditized marketplace in which insurance services and products, by definition, can seem to have similar qualities, insurers that innovate—most likely by taking advantage of new technologies—have a

way to differentiate. For example, insurers utilizing AI and predictive analytics in their services and products can offer highly tailored risk profiles, dynamic pricing, as well as active loss prevention. These innovations generate value, as well as loyalty, among customers by catering to their unique needs more than traditional cookie-cutter strategies.

Third, innovation generates operational efficiency and cost-effectiveness, which, in turn, contributes directly to OE. Innovations in processes such as RPA, cloud computing, as well as clever workflow systems enable insurers to eliminate manual, time-consuming, as well as mundane processes. This not only shortens cycle time and reduces error but also simplifies redeployment of resources as well as manpower productivity (Davenport, & Ronanki, 2018). The saved cost can then be invested in strategic projects—such as digital transformation, product innovation, as well as upskilling workers—thus supporting the firm's OE trajectory. Yes, innovation is both a facilitator and a driver of OE. Insurers with a strategic innovative mind-set can create dynamic capabilities to drive change, offer better value to clients, as well as succeed in a volatile, uncertain context.

3.8.6 Challenges in Implementing Technological Integration and Innovation

While technological integration and innovation offer significant opportunities for insurers, they also present several challenges that must be addressed to achieve successful OE in a VUCA environment.

3.8.6.1 Legacy Systems and Infrastructure

Legacy systems are also a hindrance to technological innovations in the insurance industry. Legacy systems are older infrastructures or systems that were not originally designed to accommodate newer technological advancements (Westerman, Bonnet, & McAfee, 2014). Legacy systems are also known to be very rigid in terms of technology integration, making it very difficult to integrate newer technologies such as AI, blockchain technology, big data analytics, RPA, among others. Legacy systems are also known to be incompatible with newer technologies. For instance, in order to successfully integrate AI into insurance industry systems, there is a need to access large volumes of quality data. Legacy systems are not capable of doing this. This has caused a number of complexities in the modernization of systems in the insurance industry (Müller et al., 2024).

The process of replacing or upgrading existing legacy systems is an intricate process with both financial and operational risks involved. Such practices are capital-intensive in nature, requiring substantial investments in new software, hardware, and training the workforce. Moreover, the process of introducing new technologies while ensuring business continuity is an operational risk in itself, as the process of changeover may affect the overall service delivery, customer satisfaction, and regulatory compliance

(Wang & Li, 2025).

To overcome the challenges of legacy management, the practice of incremental modernization is gaining momentum in the insurance industry. The implementation of hybrid solutions, where new technologies are integrated with existing legacy systems through middleware or application programming interfaces (APIs), is an alternative solution that allows insurers to benefit from the advantages of new technologies without incurring the risks of replacing existing legacy systems. Additionally, the implementation of cloud solutions and platform-as-a-service (PaaS) solutions enables insurers to build new infrastructures that is agile, adaptive, and flexible alongside existing legacy systems (Bharadwaj et al., 2025).

The process of managing legacy systems is an imperative for the achievement of Operational Excellence in a VUCA environment, particularly in the insurance industry where speed, accuracy, and flexibility are the key determinants of gaining a competitive edge in the marketplace.

3.8.6.2 Data Privacy and Security

Data protection and privacy have come to represent a critical complex concern as insurers embark on their digitization and data-centric journey toward OE (Deloitte, 2022). The industry works with stores, and processes highly personal customer information, including personally identifiable information (PII), financial information, as well as medical records. This makes insurers exceptionally exposed to cyberattacks, data breaches, as well as identity theft.

With more frequent and sophisticated cyber threats, insurers must prioritize investing in building robust cybersecurity infrastructure. This means employing advanced encryption, multi-factor authentication, intrusion detection systems, as well as continuous vulnerability scanning to safeguard in-motion as well as resting data. Systems must be made highly resilient by organisations to withstand operations and integrity of information in case of a security attack.

Along with technology controls, there must also be a sound data governance program. It comprises established policies and processes for accessing, classifying, utilizing, holding, and releasing data. Data governance ensures that sensitive information is treated consistently and in accordance with regulations across the company, reducing breaches as well as non-compliance.

Regulatory compliance is also a concern. Insurers must deal with a growing number of protections of personal information legislation such as the General Data Protection Regulation in the European Union, Protection of Personal Information Act of South Africa, among other national or international legislation. The regulations subject insurers to strict terms of consent to data, transparency, notice in case of a breach, as well as a right to erasure, among others. The implications of a breach are enormous fines, litigation, besides loss of reputation. Equally crucial, however, is the instillation of a cybersecurity awareness culture

in business. Human mistake still features high up on the list of reasons for breaches, and employee training programs and awareness programs have a key role to play. Workers should be educated in best practices in working with data safely, recognizing phishing attacks, and reporting unwanted threats.

3.8.6.3 Talent Acquisition and Skills Gap

Talent acquisition and the skills gap are a major hurdle for insurance companies aiming to attain Operational Excellence (OE) through digital transformation and technological innovation. With insurance companies increasingly adopting advanced technology such as artificial intelligence (AI), machine learning (ML), predictive analytics, cybersecurity, and blockchain, the need for skilled professionals with expertise in these areas has increased manifold (Willcocks, Lacity, & Craig, 2017). However, the talent pool for these experts with expertise in both technological and insurance industry knowledge is limited.

The talent gap is more visible for talent with a combination of skill sets. Employees need to be technically skilled and knowledgeable enough to understand the insurance industry. Data scientists with expertise to analyze actuarial and risk data, cybersecurity experts with knowledge of insurance industry compliance, digital transformation experts with the ability to link technological innovation with business strategy, are a few examples (Bharadwaj et al., 2025).

To bridge this talent gap, insurance companies need to implement a number of talent development strategies. One such strategy could be to develop talent within the company by providing training for existing employees on new digital skills. Insurance companies can implement this by conducting boot camps with technology vendors to develop new skill sets within the company (Müller et al., 2024).

Collaboration with higher learning institutions and technology training centers is another effective way to achieve the desired outcome. This helps insurance companies to co-create training programs, internships, and apprenticeships, leading to the development of future-ready talent. Establishing innovation labs or centers of excellence, in collaboration with higher learning institutions, can also be an effective way to achieve the desired outcome, ensuring that there is a continuous inflow of specialized talent (Syamsir et al., 2025).

In situations where immediate expertise is required, insurance companies can consider outsourcing to third-party technology providers. However, care should be taken to ensure that outsourcing aligns with the strategic goals and includes provisions for knowledge transfer, so that dependency on third-party providers does not develop in the long run.

Apart from technical skills, insurance companies also need to develop adaptive and soft skills in their employees. Agility, collaboration, and problem-solving are becoming more and more important in the VUCA (Volatile, Uncertain, Complex, and Ambiguous) world, and insurance companies need to develop

these soft skills in their employees so that they are better equipped to handle uncertainty and sustain themselves in the long run (Vishwakarma & Pandey, 2024).

3.9 MEASUREMENT AND PERFORMANCE MANAGEMENT IN IMPLEMENTING OPERATIONAL EXCELLENCE

Achieving OE involves developing robust measurement and performance management systems, in a VUCA business world. These systems serve as a foundation for organizations to gauge advancement, make informed decisions, and react to changing internal as well as external situations. With such a dynamic scenario, having the ability to measure performance accurately and anticipate results proactively is a vital catalyst for sustained excellence.

Measurement in insurance involves identification and tracking of Key Performance Indicators (KPIs) and other relevant metrics that reflect an insurance company's operational, financial, and strategic health. Some of the common insurance companies KPIs include claim processing timelines, loss ratios, customer retention percentages, accuracy of underwriting, levels of compliance with regulations, and cost-income ratios. The parameters allow insurers to gauge the effectiveness of processes, levels of client satisfaction, and soundness from both a financial and operational perspective.

On the other hand, performance management involves applying such indicators to achieve accountability, continuous improvement, as well as strategic alignment. It involves setting performance objectives, regular review of outcomes, identification of gaps or areas of inefficiency, as well as corrective action. It ensures a strict regime of performance management in an effort to ensure transparency, fact-based decisions, as well as outcome orientation at all levels of an organization. In a VUCA world, more than anything else, dynamic as well as adaptive performance management systems cannot be overestimated. It might no longer be possible to understand rapidly changing market dynamics or looming threats through static metrics. Insurers must therefore invest in real-time information analysis, dashboards, as well as predictive performance solutions that empower them to foresee problems, run scenarios, as well as take necessary countermeasures in a timely manner. For example, BI platform converged with AI-based analytical solutions can reinforce an entity's ability to identify performance anomalies, speed up claim settlement, or optimize pricing strategies in accordance with customer behavior as well as risk exposure.

One of the other most critical aspects of performance management is that it assists in reinforcing a continuous-improvement culture. Techniques and instruments such as Balanced Scorecard (Kaplan & Norton 1996) and Lean Six Sigma allow insurers to relate day-by-day operations to broader strategic goals while supporting efficiency, quality, and customer-orientation. These systems also encourage cross-functional collaboration and ensure that efforts towards performance enhancement are integrated in, rather

than separate from, organizational culture.

Despite its potential, sound performance measurement and management systems are hard to implement. Barriers to implementation involve resistance to openness, limitations in analytical capabilities, alignment of metrics to strategic goals, and data reliability. To bridge these gaps, leadership, technological, and investment in capabilities along with a clear communications approach that ties the performance measures to customer outcomes as well as to employee accountabilities are needed.

3.9.1 Measurement in the Insurance Sector

Insurance measurement can be considered to be a continuous process of defining necessary operational and strategic metrics to measure performance, uncover inefficiency, and enable fact-based decision making. Because insurance is a complex, highly regulated business, measurement provides a basis for attaining OE, especially in a VUCA world where agility as well as accuracy play a critical role.

A good insurance company's measurement system utilizes a balanced mix of both financial and non-financial measures that offers a comprehensive organizational performance view. The financial measures usually consist of loss ratios, expense ratios, combined ratios, premium growth, and return on equity, which measure profitability, cost efficiency, as well as financial feasibility. These indicators are important in assisting the shareholders and regulators in determining the fiscal health as well as business viability of the insurance company.

Just as vital, though, are non-financial performance indicators, which reflect information about customer satisfaction, efficiency in operations, employee engagement, and exposure to risk. For instance:

- Underwriting efficiency and risk control are measured through metrics like quote-to-bind ratio, underwriting turnaround time, and accuracy in risk assessment.
- Average claims settlement period, percentage of claim denial, and claims leakage are crucial both in determining areas of bottleneck and in streamlining delivery of services.
- In customer service, indicators like first-call resolution, complaint frequency, and Net Promoter Score (NPS) measure customer satisfaction as well as customer interaction quality.

For risk management, indicators such as risk-adjusted capital adequacy, together with incident reporting rates, help in monitoring performance in terms of reducing risks. Insurance measurement is not limited to internal monitoring of productivity, but also to benchmarking competitiveness, compliance with regulators, and planning strategies. Regulators typically ask insurers to report solvency, reserves, as well as operational exposures, which in turn require strict as well as open measurement systems.

Advanced analytics, performance scorecards, and dashboards increase insurers' ability to track KPIs in real time, making it possible to address problems as they happen. Technology enables not only operations

control but also enable managers to identify trends in performance, conduct root-cause analysis, as well as make evidence-based allocation of resources.

However, in order for measurement systems to produce meaningful outcomes, it is most crucial that they are:

- According to organizational objectives
- working together as a collective force
- Updated regularly in an effort to stay current under changing market conditions.

3.9.2 Importance of Measurement

Measurement forms a foundation in promoting Operational Excellence (OE) in insurance. With a context of increasing competition, regulation, and evolving customer expectations, precise measurement in a timely manner helps insurers make better decisions, allocate resources effectively, and make continuous operational improvements.

Essentially, measurement allows insurance companies to transform strategic objectives into measurable performance targets, which ensures alignment of everyday business with future ambitions. By focusing both on operational, as well as financial, measurements, insurers achieve a double perspective that maximizes effectiveness as well as sustainability.

For example: Operational efficiency metrics such as claims processing cycle time, turnaround time for policy issuance, and first-call resolution also play a key role in identifying process inefficiencies. Monitoring such metrics allows organizations to identify areas of bottlenecks, reduce delays in services, as well as increase the quality of clients' experiences (Deloitte, 2022).

Customer-centric metrics, including customer retention percentage, NPS, and satisfaction ratings, give insights into loyalty as well as customer satisfaction. These, especially in a VUCA world, where a competitive differentiation can be formed by responding to customers' needs and wants, carry vital importance.

- Financial performance metrics, such as return on investment (ROI), cost per claim, loss ratio, and combined ratio, allow insurers to measure profitability, underwriting risk management, and business sustainability.
- Aside from internal functions, use of external standards and benchmarks is also essential. Relative measurement of performance allows insurers to:
- Assess their position in relation to competitors, highlighting their strengths and areas of weaknesses.

- Identify industry best practices that can either be implemented or tailored to ensure better performance.

Set demanding yet achievable goals based upon empirical evidence rather than assumption. For instance, benchmarking settlement time for standard claims to industry standards can show whether an insurer lags behind, prompting reengineering of claims processing steps. Similar to that, benchmarking expense ratios or churn rates against industry leaders can prompt innovation as well as strategic adjustments.

Also, measurement aids compliance with regulation, helping insurers to ensure that they are meeting law-based requirements for solvency, capital, as well as reporting. Insurers increasingly find themselves requested by regulators to produce evidence not only of compliance, but of ability to measure, quantify, and assess opera

3.9.3 Strategies for Effective Measurement

Strong measurement practices are key to insurers seeking OE, especially in the VUCA world. Measurement isn't solely about tracking performance, but also an instrument to enable strategic alignment to gain agility and provide intelligence for continued enhancement and competitiveness.

One of the key secrets to making measurements successful is alignment of KPIs to organizational strategic objectives. The KPIs have to measure what matters most to organizational success—customer retention, claims efficiency, risk exposure, or profitability. Without alignment, or where measures are overly narrowed, they drive poor behaviour and poor quality decisions. Therefore, each KPI must have a visible traceability to a strategic objective, in addition to being widely agreed upon and accepted among all organizational stakeholders (Neely, Gregory, & Platts, 2002).

Underpinned by this alignment, most insurers use Balanced Scorecard methodology (Kaplan & Norton, 1996), which encourages four-dimensional focus upon performance in four key perspectives:

- Financial: Metrics such as ROI, underwriting profit, and expense ratio help assess fiscal health as well as shareholder value.
- Customer metrics such as NPS, customer satisfaction scores, and retention rates quantify service quality as well as loyalty.
- Operational processes are monitored by metrics such as claims settlement time, policy issuance efficiency, and fraud detection rates.
- Learning and development: Metrics such as employee engagement, hours of training, and innovation rates gauge organizational potential for change and innovation.

This shared framework ensures that insurers keep their focus more on long-term potential, customer value, as well as internal efficiency, instead of focusing exclusively on short-term profitability. Accuracy and

reliability in terms of information are more than crucial to any measurement process. Insurers have to implement processes of information governance to ensure consistency, quality and transparency of information sources. Bad or inadequate information can destroy credibility in a process of measurement and also lead to defective decisions. Consistent definitions of information, audit trails, and validation processes can avoid such threats.

- A second approach involves the use of sophisticated digital technologies to extend measurement capabilities:
- BI software serves to consolidate and examine data from numerous disparate systems to provide decision-makers with holistic dashboards and reports.
- Data visualization software such as Tableau or Power BI enables KPIs to be shown dynamically, making it easier to observe patterns, anomalies, as well as trends.
- Predictive analytics and machine learning have the ability to forecast future performance based on historical data, enabling proactive action instead of reactive repair.

Real-time monitoring of live information becomes more crucial. With the level of transformation in insurance today, having a means to review and respond to real-time performance indicators provides the insurer with earlier detection of problems, workflow realignments and compliance to evolving demands. Some examples include real-time notifications for fraud or claim pattern analysis to drive improved risk management as well as responsiveness.

Finally, good measurement needs to be part of organizational culture and working practices. Measurement cannot ever be a compliance exercise or a mere task. It needs to feed into day-to-day business, support employee performance management, review and decision-making at a strategic level.

3.9.4 Performance Management in the Insurance Sector

Performance management is an organizational practice that entails a disciplined objective setting process, monitoring progress, evaluating results, and taking corrective actions to ensure that strategic objectives are met (Odongo et al., 2019). For an insurance company that is doing business in an increasingly VUCA world, effective performance management underpins OE and competitive advantage.

At its basic level, insurance performance management involves optimizing key business processes such as underwriting, claim settlement, customer servicing, fraud detection, as well as policy servicing. The processes have to run concurrently and smoothly to meet the needs of both the regulators as well as the stakeholders. This should be accompanied by high-quality and customer-centric services.

A successful performance management system should comprise the fundamental components, listed and discussed below:

Setting Goals and Strategic Alignment: It begins with clear, measurable objectives set forth from the mission, vision and overall strategic organizational planning. These are most often cascaded departmentally and team-by-team in order to ensure that what a single employee does, works toward, and supports broader organizational objectives. Some examples in insurance might involve reducing claims cycle time, loss ratio, policy renewals or customer utilization of digital technology.

Monitoring and Performance Appraisal: Ongoing comparison of actual performance with established KPIs and benchmarks enable insurers to track progress, identify deviations, and make timely intervention. For instance, as soon as claim processing time crosses threshold levels, managers can drill down to identify the cause and implement remedial action. Modern performance measurement systems often include real-time dashboards and automatic alerts that enable managers to monitor all key processes.

Feedback and Continuous Improvement: Performance management is also a learning tool, not just control and compliance. With continuous feedback, people and groups can see gaps in performance as they occur, simultaneously learn from successes and failures. For insurance, a few typical examples include regular performance reviews, quality audits, customer feedback systems and lessons-learned sessions after major projects or activities.

Staff Motivation and Development: Individuals are at the heart of performance management. Insurers must ensure that performance management systems also enable the development as well as motivation of employees. This involves providing continuous feedback, training, guidance as well as career planning. Aligning individual performance to company goals encourages accountability as well as innovation. Effective insurers incorporate competency frameworks to gauge and develop key skills such as data literacy, digital awareness as well as customer engagement.

Technology-Enabled Performance Management: Digital technology extends the reach of performance management. Performance analysis, predictive modelling, and analytical software powered by artificial intelligence enable insurers to transition from reactive management to predictive management. For example, predictive analytical software can forecast probable bottlenecks or customer loss, and managers can step in beforehand. Integrated systems also enable cross-functional views to ensure that: underwriting, claims, sales as well as customer service performance insights are integrated to enable end-to-end decisions.

Resilience and Adaptability: There have to be nimble, responsive performance management systems in a VUCA world. The classic annual review cycles may not cut it, and insurers can increasingly rely on more responsive, shorter-term performance cycles to allow them to respond to market fluctuations, regulation surprises or technology shocks in a timely manner. For instance, in a pandemic such as COVID-19, digital transformation, remote delivery, and business continuity priorities changed for most insurers.

3.9.5 Importance of Performance Management

Performance management represents the crucial process by which high-order strategic intentions are converted to executable initiatives in insurance. For an industry plagued by regulation complexity, marketplace competition, and changing customer expectations, the ability to execute or operationalize strategy is key to delivering and sustaining OE (Odongo et al., 2019). With the establishment of precise performance objectives and KPIs, insurers can ensure day-by-day activities and employee efforts align, in turn, to higher-order organizational goals. Such alignment enhances focus, reduces vagaries, and encourages a mind-set of accountability, ownership, as well as constant enhancement of a complete organization.

In addition to goal alignment, performance management provides insurers with the ability to watch over performance routinely, review performance patterns, and anticipate areas of enhancement. For example, where KPIs show delays in processing claims or declining customer satisfaction, outcomes can instigate intervention in a timely manner in terms of workflow redesign, technology or employee training. Such fact-based decision-making allows insurers to stay agile in the context of operational challenges as well as fluctuating markets.

In addition, performance management facilitates resource allocation as well as strategic prioritization. Performance analysis allows insurers to identify which programs create most value that needs to be invested in budget, time or talent (Neely et al., 2002). For instance, if analysis indicates that automated settlement of claims leads to faster settlement as well as higher customer satisfaction, then priority should probably be accorded to investments in more automated capacities. Similarly, underperformance areas identified by performance reporting can also be addressed through targeted interventions, which may include, *inter alia*: reskilling programs, systems enhancement or process re-design. Last but not least, performance management allows insurers to simplify operations, improve strategic alignment as well as drive innovation. It not only, ensures execution of existing goals successfully, but also builds organizational competence to anticipate the future. Thus, it allows insurers to thrive in a volatile and dynamic world.

3.9.6 Strategies for Effective Performance Management

Good insurance performance management can only be done by means of a formal integrated process of planning, monitoring, feedback and development. Any such process can have, as a starting point, the use of cascading goals, where top-strategic goals are consistently communicated to departments teams and individuals (Kaplan & Norton, 1996). This process ensures functional alignment of business functions with a resulting understanding of how each role in an organisation contributes to overall business aims of

operational efficiency, customer satisfaction and compliance. Cascading goals then goes on to create strategic coherence, empower employees by setting definable expectations, and create a sense of shared purpose.

One of the most essential strategies involves continuous feedback systems and performance review implementation. Continuous feedback, rather than only at annual performance review time, allows managers to give feedback timeously , reward success, and correct performance issues in a timely fashion (Odongo et al., 2019). The meetings also encourage open conversation among managers and employees, building trust along with employee engagement. The feedback systems serve to reinforce correct behaviours and guarantee employees' continuation to align with changing business priorities, especially, in dynamic, highly regulated insurance industry conditions.

Also, there must exist a learning culture and professional development to support high performance. With technology changing at an unprecedented pace, and customer needs evolving, insurers have to make sure employees have the ability to adapt and innovate. This must be supported by formal training and development programs in-the-workplace training, coaching and access to outside certifications. When employees are enabled to develop, they are likely to become more motivated, generate new solutions, and take ownership with each playing a key role in delivering OE. Finally, digital performance management software and analytics solutions can introduce more transparency, objectivity, and efficiency in performance measurement. They enable real-time tracking of KPIs, automated reporting, as well as provision of data-based decision-making dashboards. Embedding these solutions into a complete performance management system can create accountability, employee involvement, organizational flexibility as well as competitiveness in a VUCA world.

3.9.7 Challenges in Implementing Measurement and Performance Management

While measurement and performance management are critical for achieving OE in the insurance sector, several challenges must be addressed to maximize their effectiveness. Below, we discuss each other.

3.9.7.1 Data Quality and Integration

One of the major obstacles to putting effective measurement and performance management into practice in the insurance industry is possessing accurate, consistent and integrated information within the diverse organizational systems (Deloitte, 2022). Most insurers continue with fragmented and aging legacy IT systems that are isolated and also incompatible in nature. Such fragmentation prevents the possibility of gathering, consolidating, and evaluating information efficiently, thus resulting in inadequate, untrustworthy, or outdated information that undermines strategic choices and tracking of performance.

In OE, accurate, high-quality, integrated information is required to validly quantify KPIs, identify trends, benchmark performance, and make valid, fact-based decisions. Without sound information, measurement systems can yield inaccurate information, resulting in poor interventions, inefficient resource allocation, along with opportunity loss for improvement.

In order to overcome such a challenge, insurers must make a top priority of instituting robust data governance processes that set standards for accuracy, completeness, timeliness and protection of data. These processes must define roles and accountabilities for data stewardship as well as create a culture of data stewardship and accountability at all levels of an organisation.

Also, investments in integration technology, such as enterprise data warehouses, data lakes, or middleware technology, can significantly enable the ability to combine information from many different sources—ranging from underwriting systems to claim systems, CRM systems, to financial reporting systems. Together, these technologies generate a single version of truth that enables real-time analysis, performance dashboards, as well as automated reporting. In addition, insurers can use artificial intelligence as well as machine learning applications to identify anomalies, scan datasets, as well as enrich or make datasets more robust to enable better analysis. Increasing integration as well as quality of data improves, not only measurement and performance management, but also provides a basic foundation to digital transformation together with innovation efforts.

3.9.7.2 Stakeholder Alignment

Stakeholder alignment is a key, yet complex, part of high-performing performance management for insurance organizations (Neely et al., 2002). Insurance organizations are highly matrixed and hierarchical entities with a variety of stakeholders, such as employees, middle management, senior management, regulators, business partners, and policyholders, with varying priorities, expectations, and awareness of organizational performance objectives and KPIs.

The main difficulty with stakeholder alignment for insurance organizations is ensuring that organizational goals and KPIs are well understood, accepted, and adopted by all stakeholders. Failure to align stakeholders will lead to a negative effect on OE (Kaplan & Norton, 2024).

To align stakeholders, insurance organizations should focus on effective and transparent communication of organizational goals and performance objectives. Large organizational goals should be broken down into specific goals for departments within the insurance organization. Similarly, performance objectives should be translated into effective KPIs for employees to demonstrate their direct effect on their daily work. This will help employees develop a sense of ownership and personal accountability for OE (Syamsir et al., 2025).

Another key mechanism is participatory goal setting. By involving the stakeholders in the formulation of KPIs, opportunities for improvement, and performance assessment, there is a higher level of buy-in, commitment, and overall accountability. When the stakeholders feel that they have been heard and that their inputs matter in the decision-making process of the organization, there is a significant improvement in their level of engagement and performance (Bharadwaj et al., 2025).

Finally, transparency is an essential mechanism in ensuring alignment. By constantly communicating the milestones, challenges, and successes of the organization through various means such as dashboards, team meetings, and performance reviews, the stakeholders are constantly reminded of the importance of inter-functional cooperation and learning. The leaders of the organization should demonstrate transparency, encourage open communication, and show the linkage of performance with organizational values. Additionally, incentive programs, recognition programs, and professional development programs linked with performance can be an effective mechanism in ensuring alignment by showing the tangible results of the employees' hard work.

It is worth noting that the alignment of the stakeholders is not a one-time process but rather a continuous process that is cyclical in nature. It requires planning, developing relationships, and adaptive leadership skills that can manage the VUCA of the modern-day insurance industry. The alignment of the stakeholders is beneficial in developing the organizational culture, which in turn leads to high performance and Operational Excellence (Vishwakarma & Pandey, 2024).

3.9.7.3 Measuring Intangible Factors

Among performance management's traditional challenges, even in insurance, is measurement of intangibles such as employee engagement, satisfaction, leadership and organizational culture ((Odongo, Wang, Suntu, & Bishoge, 2019). Such variables have qualitative natures, in which they depend upon perceptions, experience and attitude, which cannot be easily measured by typical performance metrics.

However, intangibles drive OE more than any other. For example, a highly involved workforce becomes more productive, more innovative, and more committed to providing greater customer satisfaction. Similarly, a strong organizational culture that encourages agility as well as continuous improvement can develop agility to tackle challenging, volatile business environments.

The primary challenge, however, is in making such abstract notions tangible in terms of measurable indicators to support strategic planning. Insurers can struggle to make concrete connections between customer attitudes and employees' morale and profitability, especially, if they operate in fluctuating or volatile markets. They can include a mix of quantitative as well as qualitative measurement instruments. Below is a brief description of each:

Employee engagement surveys (e.g., Gallup's Q12, pulse surveys): These assess employees' affective commitment to their job, motivational level and perception of support from, and leadership by the company. Ratings can be tracked over time to determine trends and areas to address through intervention. Customer satisfaction, as well as Net Promoter Score (NPS) survey questions, assess customer loyalty, product or service satisfaction, and willingness to recommend to others. Open-ended questions can generate more qualitative feedback about areas of excellence or pain points.

360-feedback and culture audits: These methods assess organizational values in action versus values espoused, as well as leadership effectiveness, along with perceptions of teamwork.

Social listening facilities and sentiment analysis software: Insurers employ software with artificial intelligence that searches social media feedback, customer reviews, as well as internal communications trends for real-time information about stakeholders' sentiments in a world of multiple digital channels. While these procedures yield crucial information, their findings must be interpreted in context. For instance, a dip in levels of employee engagement can result from reorganization or implementation of technology, which triggers specific reactions that cannot always be determined from quantitative information. Combining measurement with narrative description, focus groups and interview follow-up, therefore, provides findings with richness as well as utility. Furthermore, in an effort to ensure intangibles are properly integrated into the entire performance management system, insurers must incorporate them in goal-setting programs. This can involve inclusion of employee engagement levels, customer loyalty scores, leadership development outcomes in balanced scorecards and executive dashboards.

3.10 IMPORTANCE OF OPERATIONAL EXCELLENCE IN INSURANCE

In the highly competitive insurance landscape, achieving and sustaining OE is crucial for insurers to differentiate themselves, improve profitability, and enhance customer satisfaction. OE enables insurers to streamline operations, reduce costs, mitigate risks, and innovate more effectively (PwC, 2023). By focusing on operational efficiency and effectiveness, insurers can allocate resources more strategically, improve underwriting profitability, and optimize claims processing, ultimately leading to better financial performance and market competitiveness (George, 2019).

3.10.1 Key Principles of Operational Excellence

Operational Excellence in insurance is guided by several key principles that aim to drive continuous improvement and operational effectiveness. Below are a list and an abridged description of each.

- **Customer-Centricity:** Placing the customer at the centre of operations by delivering superior

service, personalized products and seamless experiences throughout the customer journey (Deloitte, 2022).

- **Process Optimization:** Identifying and eliminating inefficiencies in core processes such as underwriting, claims management, policy administration, and customer service to improve speed, accuracy and quality (George, 2019).
- **Risk Management:** Integrating robust risk management practices to assess, mitigate, and manage risks effectively, thereby enhancing financial stability and regulatory compliance (PwC, 2023).
- **Innovation:** Encouraging a culture of innovation to develop new products, services and operational solutions that meet evolving customer needs and market demands (Deloitte, 2022).
- **Employee Engagement:** Engaging and empowering employees to contribute ideas, collaborate across functions, and driving operational improvements through training, recognition and leadership support (George, 2019).

3.10.2 Challenges in Implementing Operational Excellence

Implementing OE in the insurance industry presents several challenges that require careful consideration and strategic planning. Below is a list of them with abridged descriptions:

- **Legacy Systems and Technology Integration:** Many insurers operate on outdated legacy systems that may not support modernization efforts, hindering digital transformation initiatives and data-driven decision-making (PwC, 2023).
- **Cultural Change and Organizational Resistance:** Shifting organizational culture towards a focus on OE requires overcoming resistance to change, addressing siloed thinking, and aligning stakeholders around common goals (George, 2019).
- **Data Management and Analytics:** Managing vast amounts of data from diverse sources and leveraging analytics to extract actionable insights for decision-making remains a significant challenge for insurers (Deloitte, 2022).
- **Regulatory Compliance:** Adhering to stringent regulatory requirements while implementing OE initiatives requires insurers to balance innovation with compliance, ensuring operational practices and meeting regulatory standards (PwC, 2023).

3.10.3 The Role of Technology in Driving Operational Excellence

Technology plays a pivotal role in enabling OE in the insurance sector by enhancing operational efficiency, improving customer engagement and driving innovation. Below is a list of pertinent strategies and their abridged descriptions:

- **Digital Transformation:** Embracing digital technologies such as cloud computing, AI, ML, and RPA enables insurers to automate routine tasks, streamline processes, and enhance scalability (Deloitte, 2023).
- **Data Analytics:** Leveraging advanced analytics and predictive modelling allows insurers to gain actionable insights into customer behaviour, market trends, and risk profiles, facilitating data-driven decision-making and personalized customer experiences (George, 2019).
- **InsurTech Collaboration:** Partnering with InsurTech startups and technology providers allows insurers to access innovative solutions for underwriting, claims processing, customer service and risk assessment, therefore accelerating digital transformation efforts (PwC, 2023).

3.11 SUMMARY OF THE CHAPTER

This chapter presented a literature review on OE and its implementation in the insurance industry in the VUCA world context. The review reaffirmed that OE is not a set of practices and tools, but a philosophical approach encompassing continuous improvement, customer focus, process excellence, innovation and fact-based decision-making to develop sustained value and high performance.

The South African insurance business as well as its global counterparts are under increasing pressure to counteract: an increase in technological change, evolving customer needs, sophistication in regulation as well as cutthroat competition. Insurers have to implement extensive OE systems with a connection to organizational strategies as well as sensitivity to drivers in the marketplace to counteract these pressures. Technological integration, innovation, measurement of performance, alignment to strategies as well as leadership commitment are the most essential facilitators of OE in literature. There exist a variety of hurdles, namely: legacy systems, lack of skills, information quality, as well as resistance which hinder successful implementation.

Among the findings from the literature is that there is a requirement for contextualized OE. The majority of the literature borrows from developed markets and might not portray the South African socio-economic, regulation, and technology conditions, comprehensively. An essential research gap within the literature, thus, entails OE implementation frameworks that have been structured, specifically, within the South African insurance industry. This gap captures the importance as well as timing of research. The findings of literature provide a conceptual foundation for developing a context-relevant OE implementation model that could potentially address South African insurers' strategic as well as operational needs. The subsequent chapters supplement this foundation by examining empirical evidence from industry actors as well as integrating it into a utilizable as well as replicable OE model.

CHAPTER 4: RESEARCH DESIGN AND METHODS

4.1 INTRODUCTION

This chapter presents the research design and methodology which were employed in this doctoral research. The chapter provides a clear description of how research was designed to address major research questions and achieve objectives as outlined. It begins by explaining philosophical underpinnings and the rationale for conducting a mixed-methods design. It then describes in detail: adopted research design, sampling methods, instruments of collecting data as well as the analysis process for interpreting findings.

A good research design serves as a blueprint for any research project. According to Creswell (2014), it allows researchers to develop and carry out all aspects of data generation, analysis and interpretation in a coherent and scientific way. Consistent with this, the research in this case used an exploratory sequential mixed methods design to examine in depth and validate the dynamics of OE programs in selected organizational environments.

The chapter also addresses ethical concerns, steps to ensure validity, reliability and trustworthiness, as well as steps to eliminate bias. These aspects serve to ensure that integrity as well as credibility of the research process is established. The chapter provides a foundation upon which findings and conclusions in research are built through a description of all methodological choices and why they have been employed.

4.2 RESEARCH DESIGN

As Creswell (2014) argues, a research design provides one with a way to anticipate, prepare, and set boundaries around various decisions in terms of gathering and assessing data, as well as having a coherent rationale for making decisions. Throughout research, there was a systematic inductive approach used in guiding the formulation of the research objective and purpose, which was embedded in the initial problem statement as well as corresponding study questions. The approach facilitated research to arise naturally out of found patterns as well as empirical observation evidence rather than from conceptualized theoretical constructs.

This study employed an exploratory, sequential mixed-methods research design guided by guidelines from Creswell and Clark, (2017). This research design was chosen with a view to achieving a better understanding of OE strategies that were under consideration. The exploratory component of the design was appropriate, considering that research was to venture into a relatively new field. That meant to understand ways in which OE strategies can ensure organizational development and sustainability in the context of South Africa.

The research began with a qualitative phase in which semi-structured interviews with professionals in OE were conducted. Interviews provided an opportunity to develop rich, in-depth data from practitioners' experiences, beliefs, and perceptions of OE implementation. Thematic analysis was employed to examine the qualitative data, and findings from this stage informed variables and design for the subsequent quantitative research.

This was then followed by a quantitative phase wherein, a more diverse group of respondents administered questionnaires were used. The purpose in this phase was to validate and replicate relationships as well as patterns found in qualitative analysis. By taking advantage of data in large samples of respondents, the researcher was able to assess reliability as well as generalizability of notions that emerged together by testing the structural equation model (SEM) upon which theoretical framework of the research was grounded. The staged mixed-methods design facilitated a rigorous process of triangulation, which increased credibility as well as coherence in findings. The integration of the qualitative as well as quantitative strands eventually allowed finalizing an all-inclusive thesis framework that was able to accomplish research goals satisfactorily as well as create usable insights to apply OE interventions in various organizational contexts.



Figure 4.1 Sequential, Exploratory MMR approach

4.3 RESEARCH PHILOSOPHY

Research philosophy can be defined as a set of assumptions and beliefs that guide the development and understanding of knowledge in a specific study. Research philosophy can affect how one understands the world, what is regarded as knowledge, and how one undertakes a study. Research philosophy can be broadly defined by a set of assumptions that include ontology and epistemology. Axiology is a third assumption that can influence a study. The assumptions that define a research philosophy include ontology

and epistemology. The study undertook a pragmatic ontology that recognized that the world can be composed of both subjective and objective elements. In the context of Operational Excellence (OE) implementation in the insurance sector, the processes and outcomes can be objectively observed. On the other hand, the perceptions and understanding of leadership and engagement can only be socially constructed. The study recognized that the world can be composed of different elements that can all contribute to an understanding of the world. The study undertook a pragmatic epistemology that recognized that knowledge can be obtained in both subjective and objective forms. The study recognized that understanding Operational Excellence in a volatile, uncertain, complex, and ambiguous (VUCA) world can only be obtained by integrating different forms of knowledge. Quantitative knowledge can offer a measure of the relationship between key variables in an organization. On the other hand, knowledge obtained from experts in the insurance sector can offer a subjective understanding of the processes and outcomes associated with Operational Excellence implementation.

The axiological assumptions cover the assumptions concerning the value component in the research process. The pragmatic school of thought acknowledges that a value-free research process is impossible since the researcher's perspectives and experiences influence the process. Nonetheless, transparency and ethical principles in a research process are observed. In this study, ethical principles and transparency in data analysis and reporting were observed to ensure the study's results were unbiased and credible.

Overall, the use of a pragmatic research philosophy in this study allows for the resolution of complex issues in organisations by incorporating different forms and perspectives. The use of a pragmatic philosophy in this study is consistent with the study's objectives, which focus on understanding and developing a model for implementing operational excellence in the insurance sector.

4.4 CHOICE OF RESEARCH PHILOSOPHY

From the analysis of the study's ontology, epistemology, and axiology in the preceding paragraphs, this study's research philosophy is pragmatism. The pragmatic school of thought focuses on resolving real-world problems and employs the use of the most appropriate research methods in resolving the problems (Brierley, 2017). The pragmatic school of thought is different from other philosophical schools of thought in that it allows for the use of multiple perspectives in resolving a given problem. The use of a single philosophy in a study is unlikely to provide a comprehensive understanding of the study's subject.

The pragmatic paradigm was most suitable for this study since the aim was to create a model for operational excellence implementation in the South African insurance industry. This type of organisational problem requires both empirical measurement and understanding. For that reason, the study was based on a mixed research design that incorporated both qualitative and quantitative methods.

The results from the qualitative phase were exploratory findings from industry experts on the factors,

challenges, and organizational processes related to the implementation of OE. This served as the foundation for the development of the constructs and the measurement tools used for the quantitative phase. The quantitative phase used statistical methods, specifically structural equation modeling, to validate the relationships between the identified constructs and the proposed model.

Pragmatism, as a research philosophy, enabled the use of methodological pluralism because the research was able to incorporate both the results from the qualitative phase and the quantitative phase within a single research framework. This was important because the research was able to ensure that the results were not only related to the measurable relationships between organizational variables, as seen with the quantitative phase, but also related to the practical aspects of the industry professionals, as seen with pragmatic research philosophy. The pragmatic research philosophy, which focused on the practicality of the results, was the foundation for the development of the operational excellence implementation model.

4.5 RESEARCH APPROACH

Saunders et al. (2016) utilized qualitative as well as quantitative methodological traditions to propose inductive as well as deductive strategies as fundamental to scientific inquiry. Both strategies were used in this research to develop a wide-ranging conceptual framework. The deductive strategy was used to test both hypothesis as well as theory by collecting and analyzing quantitative information, while inductive approach simultaneously guided construction of themes and patterns from qualitative information. The integration of thematic analysis with theoretical views, as constructed by research, established a more concrete yet unobtrusive conceptualization of the research problem. The combination of inductive and deductive logic facilitated depth and reliability of conclusions drawn.

4.6 RESEARCH METHODOLOGY

Saunders et al. (2016) state that research methodology is a general design that prescribes the selection and use of specific methods to conduct a research exercise. The current research used a mixed-methods approach, combining both qualitative as well as quantitative in an attempt to gain a holistic perspective in terms of the research problem. The qualitative aspect was to investigate underlying attitudes, experiences and behaviour, while the quantitative part was to quantify specific variables. The combination was used in an attempt to capitalize on paradigms' strengths, which means the qualitative depth versus quantitative breadth, thus, enabling triangulation of findings. The mixed methods was most appropriate in exploring intricate research questions as well as in enabling statistical proof in addition to contextual understanding.

4.7 RESEARCH STRATEGY

To Saunders et al. (2016), research strategy refers to a plan of action that enables research questions to be handled effectively. Selection of a research strategy was guided by the research objectives as well as by the necessity to access empirical evidence and interpretive understanding. While positivist paradigms draw upon strategies such as experiments and surveys to develop objective and generalizable findings, interpretivist paradigms draw upon case studies, ethnographies, grounded theory, and action research to derive a contextualized meaning. Quantitative information was gathered via survey, while case studies strategies have been used in research of specific context in depth with qualitative research. The mixed approach was the most appropriate to pragmatic research approach as it enabled in-depth exploration of research questions.

4.8 CHOICE OF RESEARCH STRATEGY

This study employed an exploratory sequential mixed-methods research strategy to explore the implementation of Operational Excellence (OE) strategies within VUCA environments in the insurance industry. An exploratory sequential mixed-methods research strategy involves the collection of both quantitative and qualitative data, with the exploratory phase employing a qualitative research strategy, followed by a quantitative research strategy to validate the results obtained from the exploratory phase. This research strategy was considered the most suitable for the study because the research problem was not well explored, and the exploratory phase was essential to guide the quantitative phase of the research strategy.

In the exploration phase, the research strategy employed was a qualitative research strategy, which was used to explore the experiences, perspectives, and strategic practices related to the implementation of OE strategies within VUCA environments in the insurance industry. In the exploratory phase, semi-structured interviews were conducted with organizational leaders and industry experts who voluntarily participated in the research study. The main objective of the exploration phase was to explore the ways in which organizational leaders respond to the challenges posed by VUCA environments, which are related to the implementation of OE strategies within the insurance industry. The exploratory phase was essential for the study because the results obtained from the exploratory phase were used to develop the conceptual framework for the study. The exploratory phase was essential for the study because the results obtained from the exploratory phase were used to develop the conceptual framework for the study.

After the qualitative study phase, the quantitative study phase was carried out by utilising a survey research strategy. This was important for the researcher since it allowed for the collection of standardised data from a larger population sample in the insurance industry. The survey was based on the insights gained from

the qualitative study phase. This ensured that the survey was based on organisational experience. The survey was used to collect data on key variables that affect OE implementation. These variables include leadership, organisational communication, employee engagement, technology integration, and operational performance.

The data collected during the quantitative study phase was analysed using relevant data analysis techniques. This included the utilisation of structural equation modelling. This was used to examine the relationships between the constructions that were identified during the study. It was also used to validate the proposed OE strategy implementation model. This study phase provided empirical evidence on the relationships that were proposed during the qualitative study phase. This provided a generalised study that was applicable in the insurance industry.

The selection of the exploratory sequential mixed-methods design was intentional by the researcher. This was important since it allowed for a deeper exploration of the OE implementation phenomenon. It also allowed for the collection of relevant data from a larger population sample in the insurance industry. This ensured that the study was based on organisational experiences. This was a validation tool for the study since it ensured that the quantitative study was based on relevant data from a larger population sample.

4.9 TIME HORIZON

According to Bryman (2012), time horizons refer to the duration of the study and can either be longitudinal or cross-sectional. Researchers determine whether their study will examine phenomena over a considerable period (longitudinal) or at a point in time (cross-sectional). This research employed a cross-sectional time horizon. Following Saunders et al. (2016) description in their research onion model, cross-sectional research entails collecting data over a relatively short, though determined, duration. Because it was the research's purpose to collect information at a point in time rather than examine changes over a considerable duration, the use of the cross-sectional approach was most appropriate. Furthermore, since the research was likely to be completed in the normal three-year duration of a doctoral project, the use of a cross-sectional approach was also justified. This time horizon allowed appropriate data to fit as well as to analyze in contrast to the problems that would have been experienced through longitudinal tracking.

4.10 POPULATION

A study population covers all those individuals, items, and units that meet inclusion criteria and from which inferences by a researcher are arrived at. For Polit and Beck (2010), a population represents a set or a total of all entities that meet a given set of criteria. For Welman, Kruger and Mitchell (2011), a population refers to all units from which inferences are made. For Wiid and Diggines (2013), a population represents

a total group from which researcher information must be collected. For the current research, the population comprised approximately 5,000 consumers affiliated with the organisation that was in focus. These individuals met inclusion criteria utilized in terms of research aim and represented a broader consumer set from which inferences needed to be made.

4.11 SAMPLING

Sampling entails choosing a subsample of units or individuals from populations to incorporate in a study. Polit and Beck (2010) pointed out that for a sample to represent a large population, it should meet some conditions. The sample, therefore, represents a systematically chosen subset of a population to make conclusions and draw inferences about the entire population. The sampling methods, in most cases, fall into two broad categories, which include probability sampling, which is a random selection mode and presents an opportunity of generalizability. The other is a non-probability sampling, which is a non-random selection mode and, in most cases, used in exploratory studies. When conducting sampling in the current research, the process that was employed was akin to Sekaran and Bougie's (2013) argument, where support was given to choosing a representative sample in an endeavor to ensure findings in research in terms of validity and reliability. The chosen sample was representative in terms of diversity as well as traits of a target population and was crucial in an endeavor to ensure findings in given research were meaningful as well as pertinent to a wider context.

4.11.1 CHOICE OF SAMPLING TECHNIQUE AND SAMPLE SIZE DETERMINATION

For quality assurance, credibility, as well as believability of information, care was exercised in choosing an appropriate sampling method and a prudent sample size. Vasileiou et al., (2018) recommend that qualitative samples should be of a size that allows meaningful thematic exploration in a way that avoids possibilities of poor generalizations. Following their recommendation, qualitatively, sampling was among that population to ensure a guarantee of utmost trustworthiness as well as alignment with an ontologically realist worldview. This therefore maximizes credibility and generalizability of findings.

For the qualitative component, a non-probability snowball sampling technique was employed. This approach was selected because it allowed access to hard-to-reach participants with specialized knowledge relevant to OE strategies. Participants were identified through referrals from initial contacts who met the inclusion criteria. A total of eight participants were recruited for in-depth interviews. It was anticipated that data saturation, meaning the point at which no new themes or insights emerged would occur by the tenth interview. However, contingency plans were made to recruit additional participants beyond the initial

ten if saturation had not yet been achieved.

For its quantitative component, probability sampling was employed to ensure that the sample was a true representation of the greater population. Following Taherdoost (2017) who advised that sampling in quantitative research should meet both descriptive and inference analysis statistical requirements, it was through the Krejcie and Morgan (1970) formula that a sample size was established. With reference to the formula and estimated population size, a sample of 311 participants was calculated as sufficient to yield Statistically, sound results as well as empirically investigate variable relationships in the context of OE strategy implementation.

4.12 DATA COLLECTION METHODS

The current research adopted a mixed-methods sequential data collection process that started with qualitative interviews, followed by quantitative questionnaires. The research process allowed for in-depth exploration of participants lived experiences and perceptions first, after which it was possible to test and generalize findings to a broader population utilizing structured questionnaires. The two-staged process allowed in-depth exploration of OE strategies implementation in VUCA environments, and it also facilitated pragmatic research philosophy that was adopted in for the study.

4.13 DATA COLLECTION INSTRUMENT

The development and selection of data collection instruments in this study were informed by the objectives and questions in the study, as well as the type of information that would be useful in understanding the implementation of operational excellence (OE) in the insurance sector in South Africa. According to Burns & Bush (2010), identifying the relevant sources and type of information is an important part of the research process. The authors assert that the process ensures that the data collection instruments selected for a study can effectively produce relevant and useful data. Wegener (2012) differentiates between primary and secondary data in a study. The author suggests that primary data is essential in a study since it offers unique insights from the participants who were part of the process being studied.

In this study, primary data was collected using two main data collection instruments: a semi-structured interview guide for the qualitative study and a structured questionnaire for the quantitative study. The data collection instruments were intended to collect data from the participants' perspectives and experiences in the implementation of operational excellence and factors that influence operational excellence performance in a volatile, uncertain, complex, and ambiguous (VUCA) environment.

4.13.1 Development of the Qualitative Interview Guide

The semi-structured interview guide was designed to elicit the experiences and perceptions of the participants regarding the implementation of OE strategies within the insurance industry. Semi-structured interviews were considered appropriate for the study as they enable probing into the responses of the participants while ensuring consistency across interviews (O’Leary, 2013). The questions for the interviews were derived based on existing literature related to operational excellence, organisational transformation, leadership, digital transformation, and organisational performance.

The questions for the semi-structured interviews were open-ended and related to the following aspects:

- Organisational approaches to Operational Excellence,
- Leadership commitment and strategic alignment,
- Communication and employee engagement,
- Digital transformation and process innovation,
- Barriers to OE implementation.

The qualitative study was designed to explore emerging themes that would be valuable for the construction of constructions for the quantitative study.

4.13.2 Development of the Quantitative Questionnaire

A questionnaire was created for the quantitative study following the exploratory qualitative study. The questionnaire was designed to assess the identified constructions based on the literature review and results of the qualitative study. Closed-ended questions were mainly used for the questionnaire to facilitate statistical analysis. A few open-ended questions were also included to seek additional contextual data.

The questionnaire had two parts. The first part was for collecting demographic data related to the organisation and the respondents. The second part was for collecting data related to the key constructions of the study. The key constructions were measured using the Likert scale ranging from strongly disagree to strongly agree. The items were related to dimensions such as leadership, communication, employees’ engagement, technology, and organisational performance.

4.13.3 Instrument Development: Mapping of Themes, Constructs, and Measurement Items

The questionnaire was designed based on both the literature review and the results of the qualitative study.

The results of the qualitative study were used to develop the questionnaire by mapping the identified themes to the constructions and the questionnaire items. The mapping is presented in Table 4.1.

Table 4.1: Mapping of Themes, Constructs, and Measurement Items

Qualitative Themes	Constructs	Example Questionnaire Items
Leadership and strategic direction	Leadership commitment	Senior management actively supports OE initiatives in the organisation.
Organisational communication	Communication effectiveness	Clear communication exists regarding OE strategies and organisational goals.
Employee participation and motivation	Employee engagement	Employees are encouraged to participate in continuous improvement initiatives.
Technology adoption and innovation	Digital transformation	The organisation uses digital technologies to improve operational processes.
Process improvement and efficiency	Process optimisation	Standardised processes are implemented to improve operational efficiency.
Organisational outcomes	Operational performance	OE initiatives have improved service delivery and operational performance.

4.13.4 Content Validity Procedures

Content validity procedures were followed to ensure that the data collection instruments were valid. Content validity refers to the degree to which the data collection instrument represents all aspects of the construction to be measured.

The first step was to have experts review the initial version of the interview guide and questionnaire. The experts included academic researchers who are experts in organisational management and operational excellence. The experts also included insurance industry practitioners. The experts reviewed the data collection instrument for clarity, relevance, and comprehensiveness to the study objectives. The review process ensured that some changes were made to the initial version of the instrument. The changes included refining some questions, removing unclear questions, and adding questions to ensure that all

aspects of the construction were adequately covered.

The second step was to pilot test the questionnaire with a few people from the insurance industry who were not part of the final sample. The pilot test was done to ensure that the questions were clear to the respondents, the response categories were appropriate for the questions, and the questionnaire was well structured. The pilot test feedback was used to make minor changes to the questionnaire to ensure that it was easy to read and understand.

The procedures ensured that the data collection instruments used for the study were reliable and valid. The data collection instruments ensured that the data collected was of high quality and credible.

4.14 SAMPLING FRAME, SAMPLING TECHNIQUE, AND ACHIEVED SAMPLE

The sampling process is an important part of the research process since it determines the sampling frame for the target population to ensure that the data collected adequately represents the phenomenon of interest. Consistent with the exploratory sequential mixed-methods design approach used for the study, the sampling process was done in two stages: the qualitative exploratory study and the quantitative validating study.

4.14.1 Qualitative Phase

Sampling Frame: The sampling frame for the qualitative study consisted of experienced professionals or senior leaders within the South African insurance industry who were either involved in organisational strategies, organisational operations management, or the implementation of operational excellence initiatives. The target population for the study was made up of executives, organisational operational managers, consultants, and industry experts who had substantial experience in organisational transformation or operational improvements within insurance industry organisations.

The target population was identified based on their professional networks, industry associations, or organisational networks within the insurance industry. The selection criterion was based on individuals who had extensive knowledge or experience regarding the implementation of organisational strategies within complex or dynamic organisational environments.

Sampling Technique: sampling technique used for qualitative research was the use of a purposive sampling technique. The use of a purposive sampling technique allows the researcher to access participants who have the necessary expertise and are capable of offering deep insights into the research topic. The technique is mostly used for research situations where the goal of the research is to obtain a deep understanding of the research topic, not to generalize the results of the research.

Selection Criteria for the Participants:

Some of the selection criteria for the participants were:

- The participants had to have the necessary experience in the insurance industry,
- The participants had to have been involved in the operational strategy or organizational transformation,
- The participants had to have the necessary knowledge of the operational excellence initiative or organizational improvement programs.

This was to ensure that the participants were capable of offering deep insights into the implementation of the operational excellence strategies within the insurance industry.

Achieved Sample:

A total of eight (8) industry experts were used as participants in the research. Semi-structured interviews were used as the research instrument for the study. The participants were interviewed until thematic saturation was achieved, which meant that the participants were not offering any new insights into the research topic.

4.14.2 Quantitative Phase

Sampling Frame: The sampling frame of the quantitative phase included employees and professionals working within the insurance industry of South Africa. This included those involved in the operational management of the company, strategic planning, organisational development, and the provision of services. This sampling frame is considered appropriate since they have the requisite experience working directly with the organisational processes and practices related to the implementation of OE.

The participants included those working in insurance companies, broking companies, and other relevant companies related to the insurance industry.

Sampling Technique: The sampling technique used to obtain the sample quantitative phase included a non-probability sampling technique. This involved the use of a convenience and voluntary response sampling technique. This technique allowed the researcher to obtain a large number of participants working in the industry to respond to the survey questionnaire.

The questionnaire survey was sent via the internet. This allowed the researcher to obtain a large number of participants working in the industry to respond to the questionnaire.

The use of a non-probability sampling technique may not be the ideal since it does not allow the researcher to obtain a large sample size. However, the non-probability sampling technique is considered most appropriate given the constraints of the study. This is due to the difficulty of accessing the participants to

obtain the requisite information.

Achieved Sample: The researcher managed to obtain 311 questionnaires from the participants working within the South African insurance industry. This provided a diverse sample since the participants included those working on different levels.

The sample size is considered adequate to perform the structural equation modelling analysis since a large sample size is required to perform the SEM analysis. This is to obtain reliable parameter estimates to assess the relationships between the constructions.

4.15 PILOT STUDY

For the purpose of testing the feasibility, reliability, and effectiveness of instruments used in data collection, a pilot study was performed before actual data collection. Pilot studies, as stipulated by Brink (2012), refer to the small-scale replication of a principal study to increase research design as well as to receive initial feedback.

For the qualitative component, a pilot interview was conducted with two experts in OE who did not belong to the final sample. Pilot interviewing allowed the researcher to rehearse interviewing, check the questions to ensure they were clear, and determine whether or not the questions yielded enough depth of information. Subsequent to feedback, more probing questions were developed to ensure that thoughtful answers were elicited during the actual interviews.

For the quantitative phase, there was a pilot testing of the questionnaire on 15 participants who were randomly selected from the target sampling frame. This was done to evaluate the questionnaire items for adequacy, appropriateness and clarity. Participants gave feedback on whether or not questions were understandable, whether there was confusion or misleading information in any of the items, and whether or not the questionnaire addressed all areas of inquiry. From the results, some questions had their format modified, sequencing of response categories was altered, and the validity of the instrument to use in main research was improved.

4.16 INTERVIEWS

Interviews, as Wenger (2012) stated, are a practical way of gathering information about participants' attitudes, beliefs, motivation, along with actual experiences. Interviews may come in different forms, either as structured, semi-structured or unstructured types, depending on what research requires in terms of purpose, amenable to flexibility. Semi-structured interviews, in this study, have been employed in order to obtain primary qualitative data from participants. This was meant to provide the researcher with a standard

list of essential questions while allowing flexibility for follow-up probing as well as investigation of emergent themes throughout the interview.

Semi-structured interviews in this research were most suited because they facilitated a better comprehension of OE practices currently adopted by professionals working in a VUCA context. The interview process enabled rich, contextual descriptions of worldviews and professional practices of the participants, as pointed out by Yilmaz (2013).

Eight fraternity experts from various geographical regions of the country were interviewed. The participants were selected for their specialties as well as close engagement in OE implementation. It was hoped to achieve data saturation, which is a stage at which no new information or themes emerged within the fifteenth interview. If saturation was not achieved, provisions had been made to conduct additional interviews.

4.17 DATA SATURATION

Data saturation was reached after conducting eight interviews with operational excellence professionals. While analysis progressed, answers began to repeat themselves and new themes and insights relevant to research objectives did not emerge. That signaled that further interviews would likely not produce additional consequential data. Stopping at eight participants was justified by the depth and richness of information shared along with convergence among expert opinions. Aligning with qualitative research best practice, saturation was resolved through iterative data analysis. Subsequent interviews were compared with previous data until thematic redundancy became apparent (Guest, Namey & Chen, 2020). Furthermore, the purposive sampling of participants guaranteed heterogeneity but related expertise, thus bolstering confidence that data appropriately represented the breadth of professional opinions on operational excellence application.

4.18 DATA QUESTIONNAIRE

In order to validate the qualitative findings, quantitative information was collected through a guided questionnaire. Questionnaires were used since they were affordable, could be reproduced, allowed a high number of responses to be collected quickly, and provided standardized information, which allowed for statistical analysis as well as drawing conclusions in a broad and generalized manner from the findings.

The questionnaire was sent to a sample of 1,000 respondents who were chosen from an in-house organizational database. The online survey environment of SurveyMonkey was utilized to administer the survey in order to expedite ease of access, extensive coverage and data security.

The survey used close questions, largely in the form of Likert scales, to collect attitudes, perceptions and judgments by the respondents towards OE strategy practices in their organizations. The questions were derived from two primary sources: (1) literature review constructs and variables of OE strategies, and (2) themes from in-depth interviews among OE experts. This ensured a theoretical foundation as well as contextual relevance.

4.19 DATA ANALYSIS

Data analysis was described by Wegner (2012) as a systematic process of searching, sifting and classifying data. Interview transcripts, field notes and numerical datasets were used to generate information and draw logical conclusions. In order to explore the data collected, both qualitative and quantitative forms of data analysis were used in accordance with the mixed methods research approach.

4.19.1 Analysis of Qualitative Data

Thematic analysis, which is a standard, qualitative research method that involves identifying, examining, and reporting themes or patterns in data was employed to examine qualitative interview data. Flick (2013) conceptualized thematic analysis as a process through which an understanding of various aspects of a research topic can be achieved by extracting recurring ideas and meanings from participants' stories.

Manual coding and electronic coding in which NVivo Version 10 software was used facilitated systematic coding, theme identification and data categorization of interview transcripts. The analysis was designed to search for similarities and discrepancies in participants' views in connection with implementation of OE strategies in VUCA environments. Emerging new themes were coded against conceptual categories, which were refined by iterated coding.

Not only did this thematic analysis findings make considerable contributions to qualitative research objectives, but they also formed a basis for the development of quantitative survey, in light of obtaining congruence among qualitative research phases.

4.19.2 Analysis of Quantitative Data

Quantitative information collected in the course of conducting the study was analyzed with the Statistical Package for the Social Sciences (SPSS). The software provided a broad interface for generating both descriptive as well as inferential statistics that facilitated objective exploration of trends, patterns, as well as associations in the dataset. The sample used was 311 participants.

Frequencies, mean scores and standard deviations, which are forms of descriptive statistics, represent and summarized central tendency and dispersion in the dataset. With these statistical measures, a broad description of participants' responses was provided whereby a perception or use of various aspects of OE strategies was possible.

Correlation tests were used to examine relationships among variables to identify the existence as well as strength of linear relations. This allowed the researcher to identify if adjustments in one variable would result in systematic adjustments in a different one: hence, suggesting potential connections among OE elements of strategy and implementation outcomes.

Furthermore, to establish underlying structural relationships among latent and manifest variables, Structural Equation Modeling (SEM) was used in the research. The advanced statistical method enabled the researcher to validate and test the conceptual OE implementation model in VUCA environments. SEM enabled key elements, as well as sub-elements, of the OE implementation model to be established, hence informing theory building as well as practical model building through empirical findings.

4.19.3 Data Triangulation

In the current study, data triangulation was also used to increase the validity and completeness of the findings. Data triangulation refers to the use of multiple sources of evidence to verify findings and provide a richer, more comprehensive understanding of the problem researched (Denzin, 1978; Flick, 2018). A sequential approach was adopted where qualitative data were collected and analyzed during the preliminary stage, followed by the collection of quantitative data during the second stage.

The qualitative component yielded comprehensive insights regarding the perceptions, experiences, and contextual elements associated with the phenomenon being examined. These outcomes guided the formulation of the ensuing quantitative phase, which assessed the prevalence, patterns, and generalizability of the themes previously identified. The two data strands were not examined separately; instead, data triangulation was employed in the discussion section, where qualitative and quantitative results were synthesized and interpreted, collectively.

The combination of qualitative narratives with quantitative results shed light on spaces of convergence, where results between the two approaches substantiated one another, thereby strengthening the validity of the results obtained. At the same time, points of divergence or partial overlap came under critical scrutiny, as these differences allowed for an additional comprehension of the complexities embedded in the problem under research. Such methodological triangulation allowed for an interpretation that was richer and multi-dimensional than would have been possible with a single methodological paradigm.

In summary, the process of data triangulation employed in this research, not only corroborated the findings,

but also augmented the interpretation by contextualizing statistical trends within the lived experiences of participants. This synthesis guaranteed that the ultimate conclusions were anchored in both depth and scope, consequently strengthening the rigor and credibility of the study.

4.20 MEASURES OF VALIDITY AND RELIABILITY

Validity and reliability of instruments and procedures in quantitative research enable proper accuracy, reliability, as well as generalizability of findings. Validity and reliability, as proposed by Du Plooy-Cilliers, Davis, and Bezuidenhout (2014) are fundamental elements of credible research findings, that is, where measurement of abstract entities such as perceptions, attitudes or behaviours come into play.

4.20.1 Validity

Validity here means the extent to which an instrument really measures what it was designed to measure, as per Lakshmi and Mohideen (2013). Internal as well as external validity in this research was a priority in conducting the study.

Internal validity was guaranteed by confirming that research design, sampling, as well as instruments of measurement, were rationally organized and devoid of design deficiencies. Research designs were explicitly selected to fit research questions as well as goals to guarantee instruments employed measured needed constructs with accuracy. Consistent with research findings by Welman, Kruger and Mitchell (2011), research instruments employed were designed to grasp reality as well as perception of the respondents towards strategies of OE.

External validity was also addressed, in terms of representativeness of findings to a broader population. According to Du Plooy-Cilliers et al. (2014), to what extent findings from a sample can be applied to a broader population relies on sampling methods as well as representativeness of findings. To facilitate external validity, a sufficiently large and diverse sample was chosen for the quantitative component of the research.

In a further step towards increasing validity, triangulation was employed. Triangulation employs multiple sources or methods of data to eliminate bias as well as offer consistency in findings. Quantitative questionnaires as well as qualitative interviewing have been employed in the current research, and findings from both have been compared to ensure validity in terms of coherence as well as consistency. Piloting both instruments, that is, the interview guide as well as questionnaire was done to ensure clarity, relevance, as well as their ability to elicit useful responses. Pilot study's findings gave feedback in terms of changes needed, thereby increasing content as well as construct validity.

4.20.2 Reliability

Reliability refers to repeatability or stability over time or among different observers or samples. Du Plooy-Cilliers et al. (2014) explain that a stable instrument should produce stable, similar findings under stable conditions. In order to ensure reliability in research, various strategies were used. The first was to derive survey items from literature and qualitative analysis themes, which gave a clear conceptual foundation to the items. The second was, in data collection, to use standardized administration methods to eliminate the potential for interviewer or administration variation.

Furthermore, a pilot survey of 15 subjects was conducted in an attempt to ascertain item clarity as well as internal consistency of items in the questionnaire. Cronbach's Alpha coefficients were calculated from pilot samples to examine reliability of items in the scale. Weak internal consistency items were dropped or rewritten.

Furthermore, random sampling, along with a sufficiently big sample size of 311 participants, helped to increase the stability of statistical conclusions as well as reduce the likelihood of sampling error, hence, promoting overall reliability as well as credibility of the quantitative component of the research.

Reliability in this research was established using Cronbach's Alpha test, which was a standard statistical indicator of internal reliability. It was used in determining to what extent a group of items was connected, thereby, determining reliability in scales of the questionnaire. It was okay to attain a Cronbach's Alpha of more than or equal to 0.70 in social science studies. The use of standard protocols in administrations of instruments as well as in data gathering reduced variations, resulting in better stability as well as reliability of findings.

The size of the sample as well as its design contributed significantly to increasing reliability. By taking a representative and large enough sample, the research was able to ensure that findings could be generalized to the overall bigger population, in support of reliability of findings.

4.20.3 Measures of Trustworthiness

Trustworthiness in qualitative research is a notion with a set of dimensions to make the process and findings credible, reliable as well as usable. Just as Anney (2014) emphasized, trustworthiness in qualitative research was equivalent to validity and reliability in quantitative research. According to Lincoln and Guba's (1985) standard, trustworthiness in this research was established by the following four key criteria which are also explained.

4.20.3.1 Credibility

Credibility was established to the extent that findings were valid, by which they reflected the experiences of the participants accurately. For credibility, participants with years of experience and first-hand familiarity with the field of OE were chosen deliberately. The participants had first-hand information as well as experience of OE projects, and this enabled them to make rich contributions.

Interviews were audiotaped, which gave a distinct record of responses by participants. The researcher also preserved originals of recordings, as well as transcripts, for verification and comparison. Lengthy interaction with participants, as well as members checking through analysis of the data, also ensured that findings accurately reflected their perspectives.

4.20.3.2 Dependability

Dependability refers to reliability in terms of stability and constancy of studies over time. Anney (2014) conceived reliable research as replicable under similar conditions in order to yield similar findings. To achieve reliability, the researcher maintained a detailed audit trail that encompassed very explicit documentation of research design, research process employed in data gathering, coding systems as well as data analysis methods.

Interview information, including recordings, transcripts, field notes, and coding memos, was organized and stored in a systematic way. This information would make it possible for future replication or independent evaluation of the research process.

4.20.3.3 Confirmability

Confirmability was utilized to ensure objectivity as well as neutrality of findings, in a way that research was directed by participants' responses rather than researcher assumption or prejudice. Confirmability in research was ensured by triangulation of sources, in which findings from qualitative interviewing were contrasted with literature themes as well as quantitative findings.

For increased transparency, research findings, raw data and analysis notes were provided to peer review or colleagues to allow for auditing by outside experts. This way, unbiased outside reviewers could verify coherence between inferences and data, thereby making conclusions more objective.

4.20.3.4 Transferability

Transferability was used to identify the extent to which findings can be transferred to other contexts or environments. Transferability was ensured in the research by reporting thick, rich descriptions of research context, participant background as well as broader organizational sociocultural context in which the research was conducted.

Data pertaining to sampling parameters, interview protocols and setting variables were documented in a systematic way. In this way, readers as well as future researchers could ascertain to what extent the findings were relevant to similar settings or populations.

4.20.3.5 ELIMINATION OF BIASNESS

Polit and Beck (2010) have operationally defined bias as any element that yielded inference or estimation errors, which can lead to skewed realities and result in unwarranted conclusions. Simundic (2013) also operationally defined a systematic distortion of data acquisition, analysis, reinterpretation or publication that can yield misleading outcomes. Both qualitative and quantitative research paradigms were prone to many different forms of bias. For conducting the current study, different intentional steps were adopted to avoid potential research process biases.

At first, questionnaires were cautiously developed to avoid the use of emotionally charged or suggestive terms that were likely to taint participants' responses. The questions employed neutral terms, avoiding emotionally charged vocabulary or language that might be interpreted as gender- or ethnicity insensitive. The research instruments underwent a stage of pilot testing, in which unclear or potentially biased areas were identified and edited suitably.

Where necessary, efforts to elicit clarification of participant responses in the qualitative interviews ensured that their perceptions were accurately interpreted. Probing questions were worded supportively, rather than confrontationally, and did not impose researcher assumption or expectation. Reflexivity was exercised by the researcher by maintaining a research diary to note critical thoughts about personal beliefs, and about ways in which these might inadvertently impact gathering data or interpreting. This facilitated bracketing of researcher's personal views during analysis.

Also, in qualitative data analysis, there was usage of NVivo software to ensure a systematic coding procedure as well as an open process. Coding emerged inductively from the data rather than from priori presumptions. With the view to ensure consistency and limitation of procedure bias, during the quantitative stage, compliance with established data collection protocols was adhered to. On most aspects, by utilizing such rigorous processes, research minimized chances of bias as well as ensured maximized trustworthiness

as well as accuracy of findings. Data triangulation took place in the discussion of the findings where qualitative and quantitative results were discussed together.

4.21 ETHICAL CONSIDERATIONS

With the view to ensuring protection of rights, dignity and welfare of all participants involved, this research complied with established research ethics guidelines. The Research Ethics Committee of the University of KwaZulu-Natal (UKZN) approached to seek ethical approval in regards to compliance with institutional standards of research conduct.

Permission to conduct the research was also formally granted by the members of the organization involved who were informed about the purpose, method, and research findings usage. To achieve this, the research participants were given a comprehensive informed consent form describing the purpose of the study, their role in the research as well as rights as research participants prior to conducting research. Participation in research was solely voluntary, and participants were informed of their right to withdraw from the research process at any time without penalty or prejudice.

Confidentiality as well as anonymity were ensured while conducting research. The personal identifiers were not used in reporting findings, and all information was stored safely—both in encrypted electronic forms as well as locked cabinets, where appropriate. The raw findings were only available to the lead researcher. Audio tape recordings of interview sessions were anonymized, transcribed, then disposed of after transcription and verification.

Further to the above, participants were assured that data was to be used purely for academic purposes, and no information was printed in a manner that would identify individuals or organizations. Ethical rigour in handling participant as well as data helped research integrity, credibility as well as social accountability.

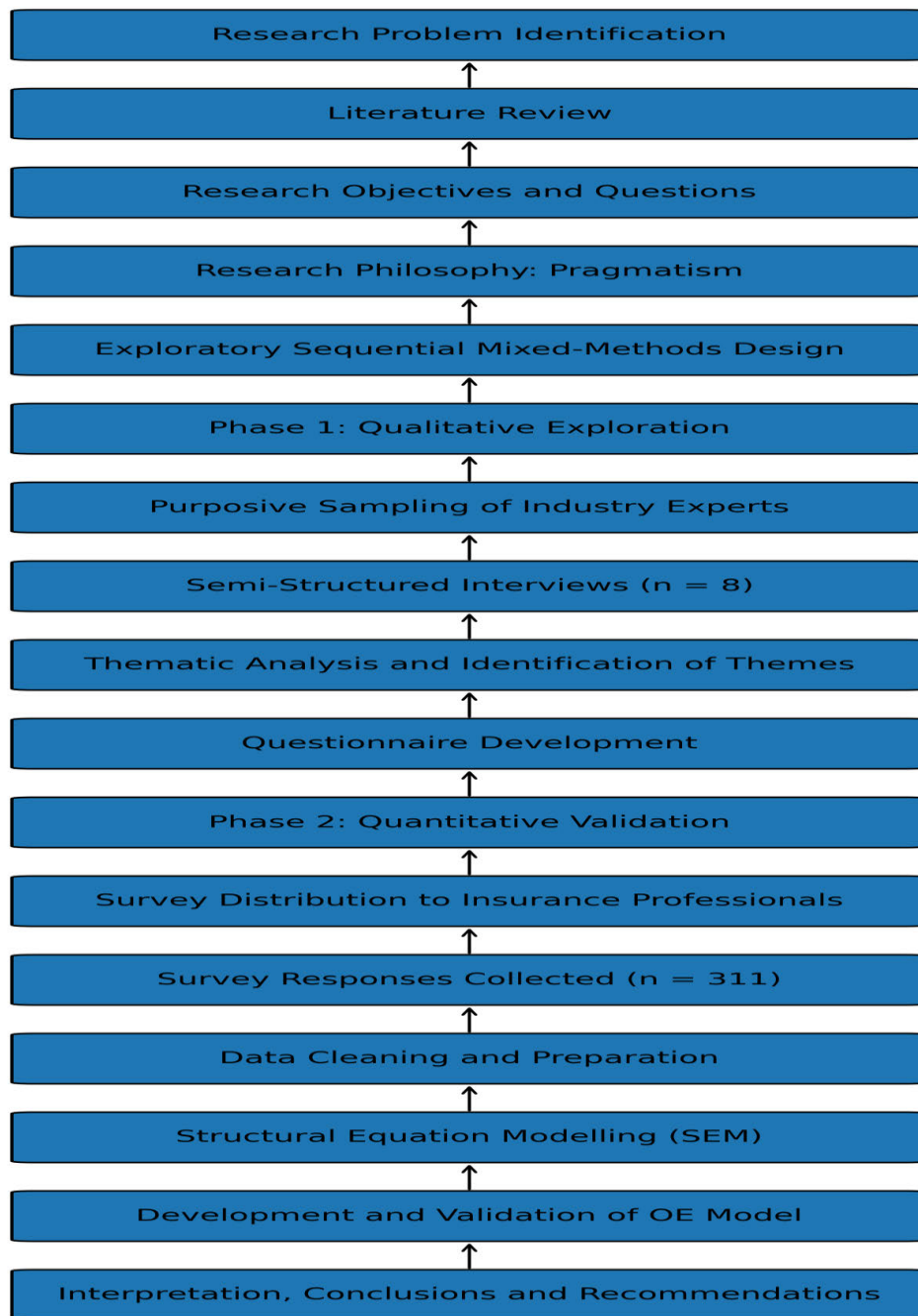


Figure 4.2 Research Process – Exploratory Sequential Mixed-Methods Design

4.22 SUMMARY OF CHAPTER

This chapter gave an overview of research design and methodological processes employed in this research. Nested in an exploratory, sequential, mixed-methods design, research aimed to explore, interpret, and validate OE strategies in intricate, dynamic contexts. Research employed was guided by research questions as much as by needs for depth versus breadth of understanding of the phenomenon in question.

The chapter presented philosophical assumptions that informed the research, reasons for conducting research in a specific manner, sampling strategies as well as methods of data collection and analysis. It addressed crucial aspects related to validity, reliability, trustworthiness, as well as ethical concerns to ensure that research processes attain high professional and academic standards.

By integrating qualitative depth with quantitative evidence, the research aimed to create findings that could both be substantial as well as actionable. Apart from facilitating the exploration of expert practice in depth, the research design also provided room for pattern generalizability through empirical examination. Empirical analysis and interpretation in subsequent chapters have made use of design and methods outlined.

CHAPTER 5: FINDINGS FROM QUALITATIVE DATA

5.1 INTRODUCTION

This chapter summarizes the overall conclusions from qualitative data analysis, with an appreciation of patterns, themes, and opinions that emerged from the research. The conclusions provide a rich interpretation of the research problem through the capturing of lived experience, perception and context informing the responses of respondents.

The chapter is initiated with an introduction of the key themes that arose from the data analysis process and their connection to the research questions. All the themes are explained in detail with verbatim quotations from the participants and contextual descriptions to enable credibility and richness. The results are presented in an organized manner in order to maximize clarity and coherence without losing the voice of the participants.

This chapter does not yet engage in large-scale interpretation but rather lays the foundation for the discussion to come by stating the results in a systematic manner. The following sections will address the principal themes in more detail, using the evidence to illuminate the research question under investigation.

5.2 SOCIA-DEMOGRAPHIC PROFILE OF THE RESPONDENTS

The table 5.1 summarizes demographic information of eight South African insurance sector experts who had between 12 and 20 years of experience. The experts, all holding senior management roles in key South African insurance companies, all point to the imperative of embracing models that push customer experience, offer operational efficiency, and are agile enough to keep up with forces in the market.

customer satisfaction.

- "Before OE, our claim processing time used to fluctuate, which was annoying our customers. We have been able to reduce our processing time by less than half through automation of repetitive questions and optimization of our claims process." – Participant A
- "We developed a continuous improvement cycle in customer experience by leveraging data intelligence and achieved 25% growth in customer satisfaction scores year on year." – Participant D

5.3.2 Theme: Cost Optimisation

Operational Excellence techniques such as Lean Six Sigma have allowed insurance companies to eliminate unnecessary waste, streamline underwriting and claims functions, and decrease admin expenses, hence gaining cost benefits and competitiveness.

- "Digitization of policy applications reduced administrative costs by less than half as well as improving accuracy." – participant E
- "By streamlining procurement activities and negotiating with our vendors, we've cut our operating expenses significantly, allowing us to offer more competitive pricing to customers." – Participant C

5.3.3 Theme: Risk Mitigation and Compliance

To manage shifting regulatory requirements, OE has enabled insurers to improve compliance with real-time surveillance, auto-reporting, and advanced risk identification practices.

- "With real-time monitoring systems and stronger internal audit processes, we've reduced regulatory violations by half." – Participant A
- "Creating an AI-driven compliance mechanism that detects potential risks before their aggravation has strengthened our governance framework and promoted stakeholder trust." – Participant B

5.3.4 Theme: Creating Innovation and Adaptability

OE has created a culture of continuous innovation such that companies are able to quickly react to developments in their line of business, launch new insurance policies, and stay ahead.

- "We applied agile methodologies so teams could rapidly test and iterate on new products." – Participant D

- "We rolled out our micro-insurance product for gig economy workers in record time due to our fast-decision-making processes." – Participant B

5.3.5 Theme: Leverage Technology to Improve Processes

Digitalization with OE eliminated inefficiencies by centralizing digital platforms, using robotic process automation (RPA), and reducing errors in claims handling.

- "We invested in a centralized digital platform that integrates customer data, policy management, and real-time claims tracking, reducing errors by a great extent." – Participant?
- "Use of robotic process automation (RPA) to perform mundane tasks such as verification of documents and fraud detection has cut processing time by half." – Participant C

5.3.6 Theme: Boosting Employee Productivity and Engagement

By applying OE principles to human resource management, organizations have empowered staff, enhanced motivation, and productivity, and overall service delivery.

- "We introduced a Kaizen-based feedback mechanism where staff were able to suggest and implement continuous small improvements." – Participant C
- "Realigned training programs to facilitate OE practices, with a less than 50% increase in employee engagement measures and a perceptible reduction in staff turnover." – Participant D

5.3.7 Theme: Enacting Sustainable Growth

OE utilizing companies have carried out strategically designed growth strategies based on operational data and customer feedback, with scalability and improved market positioning.

- "We have established a performance measurement system that tracks key operating measures and customer feedback, which allows us to improve our product offerings." – Participant B
- "Our turnaround time to claims approval has reduced from 10 days to 48 hours, making us one of the fastest insurers in the market." – Participant F

5.3.8 Theme: Enhancing Decision-Making via Data Analysis

Advanced data analysis, facilitated by OE, has improved risk analysis, reduced fraud, and enhanced market forecasting, enabling more effective strategic decisions.

- "With OE, we have implemented machine learning algorithms for improving underwriting

accuracy, leading to a reduction of less than 50% in claims fraud." – Participant D

- "Real-time data insights have improved our capacity to anticipate market trends, allowing us to change strategies proactively." – Participant?

5.4 THEMATIC ANALYSIS OF OE STRATEGY

Table 5.2 Summary Table of Themes for Operational Excellence Strategy

Theme	Description
Enhancing Customer Experience	Improved service delivery through automation, reducing claims processing time and increasing customer satisfaction.
Cost Optimization	OE reduced inefficiencies and lowered administrative and operational costs through process automation.
Risk Mitigation and Compliance	Strengthened governance through AI-driven compliance systems and real-time risk monitoring.
Fostering Innovation and Adaptability	OE enabled rapid product innovation and adaptability to change market trends.
Leveraging Technology for Process Optimization	Digital transformation through centralized platforms and automation improved efficiency.
Improving Employee Engagement and Productivity	Employee empowerment and training led to increased engagement and lower staff turnover.
Achieving Sustainable Growth	Data-driven growth strategies positioned companies for long-term market success.
Enhancing Decision-Making with Data Analytics	AI and real-time analytics improved fraud detection and market forecasting.



Figure 5.2 Word tree for OE

OE has been a gamechanger in strategic vision and mission development of South African insurance companies.

5.4.1 Theme: Improving Customer-Focused Services

OE has helped insurance firms accelerate the settlement of claims, deliver customized service, and settle pre-emptively customer grievances to create trust and loyalty.

- "By applying process improvement with structure, we reduced claim turnaround times by less than 50% and enhanced real-time customer service." – Participant B
- "OE has enabled us to transition from reactive customer service to initiative-taking, where we handle client needs before they turn into complaints." – Participant C

5.4.2 Theme: Streamlining Operations towards Cost Effectiveness

OE has helped insurance companies eliminate inefficiencies, increase process efficiencies, and reduce administration costs, freeing up potential reinvestment into customers and innovation.

- "With OE, we automated administrative tasks and streamlined underwriting, thereby reducing operating costs by less than 50%." – Participant A
- "These savings have enabled us to reinvest in product innovation and cutting-edge technologies,

enabling us to be long-term market competitive." – Participant D

5.4.3 Theme: Improving Compliance and Risk Management

As regulations change, insurers have utilized OE to enable enhanced compliance, integrate AI-based auditing, and deploy effective risk management systems.

- "With computerized audit systems and real-time compliance monitoring, we have reduced regulatory violations substantially." – Participant C
- "OE has enhanced governance frameworks, which has made us more credible to regulatory authorities and enhanced customer confidence." – Participant D

5.4.4 Theme: Developing Innovation and Agility

OE has encouraged insurers to embrace continuous improvement, leverage innovative technologies, and embrace agile methods that respond rapidly to market demands.

- "With Lean Six Sigma, we have optimized our processes and launched three digital-first products to market in a short period of time." – Participant
- "Being able to pivot on a dime-based consumer trend has set us apart, keeping us ahead of the insurance innovation curve." – Participant B

5.4.5 Theme: Leverage Technology to Enhance Decision Making

The integration of machine learning, data analytics, and AI in OE has improved fraud detection, policy customization and risk assessment.

- "By incorporating cutting-edge analytics into our operations, we have managed to reduce fraud cases by less than 50% and improve accuracy in claims." – Participant F
- "Real-time data insights now allow customers to pull policy information in real time, leading to increased transparency and trust." –Participant C

5.4.6 Theme: Boosting Worker Productivity and Engagement

OE-driven training, process-flow-based workflow, and continuous effort toward improvement have yielded a higher-engagement employee population and greater levels of service.

- "By improving workflow and engaging the staff in process improvement, we have seen an increase of less than 50% in staff engagement." – Participant C

- "A more motivated and more engaged workforce equals better customer service and overall better company performance." – Participant F

5.4.7 Theme: Achieving Sustainable Development

Businesses that have embraced OE have effectively scaled up operations, enhanced efficiency, and attained long-term sustainability in a competitive marketplace.

- "By maximizing the utilization of resources and streamlining our growth strategy, we expanded into new markets without compromising efficiency." – Participant E
- "Our focus on sustainability through OE allows us to continue offering value-based insurance solutions for years to come." – Participant A

5.4.8 Theme: Streamlining Processes to Enhance Customer Satisfaction

OE-based process optimization has resulted in quicker processing of claims, better delivery of services, and fewer customer irritations.

- "We reduced approval time from 14 days to just 3 days by automating claims processing, drastically improving customer experience." – Participant A
- "Efficiency improvements have made us a stronger preferred insurer, with improved customer retention and satisfaction levels." –Participant H

5.5 THEMES RELATED TO OPERATIONAL EXCELLENCE

Table 5.2 Summary Table of Themes for Operational Excellence

Theme	Description
Enhancing Customer-Centric Services	Process improvements have reduced claim turnaround times and strengthened initiative-taking customer service.
Streamlining Operations for Cost Efficiency	OE-driven standardization and automation have cut costs while enabling reinvestment in innovation.
Strengthening Compliance and Risk Management	AI-driven compliance and governance frameworks have minimized regulatory violations.
Fostering Innovation and Adaptability	OE has encouraged agility and new product development, responding to market demands.

Leveraging Technology for Enhanced Decision-Making	AI and analytics have improved risk assessment, fraud detection, and customer insights.
Boosting Employee Engagement and Productivity	Structured workflows and employee involvement have increased engagement and performance.
Achieving Sustainable Growth	OE-driven efficiency improvements have supported long-term market expansion.
Enhancing Customer Satisfaction through Process Optimization	Faster claims processing and improved service quality have elevated customer experiences.

Based on the eight South African insurance industry players' perceptions, the following are the prevailing themes emerging in relation to the effectiveness of OE in influencing organizational change, culture, values, and mindset change:

5.5.1 Theme: Cultural Transformation and Values Alignment

Some of the answers indicated that OE models have played a crucial role in the building of organizational culture and value alignment with business objectives.

- Participant B "emphasized customer-focus and leadership accountability."
- Participant E "reported a shift towards innovation and inclusiveness, though with some resistance from longer-serving staff."

5.5.2 Theme: Resistance to Change

Despite efforts at OE, resistance to cultural and mindset change was a thread that ran through a variety of responses, especially from old units and legacy personnel.

- Participant C "emphasized the challenge in equating the attitude of more senior staff with more contemporary models of work."
- Participant F "identified resistance in certain parts of the organization due to historical problems in the insurance industry."
- Participant A "felt resistance in older units where traditional practices prevailed."

5.5.3 Theme: Leadership and Accountability

Significant emphasis on accountability and leadership development was strongly found to encourage OE in the companies.

- Participant D “saw leadership development as central to sharing OE principles and encouraging inclusivity.”
- Participant E "was concerned with the leadership role in developing collaboration and openness throughout the organization."

5.5.4 Theme: Employee Engagement and Mindset Shift

Several answers implied the role played by OE in establishing staff commitment and creating a more positive organizational attitude.

- Participant B "highlighted the need for a change in the employee attitude, namely in order to adapt to their transformation and digitalization."
- Participant C "highlighted the need for staff development in order to achieve cultural change at every level of the organization."

5.5.5 Theme: Challenges in Scaling OE across different Divisions

Scaling OE across different divisions or geographies was often talked about as a challenge. There were some geographies that did better in adopting OE principles than others.

- Participant D "noted regional differences, with some areas struggling to adopt OE principles."
- Participant C "described the challenge of teaching OE principles in units with very entrenched historical practices."

5.5.6 Theme: Continuous Development and Continuous Improvement

Constant improvement and growth are the core of OE's success, with firms realizing that transformation is a gradual process that requires ongoing effort.

- Participant E "observed that although progress is being made, implementing cultural change at all levels of the business requires ongoing effort."
- Participant B "confirmed that complete cultural change remains an ongoing process, with ongoing investment still needed in leadership development."
- Participant E "highlighted the need to continue developing staff at all levels in order to achieve organizational change in totality."

5.5.7 Theme: Focus on Digitalization and Innovation

A few of the respondents mentioned the role of OE in innovation, that is, around digitalization in the

insurance industry.

- Participant G emphasized the necessity for OE to drive innovation and transform into digital-first models.
- Participant F stated that their focus on health and innovation is a core part of their culture transformation.

5.6 IMPLEMENTATING OE STRATEGIES IN THE SOUTH AFRICAN INSURANCE SECTOR

Their answers are filled with insight into how Organizational Excellence (OE) initiatives are being implemented in different firms. As they reflect, there are several recurring themes that cross over, each of which suggests strengths as well as challenges along the way to OE.

5.6.1 Theme: Effective Leadership and Commitment to Change

Leadership is one of the major impetuses for OE initiatives in organizations. Leadership buy-in was emphasized by all practitioners as a major success factor for the transformation. They also noted that leaders should be role models in embracing change.

- Participant B: "Leadership buy-in is most critical, and we've built a model where every team owns its own improvements."
- Participant E: "While we've made progress, we've also learned that true change requires constant leadership reinforcement of the vision."
- Participant A: "The emphasis on leadership development has been at the forefront of our strategy. Installing a new mindset at all levels."

5.6.2 Theme: Cultural Transformation and Employee Mindset Shift

The necessity of cultural transformation and attitude change at all levels of the organization is the second broad theme. Many organizations focused on values alignment, employee empowerment, and creating a learning organization to enable continuous improvement.

- Participant B: "We've stressed ongoing improvement at every level, welcoming employee suggestions into day-to-day work processes."
- Participant C: "It's not just a matter of implementing processes but getting the entire workforce on board with the cultural shift."

5.6.3 Theme: Strategic Alignment and Organizational Integration

The second underlying theme is alignment of the firm's operating and strategic goals with OE initiatives. Alignment of OE with the business strategy is critical to long-term success. Several authors cited the necessity of alignment of strategy with organizational culture and performance improvement initiatives.

- Participant D: "We started using McKinsey's 7S Framework; it helped us to get various aspects of our business in line."
- Participant F: "The emphasis has been on ensuring that our organizational strategy is balanced with employee development and leadership accountability."

5.6.4 Theme: Ongoing Improvement and Performance Measurement

The basis of OE is continuous improvement, where companies aim to increase efficiency, productivity, and customer care. KPIs and measurements are the primary tools utilized to monitor progress and success.

- Participant C: "We applied Deloitte's performance improvement frameworks to tear down silos and enhance cross-functional collaboration."
- Participant F: "Operational excellence requires frequent monitoring of performance, and the Du Pont model allowed us to focus on key measures."
- Participant B: "Measuring performance against clearly defined benchmarks has greatly enhanced our decision-making."

5.6.5 Theme: Overcoming Legacy Challenges and Resistance to Change

Resistance to change is among the most common pitfalls in the transformation journey. Some of the firms cite overcoming entrenched practice and old ways of thinking as the greatest challenge, particularly, from long-serving staff members who might be less receptive to new practices.

- Participant A: "Been difficult to port the model to other fields. difficult to change deeply ingrained behaviour."
- Participant B: "The move towards operational excellence is happening, and there is resistance from compliance-focused teams instead of performance-driven teams."

5.6.6 Theme: Employee Empowerment and Engagement

Participation in the workforce is regarded as a central element of OE. Empowering the workers through training, ownership of improvement programs, and involvement in decision-making makes them feel owned and responsible.

- Participant F: "Using employee ideas to base work practices has been a means of maintaining improvement."
- Participant D: "Instilling a new mindset at every level. Training workers is central to ensuring empowerment."
- Participant G: "Our focus on leadership development is helping to create a culture of empowerment and continuous improvement."

5.7 IMPLEMENTATION OF OE STRATEGIES

Table 5.4: Summary table showing the key themes identified regarding the implementation of OE strategies

Theme	Description
Leadership and Commitment	Leadership buy-in and active involvement are crucial for successful OE implementation. Leaders must model transformation.
Cultural Transformation	A shift in organizational culture is necessary for OE to succeed, focusing on employee mindset change and values alignment.
Strategic Alignment	Aligning OE initiatives with business strategies ensures consistency and integration across departments.
Continuous Improvement & Metrics	Emphasis on ongoing performance improvement, using metrics and KPIs to track success and areas for development.
Resistance to Change	Overcoming the resistance from long-serving employees and adapting legacy systems to new processes is challenging.
Employee Engagement & Empowerment	Empowering employees through training and involvement in decision-making fosters accountability and ownership.

The observations of eight South African insurance sector thought leaders regarding success factors for implementation of OE strategy, especially, project budget, human capital, and virtual teams, capture several overarching themes. The following is thematic analysis with accompanying commentary.

5.7.1 Theme: Project Budget and Financial Allocation

Significant portions of the project budget go into technology infrastructure, employee training, and change

management to ensure proper implementation of OE initiatives. Experts underlined the significance of end-to-end budgeting that spans short-term implementation and long-term sustainability.

- Participant B: "We invested a significant project budget in financing technology infrastructure, training staff, and the employment of outside consultants to offer strategic counsel."
- Participant C: "The budget was framed in a way to enable continuous monitoring and modification of our OE strategy, such that our investments were not merely for the first rollout but viable in the long term."

5.7.2 Theme: Human Capital Development

It was necessary to ensure that the workers had the necessary skills and knowledge to ride out the OE transition. Organizations invested in up-skilling employees, developing leadership competencies and creating ongoing training programs.

- Participant A: "We invested in reskilling our people to be able to manage the digital transformation required for OE. The focus was on attaining digital fluency across the organization."
- Participant C: "Training and development were core elements of our human capital strategy because we wanted our teams to know about the concepts of OE and how they could contribute."
- Participant D: "We prioritized human capital by providing all staff with ongoing learning platforms, keeping them in sync with our transformation objectives."

5.7.3 Theme: Application of Virtual Teams

Virtual teams' usage was the first step toward covering the geography distance and gaining the cross-function working. Virtual teams provided the ability to contribute and have flexibility from many different points, which made the transformation feasible to be incorporated at all levels.

- Participant D: "Virtual teams were necessary, especially with the shift to remote work with the pandemic. They enabled us to be able to still work together and communicate across regions."
- Participant E: "Use of virtual teams was pivotal to success in all but one location. It allowed for faster decision-making and adaptability in deploying OE."

5.7.4 Theme: Organizational Culture Change and Change Management

The experts emphasized the importance of implementing change management efforts to overcome

resistance and ensure that the organization is aligned with the new OE objectives. Being able to have a culture that embraces changes is part of OE introduction success.

- Participant F: "Involving culture in the alignment to our OE objectives entailed the deliberate and persistent focus on change management. We integrated change management in our day-to-day activities to help the employees adopt the change."
- Participant D: "We required cultural transformation to enable employees to learn and embrace the OE goals. Change management helped in removing resistance and aligning individuals towards the new direction."

5.7.5 Theme: Collaboration Technology and Technology Infrastructure

Technology infrastructure investment was one of the prominent features which helped the organization address the demands of virtual teams and collaboration in a seamless manner. Organizations focused on investment in digital technologies to facilitate communication, learning, and collaboration in the implementation of OE.

- Participant A: "Technology infrastructure accounted for much of our project budget. We focused on giving employees the tools they needed so they could collaborate successfully within the virtual environment."

Participant F: "Investment in collaboration tools enabled our staff to stay involved in the OE strategy, even while they were working remotely. It facilitated the technical and cultural change."

5.8 SUCCESS OF EMPLOYER BEHAVIOUR, THROUGHPUTS, QUALITY, REVENUE REALIZED, AND GROWTH IN THE SOUTH AFRICAN INSURANCE SECTOR

The following issues emerged from the specialist opinions on the success of employee behaviour, throughputs, quality, revenue realized, and growth in the South African insurance sector:

5.8.1 Theme: Employee Behaviour: Accountability, Collaboration, and Engagement

Across all the expert views, the behaviour of employees was also identified as a key driver of success. Increased responsibility, teamwork, and commitment were highlighted as being key to the overall performance of the business, reflecting a shift towards a more purposeful and customer-driven workforce.

- Participant A and Participant B "emphasized that employees' behaviour is now more consistent with organisational values and KPIs, and that it has assisted considerably with greater revenue in sales and growth."
- Participant E "commented that increased participation and better communication positively impacted productivity and team performance."

5.8.2 Theme: Throughputs: Process Efficiency and Automation

Improved throughputs were experienced because of process optimization and automating, which produced efficiency in operations. This is a motif that pervades claims processing, sales operations, and underwriting.

- Participant D "observed that by reducing administrative tasks, teams could focus more on customer-facing activities, directly impacting sales performance and throughput."
- Participant F "stressed leveraging digital technologies to automate adjudication of claims and sales processes, reducing turn-around times and improving productivity."

5.8.3 Theme: Quality: Service Delivery and Customer Satisfaction.

Quality was the focus, and much stress was laid on enhancing service delivery and enhancing customer satisfaction. The experts stated that customer retention and sales growth were the most significant aspects of quality improvement.

- Participant C "saw a direct link between quality service and customer retention, with managers noting customer loyalty had increased due to improved delivery of service."
- Participant B "acknowledged the emphasis placed on quality assurance, in the form of claims processing, resulting in faster settlement and increased trust from customers."

5.8.4 Theme: Sales Revenue: Improvement through Training, Digital Technology, and Alignment of Strategy

Revenue from sales was consistently marked as an area of success, with expansion owing to training initiatives, streamlining of sales strategy, and use of computer applications to support the sales force.

- Participant A and C "reported double-digit sales growth, attributing success to enhanced sales strategies and leveraging digital tools to drive sales performance to the top."
- Participants E and F "emphasized how selling ability and product knowledge were improved

significantly by continuous training, resulting in higher conversion rates and revenue increases."

5.8.5 Theme: Strategic Priorities, Innovation, and Customer-Centric Approach

Dominantly driven by innovation, customer orientation, and strategy, expansion was accelerated. Most concerned with the strategy map and its implementation driven by innovation accelerated expansion.

- Participant D and E "registered growth through more concentrated strategies, particularly in the commercial insurance marketplace."
- F and C "observed that customer orientation led to greater loyalty and growth, propelling revenue and market share."

5.9 BARRIERS AND CHALLENGES FACED BY SOUTH AFRICAN INSURANCE COMPANIES

The following themes were derived from the specialist opinions on the issues and challenges facing South African insurance companies:

5.9.1 Theme: Resistance to Change and Digital Transformation

A common issue shared by all the professionals was resistance to change in embracing modern technologies, particularly in the example of digital transformation. This includes the merging of legacy systems with modern technology, as well as resistance by staff or clients to the implementation of new digital technologies.

- Both participants D and F acknowledged resistance to change by the employees, especially when new digital processes and tools are implemented.
- Participant C "highlighted that the transition to digital-first services is a challenge, involving internal cultural transformation and customer education to reap the full value of these innovations."

5.9.2 Theme: Governance and Regulatory Compliance.

Regulatory compliance is one of the biggest issues for insurance companies, with new rules being introduced and compliance becoming more complicated, consuming the time and resources of organizations.

- B and H respondents "highlighted the difficulty of keeping abreast of new regulation, particularly in the field of financial services and insurance products. The regulatory landscape is evolving rapidly, placing pressure on insurers to keep up."
- C and G respondents "commented that tax law updates, data privacy law updates, and other compliance issues require ongoing updates in operations and policies."

5.9.3 Theme: Talent Retention and Skills Shortages

Talent retention and skills deficit are identified as key problems in the insurance sector. Rising competition for skilled professionals, particularly in technological and actuary space, is forcing firms to lose their top assets.

- Human Resource Participants A and D "highlighted talent retention as a key challenge, with intense demand for technology experts fueling employee turnover in key departments."
- D and G "stated that skills gaps in some areas, such as data science, cybersecurity, and actuarial science, are impacting their ability to innovate and expand."

5.9.4 Theme: Economic Uncertainty and Market Volatility

Market volatility and economic uncertainty continue to be the biggest challenge, particularly in the backdrop of global economic shifts, geopolitical uncertainty, and domestic market volatility. These test everything from customers' purchasing behaviour to long-term fiscal planning.

- B and E participants "spoke about the effect of economic uncertainty, particularly following COVID-19 and recession risks, on customer purchasing behaviour and total sales growth."
- Members E and F "observed that geopolitical uncertainty, such as worldwide sanctions and trade wars, negatively impact long-term projections and business expansion."

5.9.5 Theme: More Competition and Disruption Arising from Insurtech

When there were more Insurtech entrants in the market, the traditional players faced more competition. These new-fangled digital insurers were capturing the market with their customized products, lower prices, and faster, better services.

- G and A respondents "indicated jointly that Insurtech companies are challenging traditional business models by delivering bespoke, cost-effective solutions to customers."
- Participants B and E "acknowledged that the rise of tech-enabled platforms is forcing them to

reimagine their customer service and engagement models, as customers increasingly expect on-demand, digitally driven solutions.”

5.9.6 Theme: Cybersecurity and Data Privacy Challenges

The insurance industry is facing increased cyber threat, as well as growing data privacy issues. In digitalization, insurers become more susceptible to data breaches and cyberattacks that can erode customer confidence and regulatory requirements.

- Participants F and H "listed cybersecurity as among the most challenging areas, as companies expand their digital presence and store sensitive consumer data."
- Participant A "observed the ongoing need to protect customer information with the intent to maintain brand trust with an eye towards increased regulatory emphasis on data privacy."

5.9.7 Theme: Economic Volatility and Uncertainty

Economic uncertainty is the focus. Companies are facing an unstable financial environment with inflation, elevated levels of unemployment, and unstable market conditions. While this represents a challenge in the sphere of growth and sales forecasts, it is also stimulating demand for fundamental financial services such as insurance and saving schemes. Companies must contend with this while coping with shifting customer attitudes following financial austerity.

- Participants A: "The level of economic uncertainty has altered consumer purchasing habits, but it also generates greater demand for financial planning and savings-type products, and that is beneficial to the insurance sector."
- Participant H: "South Africa's high unemployment rate has led to lower disposable income for a lot of our clients, and this has been seen in fewer sales."
- Participant D: "Both our customer trends and our investment policies are influenced by extreme market volatility, which hinders long-term growth predictions."

5.9.8 Theme: Regulatory Compliance

Insurers must deal with a more fluid regulatory landscape. Increased compliance requirements, particularly in tax legislation and data protection, are requiring serious investment of time and money. The continuous evolution of these regulations presents operational challenges but also offers a chance for insurers to innovate their compliance strategies to stay ahead.

- Participant G: "The regulatory environment continues to change, and compliance is still one of the biggest challenges. New regulations for data protection and insurance law necessitate constant adjustments."
- Participant C: "Regulatory changes, such as new tax law and data protection legislation, require us to constantly update our policies and internal processes."

5.9.9 Theme: Digital Transformation and Technology

There is a common denominator of digital transformation, with the insurers racing furiously to digital-first models to improve customer experience and operational efficiency. Increasing Insurtech activity and demand for digital services are forcing incumbent insurers to invest in technology to remain competitive and meet evolving consumer expectations.

- Participant E: "The shift to digital-first services is a trend. Customers are increasingly seeking mobile-enabled and online channels to purchase policies, and we are striving to develop our digital channels to meet this."
- Participant D: "The shift towards digital transformation is opening up new business opportunities. Insurtech firms are providing customers with real-time services and customized products."

5.9.10 Theme: Changing Consumer Behaviour

The trend towards more value-for-money and lifestyle-insurance products is clear. Customers want insurance products that are coordinated with their lifestyle and needs, and insurers must innovate to offer customized services. Besides, the need for value-for-money products is growing because a lot of customers are being constrained by budget pressures.

- Participant B: "There's a move towards more customized insurance products, and customers are looking for policies that reflect their own needs and lifestyle."
- Participant E: "More and more people need sustainable and ethically produced goods, and customers demand more customized insurance products."

5.9.11 Theme: Skills Gap and Talent Shortages

Talent shortages, particularly in technology, actuarial, and digital roles, are a major concern. With digital transformation and technology integration happening at a fast pace, companies must keep pace by investing in training and building capability to bridge the gap and retain best talent in an expanding competitive marketplace.

- Participant A: "There is an emerging shortage of skills in the actuarial and technological areas, and the recruitment and retention of the right people have become more competitive."
- Participant D: "Coming to technology and digitalization, we must highlight upskilling our human resources in order to adapt to the increasing demand for technical manpower."

5.9.12 Theme: Cybersecurity Threats

As companies delve further into the digital domain, cybersecurity is more of a concern. The vulnerability to data breaches and the need for effective data security solutions are the foremost priorities for insurers in charting their online presence. Safeguarding customers' data is not just a regulatory requirement but also crucial to maintaining customers' confidence.

- Participant E: "Cybersecurity is a priority as we continue to develop our digital platforms. We must continue to improve our data protection and risk management systems so that our customers' data is not hacked."
- Participant H: "As more of our services go online, cybersecurity risks increase, and we must invest in systems capable of preventing data breaches and protecting sensitive information."

5.9.13 Theme: Corporate Citizenship and Social Responsibility

Corporate citizenship and corporate social responsibility are drawing greater attention. Being insurance companies, corporations must not only serve good goods but also to contribute to social good, i.e., within areas such as financial literacy as well as sustainability. Corporations need to align their business ambitions and corporate social responsibility to suit socially responsible buyers.

- Participant E: "There is a growing focus on corporate social responsibility. The insurance clients would like to see the insurance firms contribute to social causes, e.g., sustainable development and financial literacy."
- Participant D: "Consumers need us to help in social causes such as financial literacy and sustainable development."

5.10 VUCA WORLD IN THE SOUTH AFRICAN INSURANCE SECTOR

5.10.1 Theme: Appreciation of Global Volatility

The recurring theme is global volatility that impacts insurance business. Experts always talk about

economic downturns, political instability, and external factors that create unforeseen fluctuations in market forces and customer demands. The volatility requires companies to be flexible and prepared for sudden shifts in customer demands and market forces.

- Participant A: "The world economy has seen massive disruptions due to unforeseen events like pandemics and political instability. This creates uncertainty in consumers' behaviour and the market condition."
- Participant G: "Market conditions are constantly changing, which generates a higher sense of volatility in investment performance and client activity. We must constantly react to this."

5.10.2 Theme: Uncertainty and Ambiguity of Business Conditions

Uncertainty and ambiguity are also called omnipresent challenges. Experts call the unstable character of consumer taste, changes in regulations, and global crises that create a situation where long-term planning and forecasting is a complex endeavour. Organizations must respond to such uncertain situations with flexibility and responsiveness.

- Participant E: "Business life is uncertain. Shifting regulations and unstable market conditions often leave firms in a position where forecasts become difficult."
- Participant B: "There is more market uncertainty due to evolving regulations and evolving customer requirements. This tends to lead to difficult decision-making processes."

5.10.3 Theme: Complexity in International Business

Complexity becomes an important problem, born of the interconnections around the world, the layered regulatory systems, and the sophisticated market dynamics. Experts highlight the way these factors make it a more complicated arena to work within for those entities seeking to do business both domestically and abroad. The complexity requires insurance companies to remain adaptable and current to be able to change their approaches, as necessary.

- Participant F: "The world of business is made complex by the interconnectedness of global economies and the resulting ripple effect on local enterprises."
- Participant B: "The complexity of managing a global portfolio and adapting to proximal controls poses different levels of challenge to decision and technique planning."
- Participant H: "The alignment of political, social, and economic forces at the global level generates degrees of sophistication in how we conduct business in terms of market reach and customer relationship."

5.10.4 Theme: Strategic Innovation and Adaptation to VUCA

All the experts emphasize strategic flexibility and innovativeness. Complexity and uncertainty in the VUCA world are considered by business firms as an arena of innovation rather than as a barrier. Insurers are investing in creating flexible business models, adaptive product development, and cutting-edge technological innovations to compete and respond to evolving consumer demands.

- Participants D: "In a VUCA world, there is only one direction to go: innovation. We concentrate on the creation of new products and services that can adapt to fast-changing customer requirements."
- Participant H: "Rather than being overwhelmed by the complexity, we see it as an opportunity to innovate and expand, particularly in product development and service delivery."

5.10.5 Theme: Resilience in Coping with VUCA

Resilience is the thread that runs through all the opinions of the experts. The organizations are interested in building robust systems that allow them to react quickly to unexpected events. The experts are of the opinion that resilience, both in operations and organizational culture, is at the centre of success in a VUCA world.

- Participant C: "Building up resilience is the linchpin of our strategy in a world so risky. That is, having robust processes and flexible decision-making frameworks to cope with risk."
- Participant F: "We must develop a strong culture within the organization to weather the storm during uncertain times. Resilience enables us to maintain a focus on long-term goals while adapting to short-term adversity."

5.11 COMPLEXITY OF THE SOUTH AFRICAN BUSINESS ENVIRONMENT

5.11.1 Theme: Economic Volatility

Economic uncertainty is one of the causes of the complexity of the South African business environment. Economic inequality, unemployment, and inflation are all causes of market uncertainty, hence making long-term planning and forecasting difficult.

- Participant B: "The economic uncertainty and high inflation in the economy create uncertain conditions for business."

- Participant E: "With a high level of unemployment and economic inequality, South Africa has numerous economic issues that disrupt business activities."
- Participant G: "Economic instability, including inflation and exchange rate volatility, is common in South Africa and leads to an unpredictable business environment."

5.11.2 Theme: Policy Uncertainty and Political Instability

Policy uncertainty and political instability are the most important determinants of complexity. The propensity to change government leadership, policy, and changes in regulation makes it challenging to plan and invest in the long term.

- Participant A: "Political instability and regular shifts in the government policies tend to create unforeseen market conditions."
- Participant H: "The political environment in South Africa, with its high leadership and policy turnover, does not allow us to make hard long-term commitments."
- Participant D: "It complicates South African political life, particularly if it is legislative change that has an immediate effect on the finance and insurance sectors."

5.11.3 Theme: Social Diversity and Inequality

Social inequality and diversity add to another level of complexity. The corporate world is impacted by a diverse population with varying needs and expectations. Inequality generates uncertainty in consumer behaviour, and firms need to be sensitive to the needs of different socioeconomic segments.

- Participant B: "The extremely high rates of inequality in South Africa contribute very much to the complexity of the business environment."
- Participant G: "The significant socioeconomic divide creates a challenging market situation. Firms have to contend with the complexities of catering to a multicultural population."
- Participant C: "Fighting social inequality in a real way is a component of South Africa's difficult environment."

5.11.4 Theme: Consumer Behaviour and Market Demands

Shifting consumption patterns and altering market needs pose another challenge for the corporate world. Certainly, there is a need for business companies to become responsive and able to react quickly to rapidly changing consumer preferences, particularly with demands for online services and more personalized

products.

- Participant B: "Customers are more digitally aware, so companies must continuously adapt to shift expectations and behaviour."
- Participant E: "Another problem is the shift in consumer behaviour, especially, with the younger generations expecting more digital services."

5.11.5 Topic: Global Influence on Local Markets Analysis

The international environment exerts a profound influence on the business environment in South Africa. Global phenomena such as economic recessions, global governance, and global trade patterns affect local market patterns and destabilize South Africa's business environment.

- Participant A: "The economic conditions of the world directly impact on our local business, especially in the finance and insurance sectors."
- Participant F: "World financial crises or global regulations tend to spill back to our operations in South Africa."



5.12 BARRIERS AND IMPLICATIONS FOR BUSINESS GROWTH IN THE INSURANCE

The debate of eight major insurance businesses in South Africa presents a few overarching themes from the perspective of issues and concerns in the industry. These range from: economic volatility, regulatory

complications, market saturation and competition, customer literacy, and impacts of technological progress. All of them have clear implications for business growth, influencing market penetration, product innovation and investment.

5.12.1 Theme: Consumer Financial Constraints and Economic Uncertainty

Experts in most organizations point out that high unemployment levels, poverty and inflation reduce the purchasing power of clients. This, in turn, means low insurance policy demand, particularly from the low-income bracket.

- "One of our biggest challenges is economic instability, specifically high rates of unemployment and inequality, which constrain growth in consumer purchasing power." (Participant B)
- "The socioeconomic disparity and high rate of unemployment affect the ability of a huge majority of people to pay for or acquire insurance." (Participant D)

5.12.2 Theme: Uncertainty of Policy and Regulation

Experts warn that the ever-evolving regulations and policy ambiguity in the administration create investment risk, and compliance costs.

- "Frequent change in regulation and policy uncertainty by government are major concerns." (Participant F)
- "The complex regulatory environment and uncertainty of laws that apply to insurance products continue to be major challenges." (Participant G)

5.12.3 Theme: Competitive Pressures and Market Saturation

Market saturation within the insurance sector is a serious problem. Additionally, the advent of digital-native insurers and fintech competition makes the job even harder.

- "One of the biggest challenges is market saturation in certain areas of the insurance industry." (Participant C)
- "There is intense competition in the insurance industry, especially, from digital-first entrants." (Participant D)

- "New fintech competitors are also taking away market share from traditional players." (Participant B)

5.12.4 Theme: Customers' Education and Awareness

Unfamiliarity with insurance products, particularly, in rural and under-served areas, was mentioned by several experts as a major obstacle. Inadequate outreach funds only make it worse.

- "The biggest challenge is educating the customer on the need for insurance, especially in rural areas." (Participant A)
- "Penetration of the under-served markets will be limited without significant investment in customer awareness and education campaigns." (Participant G)

5.12.5 Theme: Effects of Business Growth and Innovation

Due to the challenges, the insurers need to focus on: digital transformation, customer retention and product innovation in a bid to remain competitive and achieve growth in the market.

- "The competitive landscape forces established insurers to adopt digital technology or risk losing customers." (Participant B)
- "Product development and expansion plans can be delayed due to regulatory problems." (Participant H)
- "Customer churn increases, and businesses must incur a lot of expenditure to retain customers rather than building the market." (Participant E)



5.13 ENABLERS FOR BUSINESS GROWTH IN THE INSURANCE SECTOR

South Africa's eight CEOs of insurance businesses are providing empowering lessons that spot key enablers which drive the business expansion in today's market. Enablers centre on leveraging: digital change, customer focus, regulatory interaction, sustainability and monetary inclusion. By adopting the aforementioned factors, insurance companies will be able to remove market barriers and attain long-term success.

5.13.1 Theme: Digital Transformation and Technological Innovation

Most of the insurance companies focus on digital solution uptake and collaboration with fintech players to enhance efficiency and broaden market reach.

- "The embracing of digital technologies and Insurtech is the way forward to optimizing operating efficiencies and personalizing offerings." (Participant D)
- "Strategic partnership with fintech players will help us scale digital products and enter unpenetrated geographies." (Participant E)

5.13.2 Theme: Data-Driven Personalization and Customer-Centric Strategies

Experts emphasize customer education and the application of data analytics to maximize engagement and retention.

- "We emphasize educating customers on the importance of insurance, especially, in the low-income segments, to raise awareness and confidence." (Participant C)
- "We tailor the services to specific customer needs with big data, which enhances satisfaction and loyalty." (Participant D)

5.13.3 Theme: Regulatory Interaction and Market Evolution

It underscored the need for staying coordinated with the regulation updates in trying to advance innovations and increase market share.

- "Regulatory clarity allows us to develop products that cover underinsured segments but remain compliant." (Participant H)

5.13.4 Theme. Employee Engagement and Workforce Development

Experts emphasize the need to spend on workforce involvement and skills in a bid to preserve competitive advantage.

- "A creative and committed workforce enables us to innovate faster and enhance customer service, which results in business success." (Participant F)

5.13.5 Theme: Financial Inclusion and Social Impact

It was found that experts emphasize expanding insurance coverage through money-related inclusion and social impact programs.

- "Targeted insurance products for the underserved segments can stimulate financial literacy and sustainable business development." (Participant B & E)

5.13.6 Theme: ESG and Sustainability Practices

Several scholars extoll the role of sustainability within business strategy, according to Environmental, Social, and Governance (ESG) principles.

- "ESG practices drive investment and construct longer-term business resilience in an evolving world." (Participant G)

reduce costs and improve customer satisfaction." (Participant F)

5.14.2 Theme: Customer-Centric Innovation and Personalization

Customer focus is the central theme of OE success, for it makes a company relevant in an ever-changing world. Using data-driven intelligence and product personalization, insurers can drive customer loyalty and market share growth.

- "We continuously evolve our offerings from customer insight to stay in front of the curve." (Participant D)
- "While digital solutions enable us to deliver our services, we grow without sacrificing the human element that customers insist on." (Participant G)

5.14.3 Theme: Risk Management and Compliance with Regulations

Strong risk management and fulfilling regulatory requirements are at the heart of establishing operating stability. Regulatory reform will be challenging, but also there will be room for institutions to act accordingly and enhance the resilience of their models.

- "Operational success relies on the strength of our risk management systems and the ability of the latter to adapt to economic uncertainty." (Participant C)
- "The key to a successful strategy is to maintain the emphasis on cooperation, regulatory change, and customer expectations." (Participant E)

5.14.4 Theme: Financial Inclusion and Social Responsibility

Financial inclusion is one of the major drivers of long-term insurance industry sustainability. Insurers who invest in corporate social responsibility as well as financial education and micro-insurance policies can increase customer segments, while alleviating economic inequalities.

- "We're making investments in financial education in the lower-income brackets to meet the increased need for affordable insurance products." (Participant H)
- "Economic inequality and unemployment are problems, but our focus on accessibility and efficiency shapes what we do." (Participant D)

5.14.5 Theme: Strategic Agility and Adaptability

Having the capacity to react to economic, regulatory and market changes at speed is one of the most important factors in keeping OE activities going. Firms that remain flexible and responsive to change are more capable of managing uncertainty and capturing new opportunities. Some writers emphasize that firms need to remain flexible and responsive to the environment.

- "Keeping a lean methodology that is a combination of customer demand and operational efficiency is paramount." (Participant F)
- "In order to make sure that our OE strategy is long-lasting, we need to be flexible and constantly re-strategized in times of economic decline." (Participant C)
- "Being able to stay agile and responsive to both internal and external situations keep our strategy evergreen." (Participant B)

5.15 MODEL ADOPTION FOR OE

The following are the findings of eight experts that provided insight into the priority factors and expectations in the determination of the adoption of new models of operational excellence among insurers.

Five overarching themes emerge from the analysis of the contributions, which reflect the values and priorities that insurers deem necessary in upholding and strengthening their operations. These are: customer-centricity, digitalization, risk management, financial inclusion, and operational efficiency and scalability. The following is a breakdown of each theme supported by quotes from the experts.

5.15.1 Theme: Customer-Centricity and Personalization

One of the most crucial factors in adopting any new model is the extent to which it will suit customer-centric strategies. Experts in all sectors indicate improving customer experience with a specific emphasis on personalization. Models must, not only meet customer requirements, but also adapt to changing tastes to build loyalty and engagement.

- "We are always open to hearing new concepts and models that can, potentially, enhance our operations. If the model has the capability to make us more efficient and enhance customer experience, we would be very keen on learning more about it." (Participant G)
- "If the model offers new insights on how best to increase market penetration and loyalty, we would be more than willing to consider it." (Participant A)"A model that would help us streamline our processes and enable us to focus on tailored services to our clients would be one we'd take seriously." (Participant

F)

5.15.2 Theme: Technology Integration and Digital Transformation

The desire for models to embrace straightforward digital transformation runs through all the answers. The models that provide greater incorporation of technology or employ high-level digital tools are seen as incredibly significant, as they improve operational efficiency, scalability as well as the customer experience.

- "A model which will enable us to streamline our processes and integrate technology seamlessly" would be something we would consider very seriously. (Participant A)
- "If your proposed model could offer efficient coping strategies in addressing risk within a dynamic environment, we'd definitely be interested in adopting it." (Participant D)
- "It would have to be constructed with a vision of future-proofing our strategy and enhancing our current systems." (Participant F)

5.15.3 Theme: Risk Management and Compliance with Regulations

Because of South Africa's complex regulatory landscape, any new model must prioritize risk mitigation strategies. It must not only be able to adapt to regulatory uncertainty but also be robust enough to handle the risks that come with operational uncertainty.

- "Risk management is at the core of our business. Any new model that would enter would have to be very risk-mitigating in a changing environment." (Participant B)
- "A model that would support operational effectiveness, customer retention, and regulatory compliance would certainly be of interest to us." (Participant G)

5.15.4 Theme: Access and Financial Inclusion

Financial inclusion is also among the key parameters used to evaluate new models. Experts emphasize the importance of insuring products to become available, particularly for underinsured segments of the population in South Africa. Models that improve the availability of financial services and products are in line with the mission of companies committed to solving social inequality and increasing their customer base.

- "The most critical in South Africa is the availability of financial products, and any model that would make insurance more accessible while remaining feasible in a harsh economy would certainly be of

interest to us." (Participant E)

- "We're very interested in models that allow for department-to-department communication, operational efficiency, and being on top of compliance with regulatory change." (Participant C)

5.15.5 Theme: Operational Efficiency and Scalability

Operational effectiveness and the ability to scale new models are key to adoption. Experts look for models that deliver real benefits in terms of cost savings, improving operations, and the ability to scale up in the existing infrastructure of the business.

- "A model that provides real benefits in terms of cost savings, efficiency, and customer satisfaction would be something to consider." (Participant C)
- "Any model proposed would have to be flexible to the current structure and be able to provide efficiency and enhance customer experience." (Participant H) "An operational efficiency model. would certainly be of interest to us." (Participant E)

CHAPTER 6: FINDINGS FROM QUANTITATIVE DATA

6.1 INTRODUCTION

This chapter provides quantitative findings on the implementation of Operational Excellence (OE) rollout in the organisation, its effectiveness, amidst challenges and sustainability dimensions in the face of volatile, uncertain, complex and ambiguous (VUCA) business environments. We begin with participants' socio-demographic variables, followed by their drivers for OE, inhibitions for OE, EO communications, leadership, governance and operations performance perceptions. The discussion covers: technology utilisation, innovation and utilisation of continuous improvement for OE achievement, as well as inhibitions from within and outside affecting strategic performance. Statistical techniques such as frequency distributions, tests of assumptions, comparisons of means, factor analysis and structural equation modeling (SEM) were employed to derive relationships between demographic variables and OE constructs. Perceived areas of strength and improvement in OE rollout implementation, and evidence-based recommendations for organisational performance and competitiveness development emanate from the findings.

6.2 SOCIO-DEMOGRAPHIC INFORMATION

The largest age groups among participants were those aged 41 to 50 years (20.9%), followed by 31-40 years (20.3%), and 26-30 years (20.3%) respectively. There were more males (51.5%). The largest group of participants possessed a postgraduate degree (37%), and a significant portion held a PhD (16.7%). More than a third were black participants (34.7%), along with a smaller group of Coloureds (14.5%) and Africans (16.7%). About a quarter of participants worked for the organisation for 6-10 years (26.7%) and 16-20 years (25.7%), which suggests stable employment (Table 6.1).

Table 6.1: Frequency distribution of participants' socio-demographic characteristics

Variable	Category	Percentage
Age	<25	11,6
	26-30	20,3
	31-40	20,3

	41-50	20,9
	51-60	18,2
	>60	8,7

Total		100.0
Gender	Male	51,5
	Female	48,5
Total		100.0
Highest Qualification	Grade 12	15,4
	Diploma	30,9
	Postgrad. Degree	37,0
	PhD	16,7
Total		100.0
Race	Africa	16,7
	White	34,1
	Black	34,7
	Coloured	14,5
Total		100.0
Years with Organisation	<5	13,8
	6-10	26,7
	11-15	22,2
	16-20	25,7
	>21	11,6
Total		100.0

6.3 OE STRATEGY IMPLEMENTATION AND THE VUCA BUSINESS ENVIRONMENT

The findings suggest that most participants (40.5%) agreed and strongly agreed that technology, information systems (40.8%) and communication (42.1%) are the strongest drivers of OE success. Customers taking ownership to improve operational efficiencies for growth and innovation and continuous improvements drive OE mixed results, with a small difference between participants who agreed and strongly agreed (37.3%) and those who disagreed and strongly disagreed (39.9%). Most respondents had mixed opinions, with participants expressing divided views. The analysis revealed that most responses were between "Disagree" and "Agree," with fewer participants expressing strong opinions (either "Strongly Agree" or "Strongly Disagree") (Table 6.2).

The respondents seemed to disagree, with 39.9% stating that the organisational effectiveness (OE) strategy was not communicated effectively. Additionally, 41.8% agreed or strongly agreed that there are teamwork issues, while 36.6% identified adaptability to change as a major challenge. When it comes to barriers affecting OE success, respondents agreed that both internal factors (38.3%), and external factors are to blame. Perceptions of financial resources seem uncertain, as evidenced by neutral responses. Lastly, the company struggles with agility and resilience, with 40.5% of respondents disagreeing or strongly disagreeing with its effectiveness in these areas (Table 6.2).

Table 6.2: Frequency distribution tables of participants' responses regarding the OE Strategy Implementation and the VUCA business environment

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Operational excellence strategy implementation						
Customer received full training on OE strategy implementation	15.1%	21.5%	26.7%	24.4%	12.3%	100%
Customers now take ownership to improve operational efficiencies for growth	11.6%	28.3%	22.8%	24.1%	13.2%	100%
OE has transformed employee work culture, ethics, values and mindset.	12.2%	25.1%	26.0%	23.8%	12.9%	100%

OE has impacted positively on customer satisfaction.	15.8%	23.8%	21.5%	25.1%	13.8%	100%
OE has opened new opportunities.	13.5%	25.7%	23.8%	25.7%	11.3%	100%
Morale is very high among employees and management.	13.8%	21.5%	26.0%	27.0%	11.7%	100%
Technology is at the centre stage of successful OE implementation	12.5%	22.8%	24.1%	28.0%	12.6%	100%
Innovation and continuous improvements initiatives drive OE strategy	12.5%	25.4%	25.7%	24.5%	11.9%	100%
Information technology/systems influenced success in OE implementation	14.5%	24.8%	19.9%	27.3%	13.5%	100%
OE strategy Implementation complemented the traditional operational improvement systems to overcome challenges and barriers for growth.	11.6%	24.8%	26.0%	26.0%	11.6%	100%
Effective communication with stakeholders enabled OE strategy implementation.	12.2%	25.1%	20.6%	28.0%	14.1%	100%
Implementation roadmap evaluation						
OE strategy implementation is facing serious external VUCA environmental forces (political, economic, social, technological and environmental legislatives)	12.5%	21.9%	30.9%	25.1%	9.6%	100%
There are serious internal barriers and obstacles that impede successful OE strategy	13.2%	23.5%	25.1%	26.3%	11.9%	100%

implementation e.g. human resistance, aging equipment, non-optimisation						
Allocated Resources and financial budgets are influencing OE Strategy performance; there is adequate finance for training, consultants' services and others.	10.9%	25.4%	27.3%	24.2%	12.2%	100%
OE strategy is inconsistent, adaptive to environmental and competitors' game changes.	14.8%	24.4%	24.1%	27.3%	9.4%	100%
OE strategy was not communicated effectively and external VUCA turbulences are speedily affecting operations before internal adjustments are done.	9.0%	30.9%	24.4%	22.8%	12.9%	100%
There is no asymmetric hammonised teamwork driven by excellent stewardship for the upholding OE strategy implementation sustainability.	12.3%	19.9%	26.0%	28.9%	12.9%	100%
This company lacks dynamic response changes internally and externally with agility and resilience.	10.6%	22.2%	26.7%	30.2%	10.3%	100%

6.4 EVALUATION OF OE STRATEGY IMPLEMENTATION

Leadership communication and involvement in operational excellence (OE) strategy are inconsistent (Table 6.3). Top management effectively communicated the vision and mission to a significant extent, with 40.9% of respondents indicating this. However, only 38.6% felt that leadership cultivated a culture of operational excellence through shared values to a great extent. Employee and customer engagement in

the strategy development process was inconsistent. Regarding the competitive advantage gained from OE, 34.1% of respondents reported that OE implementation improved market position to a great or very great extent, while 39.2% indicated that the improvement was to a little or no extent, reflecting uncertainty. When it comes to fostering an OE-driven culture, 37% of respondents believed that leadership promoted such a culture to a great or very great extent, while 38.6% disagreed, stating it was to a little or no extent.

Table 6.3: Frequency distribution table of participants' responses concerning the evaluation of OE Strategy Implementation

Statement	No Extent	Little Extent	Moderate Extent	Great Extent	Very Great Extent	Total
Top management has defined and communicated the vision and mission clearly.	13.4%	24.8%	20.9%	26.4%	14.5%	100%
OE strategy implementation rollout was steered and supported by top management.	13.8%	25.4%	22.8%	26.7%	11.3%	100%
Comprehensive consultative, brainstorming was conducted in adoption of new strategies.	14.5%	20.5%	24.8%	27.3%	12.9%	100%
The organisation has gained competitive advantage in the marketplace.	10.9%	28.3%	26.7%	22.5%	11.6%	100%
I was consulted and had input in the strategy selection, hence, there was holistic concerted effort across all.	10.2%	27.7%	22.2%	27.7%	12.2%	100%
Leadership motivated customers to own OE strategy implementation while taking pride of their achievements.	13.8%	24.8%	25.4%	24.7%	11.3%	100%

Leadership has cultivated an operation of excellence culture through shared values.	10.9%	27.7%	24.4%	22.5%	14.5%	100%
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6.5 STATUS QUO OF OE MODELS

Governance structures and adherence to maintenance protocols received mixed reviews, with 42.5% of respondents finding them satisfactory while 33.1% expressed dissatisfaction. Plant efficiencies have shown some improvement, as 41.2% of participants reported satisfaction, whereas 39.2% were dissatisfied, indicating a slightly positive perception overall. When it comes to synchronization in sales and operational planning, 37.9% rated it as satisfactory, while 34.7% were dissatisfied. 37.3% felt satisfied, while 39.2% disagreed about the alignment between OE strategy and the company's vision and mission. Opinions on product quality and waste management were nearly equally divided: 37.9% expressed satisfaction, but 38.9% were dissatisfied. Delivery performance was also inconsistent, with 38% of respondents satisfied, while 38.9% expressed dissatisfaction (Table 6.4).

Table 6.4: Frequency distribution table of participants' responses regarding the status quo of OE models

Statement	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Total
Structure and governance systems support OE strategy implementation.	9.0%	24.1%	24.4%	30.9%	11.6%	100%
Entire Sales and operational planning are synchronised for cost effectiveness.	8.7%	26.0%	27.3%	27.4%	10.6%	100%
OE strategy implementation is aligned with organisation vision and mission.	11.9%	27.3%	23.5%	23.5%	13.8%	100%
Plant efficiencies and throughputs have improved; efficiencies are up.	14.8%	24.4%	19.6%	28.0%	13.2%	100%

Product quality is good and less wastages, scraps.	15.1%	23.8%	23.2%	27.0%	10.9%	100%
Maintenance schedules are adhered to.	12.2%	24.4%	20.6%	30.9%	11.9%	100%
Deliveries are now on time and in full and I am delighted with their services.	10.6%	28.3%	23.1%	26.4%	11.6%	100%

6.6 OE SUSTAINABILITY IN A VUCA BUSINESS ENVIRONMENT

More than a third (39.2%) of respondents believe that Operational Excellence (OE) can drive future improvements, while 37.6% feel the opposite, considering it to be less true or not true at all. Additionally, 40.5% of participants believe that OE requires more financial support. There is a notable uncertainty regarding leadership's role in the implementation of OE strategies. Only 31.2% think leadership's role is effective, while 41.2% are skeptical about the effectiveness of the enabling factors. Furthermore, 38.9% of respondents acknowledge that these enablers are essential, but 37.6% believe they are not or are less true. Finally, there are concerns about the sustainability of OE, with 38.6% of respondents indicating that sustainability is at risk due to both internal and external factors (Table 6.5).

Table 6.5: Frequency distribution table of participants' responses regarding OE sustainability in a VUCA business environment

Statement	Not True	Less True	Neutral	True	Very True	Total
OE can drive performance improvements into the future.	10.6%	27.0%	23.2%	26.0%	13.2%	100%
OE requires more funding to keep systems ongoing.	10.3%	27.0%	22.2%	25.4%	15.1%	100%
Continuous improvement and innovation are key for OE sustainability.	15.1%	23.2%	25.7%	23.5%	12.5%	100%

OE sustainability remains at risk due to internal and external factors, if not monitored,	10.3%	24.8%	26.4%	23.1%	15.4%	100%
Enablers must be in place for OE success in a VUCA environment.	12.5%	25.1%	23.5%	25.1%	13.8%	100%
Leadership and governance are key to OE strategy implementation in VUCA environments.	11.2%	29.9%	27.7%	20.9%	10.3%	100%

6.7 CORRELATION ANALYSIS AMONG THE CONSTRUCTS

The Anderson-Darling test was used to assess the normality of all five constructs, and all constructs except the Operational excellence model ($p < 0.05$) were normally distributed ($p > 0.05$) (Figure 6.1).

The Spearman correlation test was then used to determine if there were any correlations among constructs.

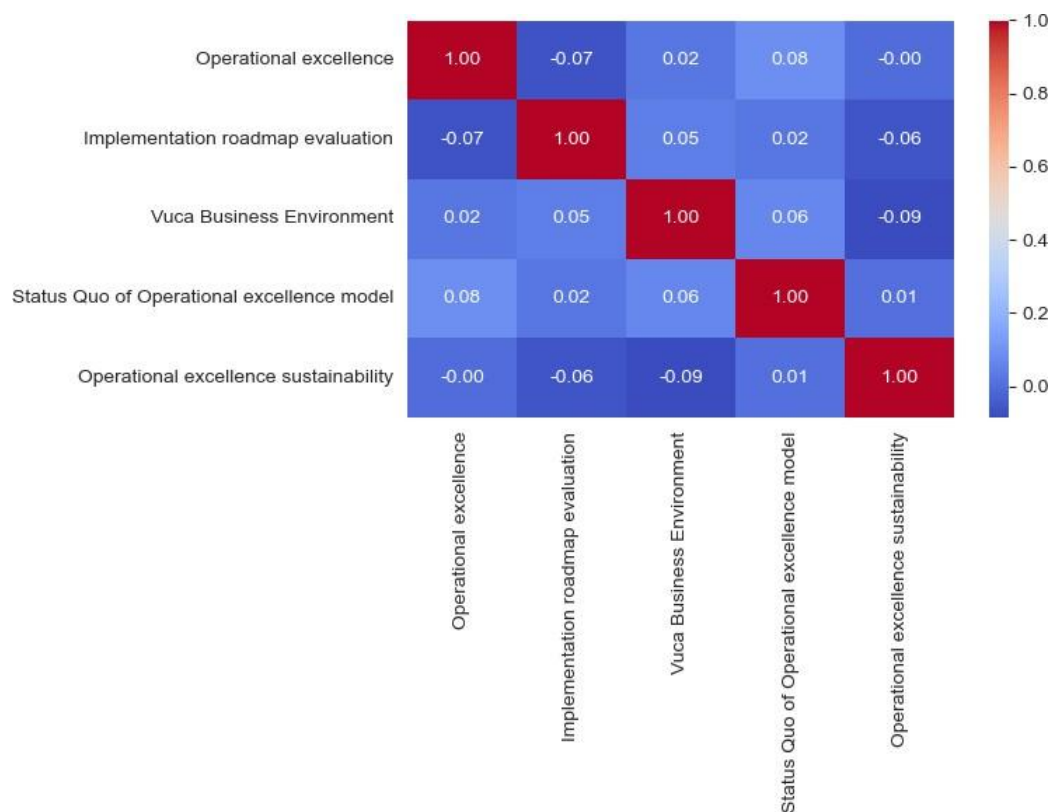


Figure 6.1: Heatmap showing correlation coefficients of all five constructs

6.8 GENDER VS CONSTRUCTS

6.8.1 Assumption Testing

6.8.1.2 Normality Assumption: The Anderson-Darling test was used to assess the normality of the data for gender across the five constructs. The results indicated that the normality assumption was not violated for all constructions, as evidenced by p-values > 0.05 (Figure 6.2).

6.8.1.3 Homogeneity of Variances: Levene's test for equality of variances showed no significant difference between the two genders for all constructs ($p > 0.05$), indicating that the assumption of homogeneity of variances was met (Figure 6.2).

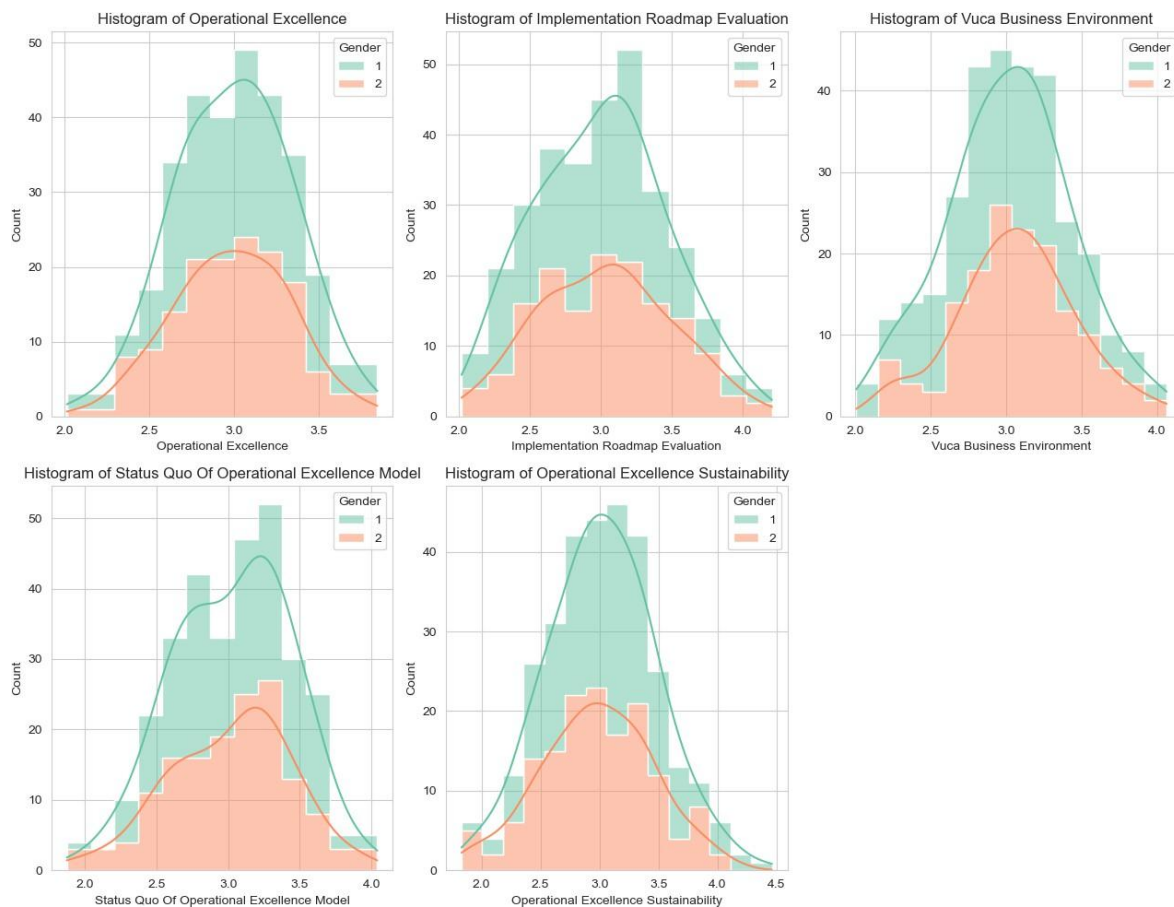


Figure 6.2: Histograms showing the distribution of gender across five different constructs

6.8.2 Comparing Means across Constructs

Null Hypothesis (H_0): The distribution of construct scores (i.e., Operational Excellence, Implementation roadmap evaluation, Vuca Business Environment, Status Quo of Operational excellence model,

Operational excellence sustainability) is the same for males and females.

Alternative Hypothesis (H_A): At least one construct's distribution differs between males and females.

The Independent T-test was used to compare the distributions across constructs, given that the normality and variance assumption were not violated. The results showed no significant differences between the two sexes for all constructs ($p > 0.05$) (Figure 6.3).

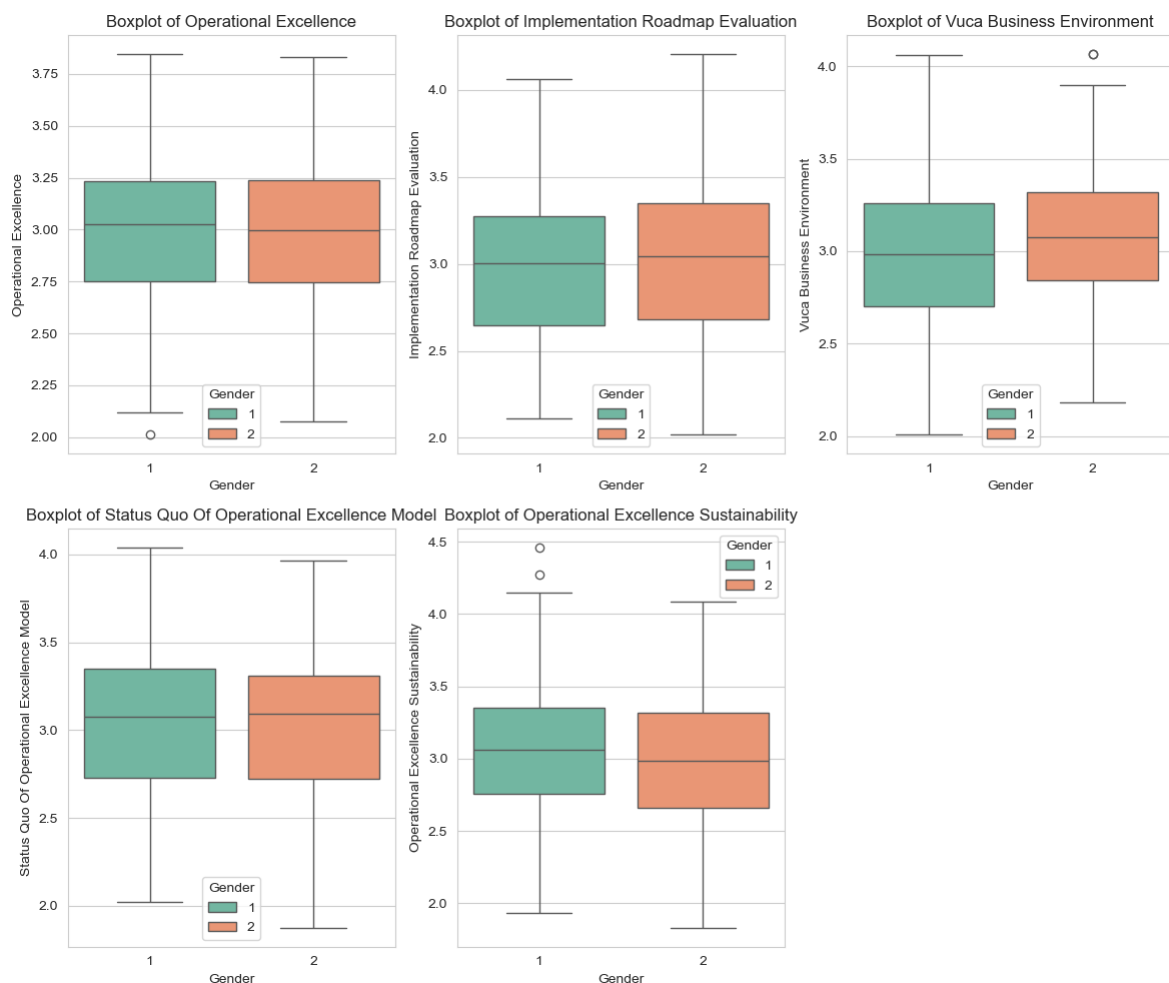


Figure 6.3: Boxplots showing the distribution of gender across five constructs

6.9 HIGHEST QUALIFICATION VS CONSTRUCTS

6.9.1 Assumption Testing

Normality Assumption: The Anderson-Darling test was used to assess the normality of the data for the highest qualification across the five constructs. The results indicated that the normality assumption was

not violated for all levels of qualification ($p > 0.05$) except for the post-grad degree distribution (Status Quo of Operational Excellence Model) ($p < 0.05$) (Figure 6.4).

Homogeneity of Variances: Levene's test for equality of variances showed no significant difference between the qualification levels of all constructs ($p > 0.05$), indicating that the assumption of homogeneity of variances was met.

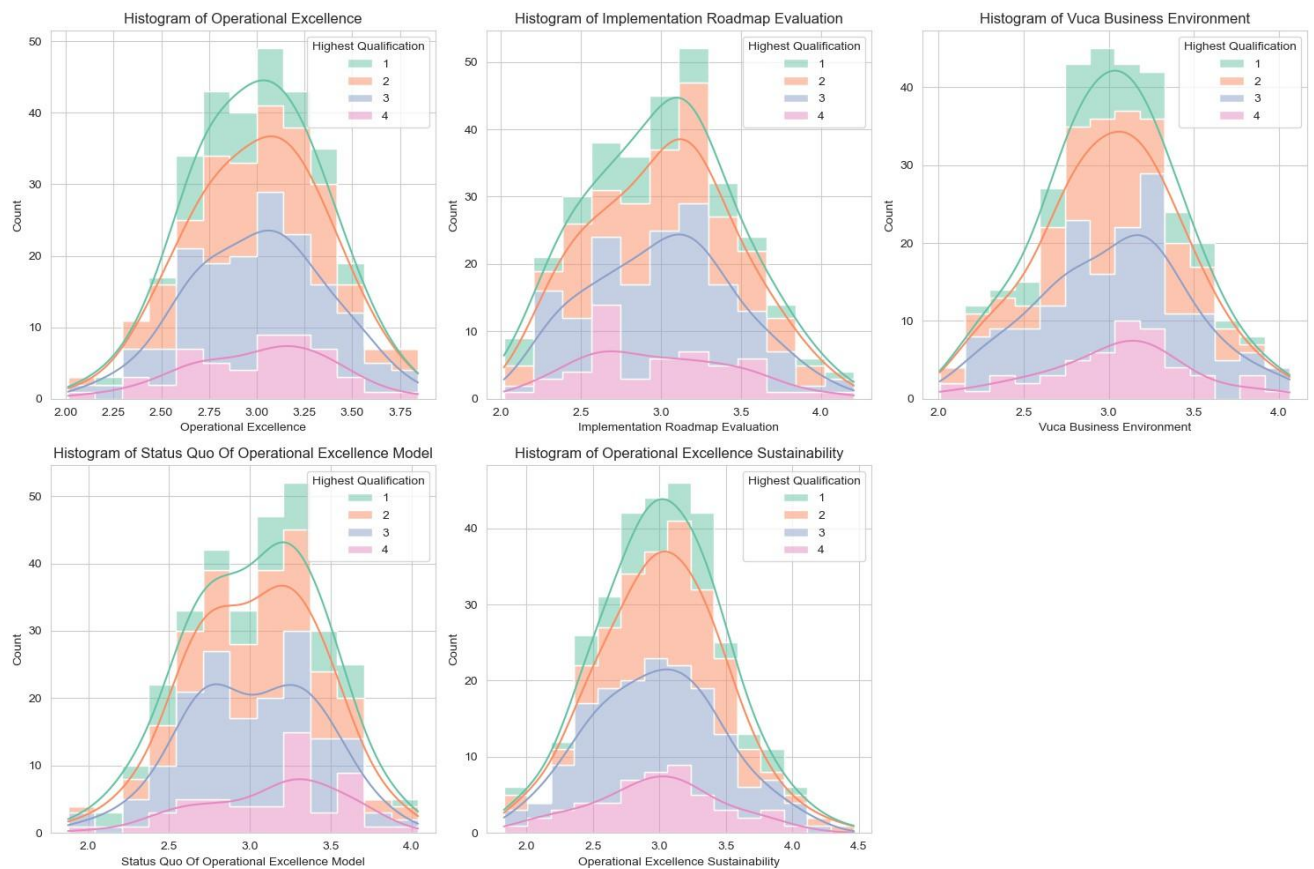


Figure 6.4: Histograms showing the distribution of participant qualification levels across five different constructs

6.9.2 Comparing means across constructs

Null Hypothesis (H_0): The distribution of construct scores (i.e., Operational Excellence, Implementation roadmap evaluation, Vuca Business Environment, Status Quo of Operational excellence model, Operational excellence sustainability) is the same for all qualification levels.

Alternative Hypothesis (H_A): At least one construct's distribution differs for all qualification levels.

The Kruskal Wallis Test was used to compare the qualification levels for the Status Quo of Operational Excellence Model construct. The results showed no significant difference ($p > 0.05$). The one-way ANOVA test was used to compare qualification level distributions for those that met assumptions. The results showed no significant difference ($p > 0.05$) (Figure 6.5).

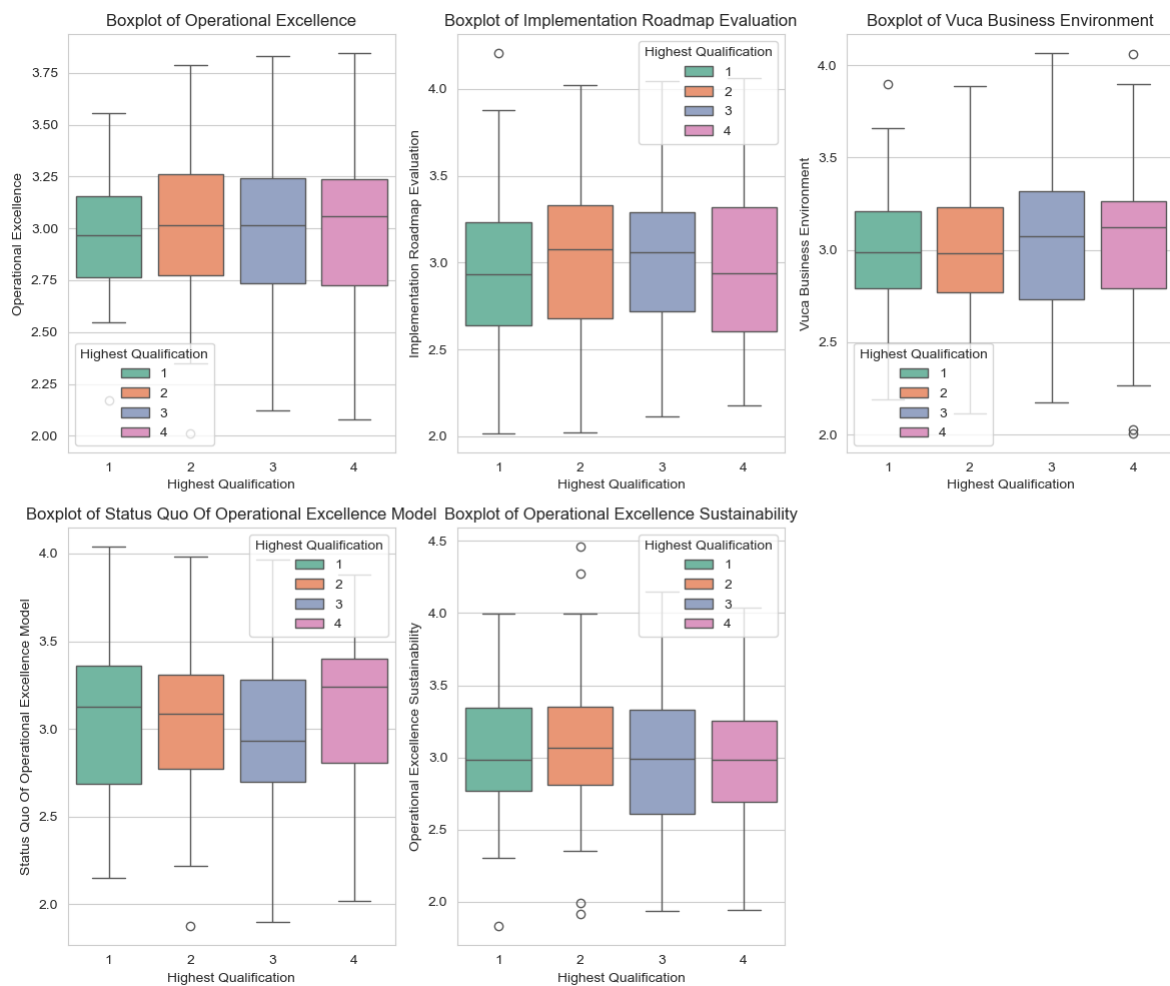


Figure 6.5: Boxplots showing the distribution of qualification levels across five constructs

6.10 AGE VS CONSTRUCTS

6.10.1 Assumption Testing

Normality Assumption: The Anderson-Darling test was used to assess the normality of age groups for all five constructs. The results indicated that the normality assumption was not violated for all levels of qualification ($p > 0.05$) except for ages below 25 (Vuca Business Environment) and the age group 31-40 (Implementation Roadmap Evaluation) ($p < 0.05$) (Figure 6.6).

Homogeneity of Variances: Levene's test for equality of variances showed no significant difference between all ages for all constructs ($p > 0.05$), indicating that the assumption of homogeneity of variances was met.

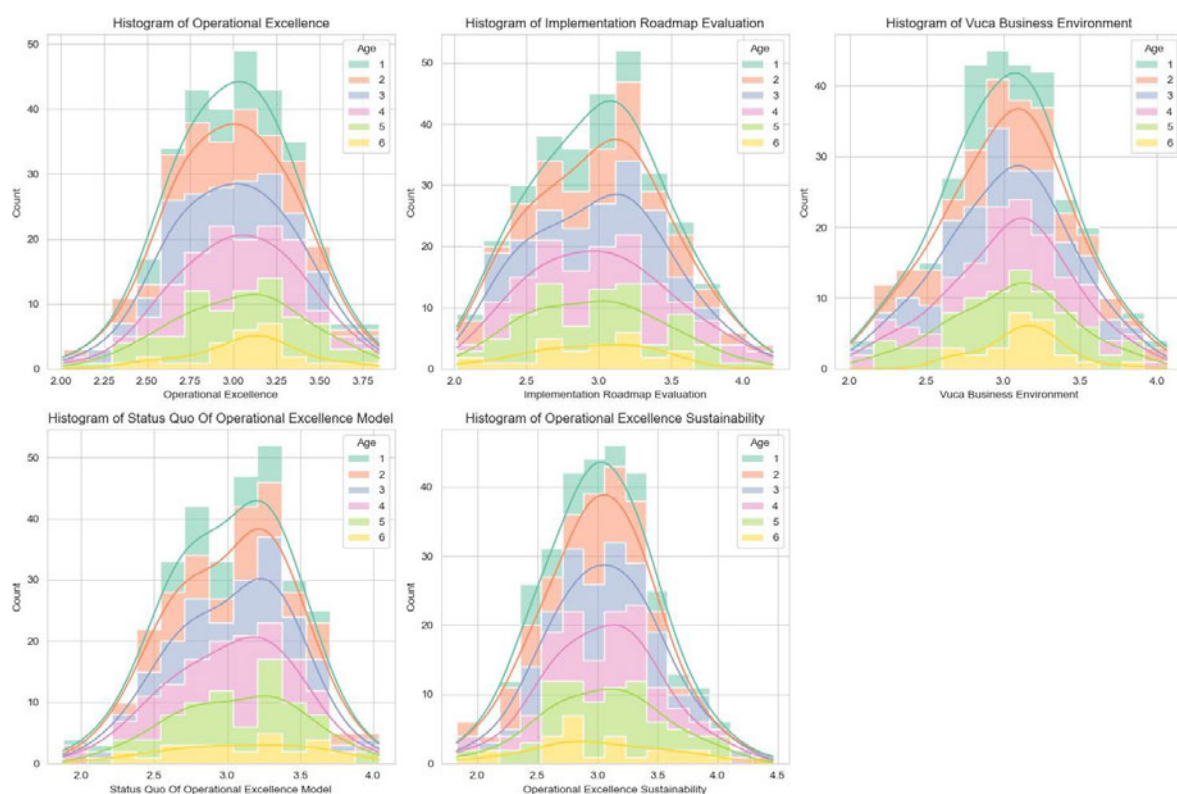


Figure 6.6: Histograms showing the distribution of participants' age across five different constructs

6.10.2 Comparing means

Null Hypothesis (H_0): The distribution of construct scores (i.e., Operational Excellence, Implementation roadmap evaluation, Vuca Business Environment, Status Quo of Operational excellence model, Operational excellence sustainability) is the same across all ages.

Alternative Hypothesis (H_A): At least one construct's distribution differs across all ages. The Kruskal-

Wallis Test was used to compare age groups of constructions that violated assumptions. The results showed no significant difference ($p > 0.05$). The one-way ANOVA test was used to compare age group distributions for those that met assumptions. The results showed no significant difference ($p > 0.05$) (Figure 6.7).

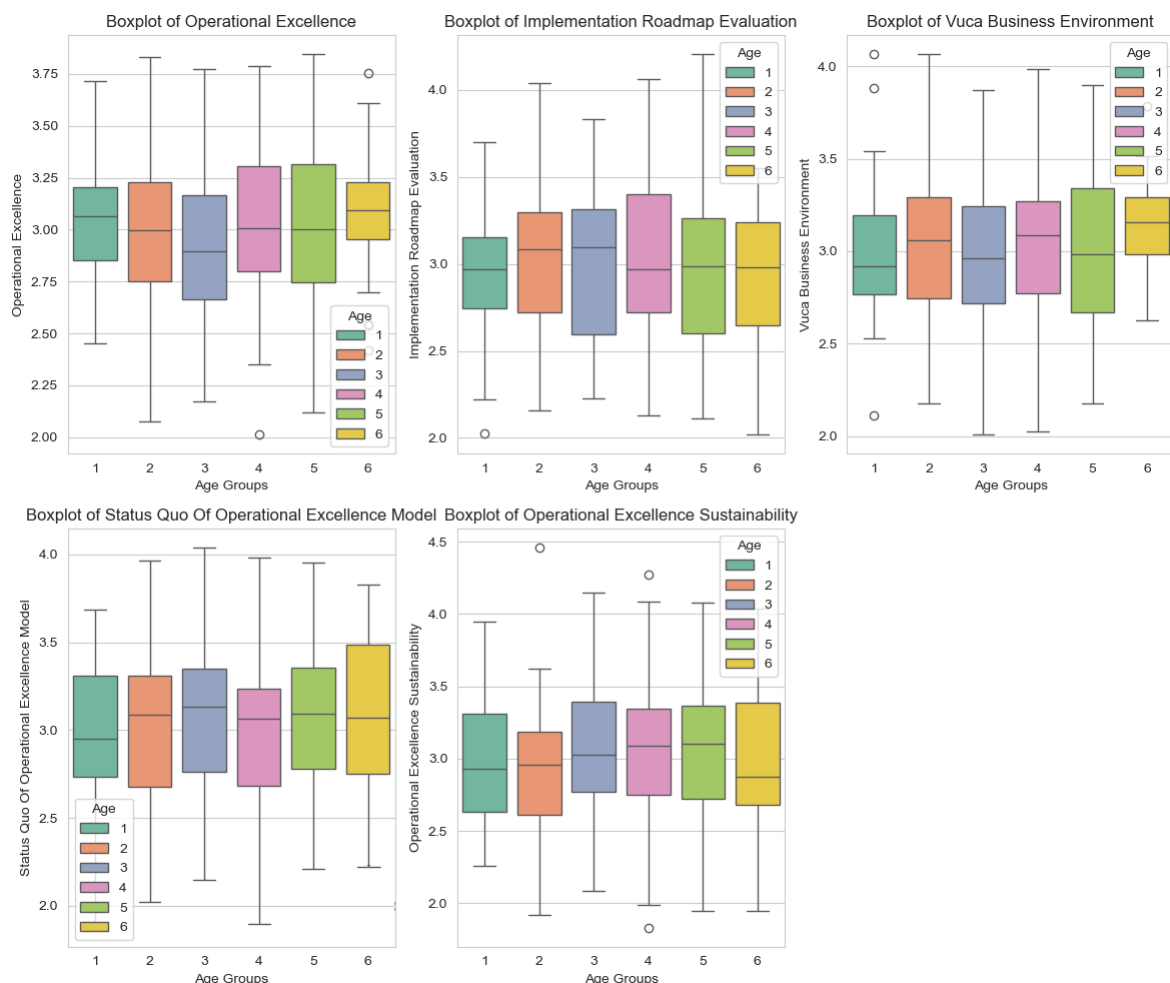


Figure 6.7: Boxplots showing the distribution of age groups across five constructs

6.11 YEAR WITH ORGANISATION VS CONSTRUCTS

Normality Assumption: The Anderson-Darling test was conducted to evaluate the normality of the data regarding the number of years individuals had been with the organisation across all five constructs. The results showed that the normality assumption was not violated ($p > 0.05$), except for the category of individuals with 21 or more years in the organisation concerning operational excellence sustainability ($p < 0.05$) (Figure 6.8).

Homogeneity of Variances: Levene’s test for equality of variances showed no significant difference for all categories of years within the organisation constructs ($p > 0.05$), indicating that the assumption of homogeneity of variances was met.

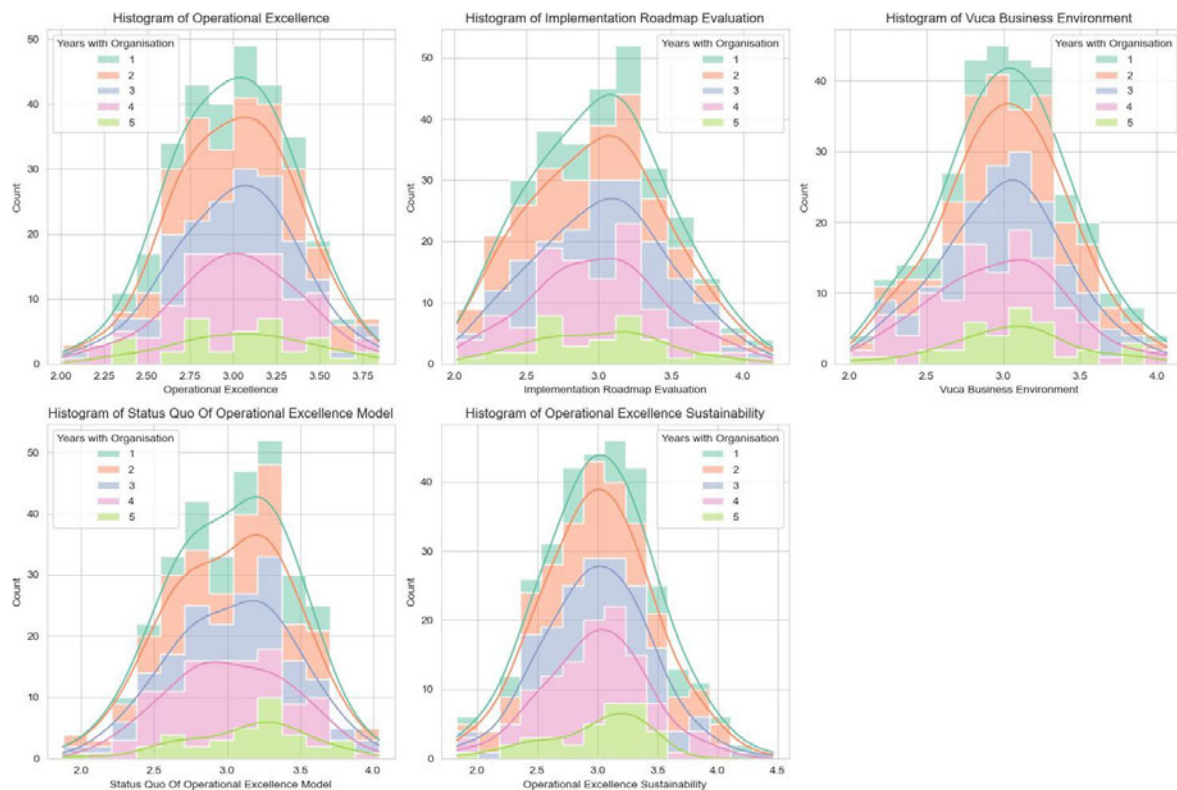


Figure 6.8: Histograms showing the distribution of years within the organisation for five different constructs

6.11.1 Comparing means

Null Hypothesis (H0): The distributions of construct scores—specifically, Operational Excellence, Implementation Roadmap Evaluation, VUCA Business Environment, Status Quo of the Operational Excellence Model, and Operational Excellence Sustainability, are the same across different years within the organisation.

Alternative Hypothesis (HA): At least one construct’s distribution differs across years within the organisation.

The Kruskal-Wallis Test was used to compare years within the organisation for all constructions that violated assumptions. The results showed no significant difference ($p > 0.05$). The one-way ANOVA test was used to compare years within the organisation for all constructions that met assumptions. The results showed no significant difference ($p > 0.05$) (Figure 6.9).

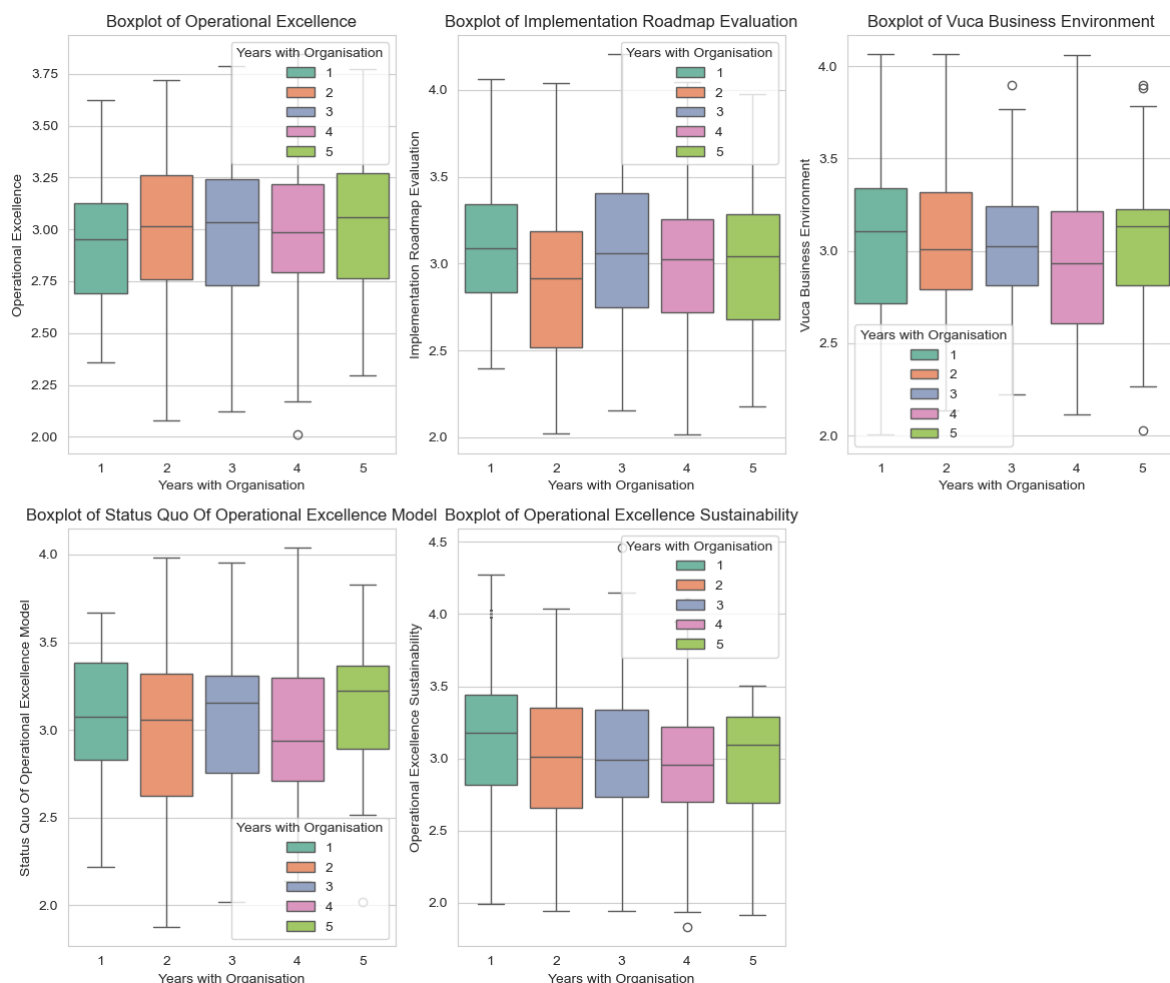


Figure 6.9: Boxplots showing the distribution of years within an organisation across five constructs

6.12 RACE VS CONSTRUCTS

6.12.1 Assumption Testing

Normality Assumption: The Anderson-Darling test was used to assess the normality of the data for all races for the five constructs. The results indicated that the normality assumption was not violated for all races ($p > 0.05$).

Homogeneity of Variances: Levene's test for equality of variances showed no significant difference between races for all constructs ($p > 0.05$), indicating that the assumption of homogeneity of variances was met (Figure 6.10).

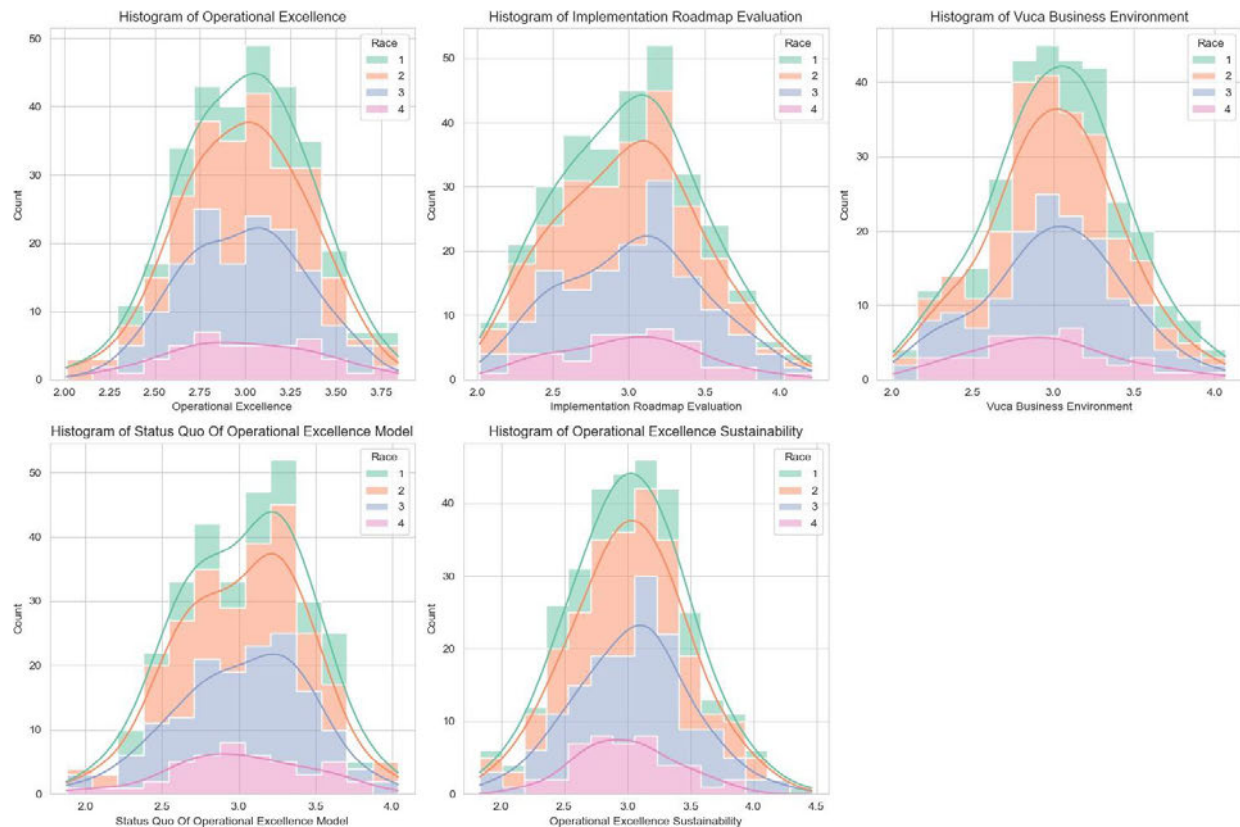


Figure 6.10: Histograms showing the distribution of races for five different constructs

6.12.2 Comparing means

Null Hypothesis (H_0): The distribution of construct scores (i.e., Operational Excellence, Implementation roadmap evaluation, Vuca Business Environment, Status Quo of Operational excellence model, Operational excellence sustainability) is the same for all races (Figure 6.11).

Alternative Hypothesis (H_A): At least one construct's distribution differs for all races.

The one-way ANOVA test was used to compare races for all constructs. The results showed no significant difference ($p > 0.05$).

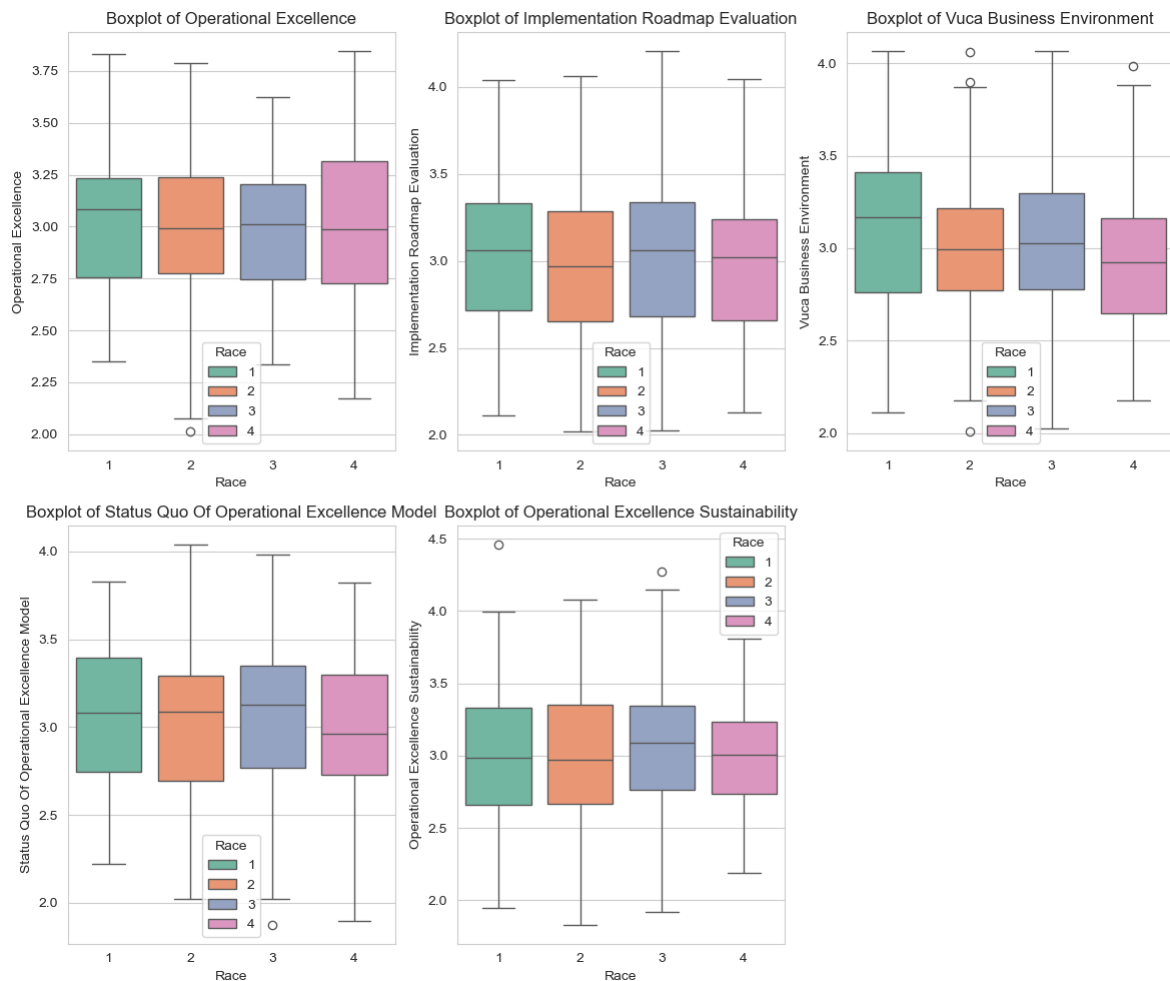


Figure 6.11: Boxplots showing the distribution of race in five constructs

6.13 FACTOR ANALYSIS

The factor analysis results indicate that different sets of variables (SE, RE, VBE, SQ, OES) were analysed, separately, with varying numbers of retained factors. The SE variables retained six factors, while the RE, VBE, SQ and OES variables each retained three factors. The first factor in each set explains the largest proportion of variance, which is a common pattern in exploratory factor analysis. However, the presence of negative eigenvalues suggests potential issues such as over-factoring or a lack of strong underlying dimensions with factor extraction. Additionally, the high uniqueness values (>0.9) for many variables suggest that some items are not well-explained by the extracted factors, which may indicate weak construct validity.

The Likelihood Ratio (LR) test results for the factor models are non-significant ($p > 0.05$), meaning that the models are not significantly different from an independent model. This suggests that the factor structure fits the data reasonably well. However, given the high uniqueness scores, some variables may

not contribute effectively to their respective factors, potentially leading to model refinement needs.

Table 6.6: Factor analysis results

Factor analysis/correlation			Number of obs = 311	
Method: principal factors			Retained factors = 6	
Rotation: (unrotated)			Number of params = 51	
Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	0.39994	0.15158	1.0267	1.0267
Factor 2	0.24836	0.06262	0.6376	1.6643
Factor 3	0.18574	0.05502	0.4768	2.1412
Factor 4	0.13072	0.05612	0.3356	2.4767
Factor 5	0.07460	0.03414	0.1915	2.6683
Factor 6	0.04046	0.08070	0.1039	2.7721
Factor 7	-0.04024	0.00510	-0.1033	2.6688
Factor 8	-0.04534	0.12880	-0.1164	2.5525
Factor 9	-0.17413	0.03361	-0.4470	2.1054
Factor 10	-0.20774	0.01511	-0.5333	1.5721
Factor 11	-0.22285	.	-0.5721	1.0000

LR test: independent vs. saturated: $\chi^2(55) = 60.80$ Prob> $\chi^2 = 0.2750$

Factor loadings (pattern matrix) and unique variances

Table 6.7: Factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Uniqueness
SE1	-0.1469	0.1309	0.1692	0.1215	0.0257	0.0825	0.9104
SE2	-0.1367	0.0838	-0.0510	0.0535	0.0661	0.1132	0.9516
SE3	0.3543	0.0447	-0.1307	0.0644	-0.0071	0.0234	0.8507
SE4	-0.2902	0.1286	0.1208	-0.0673	-0.0524	-0.0346	0.8762
SE5	0.0703	0.0919	-0.0913	-0.0918	-0.0584	0.1125	0.9538
SE6	-0.0357	0.0465	0.0156	0.2413	-0.1342	-0.0191	0.9197
SE7	0.1884	0.2210	0.1801	-0.0425	0.0586	-0.0367	0.8767
SE8	0.1183	-0.1391	0.0934	0.1653	0.1251	-0.0074	0.9149
SE9	-0.1040	0.1751	-0.1294	-0.0018	0.1554	-0.0336	0.9165
SE10	0.2881	0.1588	0.1532	-0.0423	-0.0374	0.0132	0.8650
SE11	0.0201	-0.2664	0.1814	-0.0826	0.0265	0.0581	0.8848

Table 6.8: Factor loadings

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	0.23909	0.09586	2.0187	2.0187

Factor 2	0.14323	0.05220	1.2093	3.2280
Factor 3	0.09103	0.11265	0.7686	3.9966
Factor 4	-0.02162	0.06299	-0.1825	3.8141
Factor 5	-0.08461	0.02131	-0.7143	3.0998
Factor 6	-0.10591	0.03686	-0.8943	2.2055
Factor 7	-0.14278	.	-1.2055	1.0000

LR test: independent vs. saturated: $\chi^2(21) = 18.62$ Prob> $\chi^2 = 0.6098$

Factor loadings (pattern matrix) and unique variances

Table 6.9: Factor loadings (pattern matrix) and unique variances

Variable	Factor 1	Factor 2	Factor 3	Uniqueness
RE 1	-0.0595	0.0778	0.1857	0.9559
RE 2	0.2025	0.1950	0.0215	0.9205
RE 3	-0.0548	0.1987	-0.1423	0.9372
RE 4	0.2797	-0.0525	-0.0304	0.9181
RE 5	0.2416	0.1309	-0.0125	0.9243
RE 6	-0.2336	0.1657	-0.0597	0.9144
RE 7	-0.0199	0.1109	0.1766	0.9561

. factor VBE1 VBE2 VBE3 VBE4 VBE5 VBE6 VBE7

(obs=311)

Table 6.10: Factor analysis

Factor analysis/correlation	Number of obs = 311
Method: principal factors	Retained factors = 3
Rotation: (unrotated)	Number of params = 18

Table 6.11: Factor analysis

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	0.18164	0.04370	1.9598	1.9598
Factor 2	0.13794	0.06243	1.4884	3.4482
Factor 3	0.07551	0.07959	0.8147	4.2629
Factor 4	-0.00408	0.04064	-0.0441	4.2189
Factor 5	-0.04473	0.05378	-0.4826	3.7363
Factor 6	-0.09850	0.05660	-1.0628	2.6735
Factor 7	-0.15510	.	-1.6735	1.0000

LR test: independent vs. saturated: $\chi^2(21) = 14.33$ Prob> $\chi^2 = 0.8552$

Factor loadings (pattern matrix) and unique variances

Table 6.12: Factor loadings (pattern matrix) and unique variances

Variable	Factor 1	Factor 2	Factor 3	Uniqueness
VBE1	-0.1681	0.0603	0.1470	0.9465
VBE2	0.0155	0.2413	-0.0688	0.9368
VBE3	-0.1682	0.2107	0.0610	0.9236
VBE4	0.1207	-0.0839	0.1597	0.9529
VBE5	0.2484	0.1111	-0.0372	0.9246
VBE6	0.1716	0.0801	0.1347	0.9460
VBE7	0.1384	0.0767	0.0209	0.9745

. factor SQ1 SQ2 SQ3 SQ4 SQ5 SQ6 SQ7

(obs=311)

Table 6.13: Factor Analysis

Factor analysis/correlation	Number of obs = 311
Method: principal factors	Retained factors = 3
Rotation: (unrotated)	Number of params = 18

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	0.24372	0.02102	1.5913	1.5913
Factor2	0.22270	0.15222	1.4540	3.0453
Factor3	0.07048	0.09092	0.4602	3.5054
Factor4	-0.02044	0.05242	-0.1335	3.3720
Factor5	-0.07286	0.05317	-0.4757	2.8963
Factor6	-0.12603	0.03838	-0.8228	2.0734
Factor7	-0.16441	.	-1.0734	1.0000

LR test: independent vs. saturated: $\chi^2(21) = 24.12$ Prob> $\chi^2 = 0.2874$

Factor loadings (pattern matrix) and unique variances

Table 6.14 Factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Factor3	Uniqueness
SQ1	0.0310	0.2381	-0.0572	0.9391
SQ2	-0.0820	-0.1417	0.1625	0.9468
SQ3	0.2460	-0.0261	0.1489	0.9166
SQ4	-0.0071	0.2890	0.0407	0.9148
SQ5	-0.2806	0.1601	0.0775	0.8896
SQ6	0.1980	0.1895	0.0818	0.9182
SQ7	0.2398	-0.0130	-0.0655	0.9380

. factor OES1 OES2 OES3 OES4 OES5 OES6

(obs=311)

Table 6.15: Factor Analysis

Factor analysis/correlation	Number of obs = 311
Method: principal factors	Retained factors = 3
Rotation: (unrotated)	Number of params = 15

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor1	0.17052	0.05296	2.1549	2.1549
Factor2	0.11756	0.07248	1.4856	3.6404
Factor3	0.04508	0.05854	0.5697	4.2101
Factor4	-0.01346	0.06263	-0.1701	4.0400
Factor5	-0.07610	0.08838	-0.9616	3.0784
Factor6	-0.16447	.	-2.0784	1.0000

LR test: independent vs. saturated: $\chi^2(15) = 12.14$ Prob> $\chi^2 = 0.6684$

Factor loadings (pattern matrix) and unique variances

Table 6.16: Factor loadings (pattern matrix) and unique variances

Variable	Factor1	Factor2	Factor3	Uniqueness
OES1	0.0256	0.1870	-0.1147	0.9512
OES2	0.2111	0.0992	0.0304	0.9447
OES3	-0.2186	0.0114	0.0266	0.9514
OES4	0.2732	-0.0342	0.0135	0.9240
OES5	-0.0062	0.1007	0.1735	0.9597
OES6	-0.0536	0.2476	0.0046	0.9358

In the Structural Equation Modeling (SEM) results, the relationship between OES (Organizational Engagement Score) and VBE (Variable Being Evaluated) is not statistically significant ($p = 0.159$). The negative coefficient (-0.6296) suggests a possible inverse relationship, but the lack of statistical significance means this effect cannot be reliably interpreted. Similarly, several measurement model indicators have weak factor loadings, such as OES1 (0.14) and OES3 (-0.11), which indicate that these variables do not strongly measure the underlying construction. Additionally, most variables exhibit high uniqueness, meaning that much of their variance is unexplained by the model, further questioning the measurement validity.

The model fit indices provide mixed results. The chi-square test for the baseline model ($p = 0.626$) suggests a good model fit, while the Standardized Root Mean Squared Residual (SRMR) of 0.044 is within the acceptable range, indicating a reasonable fit. However, key fit indices such as Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) are missing, which may point to estimation issues or model overfitting. The Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) are also reported, but these are mainly useful for comparing alternative models rather than assessing absolute fit.

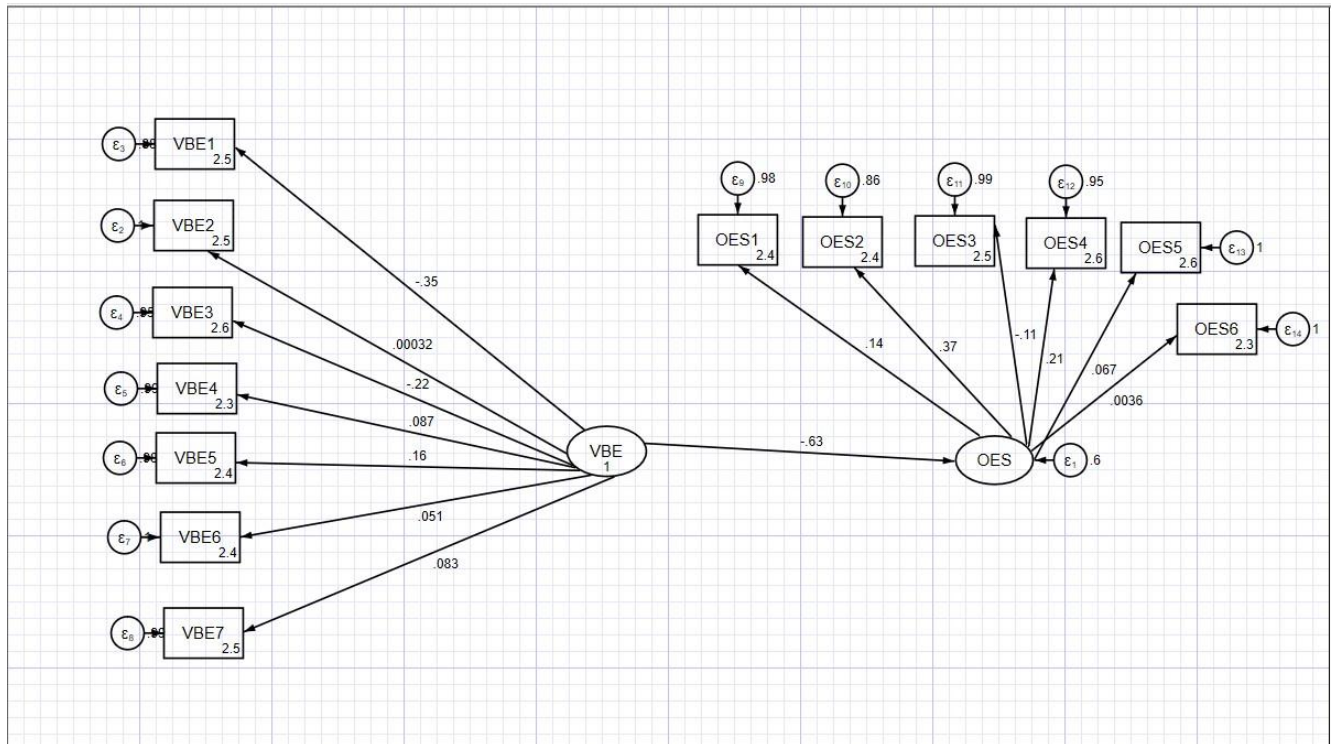


Figure 6.12: Structural equation model

Table 6.17: Structural equation model output

Structural equation model		Number of obs = 311			
Estimation method: ml					
Log likelihood = -6540.6894					
(1) [OES1]OES = 1					
(2) [VBE2]VBE = 1					

		OIM			
Standardized		Coefficient	std. err.	z	P> z [95% conf. interval]
-----+-----					
Structural					
OES					
VBE		-.6296175	.4473892	-1.41	0.159 -1.506484 .2472492

-----+-----.						
Measurement						
OES1						
OES	.1401925	.1491524	0.94	0.347	-.1521407	.4325258
_cons	2.445851	.1132805	21.59	0.000	2.223826	2.667877
-----+-----.						
OES2						
OES	.3731173	.205692	1.81	0.070	-.0300316	.7762662
_cons	2.374953	.1108286	21.43	0.000	2.157733	2.592173
-----+-----.						
OES3						
OES	-.1110056	.1378226	-0.81	0.421	-.381133	.1591217
_cons	2.549839	.1169111	21.81	0.000	2.320697	2.77898
-----+-----.						
OES4						
OES	.2130747	.1423557	1.50	0.134	-.0659373	.4920867
_cons	2.574025	.1177593	21.86	0.000	2.343221	2.804829
-----+-----.						
OES5						
OES	.0665583	.129948	0.51	0.609	-.188135	.3212517
_cons	2.555832	.1171216	21.82	0.000	2.326278	2.785386
-----+-----.						
OES6						
OES	.0035826	.1398036	0.03	0.980	-.2704274	.2775927
_cons	2.32934	.109264	21.32	0.000	2.115186	2.543494
-----+-----.						
VBE2						
VBE	.0003193	.0019515	0.16	0.870	-.0035056	.0041442
_cons	2.496288	.1150385	21.70	0.000	2.270816	2.721759

```

-----+-----
VBE1 |
    VBE | -.3498358 .1951602 -1.79 0.073 -.7323426 .0326711
    _cons | 2.462523 .1138581 21.63 0.000 2.239366 2.685681
-----+-----

VBE3 |
    VBE | -.2213832 .1494017 -1.48 0.138 -.5142051 .0714387
    _cons | 2.592349 .118403 21.89 0.000 2.360283 2.824414
-----+-----

VBE4 |
    VBE | .0871 .1485619 0.59 0.558 -.2040759 .378276
    _cons | 2.283546 .1076984 21.20 0.000 2.072461 2.494631
-----+-----

VBE5 |
    VBE | .1565556 .1372418 1.14 0.254 -.1124334 .4255447
    _cons | 2.447557 .1133415 21.59 0.000 2.225412 2.669703
-----+-----

VBE6 |
    VBE | .0514405 .1356056 0.38 0.704 -.2143415 .3172226
    _cons | 2.394901 .1115193 21.48 0.000 2.176327 2.613475
-----+-----

VBE7 |
    VBE | .0829346 .1332477 0.62 0.534 -.178226 .3440952
    _cons | 2.458322 .1137162 21.62 0.000 2.235442 2.681202
-----+-----

```

ar(e.OES1)	.9803461	.0418201	.9017132	1.065836
var(e.OES2)	.8607835	.1534945	.6068874	1.220899
var(e.OES3)	.9876777	.0305982	.9294908	1.049507
var(e.OES4)	.9545992	.0606648	.8428051	1.081222
var(e.OES5)	.99557	.0172982	.9622369	1.030058
var(e.OES6)	.9999872	.0010017	.9980257	1.001952
var(e.VBE2)	.9999999	1.25e-06	.9999975	1.000002
var(e.VBE1)	.8776149	.136548	.6469425	1.190536
var(e.VBE3)	.9509895	.0661501	.8297874	1.089895
var(e.VBE4)	.9924136	.0258795	.9429651	1.044455
var(e.VBE5)	.9754903	.042972	.8948003	1.063457
var(e.VBE6)	.9973539	.0139512	.9703814	1.025076
var(e.VBE7)	.9931218	.0221017	.9507345	1.037399
var(e.OES)	.6035818	.5633681	.0968826	3.760333
var(VBE)	1	.	.	.

Warning: The LR test of model vs. saturated is not reported because the				
fitted model is not full rank. There appears to be 1 more fitted				
parameter than the data can support.				
.				
. estat gof, stats(all)				

Fit statistic		Value	Description	
-----+-----				
Likelihood ratio				

chi2_ms(.) | . model vs. saturated
p > chi2 | .
chi2_bs(78) | 73.397 baseline vs. saturated
p > chi2 | 0.626

-----+-----
Population error |
RMSEA | . Root mean squared error of approximation
90% CI, lower bound | 0.000
upper bound | .
pclose | . Probability RMSEA <= 0.05

-----+-----
Information criteria |
AIC | 13159.379 Akaike's information criterion
BIC | 13305.231 Bayesian information criterion

-----+-----
Baseline comparison |
CFI | . Comparative fit index
TLI | . Tucker–Lewis index

-----+-----
Size of residuals |
SRMR | 0.044 Standardized root mean squared residual
CD | 0.471 Coefficient of determination

6.14 SUMMARY OF THE CHAPTER

Quantitative results present an educated labour force with postgraduate degrees, near gender balance, and high racial diversity. Technology, information systems, and communications were drivers for success in OE but were at risk from concerns regarding poor strategy communication, teamwork, and inability to adapt to change. Leadership involvement, plant efficiencies, product quality, and delivery performance perceptions were inconclusive. Though some respondents endorsed OE's contribution toward market competitiveness enhancement, repeated doubt regarding long-term sustainability of initiatives recurred due to poor financial support and enabling conditions. Statistical tests (t-tests, ANOVA, Kruskal-Wallis) could not discern significant differences in OE perceptions by gender, age, qualification, race, and years of service, indicating homogeneous perception among demographic categories. Factor analysis indicated poor construct validity among some items, and SEM results indicated non-significant relationships between important constructs, with high uniqueness values indicating room for improvement in measurement. Overall, results mirror moderate success of OE intervention, but highlight need for enhanced leadership involvement as well as better communications, enabling linkage, and adaptability measures for sustainable long-term viability in a VUCA world.

CHAPTER 7: DISCUSSION ON QUANTITATIVE AND QUALITATIVE FINDINGS

7.1 INTRODUCTION

This chapter integrates quantitative and qualitative findings into a single, cohesive discussion. The merged structure groups insights under shared themes, linking numerical evidence from surveys with rich narratives from interviews to provide a deeper understanding of OE in the South African insurance sector. Qualitative analysis of the interviews resulted in the identification of several key themes that were associated with the implementation of operational excellence. These themes were then translated into measurable survey items that formed the quantitative tool for the study. The themes formed latent constructions that were further subjected to structural equation modeling (SEM), as discussed in the next section. This ensured that the quantitative tool was informed by the qualitative analysis for construct validity (Table 7.1).

Table 7.1: Data integration

Qualitative Theme	Example Interview Insight	Conceptual Meaning	Survey Items (Indicators)	SEM Latent Variable
Leadership commitment	Executives emphasised visible leadership support for operational excellence initiatives.	Leadership drives organisational alignment and OE implementation.	• Senior leaders actively support OE initiatives • Leadership communicates OE strategy clearly • Leaders allocate resources for OE initiatives	Leadership Effectiveness
Employee engagement	Employees highlighted involvement in process improvement and decision-making.	Engagement encourages participation in continuous improvement.	• Employees contribute ideas for process improvement • Staff feel empowered to improve workflows • Employees are motivated to support OE initiatives	Employee Engagement
Digital transformation	Experts discussed automation, digital platforms, and analytics as critical enablers.	Digital systems enhance efficiency, decision-making, and innovation.	• Digital technologies improve operational efficiency • Automation reduces manual processes • Data analytics supports strategic decisions	Digital Capability

Communication and collaboration	Respondents stressed clear communication across departments.	Effective communication aligns teams and reduces implementation barriers.	• OE goals are clearly communicated • Cross-department collaboration is effective • Feedback channels support improvement initiatives	Strategic Communication
Organisational culture	Participants described a culture supporting innovation and improvement.	Culture reinforces behaviour needed for OE sustainability.	• Organisation encourages continuous improvement • Employees embrace change and innovation • Learning from mistakes is encouraged	Organizational Culture
Resistance to change	Some employees were hesitant in adopting new systems and processes.	Change management capacity determines OE success.	• Organisation manages change effectively • Training prepares employees for new systems • Employees adapt quickly to organisational change	Change Management Capability
Process optimisation	Participants emphasised lean practices and workflow improvements.	Continuous improvement enhances operational performance.	• Processes are regularly reviewed for improvement • Waste reduction initiatives are implemented • Standardised procedures improve efficiency	Process Efficiency
Customer centricity	Experts emphasised delivering value and improving customer experience.	Customer focus drives operational excellence outcomes.	• Customer needs guide service design • Customer feedback improves operational processes • Customer satisfaction is prioritised	Customer Value Orientation

7.2 TECHNOLOGY AND DIGITAL TRANSFORMATION

The findings indicate that technology (40.5%), information systems (40.8%) and communication (42.1%) are the strongest drivers of OE success. This aligns with contemporary literature emphasizing the role of digital transformation in enhancing operational efficiencies across various industries (Davenport & Harris,

2020; Brynjolfsson & McAfee, 2021). The integration of technology and information systems has been widely recognized as a key enabler of productivity, streamlining processes, and reducing operational costs (Porter & Heppelmann, 2018). Effective communication further supports these technological advancements by facilitating coordination, reducing errors and improving decision-making processes (Daft & Lengel, 2022).

Recent studies underscore the pivotal role of digital transformation in improving OE. According to Ghaleb et al. (2021), organizations that invest in advanced information systems experience a significant increase in productivity and process efficiency. Similarly, automation technologies, AI, and ERP systems have been highlighted as key contributors to reducing redundancies and optimizing workflows (Parida, Sjödin & Reim, 2020). Communication, particularly within a digital infrastructure, plays a crucial role in ensuring seamless collaboration across different organizational levels, ultimately improving responsiveness and adaptability (Roberts & Grover, 2021).

The study also revealed mixed results regarding the role of customer ownership in driving OE success, with 37.3% of participants agreeing or strongly agreeing, while 39.9% disagreed or strongly disagreed. This divergence aligns with existing literature, which suggests that customer involvement in operational efficiency strategies can yield varying outcomes depending on industry context and implementation effectiveness (Prahalad & Ramaswamy, 2021). Research by Vargo and Lusch (2022) supports the idea that co-creation of value with customers can enhance operational efficiency; however, they also acknowledge potential challenges, such as misalignment of expectations and resource constraints. The mixed responses in this study suggest that while customer engagement can be beneficial, its success is contingent on structured implementation and clear communication strategies.

The variability in participant opinions, with responses ranging mostly between "Disagree" and "Agree," suggests a lack of strong consensus on certain OE drivers. This outcome is consistent with previous research indicating that organizational efficiency is influenced by multiple interdependent factors, including organizational culture, leadership and external market conditions (Kotter, 2021). The findings suggest that while technology, information systems and communication are widely recognized as efficiency enablers, the role of customer ownership and continuous improvement initiatives may be perceived differently based on individual experiences and organizational contexts (Teece, 2022).

From a theoretical perspective, these findings reinforce the resource-based view (RBV) of the firm, which posits that firms gain competitive advantage through strategic utilization of internal resources, including technology and information systems (Barney, 2021). The study also highlights the socio-technical systems theory, which suggests that technological advancements must be integrated with human and organizational factors to achieve optimal efficiency (Bostrom & Heinen, 2022).

The findings indicate several key challenges related to OE, including poor communication of the OE strategy, teamwork issues, adaptability to change, financial uncertainty and weaknesses in agility and resilience. These results align with existing literature that underscores the complexity of maintaining OE in dynamic business environments (Kotter, 2021; Teece, 2022).

The findings reveal that 36.6% of respondents identified adaptability to change as a major challenge and highlights the difficulties organizations face in navigating uncertainty and transformation. Adaptability is a key component of organizational resilience and competitiveness, particularly, in volatile environments (Teece, 2022). However, resistance to change, rigid structures, and lack of leadership support often impede adaptability (Kotter, 2021). Organizations that embrace continuous learning, flexibility, and proactive change management strategies tend to be more successful in maintaining OE (Senge, 2020).

Respondents identified both internal (38.3%) and external factors as barriers to OE success. Internal barriers such as organizational culture, leadership inefficiencies, and structural constraints can limit performance (Parida et al., 2020). External factors, including market volatility, regulatory changes and economic fluctuations also play a critical role in shaping OE (Porter & Heppelmann, 2018). The resource-based view (RBV) suggests that organizations must leverage internal capabilities while strategically responding to external pressures to achieve sustained efficiency (Barney, 2021).

The neutral responses regarding financial resources suggest uncertainty or inconsistency in financial management and allocation. Financial resources are vital for investment in technology, employee development and operational improvements (Ghaleb et al., 2021). Organizations that fail to secure stable financial backing may struggle with long-term OE and strategic execution (Prahalad & Ramaswamy, 2021). Transparency in financial planning and effective resource allocation strategies can mitigate this uncertainty (Davenport & Harris, 2020).

A significant proportion (40.5%) of respondents disagreed or strongly disagreed that the company was effective in agility and resilience. Organizational agility—the ability to respond quickly to market shifts and internal changes—is crucial for sustaining competitive advantage (Vargo & Lusch, 2022). Similarly, resilience enables firms to withstand disruptions and recover from setbacks (Brynjolfsson & McAfee, 2021). Research highlights that firms that invest in digital transformation, adaptive leadership, and innovation are more likely to demonstrate high agility and resilience (Teece, 2022; Senge, 2020).

From a theoretical perspective, these findings align with change management models such as Kotter's (2021) eight-step process, which emphasizes communication, leadership, and adaptability as critical factors in organizational success. The results also support the dynamic capabilities framework, which stresses the need for agility and continuous innovation in response to environmental uncertainties (Teece, 2022).

Hammer (2015) argues that business process reengineering is one of the core elements which enables organizations to redesign their processes to achieve significant gains in speed, cost and quality. Additionally, Davenport and Ronanki (2018) argue that artificial intelligence-based automation enhances decision-making while reducing human errors, thereby leading to improved efficiency and better service delivery. This reduction in turnaround time is in line with the ideas of Lean Six Sigma, which promote the removal of waste and non-value-added activities (George, 2019).

The integration of AI-driven support systems has streamlined processes involved in customer interactions. Virtual assistants and AI chatbots have an essential role in handling simple inquiries, hence, enabling human representatives to dedicate more time to more complex problems. As stated by McKinsey and Company (2021), AI-powered customer service tools have the potential to lower resolution time by up to 50%, significantly increasing customer satisfaction levels. Additionally, Brynjolfsson and McAfee (2017) argue that artificial intelligence enhances service personalization, enabling organizations to tailor their response to match the individual customer's unique requirements, hence improving customer relationships.

The shift to digital means in policy implementation has resulted in a reduction of administrative costs by 30%, as Participant E observed, at the same time increasing accuracy. This finding supports the claims of Davenport and Ronanki (2018) who contend that the use of automation and digitization increases efficiency in workflow and reduces human errors. The concepts of Lean Six Sigma promote the elimination of waste and inefficiency (George, 2019), thus supporting the direct conclusion that digital processes accelerate operations and lower processing costs (Hammer, 2015).

Improving procurement processes and renegotiating contracts with suppliers have been cited as effective measures in cutting costs, Participant C claims. Porter (1985) claims that cost leadership strategies, such as improvements in supply chain effectiveness, allow organizations to stay profitable while offering competitive prices. Chopra and Meindl (2019) contend that effective management of suppliers and procurement process optimization result in lower costs and improved delivery of services, hence, improving the competitive advantage of a firm in price-sensitive markets.

Results from this study concur with the argument that the use of AI-powered compliance systems has strengthened governance systems by detecting potential risks in their initial stages before they intensify. Kroll, Schneider and Weber (2021) confirm that AI-powered compliance systems enable active risk management by analyzing vast regulatory datasets and detecting inconsistencies that could lead to compliance breaches. In addition, Brown and Osborne (2019) highlight that AI-powered compliance tools enhance risk evaluation by facilitating decision-making processes and reducing human mistakes, thus enhancing stakeholder trust.

The integration of digital platforms with RPA is transforming operational efficiency in the insurance

industry. Studies have found that centralized digital platforms enable real-time integration of data, thus minimizing human errors and enhancing the effectiveness of claims processing (Davenport & Ronanki, 2018). RPA has particularly been reported to be highly effective in automating repetitive tasks, minimizing processing times and operating costs (Willcocks, Lacity, & Craig, 2017). The use of such technologies aligns with the general industry trend towards intelligent automation that improves the accuracy of fraud detection and the speed of customer service delivery (Brynjolfsson & McAfee, 2017).

Organizations seeking growth through operational excellence leverage operational data and customer information to realize effective scaling. A study by Teece (2018) highlights the importance of dynamic capabilities in evolving business models to suit shifting market conditions. Performance measurement systems to track key operational metrics enable insurers to enhance product development based on real-time customer insights, thus fostering continuous scalability (Kaplan & Norton, 2004). In addition, claims approval times reduction supports increased customer satisfaction and higher market standing; that is in line with research highlighting the competitive advantage offered by process efficiency in the financial services industry (Hammer, 2010).

The integration of advanced data analytics in the operational excellence framework has significantly improved decision-making in the insurance industry. The use of machine learning algorithms enhances underwriting accuracy, consequently reducing cases of fraud, and improving risk assessment (Jordan & Mitchell, 2015). Empirical research confirms the effectiveness of real-time data analysis in predicting market trends, hence, allowing organizations to modify their strategies in advance and maintain competitive responsiveness (McAfee, Brynjolfsson, & Davenport, 2012). The ability to leverage predictive analytics in making well-informed strategic choices reaffirms the role of operational excellence in promoting a culture of data-driven decision-making among organizations (Provost & Fawcett, 2013).

With evolving regulations, insurers have leveraged OE to enhance compliance and establish robust risk management frameworks. Automated auditing systems and AI-driven compliance monitoring minimize regulatory violations and improve governance structures, increasing credibility with regulators (PwC, 2021). Strengthening governance through OE fosters transparency and trust among stakeholders, reinforcing the importance of regulatory adherence in sustaining long-term business success (Ferrell, Fraedrich, & Ferrell, 2021).

7.3 EMPLOYING TECHNOLOGY TO ENHANCE DECISION MAKING

The integration of AI, data analytics and machine learning within OE has improved risk assessment, fraud detection and policy customization. Studies highlight that embedding advanced analytics into insurance operations reduces fraud incidents while improving underwriting precision (Brynjolfsson & McAfee,

2017). Real-time data insights enhance transparency and customer trust, supporting the growing demand for digital-first insurance solutions (McKinsey & Company, 2023).

Training aimed at attaining organizational excellence, coupled with the introduction of structured workflows and continuous improvement efforts, has contributed to more motivated staff and improved service levels. Research reveals that engaging staff in process improvement develops a culture of continuous learning, which, in turn, increases productivity (Saks, 2017). An increased employee engagement level is linked directly to better customer service and organizational performance (Gruman & Saks, 2011).

Achieving Sustainable Development Organizations that leverage OE have successfully expanded their operations without compromising operational efficiency. Through optimizing resource allocation and streamlining growth strategies, insurers can enter new markets without compromising operational efficiency (Teece, 2018). Sustainability focus through OE advances the creation of long-lasting value and enhances resilience in competitive environments (Elkington, 1997). This eventually enhances Customer Satisfaction Through Process Improvement. Process optimization through OE has led to accelerated claims processing, improved service delivery and reduced customer dissatisfaction. Empirical evidence suggests that automation of claims approvals significantly enhances customer satisfaction and improves retention (Kaplan & Norton, 2004). In addition, efficient service delivery strengthens market positioning, thus pointing to the essentiality of process efficiency in building consumer trust (Hammer, 2010). The views expressed by the eight South African insurance industry respondents bring to light several main themes on the effectiveness of OE in facilitating changes along various aspects, such as organizational, cultural, value-based and cognitive changes.

The use of OE models has profoundly impacted the development of organizational culture and the alignment of corporate goals with core values. Moodley and Govender (2020) contend that shared leadership supports the development of a customer-centric culture, which is vital in the pursuit of success in the insurance sector. Similarly, Iddris, Dogbe and Kparl (2023) established that transformational leadership is a crucial factor in promoting organizational competitiveness through employee innovation and adopting a customer-centric strategy. However, Participant E commented that the shift towards inclusivity and innovation was resisted by veteran employees, indicating that cultural transformation is often a long-term process, often stifled by traditional practices. Molloy and Ronnie (2021) established that a lack of urgency and agility can hinder the implementation of new cultural values, especially when considering fast-changing technology.

Additionally, building a culture of innovation based on digitalization requires putting people in the organization at the forefront. It is crucial for insurance firms to begin creating an innovative culture open to all employees regardless of their hierarchical level, as stated by Camara (2022). This involves setting

clear goals concerning digitalization and making sure that staff understand the need for digital transformation. Without a corresponding alignment between organizational culture and technology development, innovation efforts risk encountering resistance or, in the worst-case scenario, failing to bring about meaningful improvements (Camara, 2022).

Organizational culture is a key driver of the achievement of operational excellence (OE) programs, and changing this culture often represents one of the toughest elements in the field of change management (Schein, 2017). Participant B's emphasis on merging employee input to shape day-to-day operations is indicative of a participatory management philosophy that has been shown to increase employee commitment and engagement in activities aimed at organizational change (Denison, Nieminen & Kotrba 2014).

However, the concern raised by Participant C about the need for workers to embrace cultural changes highlights common resistance to change. This view aligns with Lewin's Change Management Model, which holds that for organizations to be able to introduce new cultural norms, successfully, they should first actively "unfreeze" the set behaviours (Burnes, 2020). Research by Cameron and Quinn (2011) shows that organizations that focus on cultural change through leadership exemplification, incentivization systems, and ongoing training are more likely to experience lasting changes.

As opposed to it being a stand-alone initiative strategic alignment ensures the integration of OE into the overall business strategy. The mentioning of McKinsey's 7S Framework by Participant D aligns with modern academic literature that stresses the importance of an integrated approach to organizational change (Westerman, Tannou, & Bonnet, 2021). The framework integrates multiple components, such as structure, strategy, systems, shared values, skills, style and personnel, to enable a holistic and sustainable change process.

Participant F's focus on the alignment of strategy with leadership roles and employee development is a demonstration of the principles of strategic human resource management (SHRM). According to Ulrich (2013), SHRM allows for the alignment of employee development with organizational goals, thereby improving overall organizational agility. However, a study by Bartlett and Ghoshal (2002) points out that maintaining this alignment in different regions is extremely challenging, especially in diversified and decentralized organizations such as those in South Africa.

Resistance to change is a well-studied barrier to organizational change, particularly in industries dominated by set practices and regulatory constraints (Dent & Goldberg, 1999). Participant A's observation of challenges faced in the implementation of OE models in different regions is supported by research that suggests regional cultural differences within organizational culture could be hindering the implementation of new processes (Hofstede, 2001).

Worker participation in organizational activities is key to ensuring OE, since organizations that engage their personnel are often more likely to achieve higher levels of innovation and productivity (Saks, 2006). Participant F's emphasis on incorporating staff feedback into day-to-day working processes demonstrates a growing recognition of participatory decision-making as a key driver that enhances OE. Deci and Ryan (2000)'s investigation of self-determination theory explains that individuals who feel autonomous and competent are more likely to embrace changes within the organization. Also, the priority accorded by Participant D to leadership development as a measure of empowering people is supported by the findings of Spreitzer (1995), which reveal that organizations investing in training and skill development reap increased intrinsic motivation and involvement among their employees. However, as Yukl (2013) argues, it is also vital that empowerment initiatives are complemented by supportive organizational structures to ensure that employees feel their involvement in decision-making processes.

Financial resource allocation is critical to the successful implementation of initiatives that promote OE. The findings show that a significant amount of funding was directed towards technological infrastructure, workforce capability building, and change management processes. Kaplan and Norton (2004) contend that a well-designed budget ensures that financial resources are aligned with overall business goals, thereby supporting both the initial stages of implementation and long-term sustainability.

The emphasis on technological infrastructure is also complemented by recent research that underscores the continuous digital transformation in the financial sector. Observation yields that firms that invest in creating solid technological foundations benefit from enhanced efficiency, flexibility, and competitive gains (Westerman, Tannou & Bonnet 2021). Similarly, Participant B noted that investing in staff training and hiring external consultants is aligned with human capital theory, which suggests that investing in human resource improvement returns significant long-term benefits to organizations (Becker, 1993). In addition, the allocation of fiscal resources to sustain the ongoing evaluation and improvement of OE initiatives are key to ensuring sustainability (Brynjolfsson & McAfee, 2014). Without continued fiscal investment, the initial implementation efforts can wane, leading to suboptimal results (Deloitte, 2022).

The comment from Participant D on the need to promote collaboration and clear communication aligns with virtual leadership principles. The flexibility provided by virtual teams, as suggested by Participant E, is supported by empirical studies that underscore the importance of remote working in creating a work-life balance and increasing general employee satisfaction (Bailey & Kurland, 2002). Efficient virtual work, however, requires a commitment to electronic communication technology and clearly defined procedures for managing communication breakdown and team cohesion. The comments also indicate that the incorporation of change management into daily routines is important in ensuring sustainable change. This observation aligns with Prosci's (2021) ADKAR model that emphasizes: awareness, desire, knowledge, ability, and reinforcement as key elements of successful change initiatives. Cultural change is of immense

importance in the context of aligning with organizational excellence goals. In a study by Cameron and Quinn (2011), organizations that aim for excellence need to change their cultural norms to encourage innovation, teamwork and continuous improvement. The proactive approaches used by organizations in this study highlight the need for a systematic and long-term commitment to change management.

Quality has also been recognized as a key driver of success, emphasizing the need to enhance delivery service and boost customer satisfaction as ways to foster customer loyalty. Participant C recognized a direct relationship between the delivery of quality service and customer retention, with managers noting increased customer loyalty due to improved service delivery. Participant B stressed the significance of instituting quality assurance strategies, particularly in the claims processing system, which resulted in faster settlement and improved customer confidence. Delivery of excellent service is critical to building customer satisfaction and guaranteeing long-term success in the insurance sector (Zeithaml, Bitner, & Gremler 2020). Empirical studies show that companies with strong quality management systems are more likely to retain customers and attain a competitive advantage (Parasuraman, Zeithaml, & Berry 2019). By prioritizing service excellence, organizations build credibility and trust, which in turn increases customer loyalty (Kotler & Keller, 2021).

Firms that aligned their strategic objectives with consumer needs and leveraged innovation witnessed substantial growth rates. Participants C and F noted that pursuing a customer focus led to increased loyalty and expansion, thereby increasing revenue and market share. Analysis: A conscious focus on innovation in conjunction with a customer-centric approach is critical for the growth of businesses (Teece, 2018). Companies that focus on meeting customer needs and adopting innovative approaches are more likely to create a strong presence in a competitive market (Christensen, Raynor, & McDonald 2020). Evidence shows that companies that can integrate customer feedback into their strategic planning models enjoy increased customer loyalty and sustained revenue growth (Lemon & Verhoef, 2016).

7.4 RESISTANCE TO CHANGE AND DIGITAL TRANSFORMATION

Resistance to digital change is a major challenge in the insurance sector in South Africa. Research reveals that effective digital transformation requires significant changes to organizational culture, business processes, and client interaction mechanisms (Westerman et al., 2021). Employees often resist the adoption of innovative technologies, mainly because they are afraid of the possibility of job loss and a lack of training opportunities (Bughin, Catlin, & LaBerge 2022).

Participant responses show that the integration of legacy systems with modern technologies is a major

challenge. Insurers in South Africa are lagging their global counterparts in the implementation of digital technologies, mainly because of outdated infrastructure and resistance to automating processes, as revealed by a study by Ojo and Van Belle (2021). Clients' resistance to digital-first services requires the introduction of specialized training programs and phased adoption approaches to enhance the adoption rate (KPMG, 2023).

The shortage of skilled professionals in actuarial science, data analysis, and digital insurance products has become a major concern for insurance companies. Studies predict that the rapid financial services digitization requires a talent pool with innovative skills in artificial intelligence, machine learning, and big data analytics (World Economic Forum, 2023). However, the local labor market lacks proper digital literacy, and this results in difficulties in talent attraction and retention (Muller & Naidoo, 2023). Severe competition for skilled people escalates employee turnover in the job market, thus worsening the skills gap. Insurance firms in South Africa are increasingly investing in in-house training initiatives and strategic partnerships with learning institutions to counter the talent gap, as per a report published by Deloitte (2022). However, the industry needs to adopt proper employee engagement and retention strategies to sustain its competitive advantage.

7.5 ECONOMIC UNCERTAINTY AND MARKET FLUCTUATIONS

Economic uncertainty continues to have an impact on the insurance industry in terms of informing consumer buying behavior and investment strategies. Research reports that concern global recession, inflation pressures, and geopolitical tensions have translated into lower consumer confidence and weaker demand for insurance products (IMF, 2023). The respondents acknowledged that the COVID-19 pandemic accelerated economic volatility, resulting in higher payouts of claims and lower profit margins. Consistent with this, a study by Naicker and Pillay (2022) finds that South African insurers face ongoing challenges due to volatile exchange rates, inflationary pressures, and changes in interest rates, all of which complicate proper risk assessment and pricing measures.

The rise of Insurtech firms poses a significant threat to traditional insurance companies. The Insurtech firms leverage technologies like artificial intelligence, blockchain, and automation to provide personalized, affordable solutions that appeal to digitally savvy customers (Hughes, Le Roux, & Mthembu 2023). The need for traditional insurance companies to overhaul their service models to stay competitive with agile Insurtech disruptors was highlighted by participants. Insurance companies that fail to adopt digital transformation, as per a study by Accenture (2023), stand to lose market share to technologically savvy platforms that focus on customer experience, speedy claims settlement, and data-driven policy pricing.

The insurance industry is now facing more cybersecurity risks and data privacy concerns, especially

considering the fast rhythm of digitalization. Studies indicate that there has been an increase in cyberattacks targeting sensitive customer data, which has led to increased regulatory scrutiny and compliance costs (McKinsey, 2023). Respondents pointed out that maintaining data security is essential to sustaining customer trust and meeting regulatory obligations. The research by Gordon, Patel, and Khan (2022) highlights the importance of advanced cybersecurity systems, including artificial intelligence-powered threat detection and robust encryption techniques, to mitigate threats. South African insurance firms need to prioritize investing in cybersecurity solutions to prevent financial losses and reputational damage due to data breaches.

The South African insurance sector operates in an environment characterized by economic uncertainty, encompassing inflationary pressures, high rates of unemployment, and fluctuating market conditions. The existing economic uncertainty is directly associated with consumer spending patterns, often resulting in the reduced demand for discretionary insurance products. This economic uncertainty can, at the same time, increase the demand for basic insurance products, such as life, health, and savings schemes, as consumers seek financial protection in the face of adverse economic conditions (PwC, 2023). Sustained durations of economic downturn affect investment decisions and the affordability of insurance premium costs, thereby affecting the viability of long-term insurance companies (IMF, 2023). Insurers must skillfully balance their risk exposure while providing affordable products since it is still important to deal with the current uncertainties (OECD, 2022).

The insurance sector is undergoing rapid digitalization, driven by an increase in consumer expectation for services emphasizing a digital-first approach, combined with the growth of Insurtech businesses (Deloitte, 2023). Digital transformation has created improved customer experience, reduced administration costs, and improved underwriting efficiency, aided by automation and AI. The use of advancements like blockchain is also transforming the practices of handling claims and fighting fraud (EY, 2023). However, legacy system integration remains a challenge for many traditional insurers, impeding their ability to compete with Insurtech firms that offer streamlined, user-friendly digital solutions (McKinsey, 2023). To remain competitive, insurers must invest in modern technological infrastructure and digital literacy among employees to maximize the benefits of technological advancements.

In the insurance sector, there is a dramatic shift in consumer expectations, with a growing need for personalized and flexible insurance products. Growing financial pressures have led clients to seek cost-effective policies tailored to their individual needs (Accenture, 2022). In addition, there is a growing emphasis on insurance products that focus on sustainability, reflecting a broader societal trend towards ethical consumption and corporate responsibility (KPMG, 2023). Studies show that customer-centric models that offer on-demand, usage-based insurance products, e.g., pay-as-you-drive car insurance—are gaining traction due to shifting consumer attitudes (Bain & Company, 2023). Insurers are forced to

redesign their product offerings using data analytics to develop policies that are more flexible and customized to an individual's specific requirements.

The rapid adoption of digital technologies in the insurance sector has increased the need for skilled professionals in areas like technology, actuarial science, and cybersecurity (WEF, 2023). The current shortage of skills in these key areas is a great hindrance since the lack of experts hinders innovation and lowers operational effectiveness. Evidence suggests that insurers need to focus on upskilling their workforce by introducing reskilling programs and collaborations with universities to alleviate the current talent gap (ILO, 2023). Additionally, providing competitive compensation and opportunities for professional growth is crucial for recruiting and retaining top talent in an incredibly competitive labor market.

Global volatility, especially as evidenced through economic crises, political upheavals, and unexpected events like pandemics, is a significant challenge to insurance companies. These factors bring about unpredictable shifts in market conditions and affect customer behaviors. The uncertainty related to external events makes it a necessity for organizations to be agile and responsive, as they must anticipate sudden changes in customer requirements and market trends (Hough & Neuland, 2021). In the context of the insurance sector, this highlights the necessity for companies to constantly review risk assessment models and modify their strategy to maintain a competitive advantage in a dynamic environment. The ability to manage such volatility effectively lies in the responsiveness of the organization, which makes it capable of responding rapidly to unexpected market changes (Bode, Bode, & Braun 2022).

The existence of ambiguity and uncertainty are inherent elements of the business environment, where spontaneous consumer actions and changes in regulation make long-range forecasting processes unreliable. As exemplified in past studies, businesses operating in the context of an unstable environment have significant challenges within the long-term planning process due to the inherent unreliability of traditional forecasting methods (Santos & Brito, 2020). In the case of the South African insurance industry, an increasingly dynamic regulatory environment is joined by fluctuating market conditions making it difficult to make accurate estimates of consumer demands. Scholars believe that organizations highlighting better performance within such environments deploy a dynamic methodology in business planning, utilizing adjustable strategies that could be altered within short notice periods to respond to unexpected situations (Tushman & O'Reilly, 2021). Adaptability is a key factor cited in successfully counteracting the presence of uncertainty and ambiguity inherent to a VUCA environment.

The rising complexity of the global business environment forms another core theme identified in the study. With growing interconnectivity among economies, which is marked by complex regulatory regimes and varied market conditions, insurance companies face several challenges in their operations at both national and international levels. Academic literature in the domain of business and management suggests that

multinational corporations face elevated levels of complexity due to interactions among political, economic, and social factors, which further affect decision-making and strategy formulation (Scherer & Boddewyn, 2021). South African insurance companies, operating in domestic markets as well as abroad, must consider the complexities brought on by transnational regulations, competitive pressures, and changing consumer needs. Operating such a diversified global portfolio while following localized regulatory regimes poses a significant challenge in attaining greater agility and achieving strategic growth (Gagnon, Jansen, & Michael 2018).

In response to the challenges posed by a VUCA environment, strategic innovation has become an essential mechanism for organizational responses. Businesses increasingly see complexity and uncertainty not as challenges, but as opportunities for driving innovation. Recent research underscores the importance of innovation in enhancing organizational resilience and competitive advantage in the face of volatile conditions (Hamel & Prahalad, 2020). In the South African insurance sector, companies are investing in creating resilient business models and leveraging technology to offer flexible, consumer-centric products able to evolve with changing consumer tastes. The development of Insurtech provides a compelling example of how technological innovation can be a source of competitive advantage by allowing for more tailored services to be delivered and for real-time engagement with customers (Liyanage & Abeysekera, 2021). Insurance companies that focus on strategic innovation are better at responding to market changes and meeting the changing needs of consumers, positioning them well for long-term growth.

Economic uncertainty is a major feature of the business environment in South Africa, characterized by high levels of inflation, unemployment, and economic inequality. The volatility in the economy, expressed in the form of fluctuating inflation and exchange rates, makes long-term forecasting and strategic planning for businesses especially challenging. Bode et al. (2022) argue that such economic volatility forces firms to regularly adjust their risk management strategies and adopt more flexible approaches in their business practices. Macroeconomic variation often leads to increased operating costs, supply chain disruptions, and reduced consumer spending (Scherer & Boddewyn, 2021).

Empirical studies show that businesses working in unstable economic conditions need to develop flexible strategies, like diversifying sources of income and focusing on cost-effectiveness, to mitigate risks (Goh & Marquez, 2020). In South Africa, inflation is often caused by both domestic factors (e.g., energy prices) and international impacts (e.g., changes in commodity prices), so businesses must constantly change their strategies to ensure the sustainability of their operations (Hough & Neuland, 2021).

Political instability and uncertainty are major challenges in South Africa, which are marked by regular changes in governmental leadership, policy changes, and an unstable regulatory environment that detracts from the feasibility of long-term business strategies. The political environment in South Africa, marked by leadership changes and policy inconsistencies, creates an uncertain business environment for

businesses (Kihn & Da Silva, 2020). Scholars argue that policy uncertainty has a direct impact on the finance and insurance sectors by magnifying the risks associated with legislative changes, tax planning structures, and investment plans (Tushman & O'Reilly, 2021).

The uncertainty linked to government policy may lead to delayed investments, reduced investor confidence, and difficulties in formulating long-term strategic objectives (Redding, 2021). This complex scenario requires organizations operating in South Africa to employ flexible strategic planning techniques, hence allowing for swift reactions to changes in the political and regulatory environment. Organizations often rely on scenario analysis and risk management tools to effectively navigate the unpredictable political landscape (Bode et al., 2022).

Recent research shows that businesses operating in disparate and unequal markets are required to adopt inclusion strategies to meet the unique needs of different consumer segments (Scholtz, 2021). This includes product and service customization that appeals to the needs of poor and marginalized groups, as well as broader societal issues such as education and healthcare (Scherer & Boddewyn, 2021). Additionally, companies that take an active role in addressing inequality through corporate social responsibility programs could boost their public image and develop customer loyalty, hence achieving sustainable business success (Harrison & Turner, 2021).

The changing consumer attitudes, particularly among the younger generation, adds another level of complexity to the South African business environment. Over the past few years, there has been a significant rise in the demand for digital services, personalized products, and corporate social responsibility initiatives. As suggested in academic debates, it is essential for organizations to respond to changing consumer needs by embracing digital transformation strategies and offering products that align with the values and aspirations of modern consumers (Hamel & Prahalad, 2020). The increasing preference of consumers to interact with digital media, especially in the context of the COVID-19 pandemic, has accelerated the shift towards online channels, with consumers showing a preference for mobile-friendly services that provide smooth user experiences and customized choices (Liyanage & Abeysekera, 2021). This trend is especially relevant to sectors like retail and financial services, where organizations need to invest in innovation and technology to meet consumer demands. To cope with the rapid changes in consumer behavior, companies need to be flexible and responsive to maintain their competitive advantage (Bode et al., 2022).

The international business environment has a significant impact on local markets, particularly with regards to economic recession, international regulatory systems, and trade patterns. Developments in the international environment, such as economic recessions or changes to international trade treaties, have a cascading effect on business in South Africa, particularly on industries like finance, insurance, and manufacturing. Empirical evidence shows that international economic shocks, as seen in the 2008 fiscal

crisis and the ongoing effects of the COVID-19 pandemic, make businesses in developing countries like South Africa vulnerable to outside risks (Goh & Marquez, 2020). Global regulations—covering trade tariffs, environmental policy, and financial law—have a major impact on the operation of domestic markets. For instance, changes in world commodity prices or exchange rates can affect the viability and stability of businesses in South Africa, a country that is significantly reliant on imports and exports (Santos & Brito, 2020). As such, businesses in South Africa need to be able to deal with issues from the global environment and adapt their strategies in accordance with global trends, specifically about supply chain management and market positioning (Gagnon, Jansen, & Michael 2020).

Mutize and Gossel's (2020) work emphasizes that recessions are linked to lower levels of insurance penetration due to consumers' preferences for essential spending over discretionary financial products such as insurance. Additionally, periods marked by economic uncertainty result in a rise in the frequency of claims due to financial distress, thus affecting the profitability and risk pricing models of insurers (Bierman & Lategan, 2021). Against these constraints, insurers are compelled to practice innovation through designing microinsurance products and flexible payment structures for the lower-income consumers. Embedded insurance, whereby the coverage is embedded in other financial products or services, could be a catalyst for improving access and easing market penetration (KPMG, 2023).

The ongoing changes to regulatory frameworks and the changing nature of compliance requirements add to a complex and volatile environment for insurance companies. In South Africa, the insurance sector is under strict regulation by the Financial Sector Conduct Authority (FSCA) and the Prudential Authority (PA), both of which are rolling out amendments to the Insurance Act (2017) and the Treating Customers Fairly (TCF) principles (PwC, 2023). Regulatory uncertainty impacts insurance firms by increasing compliance costs, slowing the development of new products, and discouraging long-term focused investments (Naidoo, 2022). Scholars argue that while stringent regulations enhance consumer protection and financial stability, too-frequent regulation changes can stifle business growth and reduce the industry's competitive advantage (Schoeman & Erasmus, 2021). To minimize the risks of regulation, insurance companies must adopt proactive regulatory compliance strategies. This entails engaging with policymakers, leveraging regulatory technology (RegTech) to improve the administration of compliance processes, and expanding their product portfolios to ensure they meet evolving legal requirements (EY, 2023).

The South African insurance industry is experiencing market saturation, with traditional insurers facing stiff competition from digital-first providers and fintech disruptors. Market saturation limits growth opportunities for incumbents, necessitating differentiation through innovative products and superior customer experiences (Brennan, Fitzgerald, & Solomon 2021). Recent studies project that the advent of Insurtech companies and incumbent insurance carriers focused on digital interaction has altered market

forces by providing more adaptive and client-centered solutions (Accenture, 2022). Such players leverage AI, deep data analytics, and automation to produce personalized insurance products at lower costs, thereby lowering the market share of traditional competitors (Deloitte, 2023). To preserve their competitive advantage, insurance companies need to invest in digital transformation activities, enhance customer engagement strategies, and form partnerships with fintech organizations to advance innovation and co-create modern insurance products (McKinsey, 2023). Practices like usage-based insurance, dynamic pricing models, and end-to-end online policy administration might help insurers stand out in a crowded marketplace (Llewellyn, 2022).

Limited understanding of insurance, particularly in rural and deprived areas, is a major impediment to the growth of the market. Lack of awareness of the benefits of insurance generates skepticism, lowers participation levels, and results in policy cancellations (Kakembo & Chigbu, 2021). The literature shows that successful consumer education programs can boost the uptake of insurance products by resolving misconceptions and building confidence in financial institutions (Bester, Chamberlain, & Hougaard 2022). However, the lack of proper resource allocation to training schemes and marketing efforts limits the insurers' capacity to tap into new market segments. Insurance companies should introduce focused financial literacy programs, employ mobile-led campaigns, and form partnerships with community associations to increase awareness and build confidence among their customers. In addition, digital media and social media are cost-effective channels to educate consumers about the benefits of insurance and risk management (PwC, 2023).

The digital transformation process is radically changing the insurance industry, enhancing operational efficiency, customer experience, and market accessibility. The use of AI, blockchain technology, and big data analytics has dramatically changed the approaches used in risk assessment and claims processing (Accenture, 2023). AI-driven automation reduces processing times and operational costs, while data analytics enables insurers to analyze risk profiles with higher accuracy (McKinsey, 2023). In addition, digital platforms enable the purchase of policies and filing of claims via mobile apps, thus improving accessibility in disadvantaged areas (Deloitte, 2022).

The rise of collaborative partnerships between Insurtech and fintech players is reshaping traditional insurance models. Partnerships between insurers and fintech organizations allow scalable digital solutions to be developed, thus improving market access, particularly in underinsured and unbanked segments (KPMG, 2023). Innovations like embedded insurance, which involve the discreet embedding of protection in digital transactions, facilitate increased consumer onboarding and engagement (Brennan et al., 2022). Major insurance companies in South Africa, such as Old Mutual and Discovery Insure, have successfully integrated artificial intelligence-powered chatbots into their customer service systems as well as introduced telematics-based pricing, leading to improved customer retention and satisfaction (PwC, 2023).

Engagement with policymakers and proactive regulatory compliance foster industry innovation and growth. Frequent regulatory changes pose compliance challenges; however, active engagement with regulatory bodies enables insurers to develop market-responsive products while maintaining legal adherence (Naidoo, 2022). South Africa's microinsurance regulations, for instance, have provided opportunities for insurers to expand coverage among underserved populations (PwC, 2023). A stable regulatory environment supports innovation and reduces entry barriers. Regulatory sandboxes—allowing insurers to evaluate new products under controlled supervision—have been instrumental in expanding inclusive insurance models (Schoeman & Erasmus, 2021). Together with the regulator, South African insurers have successfully created microinsurance products and mobile-based insurance policies, significantly improving financial inclusion and expanding market reach (KPMG, 2023).

A highly educated workforce is an important factor in sustaining innovation and improving customer service. With the insurance industry transforming because of digitalization, constant training of staff in data analytics, artificial intelligence applications, and customer relationship management helps improve efficiency and service quality (Deloitte, 2023). Insurance companies investing in employee development programs reflect increased operational performance and innovation (McKinsey, 2022). Studies have shown that companies with high levels of employee engagement are likely to achieve higher customer satisfaction and better business results (Bierman & Lategan, 2021). An engaged workforce drives product innovation, increases service quality, and enhances brand reputation (EY, 2023). Sanlam's commitment to upgrading professional capabilities through upskilling programs focused on digital insurance products has yielded higher levels of customer service quality and business growth (McKinsey, 2022).

Environmental, Social, and Governance (ESG) practices are becoming integral to long-term business resilience and investment attractiveness. Insurers integrating ESG principles into their business models experience enhanced investor confidence and regulatory favorability. Sustainable insurance products, such as climate risk coverage and green investment-linked policies, align with global ESG trends (Hancock, Parsons, & Sutherland 2021). Investors prioritize sustainability-focused companies, influencing capital allocation in the insurance sector (KPMG, 2023). Strong ESG practices contribute to long-term financial stability and reputational strength (McKinsey, 2022). ESG Integration in Insurance Old Mutual's introduction of sustainable investment-linked insurance products align with ESG objectives, enhancing brand credibility and attracting socially responsible investors (PwC, 2023).

7.6 ENABLERS FOR SUSTAINING OPERATIONAL EFFECTIVENESS IN THE INSURANCE SECTOR

OE is crucial in guaranteeing the long-term viability of insurance companies in the insurance sector, particularly in a volatile and complex market such as South Africa. OE involves strategic actions to

enhance efficiency, optimize resource allocation, and maintain a competitive advantage. Five empirically grounded facilitators of operational effectiveness include digital transformation, customer-centric innovation, compliance with risk and regulatory guidelines, a focus on financial inclusion with social responsibility, and strategic flexibility. These factors enable insurance firms to navigate economic uncertainty, adapt to evolving consumer expectations, and maintain resilience over the long term.

Customer-focused strategies are central to the attainment of operational excellence since they ensure that products and services align with changing consumer preferences. The use of data-driven personalization has been proven to enhance customer retention, satisfaction, and loyalty by a wide margin (Grewal, Hulland, Kopalle, & Karahanna 2020). In addition, digital self-service platforms and AI-driven chatbots enhance customer interactions, allowing organizations to provide efficient and integrated support while also providing cost efficiencies (Hagedorn-Hansen, Verhoef, & Els 2019).

Strong risk management structures are critical to maintaining operational efficiency in the insurance sector, especially during economic uncertainty and complex regulatory environments. Compliance with changing legal and regulatory requirements not only ensures stability but also reinforces consumer confidence. Studies have shown that by embracing proactive risk management practices, including ERM structures, organizations can anticipate market disruptions and reduce financial losses (Kaplan & Mikes, 2021). In addition, the intersection of regulatory requirements and technological innovation is becoming more critical, as digital technologies enable real-time reporting, fraud detection, and compliance with global standards (Brender & Dragos, 2021).

Financial inclusion programs are instrumental in improving operational effectiveness by expanding insurance coverage for marginalized groups, thus increasing market penetration and profitability in the sector. Academic literature highlights the importance of microinsurance and the development of low-cost premium structures in meeting the insurance coverage gap witnessed in emerging economies (Churchill & Matul, 2022). Social responsibility efforts such as financial literacy programs and community-based initiatives help build trust and promote long-term sustainability. The integration of ESG factors into insurance operations not only strengthens brand reputation but also appeals to impact investors who are predisposed towards sustainable business models (Eccles et al., 2020). Strategic agility and flexibility. The ability to adapt quickly to external and internal changes is a core enabler of OE. Empirical evidence shows that firms with agile business models are effective in coping with changes in regulatory environments, economic conditions, and technological advancements (Doz & Kosonen, 2021). Agility enables organizations to re-evaluate operational strategies, maximize resource allocation, and facilitate rapid innovation to counter new challenges (Teece, Peteraf, & Leih 2022). Additionally, dynamic capabilities like scenario planning and real-time analytics enhance decision-making processes, thereby allowing organizations to sustain resilience in changing environments (Eisenhardt & Martin, 2020).

Customer-centricity is an integral part of modern insurance business models, where organizations strive to enhance user experience, foster loyalty, and gain market penetration. Empirical research suggests that personalization, enabled by artificial intelligence and data analytics, plays a critical role in enhancing customer retention and engagement (Lemon & Verhoef, 2016). Personalization enables companies to tailor policies, pricing models, and services based on the unique needs of individual customers, thus improving satisfaction and increasing customer lifetime value. In addition, customer-centric approaches enable companies to stay coordinated with changing consumer expectations, particularly in competitive markets where differentiation is critical.

Risk management is an inherent component of insurance business operations owing to the inherent volatility in the economic and financial environment. To achieve maximum effectiveness, OE models must incorporate extensive risk management measures that are in line with current regulatory environments, thus promoting stability and mitigating possible legal exposures (Eling & Lehmann, 2018). The South African insurance sector is specifically affected by evolving regulatory needs, as illustrated by the Financial Sector Regulation Act (2017) and the Solvency Assessment and Management (SAM) regime, which call for constant adjustments (South African Reserve Bank, 2021). Compliance with these regulatory provisions is paramount to protecting consumers, maintaining financial stability, and promoting confidence in the industry, thus making it an integral component of any operational model.

Financial inclusion is a core tenet of the uptake of insurance models, particularly in developing countries like South Africa, where economic disparities limit access to financial services (Beck & Cull, 2014). Insurance models that are inclusively designed aim to provide low-cost and easily accessible products to vulnerable populations, employing microinsurance and technology platforms to reach low-income groups (Churchill & Matul, 2012). Evidence shows that the inclusion of financial literacy programs in insurance schemes enhances public understanding and usage of insurance products, promoting long-term financial security (Demirgüç-Kunt, Klapper, Singer, & Ansar 2018). Addressing financial inclusion is not only a moral imperative as a component of corporate social responsibility but also a business strategy for expanding market reach and strengthening brand loyalty. Operational effectiveness and scalability. Operational efficiency is an essential factor affecting the sustainability of a business model, as organizations seek to formulate strategies that maximize the use of resources, reduce costs, and enhance the delivery of services (Porter, 1996). Scalability is of particular importance in the insurance sector, requiring models with the ability to expand without sacrificing the quality of service delivered (Brynjolfsson & McAfee, 2014). Successful models combine automation, streamlined processes, and innovative procedures to improve responsiveness and reduce the time taken in processing claims (Davenport & Harris, 2007). Scalable models also ensure responsiveness to changing market conditions, allowing companies to expand operations while maintaining financial sustainability.

7.7 COMMUNICATION OF OE STRATEGY

A significant proportion of respondents (39.9%) indicated that the OE strategy was not communicated effectively. Communication is widely recognized as a fundamental driver of organizational success, as it facilitates clarity, alignment, and engagement among employees (Daft & Lengel, 2022). Poor communication can lead to misunderstandings, resistance to strategic initiatives, and a lack of cohesion within the organization (Roberts & Grover, 2021). Kotter (2021) emphasizes that transformational change requires clear, consistent, and transparent communication to ensure organizational buy-in and effective implementation of strategic goals.

From a theoretical perspective, these findings align with change management models such as Kotter's (2021) eight-step process, which emphasizes communication, leadership, and adaptability as critical factors in organizational success. The results also support the dynamic capabilities framework, which stresses the need for agility and continuous innovation in response to environmental uncertainties (Teece, 2022).

7.8 ENHANCING CUSTOMER EXPERIENCE THROUGH OPERATIONAL EXCELLENCE

OE plays a critical role in enhancing customer experience by optimizing business processes, improving efficiency, and lowering response times. The topic has been widely studied in academic literature, where scholars stress that OE techniques have a profound impact on customer satisfaction and loyalty.

One of the main findings of the study is that the implementation of OE has significantly improved the effectiveness of the claims process. The automation of repetitive questions and optimization of the claims process have led to a 40% reduction in processing time, having a positive effect on customer satisfaction. Hammer (2015) argues that business process reengineering—one of the core elements of OE—enables organizations to redesign their processes to achieve significant gains in speed, cost, and quality. Additionally, Davenport and Ronanki (2018) argue that artificial intelligence-based automation enhances decision-making while reducing human errors, thereby leading to improved efficiency and better service delivery. This reduction in turnaround time is in line with the ideas of Lean Six Sigma, which promote the removal of waste and non-value-added activities (George, 2019).

One of the core elements of OE contributing to customer experience improvement is implementing feedback mechanisms driven by data insights. Participant D experienced a 25% rise in customer satisfaction levels, which can be attributed to the continued improvement in customer interactions. The result is in line with the principles set by the TQM paradigm, which identifies the importance of continuous feedback and iterative improvement as part of a customer-focused approach (Evans and Lindsay, 2020).

Reichheld and Detrick (2003) believe that organizations that systematically gather and study customer feedback reflect superior performance in enhancing service quality and building long-term customer loyalty. Furthermore, Parasuraman, Zeithaml, and Berry (1988) argue that customer-driven service quality improvement is crucial in maintaining a competitive advantage in the service industry.

The integration of AI-driven support systems has streamlined processes involved in customer interactions. Virtual assistants and AI chatbots have an essential role in handling simple inquiries, hence enabling human representatives to dedicate more time to more complex problems. As stated by McKinsey & Company (2021), AI-powered customer service tools have the potential to lower resolution time by up to 50%, significantly increasing customer satisfaction levels. Additionally, Brynjolfsson and McAfee (2017) argue that artificial intelligence enhances service personalization, enabling organizations to tailor their response to match the individual customer's unique requirements, hence improving customer relationships.

The use of agile methods has enabled fast testing and iteration of new products. As stated by Rigby, Sutherland, and Takeuchi (2016), developing organizational agility is accomplished by promoting iterative development and continuous feedback. This approach enables organizations to react more effectively to changing market forces and consumer needs (Highsmith, 2019).

The integration of digital platforms with RPA is transforming operational efficiency in the insurance industry. Studies have found that centralized digital platforms enable real-time integration of data, thus minimizing human errors and enhancing the effectiveness of claims processing (Davenport & Ronanki, 2018). RPA has particularly been reported to be highly effective in automating repetitive tasks, minimizing processing times, and operating costs (Willcocks, Lacity, & Craig, 2017). The use of such technologies aligns with the general industry trend towards intelligent automation that improves the accuracy of fraud detection and the speed of customer service delivery (Brynjolfsson & McAfee, 2017). OE has had a considerable impact on employee engagement and productivity improvement. Implementation of Kaizen-based feedback mechanisms supports continuous improvement through active participation of employees in process improvement (Imai, 2012). Additionally, it has been found that organizations that invest in training programs based on Operational Excellence result in higher levels of employee engagement and a reduction in turnover rates (Saks, 2017). Empirical studies also demonstrate that formal feedback mechanisms and employee skill development programs have a positive impact on motivation and performance, leading to better service quality (Gruman & Saks, 2011).

Organizations seeking growth through operational excellence leverage operational data and customer information to realize effective scaling. The study by Teece (2018) highlights the importance of dynamic capabilities in evolving business models to suit shifting market conditions. Performance measurement systems to track key operational metrics enable insurers to enhance product development based on real-time customer insights, thus fostering continuous scalability (Kaplan & Norton, 2004). In addition, claims

approval times reduction supports increased customer satisfaction and higher market standing, in line with research highlighting the competitive advantage offered by process efficiency in the financial services industry (Hammer, 2010).

The integration of AI, data analytics, and machine learning within OE has improved risk assessment, fraud detection, and policy customization. Studies highlight that embedding advanced analytics into insurance operations reduces fraud incidents while improving underwriting precision (Brynjolfsson & McAfee, 2017). Real-time data insights enhance transparency and customer trust, supporting the growing demand for digital-first insurance solutions (McKinsey & Company, 2023).

Achieving Sustainable Development Organizations that leverage OE have successfully expanded their operations without compromising operational efficiency. Through optimizing resource allocation and streamlining growth strategies, insurers can enter new markets without compromising operational efficiency (Teece, 2018). Sustainability focus through OE advances the creation of long-lasting value and enhances resilience in competitive environments (Elkington, 1997). Enhancing Customer Satisfaction Through Process Improvement. Process optimization through OE has led to accelerated claims processing, improved service delivery, and reduced customer dissatisfaction. Empirical evidence suggests that automation of claims approvals significantly enhances customer satisfaction and improves retention (Kaplan & Norton, 2004). In addition, efficient service delivery strengthens market positioning, thus pointing to the essentiality of process efficiency in building consumer trust (Hammer, 2010). The views expressed by the eight South African insurance industry respondents bring to light several main themes on the effectiveness of OE in facilitating changes along various aspects, such as organizational, cultural, value-based, and cognitive changes. The use of OE models has profoundly impacted the development of organizational culture and the alignment of corporate goals with core values. Moodley and Govender (2020) contend that shared leadership supports the development of a customer-centric culture, which is vital in the pursuit of success in the insurance sector. Similarly, Iddris, Dogbe, and Kparl (2023) established that transformational leadership is a crucial factor in promoting organizational competitiveness through employee innovation and adopting a customer-centric strategy. However, Participant E commented that the shift towards inclusivity and innovation was resisted by veteran employees, indicating that cultural transformation is often a long-term process, often stifled by traditional practices. Molloy and Ronnie (2021) established that a lack of urgency and agility can hinder the implementation of new cultural values, especially considering fast-changing technology.

Successful implementation of OE initiatives is also heavily dependent on leadership effectiveness and accountability. Participant D's emphasis on developing leadership competencies to infuse OE values aligns with Chukwuma and Zondo's (2024) research, which establishes that transformational leadership reduces resistance to change and fosters an organizational culture receptive to change. Further, Moodley and

Govender (2020) argue that collective leadership enhances customer focus, which is a critical success factor in the insurance industry. However, ensuring consistency in leadership practices across the organization is a challenge, as differences in leadership approaches could undermine the efficacy of OE structures.

In addition, the concern shown by Participant B about teams emphasizing compliance with rules over performance reflects the difficulty involved in shifting from a compliance-based culture to a performance-based culture. As framed by Kotter (2014), managing resistance effectively requires honest communication about the benefits of change, as well as efforts like change agents and pilot projects that can demonstrate effectiveness before wider rollout.

Worker participation in organizational activities is key to ensuring OE, since organizations that engage their personnel are often more likely to achieve higher levels of innovation and productivity (Saks, 2006). Participant F's emphasis on incorporating staff feedback into day-to-day working processes demonstrates a growing recognition of participatory decision-making as a key driver that enhances OE. Deci and Ryan (2000)'s investigation of self-determination theory explains that individuals who feel autonomous and competent are more likely to embrace changes within the organization. Also, the priority accorded by Participant D to leadership development as a measure of empowering people is supported by the findings of Spreitzer (1995), which reveal that organizations investing in training and skill development reap increased intrinsic motivation and involvement among their employees. However, as Yukl (2013) argues, it is also vital that empowerment initiatives are complemented by supportive organizational structures to ensure that employees feel their involvement in decision-making processes. The allocation of financial resources towards technological infrastructure highlights its significance in supporting virtual teams and streamlining collaborative processes. Research on digital transformation highlights the significant role of technology in enhancing operational effectiveness and organizational responsiveness (Bharadwaj, El Sawy, Pavlou, & Venkatraman 2013). The observations expressed by Participant A on the availability of collaboration tools for employees align with evidence from studies on enterprise digital platforms. The use of digital tools enables knowledge management, thus ensuring that employees use the resources necessary for organizational effectiveness efforts (Nonaka & Takeuchi, 1995). The focus laid by Participant F on the importance of technology in maintaining engagement indicates the intersection of digital tools and employee experience.

Research into workforce behavior and organizational effectiveness shows that motivated employees exhibit higher productivity, greater commitment to organizational goals, and better customer service (Saks, 2021). In addition, when employees take ownership of their assigned tasks and responsibilities, organizations benefit from improved effectiveness as well as efficiency (Luthans et al., 2020). Besides, collaboration allows for the sharing of ideas, thus leading to better problem-solving capacity and driving

innovation (Edmondson, 2019).

7.9 THE OFFERING OF QUALITY SERVICE AND CUSTOMER SATISFACTION

Quality has also been recognized as a key driver of success, emphasizing the need to enhance delivery service and boost customer satisfaction as ways to foster customer loyalty. Participant C recognized a direct relationship between the delivery of quality service and customer retention, with managers noting increased customer loyalty due to improved service delivery. Participant B stressed the significance of instituting quality assurance strategies, particularly in the claims processing system, which resulted in faster settlement and improved customer confidence. Delivery of excellent service is critical to building customer satisfaction and guaranteeing long-term success in the insurance sector (Zeithaml et al., 2020). Empirical studies show that companies with strong quality management systems are more likely to retain customers and attain a competitive advantage (Parasuraman et al., 2019). By prioritizing service excellence, organizations build credibility and trust, which in turn increases customer loyalty (Kotler & Keller, 2021).

7.10 STRATEGIC FOCUS, INNOVATION, AND CUSTOMER-CENTRIC APPROACH

Firms that aligned their strategic objectives with consumer needs and leveraged innovation witnessed substantial growth rates. Participants C and F noted that pursuing a customer focus led to increased loyalty and expansion, thereby increasing revenue and market share. Analysis: A conscious focus on innovation in conjunction with a customer-centric approach is critical for the growth of businesses (Teece, 2018). Companies that focus on meeting customer needs and adopting innovative approaches are more likely to create a strong presence in a competitive market (Christensen, Raynor, & McDonald 2020). Evidence shows that companies that can integrate customer feedback into their strategic planning models enjoy increased customer loyalty and sustained revenue growth (Lemon & Verhoef, 2016).

The rise of Insurtech firms poses a significant threat to traditional insurance companies. The Insurtech firms leverage technologies like artificial intelligence, blockchain, and automation to provide personalized, affordable solutions that appeal to digitally savvy customers (Hughes, Le Roux, & Mthembu 2023). The need for traditional insurance companies to overhaul their service models to stay competitive with agile Insurtech disruptors was highlighted by participants. Insurance companies that fail to adopt digital transformation, as per a study by Accenture (2023), stand to lose market share to technologically savvy platforms that focus on customer experience, speedy claims settlement, and data-driven policy pricing.

The insurance industry is now facing more cybersecurity risks and data privacy concerns, especially considering the fast rhythm of digitalization. Studies indicate that there has been an increase in cyberattacks targeting sensitive customer data, which has led to increased regulatory scrutiny and compliance costs (McKinsey, 2023). Respondents pointed out that maintaining data security is essential to sustaining customer trust and meeting regulatory obligations. The research by Gordon Patel, and Khan (2022) highlights the importance of advanced cybersecurity systems, including artificial intelligence-powered threat detection and robust encryption techniques, to mitigate threats. South African insurance firms need to prioritize investing in cybersecurity solutions to prevent financial losses and reputational damage due to data breaches.

The insurance sector is undergoing rapid digitalization, driven by an increase in consumer expectation for services emphasizing a digital-first approach, combined with the growth of Insurtech businesses (Deloitte, 2023). Digital transformation has created improved customer experience, reduced administration costs, and improved underwriting efficiency, aided by automation and AI. The use of advancements like blockchain is also transforming the practices of handling claims and fighting fraud (EY, 2023).

In the insurance sector, there is a dramatic shift in consumer expectations, with a growing need for personalized and flexible insurance products. Growing financial pressures have led clients to seek cost-effective policies tailored to their individual needs (Accenture, 2022). In addition, there is a growing emphasis on insurance products that focus on sustainability, reflecting a broader societal trend towards ethical consumption and corporate responsibility (KPMG, 2023). Studies show that customer-centric models that offer on-demand, usage-based insurance products, e.g., pay-as-you-drive car insurance—are gaining traction due to shifting consumer attitudes (Bain & Company, 2023). Insurers are forced to redesign their product offerings using data analytics to develop policies that are more flexible and customized to an individual's specific requirements.

Global volatility, especially as evidenced through economic crises, political upheavals, and unexpected events like pandemics, is a significant challenge to insurance companies. These factors bring about unpredictable shifts in market conditions and affect customer behaviors. The uncertainty related to external events makes it a necessity for organizations to be agile and responsive, as they must anticipate sudden changes in customer requirements and market trends (Hough & Neuland, 2021). In the context of the insurance sector, this highlights the necessity for companies to constantly review risk assessment models and modify their strategy to maintain a competitive advantage in a dynamic environment. The ability to manage such volatility effectively lies in the responsiveness of the organization, which makes it capable of responding rapidly to unexpected market changes (Bode et al., 2022).

In response to the challenges posed by a VUCA environment, strategic innovation has become an essential mechanism for organizational responses. Businesses increasingly see complexity and uncertainty not as

challenges, but as opportunities for driving innovation. Recent research underscores the importance of innovation in enhancing organizational resilience and competitive advantage in the face of volatile conditions (Hamel & Prahalad, 2020). In the South African insurance sector, companies are investing in creating resilient business models and leveraging technology to offer flexible, consumer-centric products able to evolve with changing consumer tastes. The development of Insurtech provides a compelling example of how technological innovation can be a source of competitive advantage by allowing for more tailored services to be delivered and for real-time engagement with customers (Liyanage & Abeysekera, 2021). Insurance companies that focus on strategic innovation are better at responding to market changes and meeting the changing needs of consumers, positioning them well for long-term growth.

7.11 RESILIENCE

Resilience is widely recognized as a key competence for organizations operating in a VUCA environment. This is based on the need for businesses to develop resilient operational models that are capable of withstanding and adjusting to sudden disruptions. Researchers contend that resilience is not just about operational practices but also about the prevailing organizational culture (Vuori & Huy, 2020). Organizations that focus on resilience develop an adaptive cultural model that enables them to focus on long-term objectives despite short-term challenges. In the insurance sector, resilience is the capacity to ensure service continuity in times of crises, sustain customer trust, and ensure that risk management systems are flexible enough to adapt to sudden market changes. Empirical studies show that resilient organizations are likely to thrive in volatile environments since they can sustain stability while addressing new challenges (Sheffi, 2021).

Recent research shows that businesses operating in disparate and unequal markets are required to adopt inclusion strategies to meet the unique needs of different consumer segments (Scholtz, 2021). This includes product and service customization that appeals to the needs of poor and marginalized groups, as well as broader societal issues such as education and healthcare (Scherer & Boddewyn, 2021). Additionally, companies that take an active role in addressing inequality through corporate social responsibility programs could boost their public image and develop customer loyalty, hence achieving sustainable business success (Harrison & Turner, 2021).

The ongoing changes to regulatory frameworks and the changing nature of compliance requirements add to a complex and volatile environment for insurance companies. In South Africa, the insurance sector is under strict regulation by the Financial Sector Conduct Authority (FSCA) and the Prudential Authority (PA), both of which are rolling out amendments to the Insurance Act (2017) and the Treating Customers Fairly (TCF) principles (PwC, 2023). Regulatory uncertainty impacts insurance firms by increasing compliance costs, slowing the development of new products, and discouraging long-term focused

investments (Naidoo, 2022). Scholars argue that while stringent regulations enhance consumer protection and financial stability, too-frequent regulation changes can stifle business growth and reduce the industry's competitive advantage (Schoeman & Erasmus, 2021). To minimize the risks of regulation, insurance companies must adopt proactive regulatory compliance strategies. This entails engaging with policymakers, leveraging regulatory technology (RegTech) to improve the administration of compliance processes, and expanding their product portfolios to ensure they meet evolving legal requirements (EY, 2023).

The South African insurance industry is experiencing market saturation, with traditional insurers facing stiff competition from digital-first providers and fintech disruptors. Market saturation limits growth opportunities for incumbents, necessitating differentiation through innovative products and superior customer experiences (Brennan et al., 2021). Recent studies project that the advent of Insurtech companies and incumbent insurance carriers focused on digital interaction has altered market forces by providing more adaptive and client-centered solutions (Accenture, 2022). Such players leverage AI, deep data analytics, and automation to produce personalized insurance products at lower costs, thereby lowering the market share of traditional competitors. To preserve their competitive advantage, insurance companies need to invest in digital transformation activities, enhance customer engagement strategies, and form partnerships with fintech organizations to advance innovation and co-create modern insurance products (McKinsey, 2023). Practices like usage-based insurance, dynamic pricing models, and end-to-end online policy administration might help insurers stand out in a crowded marketplace (Llewellyn, 2022). The rise of collaborative partnerships between Insurtech and fintech players is reshaping traditional insurance models. Partnerships between insurers and fintech organizations allow scalable digital solutions to be developed, thus improving market access, particularly in underinsured and unbanked segments (KPMG, 2023). Innovations like embedded insurance, which involve the discreet embedding of protection in digital transactions, facilitate increased consumer onboarding and engagement (Brennan et al., 2022). Major insurance companies in South Africa, such as Old Mutual and Discovery Insure, have successfully integrated artificial intelligence-powered chatbots into their customer service systems as well as introduced telematics-based pricing, leading to improved customer retention and satisfaction (PwC, 2023).

7.12 FINANCIAL INCLUSION

Financial inclusion is a core tenet of the uptake of insurance models, particularly in developing countries like South Africa, where economic disparities limit access to financial services (Beck & Cull, 2014). Insurance models that are inclusively designed aim to provide low-cost and easily accessible products to vulnerable populations, employing microinsurance and technology platforms to reach low-income groups (Churchill & Matul, 2012). Evidence shows that the inclusion of financial literacy programs in insurance

schemes enhances public understanding and usage of insurance products, promoting long-term financial security (Demirgüç-Kunt et al., 2018). Addressing financial inclusion is not only a moral imperative as a component of corporate social responsibility but also a business strategy for expanding market reach and strengthening brand loyalty. Operational effectiveness and scalability. Operational efficiency is an essential factor affecting the sustainability of a business model, as organizations seek to formulate strategies that maximize the use of resources, reduce costs, and enhance the delivery of services (Porter, 1996). Scalability is of particular importance in the insurance sector, requiring models with the ability to expand without sacrificing the quality of service delivered (Brynjolfsson & McAfee, 2014). Successful models combine automation, streamlined processes, and innovative procedures to improve responsiveness and reduce the time taken in processing claims (Davenport & Harris, 2007). Scalable models also ensure responsiveness to changing market conditions, allowing companies to expand operations while maintaining financial sustainability.

7.13 TEAMWORK, EMPLOYEE ENGAGEMENT AND HUMAN CAPITAL

The study revealed mixed results regarding the role of customer ownership in driving OE success, with 37.3% of participants agreeing or strongly agreeing, while 39.9% disagreed or strongly disagreed. This divergence aligns with existing literature, which suggests that customer involvement in operational efficiency strategies can yield varying outcomes depending on industry context and implementation effectiveness. Research by Vargo and Lusch (2022) supports the idea that co-creation of value with customers can enhance operational efficiency; however, they also acknowledge potential challenges, such as misalignment of expectations and resource constraints. The mixed responses in this study suggest that while customer engagement can be beneficial, its success is contingent on structured implementation and clear communication strategies.

The findings indicate several key challenges related to OE, including poor communication of the OE strategy, teamwork issues, adaptability to change, financial uncertainty, and weaknesses in agility and resilience. These results align with existing literature that underscores the complexity of maintaining OE in dynamic business environments (Kotter, 2021; Teece, 2022).

A significant proportion of respondents (39.9%) indicated that the OE strategy was not communicated effectively. Communication is widely recognized as a fundamental driver of organizational success, as it facilitates clarity, alignment, and engagement among employees (Daft & Lengel, 2022). Poor communication can lead to misunderstandings, resistance to strategic initiatives, and a lack of cohesion within the organization (Roberts & Grover, 2021). Kotter (2021) emphasizes that transformational change requires clear, consistent, and transparent communication to ensure organizational buy-in and effective implementation of strategic goals.

The study found that 41.8% of respondents agreed or strongly agreed that teamwork issues were prevalent. Effective teamwork is crucial for OE, as collaborative work environments enhance innovation, problem-solving, and efficiency (Edmondson, 2019). However, challenges such as lack of trust, unclear roles, and ineffective leadership can hinder team performance (Lencioni, 2021). Research suggests that fostering a strong organizational culture that promotes collaboration and psychological safety can mitigate teamwork-related challenges and enhance OE (Gino, 2020).

The neutral responses regarding financial resources suggest uncertainty or inconsistency in financial management and allocation. Financial resources are vital for investment in technology, employee development, and operational improvements (Ghaleb et al., 2021). Organizations that fail to secure stable financial backing may struggle with long-term OE and strategic execution (Prahalad & Ramaswamy, 2021). Transparency in financial planning and effective resource allocation strategies can mitigate this uncertainty (Davenport & Harris, 2020).

7.14 PROMOTING ENGAGEMENT AND MAXIMIZING EMPLOYEE PRODUCTIVITY

Operational Excellence has had a considerable impact on employee engagement and productivity improvement. Implementation of Kaizen-based feedback mechanisms supports continuous improvement through active participation of employees in process improvement (Imai, 2012). Additionally, it has been found that organizations that invest in training programs based on Operational Excellence result in higher levels of employee engagement and a reduction in turnover rates (Saks, 2017). Empirical studies also demonstrate that formal feedback mechanisms and employee skill development programs have a positive impact on motivation and performance, leading to better service quality (Gruman & Saks, 2011).

Training aimed at attaining organizational excellence, coupled with introducing structured workflows and continuous improvement efforts, has contributed to a more motivated staff and improved service levels. Research reveals that engaging staff in process improvement develops a culture of continuous learning, which, in turn, increases productivity (Saks, 2017). An increased employee engagement level is linked directly to better customer service and organizational performance (Gruman & Saks, 2011).

The use of OE models has profoundly impacted the development of organizational culture and the alignment of corporate goals with core values. Moodley and Govender (2020) contend that shared leadership supports the development of a customer-centric culture, which is vital in the pursuit of success in the insurance sector. Similarly, Iddris, Dogbe, and Kparl (2023) established that transformational leadership is a crucial factor in promoting organizational competitiveness through employee innovation and adopting a customer-centric strategy. However, Participant E commented that the shift towards inclusivity and innovation was resisted by veteran employees, indicating that cultural transformation is

often a long-term process, often stifled by traditional practices. Molloy and Ronnie (2021) established that a lack of urgency and agility can hinder the implementation of new cultural values, especially considering fast-changing technology.

Resistance to change is most notable among long-tenured employees and traditional departments, posing a significant barrier. The insight offered by Participant C about the need to balance the thinking of long-tenured employees with modern work models captures a widespread problem. As per Chukwuma and Zondo (2024), their study showed that transformational leadership, by the process of inspirational motivation, could reduce employees' resistance to change by inducing commitment and overcoming fear of new projects. Additionally, Magano (2021) established that continuous exposure to work pressures without efficient change management mechanisms can lead to change fatigue, burnout, and low organizational commitment, hence enhancing resistance.

The development of staff engagement and building a positive organizational culture are key elements for the successful adoption of OE. Molloy and Ronnie (2021) highlight the need for organizations to be agile and ready for change, particularly in the era of the Fourth Industrial Revolution. Additionally, Magano (2021) found that change fatigue negatively impacts staff engagement and organizational attachment, calling for the necessity of embracing proactive employee engagement to facilitate continuous transformation efforts.

Additionally, building a culture of innovation based on digitalization requires putting people in the organization at the forefront. It is crucial for insurance firms to begin creating an innovative culture open to all employees regardless of their hierarchical level, as stated by Camara (2022). This involves setting clear goals concerning digitalization and making sure that staff understand the need for digital transformation. Without a corresponding alignment between organizational culture and technology development, innovation efforts risk encountering resistance or, in the worst-case scenario, failing to bring about meaningful improvements (Camara, 2022).

In addition, the leadership role as a cultural agent, as described by Participant A, is reiterated in the theoretical models of transformational leadership (Bass & Riggio, 2006). These models suggest that successful leaders develop a shared vision and encourage employees to adopt innovative ideas and approaches. However, as Participant E points out, change is a continuous process. Therefore, this reiterates the importance of leadership development programs that will prepare managers with the necessary competencies to drive long-term organizational excellence initiatives (Gagnon, Jansen, & Michael 2018).

7.15 CULTURAL CHANGE AND CHANGES IN EMPLOYEE MINDSET

Organizational culture is a key driver of the achievement of OE programs, and changing this culture often

represents one of the toughest elements in the field of change management (Schein, 2017). Participant B's emphasis on merging employee input to shape day-to-day operations is indicative of a participatory management philosophy that has been shown to increase employee commitment and engagement in activities aimed at organizational change (Denison, Nieminen, & Kotrba 2014).

However, the concern raised by Participant C about the need for workers to embrace cultural changes highlights a common resistance to change. This view aligns with Lewin's Change Management Model, which holds that for organizations to be able to introduce new cultural norms successfully, they should first actively "unfreeze" the set behaviors (Burnes, 2020). Research by Cameron and Quinn (2011) shows that organizations that focus on cultural change through leadership exemplification, incentivization systems, and ongoing training are more likely to experience lasting changes.

Strategic alignment ensures the integration of OE into the overall business strategy, as opposed to it being a stand-alone initiative. The mention by Participant D of McKinsey's 7S Framework aligns with modern academic literature that stresses the importance of an integrated approach to organizational change (Waterman et al., 1980). The framework integrates multiple components, such as structure, strategy, systems, shared values, skills, style, and personnel, to enable a holistic and sustainable change process.

Participant F's focus on the alignment of strategy with leadership roles and employee development is a demonstration of the principles of strategic human resource management (SHRM). According to Ulrich (2013), SHRM allows for the alignment of employee development with organizational goals, thereby improving overall organizational agility. However, a study by Bartlett and Ghoshal (2002) points out that maintaining this alignment in different regions is extremely challenging, especially in diversified and decentralized organizations such as those in South Africa.

However, as noted by Participant F, too much reliance on performance measures sometimes creates a tension between data-driven and human factor-based decisions. As reported by Bourne et al. (2003), too much emphasis on KPIs has the potential to have negative consequences, such as a focus on short-term results over long-term cultural change. To avoid this problem, organizations need to find a balance between quantitative performance measurement and qualitative research into employee motivation and changes in organizational culture (Neely, Gregory, & Platts 2002).

The emphasis on technological infrastructure is also complemented by recent research that underscores the continuous digital transformation in the financial sector. According to studies, firms that invest in creating solid technological foundations benefit from enhanced efficiency, flexibility, and competitive gains (Westerman et al., 2014). Similarly, Participant B noted that investing in staff training and hiring external consultants is aligned with human capital theory, which suggests that investing in human resource improvement returns significant long-term benefits to organizations (Becker, 1993).

7.16 HUMAN CAPITAL DEVELOPMENT

The development of human capital is identified as a core component in the achievement of OE. The answers highlight the importance of developing employee skills, encouraging digital literacy, and incorporating continuous learning models. This finding is in line with the RBV of organizations, which argues that a firm's human capital represents a key strategic resource (Barney, 1991).

Development of leadership skills forms an integral part of organizational frameworks. Literature shows that transformational leadership is key to helping workers through organizational change processes (Bass & Riggio, 2006). Investing in leadership training ensures that organizational managers are endowed with competencies to initiate and sustain programs of operational excellence (Gagnon, Jansen, & Michael 2018).

7.17 USE OF VIRTUAL TEAMS

The use of virtual teams represents a dynamic step forward in cooperative practices in professional settings, especially in the wake of the shift to work-from-home work due to the pandemic. Virtual teams have been shown to enhance organizational flexibility, allowing organizations to access talent from geographically distant areas (Dulebohn & Hoch, 2017).

The comment from Participant D on the need to promote collaboration and clear communication aligns with virtual leadership principles. The flexibility provided by virtual teams, as suggested by Participant E, is supported by empirical studies that underscore the importance of remote working in creating a work-life balance and increasing general employee satisfaction (Bailey & Kurland, 2002). Efficient virtual work, however, requires a commitment to electronic communication technology and clearly defined procedures for managing communication breakdown and team cohesion. The comments also indicate that the incorporation of change management into daily routines is important in ensuring sustainable change. This observation aligns with Prosci's (2021) ADKAR model that emphasizes awareness, desire, knowledge, ability, and reinforcement as key elements of successful change initiatives. Cultural change is of immense importance in the context of aligning with organizational excellence goals. In a study by Cameron and Quinn (2011), organizations that aim for excellence need to change their cultural norms to encourage innovation, teamwork, and continuous improvement. The proactive approaches used by organizations in this study highlight the need for a systematic and long-term commitment to change management.

The allocation of financial resources towards technological infrastructure highlights its significance in supporting virtual teams and streamlining collaborative processes. Research on digital transformation highlights the significant role of technology in enhancing operational effectiveness and organizational

responsiveness (Bharadwaj et al., 2013). The observations expressed by Participant A on the availability of collaboration tools for employees align with evidence from studies on enterprise digital platforms. The use of digital tools enables knowledge management, thus ensuring that employees use the resources necessary for organizational effectiveness efforts (Nonaka & Takeuchi, 1995).

7.17.1 EMPLOYEE BEHAVIOR- RESONSIBILITY, TEAMWORK, AND INVOLVEMENT

Employee conduct has been recognized as a key determinant of organizational success. Experts have highlighted that building accountability, teamwork, and commitment leads to the creation of an increasingly results-driven and customer-focused workforce. Participants A and B stressed that employees' behavior has increasingly aligned with the values and Key Performance Indicators (KPIs) of the organization, which has significantly contributed to the growth in sales revenue and general progress. Participant E noted that greater engagement and better communication had a positive effect on productivity and team performance.

Research into workforce behavior and organizational effectiveness shows that motivated employees exhibit higher productivity, greater commitment to organizational goals, and better customer service (Saks, 2021). In addition, when employees take ownership of their assigned tasks and responsibilities, organizations benefit from improved effectiveness as well as efficiency (Luthans, Youssef-Morgan, & Avolio 2020). Besides, collaboration allows for the sharing of ideas, thus leading to better problem-solving capacity and driving innovation (Edmondson, 2019).

Resistance to digital change is a major challenge in the insurance sector in South Africa. Research reveals that effective digital transformation requires significant changes to organizational culture and business processes, and client interaction mechanisms (Westerman et al., 2021). Employees often resist the adoption of innovative technologies, mainly because they are afraid of the possibility of job loss and a lack of training opportunities (Bughin, Catlin, & LaBerge 2022).

Participant responses show that the integration of legacy systems with modern technologies is a major challenge. Insurers in South Africa are lagging their global counterparts in the implementation of digital technologies, mainly because of outdated infrastructure and resistance to automating processes, as revealed by a study by Ojo and Van Belle (2021). Clients' resistance to digital-first services requires the introduction of specialized training programs and phased adoption approaches to enhance the adoption rate (KPMG, 2023).

7.18 SKILLS DEFICIT AND TALENT RETENTION

The shortage of skilled professionals in actuarial science, data analysis, and digital insurance products has become a major concern for insurance companies. Studies predict that the rapid financial services digitization requires a talent pool with innovative skills in artificial intelligence, machine learning, and big data analytics (World Economic Forum, 2023). However, the local labor market lacks proper digital literacy, and this results in difficulties in talent attraction and retention (Muller & Naidoo, 2023). Severe competition for skilled people escalates employee turnover in the job market, thus worsening the skills gap. Insurance firms in South Africa are increasingly investing in in-house training initiatives and strategic partnerships with learning institutions to counter the talent gap, as per a report published by Deloitte (2022). However, the industry needs to adopt proper employee engagement and retention strategies to sustain its competitive advantage.

Compliance with regulatory frameworks remains a major challenge for the insurance sector in South Africa. The rapid evolution of financial regulations, including data protection laws like the Protection of Personal Information Act (POPIA) and taxation laws, requires insurers to undertake constant adjustments (FSCA, 2023). The need for compliance forces greater financial investments in internal risk management systems, legal skills, and information technology infrastructure to attain conformity. However, legacy system integration remains a challenge for many traditional insurers, impeding their ability to compete with Insurtech firms that offer streamlined, user-friendly digital solutions (McKinsey, 2023). To remain competitive, insurers must invest in modern technological infrastructure and digital literacy among employees to maximize the benefits of technological advancements.

The rapid adoption of digital technologies in the insurance sector has increased the need for skilled professionals in areas like technology, actuarial science, and cybersecurity (WEF, 2023). The current shortage of skills in these key areas is a great hindrance since the lack of experts hinders innovation and lowers operational effectiveness. Evidence suggests that insurers need to focus on upskilling their workforce by introducing reskilling programs and collaborations with universities to alleviate the current talent gap (ILO, 2023). Additionally, providing competitive compensation and opportunities for professional growth is crucial for recruiting and retaining top talent in an incredibly competitive labor market.

As insurers increasingly move into online spaces, cybersecurity threats and data protection challenges have become exponentially more critical. With the increase in cyberattacks against financial institutions, the need for robust cybersecurity frameworks has been accelerated (ISACA, 2023). Data breaches pose not just financial risks but also risks to consumer confidence, thus making cybersecurity a top priority for insurers. Regulatory frameworks such as POPIA require insurers to enhance data protection measures, ensuring compliance with strict privacy standards (FSCA, 2023). Industry best practices emphasize the need for multi-layered cybersecurity strategies, including encryption, threat intelligence, and employee

training on data security protocols (Gartner, 2023).

In response to the challenges posed by a VUCA environment, strategic innovation has become an essential mechanism for organizational responses. Businesses increasingly see complexity and uncertainty not as challenges, but as opportunities for driving innovation. Recent research underscores the importance of innovation in enhancing organizational resilience and competitive advantage in the face of volatile conditions (Hamel & Prahalad, 2020). In the South African insurance sector, companies are investing in creating resilient business models and leveraging technology to offer flexible, consumer-centric products able to evolve with changing consumer tastes. The development of Insurtech provides a compelling example of how technological innovation can be a source of competitive advantage by allowing for more tailored services to be delivered and for real-time engagement with customers (Liyanage & Abeysekera, 2021). Insurance companies that focus on strategic innovation are better at responding to market changes and meeting the changing needs of consumers, positioning them well for long-term growth.

Limited understanding of insurance, particularly in rural and deprived areas, is a major impediment to the growth of the market. Lack of awareness of the benefits of insurance generates skepticism, lowers participation levels, and results in policy cancellations (Kakembo & Chigbu, 2021). The literature shows that successful consumer education programs can boost the uptake of insurance products by resolving misconceptions and building confidence in financial institutions (Bester, Chamberlain, & Hougaard 2022). However, the lack of proper resource allocation to training schemes and marketing efforts limits the insurers' capacity to tap into new market segments. Insurance companies should introduce focused financial literacy programs, employ mobile-led campaigns, and form partnerships with community associations to increase awareness and build confidence among their customers. In addition, digital media and social media are cost-effective channels to educate consumers about the benefits of insurance and risk management (PwC, 2023). The above-described challenges cumulatively impact the growth and innovative strategies in the insurance sector. Regulatory barriers hinder the launch of new products, economic constraints limit the adoption by consumers, and market saturation strengthens competitive forces. Therefore, insurers are refocusing their attention on digitalization, customer loyalty, and strategic innovation as the primary drivers for maintaining long-term growth (EY, 2022). Empirical research suggests that insurers that successfully integrate technology into their operational models—such as artificial intelligence-powered underwriting engines, blockchain-supported claim processing, and the use of telematics in motor insurance—gain a competitive advantage (Hancock, Parsons, & Sutherland 2021). In addition, tailored insurance products, such as pay-per-mile car insurance and health-oriented life insurance, are future trends that respond to evolving consumer needs (McKinsey, 2022). The need for more investment in retaining customers is clear, with important levels of customer attrition that force organizations to invest significant amounts of resources into loyalty programs, digital engagement platforms, and tailor-made service offers (Bierman & Lategan, 2021). With the use of advanced data

analytics and consumer behavior insights, insurance companies can enhance customer retention and develop targeted campaigns that enhance the user experience (Deloitte, 2023).

The rise of collaborative partnerships between Insurtech and fintech players is reshaping traditional insurance models. Partnerships between insurers and fintech organizations allow scalable digital solutions to be developed, thus improving market access, particularly in underinsured and unbanked segments (KPMG, 2023). Innovations like embedded insurance, which involve the discreet embedding of protection in digital transactions, facilitate increased consumer onboarding and engagement (Brennan, Fitzgerald, & Solomon 2022). Major insurance companies in South Africa, such as Old Mutual and Discovery Insure, have successfully integrated artificial intelligence-powered chatbots into their customer service systems as well as introduced telematics-based pricing, leading to improved customer retention and satisfaction (PwC, 2023).

The examination of large data sets allows insurance companies to provide tailored policy choices and improve customer engagement strategies (EY, 2023). Usage-based insurance models, such as pay-as-you-drive car policies and health-oriented life insurance, align coverage with consumer behavior, thus encouraging customer satisfaction and loyalty (Deloitte, 2022). Discovery Health's behavior-based insurance model, which rewards policyholders for healthy living through its Vitality program, illustrates how data-driven personalization creates higher levels of engagement and drives business growth (Hancock et al., 2021).

Engagement with policymakers and proactive regulatory compliance foster industry innovation and growth. Frequent regulatory changes pose compliance challenges; however, active engagement with regulatory bodies enables insurers to develop market-responsive products while maintaining legal adherence (Naidoo, 2022). South Africa's microinsurance regulations, for instance, have been provided opportunities for insurers to expand coverage among underserved populations (PwC, 2023). A stable regulatory environment supports innovation and reduces entry barriers. Regulatory sandboxes—allowing insurers to evaluate new products under controlled supervision—have been instrumental in expanding inclusive insurance models (Schoeman & Erasmus, 2021). Together with the regulator, South African insurers have successfully created microinsurance products and mobile-based insurance policies, significantly improving financial inclusion and expanding market reach (KPMG, 2023).

A highly educated workforce is an important factor in sustaining innovation and improving customer service. With the insurance industry transforming because of digitalization, constant training of staff in data analytics, artificial intelligence applications, and customer relationship management helps improve efficiency and service quality (Deloitte, 2023). Insurance companies investing in employee development programs reflect increased operational performance and innovation (McKinsey, 2022). Studies have shown that companies with high levels of employee engagement are likely to achieve higher customer

satisfaction and better business results (Bierman & Lategan, 2021). An engaged workforce drives product innovation, increases service quality, and enhances brand reputation (EY, 2023). Sanlam's commitment to upgrading professional capabilities through upskilling programs focused on digital insurance products has yielded higher levels of customer service quality and business growth (McKinsey, 2022).

Expanding insurance to underserved populations helps enhance financial inclusion and stimulates market expansion. Financial inclusion initiatives such as microinsurance and parametric insurance increase coverage among lower-income groups. Research shows that insurance models based on community engagement enable deeper penetration in emerging markets (Kakembo & Chigbu, 2021). Educational outreach initiatives enhance public understanding of insurance benefits, fostering long-term policy adoption (Bester et al., 2022). Mobile-based insurance models, leveraging fintech partnerships, have significantly improved financial inclusion (PwC, 2023). Hollard Insurance's collaboration with fintech firms to provide mobile-based insurance products has expanded coverage among low-income South Africans, demonstrating financial inclusion's role in business growth (Accenture, 2022).

Customer-centricity is an integral part of modern insurance business models, where organizations strive to enhance user experience, foster loyalty, and gain market penetration. Empirical research suggests that personalization, enabled by artificial intelligence and data analytics, plays a critical role in enhancing customer retention and engagement (Lemon & Verhoef, 2016). Personalization enables companies to tailor policies, pricing models, and services based on the unique needs of individual customers, thus improving satisfaction and increasing customer lifetime value (Sheth, 2021). In addition, customer-centric approaches enable companies to stay coordinated with changing consumer expectations, particularly in competitive markets where differentiation is critical. Digitalization is a core driver for improving organizational effectiveness, with financial technology, blockchain, and artificial intelligence transforming the insurance industry (Manyika, Chui, Bisson, & Woetzel 2021). The adoption of digital technologies enhances operational effectiveness by allowing faster claims processing, improving fraud detection, and boosting customer engagement through chatbots and self-service channels (Fitzgerald et al., 2014). The use of data-driven technologies allows insurers to improve decision-making, better assess risks, and reduce operational costs (Westerman et al., 2014). The intended model thus needs to incorporate digital solutions in line with changing industry standards and customer expectations, thus allowing for scalability and long-term sustainability.

7.19 ADAPTIBILITY, INNOVATION, AND STRATEGIC FLEXIBILITY

Recent studies underscore the pivotal role of digital transformation in improving OE. According to Ghaleb et al. (2021), organizations that invest in advanced information systems experience a significant increase in productivity and process efficiency. Similarly, automation technologies, AI, and ERP systems have

been highlighted as key contributors to reducing redundancies and optimizing workflows (Parida et al., 2020). Communication, particularly within a digital infrastructure, plays a crucial role in ensuring seamless collaboration across different organizational levels, ultimately improving responsiveness and adaptability (Roberts & Grover, 2021).

The variability in participant opinions, with responses ranging mostly between "Disagree" and "Agree," suggests a lack of strong consensus on certain OE drivers. This outcome is consistent with previous research indicating that organizational efficiency is influenced by multiple interdependent factors, including organizational culture, leadership, and external market conditions (Kotter, 2021). The findings suggest that while technology, information systems, and communication are widely recognized as efficiency enablers, the role of customer ownership and continuous improvement initiatives may be perceived differently based on individual experiences and organizational contexts (Teece, 2022).

The study found that 41.8% of respondents agreed or strongly agreed that teamwork issues were prevalent. Effective teamwork is crucial for OE, as collaborative work environments enhance innovation, problem-solving, and efficiency (Edmondson, 2019). However, challenges such as lack of trust, unclear roles, and ineffective leadership can hinder team performance (Lencioni, 2021). Research suggests that fostering a strong organizational culture that promotes collaboration, and psychological safety can mitigate teamwork-related challenges and enhance OE (Gino, 2020).

The finding that 36.6% of respondents identified adaptability to change as a major challenge highlights the difficulties organizations face in navigating uncertainty and transformation. Adaptability is a key component of organizational resilience and competitiveness, particularly in volatile environments (Teece, 2022). However, resistance to change, rigid structures, and lack of leadership support often impede adaptability (Kotter, 2021). Organizations that embrace continuous learning, flexibility, and proactive change management strategies tend to be more successful in maintaining OE (Senge, 2020).

A significant proportion (40.5%) of respondents disagreed or strongly disagreed that the company was effective in agility and resilience. Organizational agility—the ability to respond quickly to market shifts and internal changes—is crucial for sustaining competitive advantage (Vargo & Lusch, 2022). Similarly, resilience enables firms to withstand disruptions and recover from setbacks (Brynjolfsson & McAfee, 2021). Research highlights that firms that invest in digital transformation, adaptive leadership, and innovation are more likely to demonstrate high agility and resilience (Teece, 2022; Senge, 2020).

From a theoretical perspective, these findings align with change management models such as Kotter's (2021) eight-step process, which emphasizes communication, leadership, and adaptability as critical factors in organizational success. The results also support the dynamic capabilities framework, which stresses the need for agility and continuous innovation in response to environmental uncertainties (Teece,

2022).

7.20 PROMOTING INNOVATION AND FLEXIBILITY THROUGH OPERATIONAL EXCELLENCE

OE is central to the development of an innovation and adaptability culture. Through the streamlining of decision-making models, the adoption of agile methodologies, and the encouragement of continuous improvement, companies are well placed to respond quickly to market changes and maintain their competitive edge.

The use of agile methods has enabled fast testing and iteration of new products. As stated by Rigby, Sutherland, and Takeuchi (2016), developing organizational agility is accomplished by promoting iterative development and continuous feedback. This approach enables organizations to react more effectively to changing market forces and consumer needs (Highsmith, 2019).

Flexibility The launch of a micro-insurance product specifically designed for gig economy workers is an example of the positive effect that effective decision-making models can have on driving innovation. Teece (2018) further suggests that the acquisition of dynamic capabilities—such as timely decision-making and strategic flexibility—is necessary for organizations operating in fast-changing industries. In addition, Christensen, Raynor, and McDonald (2015) argue that companies that practice innovation and are flexible are better placed strategically to capture new market opportunities.

7.21 FOSTERING INNOVATION AND ADAPTIBILITY

OE has become a key driver promoting innovation as well as flexibility in the insurance sector. The implementation of agile approaches has helped companies in this sector analyze and analyze new products offerings effectively, thus creating a dynamic environment for continuous improvement (Rigby, Sutherland, & Takeuchi, 2016). Empirical studies have shown that companies that adopt agile models reduce their time-to-market significantly, thus enhancing their competitive edge (Denning, 2018). In addition, strong decision-making models allow for rapid product development, such as the development of micro-insurance products specific to gig economy participants. This claim is supported by a study conducted by McKinsey & Company (2021), which shows that digital-first insurers who follow OE models can respond to market changes 30% faster compared to their traditional peers.

OE has helped ensure providers eliminate inefficiencies, create standardized processes, and reduce administrative expenses, hence reinvesting in innovative projects. Academics argue that the automation of underwriting and administrative functions leads to significant cost reductions, allowing organizations

to invest in advanced digital solutions (Porter & Heppelmann, 2015). Reinversion of funds into innovation enhances competitive advantage and maintains long-term market leadership (Christensen, Raynor, & McDonald, 2015).

The use of OE models has profoundly impacted the development of organizational culture and the alignment of corporate goals with core values. Moodley and Govender (2020) contend that shared leadership supports the development of a customer-centric culture, which is vital in the pursuit of success in the insurance sector. Similarly, Iddris, Dogbe, and Kparl (2023) established that transformational leadership is a crucial factor in promoting organizational competitiveness through employee innovation and adopting a customer-centric strategy. However, Participant E commented that the shift towards inclusivity and innovation was resisted by veteran employees, indicating that cultural transformation is often a long-term process, often stifled by traditional practices. Molloy and Ronnie (2021) established that a lack of urgency and agility can hinder the implementation of new cultural values, especially considering fast-changing technology.

The development of staff engagement and building a positive organizational culture are key elements for the successful adoption of OE. Molloy and Ronnie (2021) highlight the need for organizations to be agile and ready for change, particularly in the era of the Fourth Industrial Revolution. Additionally, Magano (2021) found that change fatigue negatively impacts staff engagement and organizational attachment, calling for the necessity of embracing proactive employee engagement to facilitate continuous transformation efforts.

Additionally, building a culture of innovation based on digitalization requires putting people in the organization at the forefront. It is crucial for insurance firms to begin creating an innovative culture open to all employees regardless of their hierarchical level, as stated by Camara (2022). This involves setting clear goals concerning digitalization and making sure that staff understand the need for digital transformation. Without a corresponding alignment between organizational culture and technology development, innovation efforts risk encountering resistance or, in the worst-case scenario, failing to bring about meaningful improvements (Camara, 2022).

Worker participation in organizational activities is key to ensuring OE, since organizations that engage their personnel are often more likely to achieve higher levels of innovation and productivity (Saks, 2006). Participant F's emphasis on incorporating staff feedback into day-to-day working processes demonstrates a growing recognition of participatory decision-making as a key driver that enhances OE. Deci and Ryan (2000)'s investigation of self-determination theory explains that individuals who feel autonomous and competent are more likely to embrace changes within the organization. Also, the priority accorded by Participant D to leadership development as a measure of empowering people is supported by the findings of Spreitzer (1995), which reveal that organizations investing in training and skill development reap

increased intrinsic motivation and involvement among their employees. However, as Yukl (2013) argues, it is also vital that empowerment initiatives are complemented by supportive organizational structures to ensure that employees feel their involvement in decision-making processes.

Participant A's activity in digital transformation is linked to the increased focus on digital transformation in different industries. The use of virtual teams represents a dynamic step forward in cooperative practices in professional settings, especially in the wake of the shift to work-from-home work due to the pandemic. Virtual teams have been shown to enhance organizational flexibility, allowing organizations to access talent from geographically distant areas (Dulebohn & Hoch, 2017).

The comment from Participant D on the need to promote collaboration and clear communication aligns with virtual leadership principles. The flexibility provided by virtual teams, as suggested by Participant E, is supported by empirical studies that underscore the importance of remote working in creating a work-life balance and increasing general employee satisfaction (Bailey & Kurland, 2002). Efficient virtual work, however, requires a commitment to electronic communication technology and clearly defined procedures for managing communication breakdown and team cohesion. The comments also indicate that the incorporation of change management into daily routines is important in ensuring sustainable change. This observation aligns with Prosci's (2021) ADKAR model that emphasizes awareness, desire, knowledge, ability, and reinforcement as key elements of successful change initiatives. Cultural change is of immense importance in the context of aligning with organizational excellence goals. In a study by Cameron and Quinn (2011), organizations that aim for excellence need to change their cultural norms to encourage innovation, teamwork, and continuous improvement. The proactive approaches used by organizations in this study highlight the need for a systematic and long-term commitment to change management.

Research into workforce behavior and organizational effectiveness shows that motivated employees exhibit higher productivity, greater commitment to organizational goals, and better customer service (Saks, 2021). In addition, when employees take ownership of their assigned tasks and responsibilities, organizations benefit from improved effectiveness as well as efficiency (Luthans et al., 2020). Besides, collaboration allows for the sharing of ideas, thus leading to better problem-solving capacity and driving innovation (Edmondson, 2019).

7.23 RISK MANAGEMENT, REGULATORY COMPLIANCE, AND GOVERNANCE

7.23.1 Risk management and regulatory compliance through operational excellence

OE has played a leading role in reducing risk and strengthening compliance assurance, particularly in the

scenario of changing regulatory requirements. By deploying real-time monitoring, automated reporting systems, and proactive risk assessment methodologies, insurance firms have strengthened their governance frameworks and ensured compliance with regulatory compliance standards.

The use of real-time monitoring tools and enhancement of internal audit techniques have drastically reduced the frequency of regulatory violations, according to Participant A. Power (2020) stated that real-time compliance monitoring encourages greater transparency and helps organizations identify and correct compliance violations in a timely manner. In addition, the implementation of continuous auditing techniques enhances accountability and ensures compliance with regulatory requirements (Vasarhelyi, Alles, & Kogan 2018).

Results from this study concur with the argument that the use of AI-powered compliance systems has strengthened governance systems by detecting potential risks in their initial stages before they intensify. Kroll, Schneider, and Weber (2021) confirm that AI-powered compliance systems enable active risk management by analyzing vast regulatory datasets and detecting inconsistencies that could lead to compliance breaches. In addition, Brown, and Osborne (2019) highlight that AI-powered compliance tools enhance risk evaluation by enhancing decision-making processes and reducing human mistakes, thus enhancing stakeholder trust.

The integration of advanced data analytics in the operational excellence framework has significantly improved decision-making in the insurance industry. The use of machine learning algorithms enhances underwriting accuracy, consequently reducing cases of fraud, and improving risk assessment (Jordan & Mitchell, 2015). Empirical research confirms the effectiveness of real-time data analysis in predicting market trends, hence allowing organizations to modify their strategies in advance and maintain competitive responsiveness (McAfee, Brynjolfsson, & Davenport, 2012). The ability to leverage predictive analytics in making well-informed strategic choices reaffirms the role of operational excellence in promoting a culture of data-driven decision-making among organizations (Provost & Fawcett, 2013).

With evolving regulations, insurers have leveraged OE to enhance compliance and establish robust risk management frameworks. Automated auditing systems and AI-driven compliance monitoring minimize regulatory violations and improve governance structures, increasing credibility with regulators (PwC, 2021). Strengthening governance through OE fosters transparency and trust among stakeholders, reinforcing the importance of regulatory adherence in sustaining long-term business success (Ferrell, Fraedrich, & Ferrell, 2021).

The integration of AI, data analytics, and machine learning within OE has improved risk assessment, fraud detection, and policy customization. Studies highlight that embedding advanced analytics into insurance operations reduces fraud incidents while improving underwriting precision (Brynjolfsson & McAfee,

2017). Real-time data insights enhance transparency and customer trust, supporting the growing demand for digital-first insurance solutions (McKinsey & Company, 2023).

Additionally, building a culture of innovation based on digitalization requires putting people in the organization at the forefront. It is crucial for insurance firms to begin creating an innovative culture open to all employees regardless of their hierarchical level, as stated by Camara (2022). This involves setting clear goals concerning digitalization and making sure that staff understand the need for digital transformation. Without a corresponding alignment between organizational culture and technology development, innovation efforts risk encountering resistance or, in the worst-case scenario, failing to bring about meaningful improvements (Camara, 2022).

The regulatory environment of the insurance industry in South Africa has become increasingly complex over time, with ongoing changes in financial regulations and laws related to data protection. The implementation of the Protection of Personal Information Act (POPIA), alongside changes in tax laws, presents insurers with considerable operational and financial burdens (Sithole & Moyo, 2022). The widening range of regulatory actions is consistent with the findings of De Villiers et al. (2022), which show that continuous changes to compliance frameworks lead to higher administrative costs and operational inefficiencies. Additionally, non-compliance with these regulations can attract heavy fines, damage an organization's reputation, and even trigger legal action, thus placing further pressure on resources (PwC, 2023).

Economic uncertainty continues to have an impact on the insurance industry in terms of informing consumer buying behavior and investment strategies. Research reports that concern global recession, inflation pressures, and geopolitical tensions have translated into lower consumer confidence and weaker demand for insurance products (IMF, 2023). The respondents acknowledged that the COVID-19 pandemic accelerated economic volatility, resulting in higher payouts of claims and lower profit margins. Consistent with this, a study by Naicker and Pillay (2022) finds that South African insurers face ongoing challenges due to volatile exchange rates, inflationary pressures, and changes in interest rates, all of which complicate proper risk assessment and pricing measures. The insurance industry is now facing more cybersecurity risks and data privacy concerns, especially considering the fast rhythm of digitalization. Studies indicate that there has been an increase in cyberattacks targeting sensitive customer data, which has led to increased regulatory scrutiny and compliance costs (McKinsey, 2023). Respondents pointed out that maintaining data security is essential to sustaining customer trust and meeting regulatory obligations. The research by Gordon et al. (2022) highlights the importance of advanced cybersecurity systems, including artificial intelligence-powered threat detection and robust encryption techniques, to mitigate threats. South African insurance firms need to prioritize investing in cybersecurity solutions to prevent financial losses and reputational damage due to data breaches.

The South African insurance sector operates in an environment characterized by economic uncertainty, encompassing inflationary pressures, high rates of unemployment, and fluctuating market conditions. The existing economic uncertainty is directly associated with consumer spending patterns, often resulting in the reduced demand for discretionary insurance products. This economic uncertainty can, at the same time, increase the demand for basic insurance products, such as life, health, and savings schemes, as consumers seek financial protection in the face of adverse economic conditions (PwC, 2023). Sustained durations of economic downturn affect investment decisions and the affordability of insurance premium costs, thereby affecting the viability of long-term insurance companies (IMF, 2023). Insurers must skillfully balance their risk exposure while providing affordable products since it is still important to deal with the current uncertainties.

7.23.2 Corporate social responsibility

Corporate social responsibility (CSR) has become a core element of strategic planning for the insurance sector. Organizations are increasingly expected to undertake activities linked to financial education, sustainable growth, and social empowerment. Empirical research suggests that CSR activities have a positive effect on enhancing the reputation of brands, building trust among consumers, and creating stakeholder value over the long term (Harvard Business Review, 2023). Insurance firms must integrate sustainability principles into their business models, making sure that their strategic plans align with ESG standards to meet the evolving needs of the market (Deloitte, 2023). Moreover, improving financial literacy among consumers can help increase insurance penetration and policy uptake in historically underserved communities.

Global volatility, especially as evidenced through economic crises, political upheavals, and unexpected events like pandemics, is a significant challenge to insurance companies. These factors bring about unpredictable shifts in market conditions and affect customer behaviors. The uncertainty related to external events makes it a necessity for organizations to be agile and responsive, as they must anticipate sudden changes in customer requirements and market trends (Hough & Neuland, 2021). In the context of the insurance sector, this highlights the necessity for companies to constantly review risk assessment models and modify their strategy to maintain a competitive advantage in a dynamic environment. The ability to manage such volatility effectively lies in the responsiveness of the organization, which makes it capable of responding rapidly to unexpected market changes.

The existence of ambiguity and uncertainty are inherent elements of the business environment, where spontaneous consumer actions and changes in regulation make long-range forecasting processes unreliable. As exemplified in past studies, businesses operating in the context of an unstable environment have significant challenges within the long-term planning process due to the inherent unreliability of

traditional forecasting methods (Santos & Brito, 2020). In the case of the South African insurance industry, an increasingly dynamic regulatory environment is joined by fluctuating market conditions making it difficult to make accurate estimates of consumer demands. Scholars believe that organizations highlighting better performance within such environments deploy a dynamic methodology in business planning, utilizing adjustable strategies that could be altered within short notice periods to respond to unexpected situations (Tushman & O'Reilly, 2021). Adaptability is a key factor cited in successfully counteracting the presence of uncertainty and ambiguity inherent to a VUCA environment.

The rising complexity of the global business environment forms another core theme identified in the study. With growing interconnectivity among economies, which is marked by complex regulatory regimes and varied market conditions, insurance companies face several challenges in their operations at both national and international levels. Academic literature in the domain of business and management suggests that multinational corporations face elevated levels of complexity due to interactions among political, economic, and social factors, which further affect decision-making and strategy formulation (Scherer & Boddewyn, 2021). South African insurance companies, operating in domestic markets as well as abroad, must consider the complexities brought on by transnational regulations, competitive pressures, and changing consumer needs. Operating such a diversified global portfolio while following localized regulatory regimes poses a significant challenge in attaining greater agility and achieving strategic growth (Gagnon, Jansen, & Michael 2018).

Empirical studies show that businesses working in unstable economic conditions need to develop flexible strategies, like diversifying sources of income and focusing on cost-effectiveness, to mitigate risks (Goh & Marquez, 2020). In South Africa, inflation is often caused by both domestic factors (e.g., energy prices) and international impacts (e.g., changes in commodity prices), so businesses must constantly change their strategies to ensure the sustainability of their operations (Hough & Neuland, 2021).

Political instability and uncertainty are major challenges in South Africa, which are marked by regular changes in governmental leadership, policy changes, and an unstable regulatory environment that detracts from the feasibility of long-term business strategies. The political environment in South Africa, marked by leadership changes and policy inconsistencies, creates an uncertain business environment for businesses (Kihn & Da Silva, 2020). Scholars argue that policy uncertainty has a direct impact on the finance and insurance sectors by magnifying the risks associated with legislative changes, tax planning structures, and investment plans (Tushman & O'Reilly, 2021).

The uncertainty linked to government policy may lead to delayed investments, reduced investor confidence, and difficulties in formulating long-term strategic objectives (Redding, 2021). This complex scenario requires organizations operating in South Africa to employ flexible strategic planning techniques, hence allowing for swift reactions to changes in the political and regulatory environment. Organizations

often rely on scenario analysis and risk management tools to effectively navigate the unpredictable political landscape (Bode et al., 2022).

Mutize and Gossel's (2020) work emphasizes that recessions are linked to lower levels of insurance penetration due to consumers' preferences for essential spending over discretionary financial products such as insurance. Additionally, periods marked by economic uncertainty result in a rise in the frequency of claims due to financial distress, thus affecting the profitability and risk pricing models of insurers (Bierman & Lategan, 2021). Against these constraints, insurers are compelled to practice innovation through designing microinsurance products and flexible payment structures for the lower-income consumers. Embedded insurance, whereby the coverage is embedded in other financial products or services, could be a catalyst for improving access and easing market penetration (KPMG, 2023).

The ongoing changes to regulatory frameworks and the changing nature of compliance requirements add to a complex and volatile environment for insurance companies. In South Africa, the insurance sector is under strict regulation by the Financial Sector Conduct Authority (FSCA) and the Prudential Authority (PA), both of which are rolling out amendments to the Insurance Act (2017) and the Treating Customers Fairly (TCF) principles (PwC, 2023). Regulatory uncertainty impacts insurance firms by increasing compliance costs, slowing the development of new products, and discouraging long-term focused investments (Naidoo, 2022). Scholars argue that while stringent regulations enhance consumer protection and financial stability, too-frequent regulation changes can stifle business growth and reduce the industry's competitive advantage (Schoeman & Erasmus, 2021). To minimize the risks of regulation, insurance companies must adopt proactive regulatory compliance strategies. This entails engaging with policymakers, leveraging regulatory technology (RegTech) to improve the administration of compliance processes, and expanding their product portfolios to ensure they meet evolving legal requirements (EY, 2023).

The digital transformation process is radically changing the insurance industry, enhancing operational efficiency, customer experience, and market accessibility. The use of AI, blockchain technology, and big data analytics has dramatically changed the approaches used in risk assessment and claims processing (Accenture, 2023). AI-driven automation reduces processing times and operational costs, while data analytics enables insurers to analyze risk profiles with higher accuracy (McKinsey, 2023). In addition, digital platforms enable the purchase of policies and filing of claims via mobile apps, thus improving accessibility in disadvantaged areas (Deloitte, 2022).

Engagement with policymakers and proactive regulatory compliance foster industry innovation and growth. Frequent regulatory changes pose compliance challenges; however, active engagement with regulatory bodies enables insurers to develop market-responsive products while maintaining legal adherence (Naidoo, 2022). South Africa's microinsurance regulations, for instance, have provided

opportunities for insurers to expand coverage among underserved populations (PwC, 2023). A stable regulatory environment supports innovation and reduces entry barriers. Regulatory sandboxes—allowing insurers to evaluate new products under controlled supervision—have been instrumental in expanding inclusive insurance models (Schoeman & Erasmus, 2021). Together with the regulator, South African insurers have successfully created microinsurance products and mobile-based insurance policies, significantly improving financial inclusion and expanding market reach (KPMG, 2023).

7.24 FINANCIAL RESOURCES, COST OPTIMIZATION AND SUSTAINABILITY

The findings indicate that technology (40.5%), information systems (40.8%), and communication (42.1%) are the strongest drivers of operational efficiency (OE) success. This aligns with contemporary literature emphasizing the role of digital transformation in enhancing operational efficiencies across various industries (Davenport & Harris, 2020; Brynjolfsson & McAfee, 2021). The integration of technology and information systems has been widely recognized as a key enabler of productivity, streamlining processes, and reducing operational costs (Porter & Heppelmann, 2018). Effective communication further supports these technological advancements by facilitating coordination, reducing errors, and improving decision-making processes (Daft & Lengel, 2022).

Respondents identified both internal (38.3%) and external factors as barriers to OE success. Internal barriers such as organizational culture, leadership inefficiencies, and structural constraints can limit performance (Parida et al., 2020). External factors, including market volatility, regulatory changes, and economic fluctuations, also play a critical role in shaping OE (Porter & Heppelmann, 2018). The RBV suggests that organizations must leverage internal capabilities while strategically responding to external pressures to achieve sustained efficiency (Barney, 2021).

The neutral responses regarding financial resources suggest uncertainty or inconsistency in financial management and allocation. Financial resources are vital for investment in technology, employee development, and operational improvements (Ghaleb et al., 2021). Organizations that fail to secure stable financial backing may struggle with long-term OE and strategic execution (Prahalad & Ramaswamy, 2021). Transparency in financial planning and effective resource allocation strategies can mitigate this uncertainty (Davenport & Harris, 2020).

7.24.1 Cost Optimization Through Operational Excellence

The shift to digital means in policy implementation has resulted in a reduction of administrative costs by 30%, as Participant E observed, at the same time increasing accuracy. This finding supports the

claims of Davenport and Ronanki (2018), who contend that the use of automation and digitization increases efficiency in workflow and reduces human errors. The concepts of Lean Six Sigma promote the elimination of waste and inefficiency (George, 2019), thus supporting the direct conclusion that digital processes accelerate operations and lower processing costs (Hammer, 2015).

Improving procurement processes and renegotiating contracts with suppliers have been cited as effective measures in cutting costs, Participant C claims. Porter (1985) claims that cost leadership strategies, such as improvements in supply chain effectiveness, allow organizations to stay profitable while offering competitive prices. Chopra and Meindl (2019) contend that effective management of suppliers and procurement process optimization result in lower costs and improved delivery of services, hence improving the competitive advantage of a firm in price-sensitive markets.

Organizations seeking growth through operational excellence leverage operational data and customer information to realize effective scaling. The study by Teece (2018) highlights the importance of dynamic capabilities in evolving business models to suit shifting market conditions. Performance measurement systems to track key operational metrics enable insurers to enhance product development based on real-time customer insights, thus fostering continuous scalability (Kaplan & Norton, 2004). In addition, claims approval times reduction supports increased customer satisfaction and higher market standing, in line with research highlighting the competitive advantage offered by process efficiency in the financial services industry (Hammer, 2010).

7.24.2 Improving Systems to Maximize Economic Efficiency

OE has helped ensure providers eliminate inefficiencies, create standardized processes, and reduce administrative expenses, hence reinvesting in innovative projects. Academics argue that the automation of underwriting and administrative functions leads to significant cost reductions, allowing organizations to invest in advanced digital solutions (Porter & Heppelmann, 2015). Reinvestment of funds into innovation enhances competitive advantage and maintains long-term market leadership (Christensen, Raynor, & McDonald, 2015). Achieving Sustainable Development Organizations that leverage OE have successfully expanded their operations without compromising operational efficiency. Through optimizing resource allocation and streamlining growth strategies, insurers can enter new markets without compromising operational efficiency (Teece, 2018). Sustainability focus through OE advances the creation of long-lasting value and enhances resilience in competitive environments (Elkington, 1997). Enhancing Customer Satisfaction Through Process Improvement. Process optimization through operational excellence (OE) has led to accelerated claims processing, improved service delivery, and reduced customer dissatisfaction. Empirical evidence suggests that automation of claims approvals significantly enhances customer satisfaction and improves retention (Kaplan & Norton, 2004). In addition, efficient service delivery

strengthens market positioning, thus pointing to the essentiality of process efficiency in building consumer trust (Hammer, 2010). The views expressed by the eight South African insurance industry respondents bring to light several main themes on the effectiveness of Organizational Excellence (OE) in facilitating changes along various aspects, such as organizational, cultural, value-based, and cognitive changes.

7.24.3 Project Budget and Financial Allocation

Financial resource allocation is critical to the successful implementation of initiatives that promote OE. The findings show that a significant amount of funding was directed towards technological infrastructure, workforce capability building, and change management processes. Kaplan and Norton (2004) contend that a well-designed budget ensures that financial resources are aligned with overall business goals, thereby supporting both the initial stages of implementation and long-term sustainability.

The emphasis on technological infrastructure is also complemented by recent research that underscores the continuous digital transformation in the financial sector. According to studies, firms that invest in creating solid technological foundations benefit from enhanced efficiency, flexibility, and competitive gains (Westerman et al., 2014). Similarly, Participant B noted that investing in staff training and hiring external consultants is aligned with human capital theory, which suggests that investing in human resource improvement returns significant long-term benefits to organizations (Becker, 1993).

The allocation of financial resources towards technological infrastructure highlights its significance in supporting virtual teams and streamlining collaborative processes. Research on digital transformation highlights the significant role of technology in enhancing operational effectiveness and organizational responsiveness (Bharadwaj et al., 2013). The observations expressed by Participant A on the availability of collaboration tools for employees align with evidence from studies on enterprise digital platforms. The use of digital tools enables knowledge management, thus ensuring that employees use the resources necessary for organizational effectiveness efforts (Nonaka & Takeuchi, 1995). The focus laid by Participant F on the importance of technology in maintaining engagement indicates the intersection of digital tools and employee experience.

The regulatory environment of the insurance industry in South Africa has become increasingly complex over time, with ongoing changes in financial regulations and laws related to data protection. The implementation of the Protection of Personal Information Act (POPIA), alongside changes in tax laws, presents insurers with considerable operational and financial burdens (Sithole & Moyo, 2022). The widening range of regulatory actions is consistent with the findings of De Villiers et al. (2022), which show that continuous changes to compliance frameworks lead to higher administrative costs and operational inefficiencies. Additionally, non-compliance with these regulations can attract heavy fines,

damage an organization's reputation, and even trigger legal action, thus placing further pressure on resources (PwC, 2023).

The shortage of skilled professionals in actuarial science, data analysis, and digital insurance products has become a major concern for insurance companies. Studies predict that the rapid financial services digitization requires a talent pool with innovative skills in artificial intelligence, machine learning, and big data analytics (World Economic Forum, 2023). However, the local labor market lacks proper digital literacy, and this results in difficulties in talent attraction and retention (Muller & Naidoo, 2023). Severe competition for skilled people escalates employee turnover in the job market, thus worsening the skills gap. Insurance firms in South Africa are increasingly investing in in-house training initiatives and strategic partnerships with learning institutions to counter the talent gap, as per a report published by Deloitte (2022). However, the industry needs to adopt proper employee engagement and retention strategies to sustain its competitive advantage.

7.24.4 Economic Uncertainty and Market Fluctuations

Economic uncertainty continues to have an impact on the insurance industry in terms of informing consumer buying behavior and investment strategies. Research reports that concern global recession, inflation pressures, and geopolitical tensions have translated into lower consumer confidence and weaker demand for insurance products (IMF, 2023). The respondents acknowledged that the COVID-19 pandemic accelerated economic volatility, resulting in higher payouts of claims and lower profit margins. Consistent with this, a study by Naicker and Pillay (2022) finds that South African insurers face ongoing challenges due to volatile exchange rates, inflationary pressures, and changes in interest rates, all of which complicate proper risk assessment and pricing measures.

The insurance industry is now facing more cybersecurity risks and data privacy concerns, especially considering the fast rhythm of digitalization. Studies indicate that there has been an increase in cyberattacks targeting sensitive customer data, which has led to increased regulatory scrutiny and compliance costs (McKinsey, 2023). Respondents pointed out that maintaining data security is essential to sustaining customer trust and meeting regulatory obligations. The research by Gordon et al. (2022) highlights the importance of advanced cybersecurity systems, including artificial intelligence-powered threat detection and robust encryption techniques, to mitigate threats. South African insurance firms need to prioritize investing in cybersecurity solutions to prevent financial losses and reputational damage due to data breaches.

The South African insurance sector operates in an environment characterized by economic uncertainty, encompassing inflationary pressures, high rates of unemployment, and fluctuating market conditions. The

existing economic uncertainty is directly associated with consumer spending patterns, often resulting in the reduced demand for discretionary insurance products. This economic uncertainty can, at the same time, increase the demand for basic insurance products, such as life, health, and savings schemes, as consumers seek financial protection in the face of adverse economic conditions (PwC, 2023). Sustained durations of economic downturn affect investment decisions and the affordability of insurance premium costs, thereby affecting the viability of long-term insurance companies (IMF, 2023). Insurers must skillfully balance their risk exposure while providing affordable products since it is still important to deal with the current uncertainties (OECD, 2022).

In the insurance sector, there is a dramatic shift in consumer expectations, with a growing need for personalized and flexible insurance products. Growing financial pressures have led clients to seek cost-effective policies tailored to their individual needs (Accenture, 2022). In addition, there is a growing emphasis on insurance products that focus on sustainability, reflecting a broader societal trend towards ethical consumption and corporate responsibility (KPMG, 2023). Studies show that customer-centric models that offer on-demand, usage-based insurance products, e.g., pay-as-you-drive car insurance—are gaining traction due to shifting consumer attitudes (Bain & Company, 2023). Insurers are forced to redesign their product offerings using data analytics to develop policies that are more flexible and customized to an individual's specific requirements.

Economic uncertainty is a major feature of the business environment in South Africa, characterized by high levels of inflation, unemployment, and economic inequality. The volatility in the economy, expressed in the form of fluctuating inflation and exchange rates, makes long-term forecasting and strategic planning for businesses especially challenging. Bode et al. (2022) argue that such economic volatility forces firms to regularly adjust their risk management strategies and adopt more flexible approaches in their business practices. Macroeconomic variation often leads to increased operating costs, supply chain disruptions, and reduced consumer spending (Scherer & Boddewyn, 2021).

Empirical studies show that businesses working in unstable economic conditions need to develop flexible strategies, like diversifying sources of income and focusing on cost-effectiveness, to mitigate risks (Goh & Marquez, 2020). In South Africa, inflation is often caused by both domestic factors (e.g., energy prices) and international impacts (e.g., changes in commodity prices), so businesses must constantly change their strategies to ensure the sustainability of their operations (Hough & Neuland, 2021).

Political instability and uncertainty are major challenges in South Africa, which are marked by regular changes in governmental leadership, policy changes, and an unstable regulatory environment that detracts from the feasibility of long-term business strategies. The political environment in South Africa, marked by leadership changes and policy inconsistencies, creates an uncertain business environment for businesses (Kihn & Da Silva, 2020). Scholars argue that policy uncertainty has a direct impact on the

finance and insurance sectors by magnifying the risks associated with legislative changes, tax planning structures, and investment plans (Tushman & O'Reilly, 2021).

The uncertainty linked to government policy may lead to delayed investments, reduced investor confidence, and difficulties in formulating long-term strategic objectives (Redding, 2021). This complex scenario requires organizations operating in South Africa to employ flexible strategic planning techniques, hence allowing for swift reactions to changes in the political and regulatory environment. Organizations often rely on scenario analysis and risk management tools to effectively navigate the unpredictable political landscape (Bode et al., 2022).

Mutize and Gossel's (2020) work emphasizes that recessions are linked to lower levels of insurance penetration due to consumers' preferences for essential spending over discretionary financial products such as insurance. Additionally, periods marked by economic uncertainty result in a rise in the frequency of claims due to financial distress, thus affecting the profitability and risk pricing models of insurers (Bierman & Lategan, 2021). Against these constraints, insurers are compelled to practice innovation through designing microinsurance products and flexible payment structures for the lower-income consumers. Embedded insurance, whereby the coverage is embedded in other financial products or services, could be a catalyst for improving access and easing market penetration (KPMG, 2023).

The ongoing changes to regulatory frameworks and the changing nature of compliance requirements add to a complex and volatile environment for insurance companies. In South Africa, the insurance sector is under strict regulation by the Financial Sector Conduct Authority (FSCA) and the Prudential Authority (PA), both of which are rolling out amendments to the Insurance Act (2017) and the Treating Customers Fairly (TCF) principles (PwC, 2023). Regulatory uncertainty impacts insurance firms by increasing compliance costs, slowing the development of new products, and discouraging long-term focused investments (Naidoo, 2022). Scholars argue that while stringent regulations enhance consumer protection and financial stability, too-frequent regulation changes can stifle business growth and reduce the industry's competitive advantage (Schoeman & Erasmus, 2021). To minimize the risks of regulation, insurance companies must adopt proactive regulatory compliance strategies. This entails engaging with policymakers, leveraging regulatory technology (RegTech) to improve the administration of compliance processes, and expanding their product portfolios to ensure they meet evolving legal requirements (EY, 2023).

The South African insurance industry is experiencing market saturation, with traditional insurers facing stiff competition from digital-first providers and fintech disruptors. Market saturation limits growth opportunities for incumbents, necessitating differentiation through innovative products and superior customer experiences (Brennan et al., 2021). Recent studies project that the advent of Insurtech companies and incumbent insurance carriers focused on digital interaction has altered market forces by providing

more adaptive and client-centered solutions (Accenture, 2022). Such players leverage AI, deep data analytics, and automation to produce personalized insurance products at lower costs, thereby lowering the market share of traditional competitors (Deloitte, 2023). To preserve their competitive advantage, insurance companies need to invest in digital transformation activities, enhance customer engagement strategies, and form partnerships with fintech organizations to advance innovation and co-create modern insurance products (McKinsey, 2023). Practices like usage-based insurance, dynamic pricing models, and end-to-end online policy administration might help insurers stand out in a crowded marketplace (Llewellyn, 2022).

Expanding insurance to underserved populations helps enhance financial inclusion and stimulates market expansion. Financial inclusion initiatives such as microinsurance and parametric insurance increase coverage among lower-income groups. Research shows that insurance models based on community engagement enable deeper penetration in emerging markets (Kakembo & Chigbu, 2021). Educational outreach initiatives enhance public understanding of insurance benefits, fostering long-term policy adoption (Bester et al., 2022). Mobile-based insurance models, leveraging fintech partnerships, have significantly improved financial inclusion (PwC, 2023). Hollard Insurance's collaboration with fintech firms to provide mobile-based insurance products has expanded coverage among low-income South Africans, demonstrating financial inclusion's role in business growth (Accenture, 2022).

7.25 BARRIERS TO OPERATIONAL EFFECTIVENESS

The study also revealed mixed results regarding the role of customer ownership in driving OE success, with 37.3% of participants agreeing or strongly agreeing, while 39.9% disagreed or strongly disagreed. This divergence aligns with existing literature, which suggests that customer involvement in operational efficiency strategies can yield varying outcomes depending on industry context and implementation effectiveness (Prahalad & Ramaswamy, 2021). Research by Vargo and Lusch (2022) supports the idea that co-creation of value with customers can enhance operational efficiency; however, they also acknowledge potential challenges, such as misalignment of expectations and resource constraints. The mixed responses in this study suggest that while customer engagement can be beneficial, its success is contingent on structured implementation and clear communication strategies.

A significant proportion of respondents (39.9%) indicated that the OE strategy was not communicated effectively. Communication is widely recognized as a fundamental driver of organizational success, as it facilitates clarity, alignment, and engagement among employees (Daft & Lengel, 2022). Poor communication can lead to misunderstandings, resistance to strategic initiatives, and a lack of cohesion within the organization (Roberts & Grover, 2021). Kotter (2021) emphasizes that transformational change

requires clear, consistent, and transparent communication to ensure organizational buy-in and effective implementation of strategic goals.

The study found that 41.8% of respondents agreed or strongly agreed that teamwork issues were prevalent. Effective teamwork is crucial for OE, as collaborative work environments enhance innovation, problem-solving, and efficiency (Edmondson, 2019). However, challenges such as lack of trust, unclear roles, and ineffective leadership can hinder team performance (Lencioni, 2021). Research suggests that fostering a strong organizational culture that promotes collaboration and psychological safety can mitigate teamwork-related challenges and enhance OE (Gino, 2020).

The finding that 36.6% of respondents identified adaptability to change as a major challenge highlights the difficulties organizations face in navigating uncertainty and transformation. Adaptability is a key component of organizational resilience and competitiveness, particularly in volatile environments (Teece, 2022). However, resistance to change, rigid structures, and lack of leadership support often impede adaptability (Kotter, 2021). Organizations that embrace continuous learning, flexibility, and proactive change management strategies tend to be more successful in maintaining OE (Senge, 2020).

7.25.1 Barriers to OE: Internal and External Factors

Respondents identified both internal (38.3%) and external factors as barriers to OE success. Internal barriers such as organizational culture, leadership inefficiencies, and structural constraints can limit performance (Parida et al., 2020). External factors, including market volatility, regulatory changes, and economic fluctuations, also play a critical role in shaping OE (Porter & Heppelmann, 2018). The resource-based view (RBV) suggests that organizations must leverage internal capabilities while strategically responding to external pressures to achieve sustained efficiency (Barney, 2021).

Resistance to change is most notable among long-tenured employees and traditional departments, posing a significant barrier. The insight offered by Participant C about the need to balance the thinking of long-tenured employees with modern work models captures a widespread problem. As per Chukwuma and Zondo (2024), their study showed that transformational leadership, by the process of inspirational motivation, could reduce employees' resistance to change by inducing commitment and overcoming fear of new projects. Additionally, Magano (2021) established continuous exposure to work pressures without efficient change management mechanisms can lead to change fatigue, burnout, and low organizational commitment, hence enhancing resistance.

Successful implementation of operational excellence (OE) initiatives is also heavily dependent on leadership effectiveness and accountability. Participant D's emphasis on developing leadership competencies to infuse OE values aligns with Chukwuma and Zondo's (2024) research, which establishes

that transformational leadership reduces resistance to change and fosters an organizational culture receptive to change. Further, Moodley and Govender (2020) argue that collective leadership enhances customer focus, which is a critical success factor in the insurance industry. However, ensuring consistency in leadership practices across the organization is a challenge, as differences in leadership approaches could undermine the efficacy of OE structures.

7.25.2 Challenges to Improving Organizational Efficiency in Different Departments

Implementing OE uniformly across various divisions presents notable challenges. Participant D's observation of regional differences in adopting OE principles underscores the complexity of scaling initiatives. Molloy and Ronnie (2021) identified that a lack of agility and urgency can hinder the widespread adoption of new practices, particularly in regions or divisions with deep-rooted historical practices. This suggests that OE frameworks must be adaptable and sensitive to the unique contexts of different organizational segments to achieve comprehensive transformation.

Organizational transformation can be described as an evolutionary process that takes consistent effort and dedication over the long term. As per McKinsey & Company (2015), it is necessary for insurance companies to create a culture based on continuous improvement, which requires the development of proper processes and practices; though this task is difficult, it eventually leads to a stronger organization. This strategy not only enhances operational effectiveness but also creates a resilient and flexible culture that is better able to manage the challenges of the insurance industry. The long-term success of organizational transformation depends on the ability of organizations to embed the principles of Operational Excellence (OE) into their day-to-day operations and leadership models, thus infusing them into their organizational culture (McKinsey & Company, 2015).

Additionally, building a culture of innovation based on digitalization requires putting people in the organization at the forefront. It is crucial for insurance firms to begin creating an innovative culture open to all employees regardless of their hierarchical level, as stated by Camara (2022). This involves setting clear goals concerning digitalization and making sure that staff understand the need for digital transformation. Without a corresponding alignment between organizational culture and technology development, innovation efforts risk encountering resistance or, in the worst-case scenario, failing to bring about meaningful improvements (Camara, 2022).

However, the concern raised by Participant C about the need for workers to embrace cultural changes highlights a common resistance to change. This view aligns with Lewin's Change Management Model, which holds that for organizations to be able to introduce new cultural norms successfully, they should first actively "unfreeze" the set behaviors (Burnes, 2020). Research by Cameron and Quinn (2011) shows

that organizations that focus on cultural change through leadership exemplification, incentivization systems, and ongoing training are more likely to experience lasting changes.

7.25.3 Resistance to Change and Overcoming Historic Challenges

Resistance to change is a well-studied barrier to organizational change, particularly in industries dominated by set practices and regulatory constraints (Dent & Goldberg, 1999). Participant A's observation of challenges faced in the implementation of OE models in different regions is supported by research that suggests regional cultural differences within organizational culture could be hindering the implementation of new processes (Hofstede, 2001).

Change management is a key element in the effective achievement of organizational effectiveness (OE). Resistance to change, particularly from long-serving staff, highlights the importance of clearly defined management systems. Kotter's (1996) eight-step model of change highlights the importance of open communication, strong leadership support, and reinforcement mechanisms in reducing resistance and building cultural support.

7.25.4 Resistance to Change and Digital Transformation

Resistance to digital change is a major challenge in the insurance sector in South Africa. Research reveals that effective digital transformation requires significant changes to organizational culture, business processes, and client interaction mechanisms (Westerman et al., 2021). Employees often resist the adoption of innovative technologies, mainly because they are afraid of the possibility of job loss and a lack of training opportunities (Bughin et al., 2022).

Participant responses show that the integration of legacy systems with modern technologies is a major challenge. Insurers in South Africa are lagging their global counterparts in the implementation of digital technologies, mainly because of outdated infrastructure and resistance to automating processes, as revealed by a study by Ojo and Van Belle (2021). Clients' resistance to digital-first services requires the introduction of specialized training programs and phased adoption approaches to enhance the adoption rate (KPMG, 2023).

7.25.5 Skills Deficit and Talent Retention

Economic uncertainty continues to have an impact on the insurance industry in terms of informing consumer buying behavior and investment strategies. Research reports that concern global recession,

inflation pressures, and geopolitical tensions have translated into lower consumer confidence and weaker demand for insurance products (IMF, 2023). The respondents acknowledged that the COVID-19 pandemic accelerated economic volatility, resulting in higher payouts of claims and lower profit margins. Consistent with this, a study by Naicker and Pillay (2022) finds that South African insurers face ongoing challenges due to volatile exchange rates, inflationary pressures, and changes in interest rates, all of which complicate proper risk assessment and pricing measures.

7.25.6 Cybersecurity and Data Privacy Concerns

The insurance industry is now facing more cybersecurity risks and data privacy concerns, especially considering the fast rhythm of digitalization. Studies indicate that there has been an increase in cyberattacks targeting sensitive customer data, which has led to increased regulatory scrutiny and compliance costs (McKinsey, 2023). Respondents pointed out that maintaining data security is essential to sustaining customer trust and meeting regulatory obligations. The research by Gordon et al. (2022) highlights the importance of advanced cybersecurity systems, including artificial intelligence-powered threat detection and robust encryption techniques, to mitigate threats. South African insurance firms need to prioritize investing in cybersecurity solutions to prevent financial losses and reputational damage due to data breaches.

Compliance with regulatory frameworks remains a major challenge for the insurance sector in South Africa. The rapid evolution of financial regulations, including data protection laws like the Protection of Personal Information Act (POPIA) and taxation laws, requires insurers to undertake constant adjustments (FSCA, 2023). The need for compliance forces greater financial investments in internal risk management systems, legal skills, and information technology infrastructure to attain conformity. However, legacy system integration remains a challenge for many traditional insurers, impeding their ability to compete with Insurtech firms that offer streamlined, user-friendly digital solutions (McKinsey, 2023). To remain competitive, insurers must invest in modern technological infrastructure and digital literacy among employees to maximize the benefits of technological advancements.

The rising complexity of the global business environment forms another core theme identified in the study. With growing interconnectivity among economies, which is marked by complex regulatory regimes and varied market conditions, insurance companies face several challenges in their operations at both national and international levels. Academic literature in the domain of business and management suggests that

multinational corporations face elevated levels of complexity due to interactions among political, economic, and social factors, which further affect decision-making and strategy formulation (Scherer & Boddewyn, 2021). South African insurance companies, operating in domestic markets as well as abroad, must consider the complexities brought on by transnational regulations, competitive pressures, and changing consumer needs. Operating such a diversified global portfolio while following localized regulatory regimes poses a significant challenge in attaining greater agility and achieving strategic growth (Jansen et al., 2020).

In response to the challenges posed by a VUCA environment, strategic innovation has become an essential mechanism for organizational responses. Businesses increasingly see complexity and uncertainty not as challenges, but as opportunities for driving innovation. Recent research underscores the importance of innovation in enhancing organizational resilience and competitive advantage in the face of volatile conditions (Hamel & Prahalad, 2020). In the South African insurance sector, companies are investing in creating resilient business models and leveraging technology to offer flexible, consumer-centric products able to evolve with changing consumer tastes. The development of Insurtech provides a compelling example of how technological innovation can be a source of competitive advantage by allowing for more tailored services to be delivered and for real-time engagement with customers (Liyanage & Abeysekera, 2021). Insurance companies that focus on strategic innovation are better at responding to market changes and meeting the changing needs of consumers, positioning them well for long-term growth.

Socioeconomic inequality and diversity are inherent features of the South African business environment, having a profound impact on consumer behavior and market forces. The demographic structure of the country, comprising diverse ethnic, cultural, and economic groups, makes it challenging for businesses to ascertain consumer needs and market expectations accurately (Santos & Brito, 2020). Differences in income and resources lead to segments of consumers with diverse needs, thus posing a challenge for businesses to develop products and services that address all segments.

7.25.7 Barriers and Implications for Business Growth in the South African Insurance Sector

The South African insurance industry is influenced by numerous macroeconomic, regulatory, and market forces that impact organizational growth and strategic management practices. A thematic analysis of professional insights from eight leading insurance firms in South Africa reveals key challenges, such as economic uncertainty, regulatory challenges, market saturation, consumer consciousness, and the effects of technological advancements. These factors have a key role in enabling corporate growth by influencing market entry, product innovation, and investment strategies. The existing literature provides pertinent explanations of these challenges and suggests strategies for their alleviation.

The South African insurance industry is experiencing market saturation, with traditional insurers facing stiff competition from digital-first providers and fintech disruptors. Market saturation limits growth opportunities for incumbents, necessitating differentiation through innovative products and superior customer experiences (Brennan et al., 2021). Recent studies project that the advent of Insurtech companies and incumbent insurance carriers focused on digital interaction has altered market forces by providing more adaptive and client-centered solutions (Accenture, 2022). Such players leverage AI, deep data analytics, and automation to produce personalized insurance products at lower costs, thereby lowering the market share of traditional competitors (Deloitte, 2023). To preserve their competitive advantage, insurance companies need to invest in digital transformation activities, enhance customer engagement strategies, and form partnerships with fintech organizations to advance innovation and co-create modern insurance products (McKinsey, 2023). Practices like usage-based insurance, dynamic pricing models, and end-to-end online policy administration might help insurers stand out in a crowded marketplace (Llewellyn, 2022).

A significant proportion of respondents (39.9%) indicated that the OE strategy was not communicated effectively. Communication is widely recognized as a fundamental driver of organizational success, as it facilitates clarity, alignment, and engagement among employees (Daft & Lengel, 2022). Poor communication can lead to misunderstandings, resistance to strategic initiatives, and a lack of cohesion within the organization (Roberts & Grover, 2021). Kotter (2021) emphasizes that transformational change requires clear, consistent, and transparent communication to ensure organizational buy-in and effective implementation of strategic goals.

The finding that 36.6% of respondents identified adaptability to change as a major challenge highlights the difficulties organizations face in navigating uncertainty and transformation. Adaptability is a key component of organizational resilience and competitiveness, particularly in volatile environments (Teece, 2022). However, resistance to change, rigid structures, and lack of leadership support often impede adaptability (Kotter, 2021). Organizations that embrace continuous learning, flexibility, and proactive change management strategies tend to be more successful in maintaining OE (Senge, 2020).

Respondents identified both internal (38.3%) and external factors as barriers to OE success. Internal barriers such as organizational culture, leadership inefficiencies, and structural constraints can limit performance (Parida et al., 2020). External factors, including market volatility, regulatory changes, and economic fluctuations, also play a critical role in shaping OE (Porter & Heppelmann, 2018). The resource-based view (RBV) suggests that organizations must leverage internal capabilities while strategically responding to external pressures to achieve sustained efficiency (Barney, 2021).

From a theoretical perspective, these findings align with change management models such as Kotter's (2021) eight-step process, which emphasizes communication, leadership, and adaptability as critical

factors in organizational success. The results also support the dynamic capabilities framework, which stresses the need for agility and continuous innovation in response to environmental uncertainties (Teece, 2022).

7.26 SUMMARY OF THE CHAPTER

This combined analysis combines quantitative survey findings with qualitative interview findings to supply a combined picture of operational effectiveness (OE) among South African insurance firms. The results point to technology and digitalization (i.e., AI, automation, and data analytics) as the most influential drivers of OE and facilitate efficiency improvement, risk analysis improvement, and improved customer service. Communication and customer orientation are key enablers, and feedback processes, customized services, and efficient claims handling contribute significantly to customer satisfaction and loyalty.

Joint effort, motivated workers, and human capital development are revealed to enhance productivity and innovation, through training, consultative style of decision-making, and virtual collaboration facilities. Speed, innovation, and strategic agility—typically attained through agile techniques and improvement ever-constantly—allows insurers to respond to rapid shifts in the market and innovate new product lines like micro-insurance among the underprivileged masses.

Research further highlights risk management, regulatory compliance, and centre-of-governance, facilitated using real-time tracking and AI-driven compliance platforms minimizing breaches and maximizing disclosure. Capital expenditures and cost advantage are again prime in supporting sustaining OE, financing technology, human capital, and innovation spend, and ESG practices building resilience into the long term.

While these advantages are present, issues such as resistance to change, competence deficits, market maturity, economic volatility, and cybersecurity issues remain. Business objectives and strategic OE projects need to be synergistic, as the review highlights, and approaches like the RBV and dynamic capability theory can be applied. In practice, insurers need to make investments in digital infrastructures, develop collegial cultures, provide open communication, and adopt proactive compliance and change management approaches to drive sustainable operating efficiencies.

CHAPTER 8: INTEGRATED OPERATION EXCELLENCE MODEL

8.1 INTRODUCTION

Operational excellence (OE) is becoming an industry strategy across the world due to its ability to bring efficiency, quality, and agility. In the insurance sector, OE is quickly becoming a differentiator for providing greater customer value, responding to regulatory requirements, as well as sustaining profitability amidst competitive economic backgrounds. The South African insurance industry, in particular, is at the threshold of an era of accelerated change with increasing regulatory pressure (i.e., FSCA, POPIA), increasing digitalization, and pressure from more technologically aware, savvy, and discerning customers.

These dynamic pressures have uncovered gaps and inefficiencies in the operational workings of insurance organizations, prompting the necessity to adopt formal OE structures tailored to the local context. The aim of this research is to develop an inclusive, context-relevant OE implementation framework for the insurance industry in South Africa. The framework will help insurers map out efficient inner workings, reduce operational waste, promote enhanced customer experience, as well as be better able to respond to regulatory and market pressures.

The proposed model has four key dimensions:

- **Strategic Intent:** Connecting OE programs with long-term organization goals and external expectations.
- **Process Methodologies:** Utilizing formal methodologies such as Lean Six Sigma to make workflows efficient and performance oriented.
- **People Management:** Creating an ongoing development culture by leadership, employee empowerment, management of change effectively.
- **Digital Capabilities:** Leveraging technological innovation to drive greater automation, analytics, and digital customer experience.

Together, they give us an overall strategy for operational excellence to address both near-term performance optimization as well as long-term strategy adaptation and stability in the South African insurance industry.

8.2 CONCEPTUAL MODEL OVERVIEW

The "Integrated Operational Excellence Framework for the South African Insurance Industry" is recommended as an all-encompassing and adaptable roadmap that is designed to help insurers integrate OE principles into the core of their businesses systematically. The framework recognizes operational

excellence is achieved by more than specific process improvements—it demands coordinated strategy that aligns strategy, operations, people, and technology within an industry and geography specific setting.

The model is multi-disciplinary in character, drawing from established theory and practice such as Lean Six Sigma to advise process change, strategic management to direct the setting of goals and resource allocation, and theory related to behavioral and cultural change. The theory elements are contextualized to be able to address the unique elements of the South African insurance industry, including a multiculturally heterogeneous clientele, the multi-layered nature of the regulatory system, and socio-economic determinants of operational capability and client demands.

This model emphasizes the key necessity to align high-level objectives with daily operational practices. The model encourages insurers to make operational initiatives directly related to purpose and vision so that change-driving initiatives have the potential to make an inclusive contribution to long-term goals. In addition, the model promotes continuous improvement/innovation by integrating feedback systems, monitoring systems, and employee participation procedures.

To achieve this, the model aims to drive organizations beyond fix-it methods to a sustaining changeable process able to drive competitiveness, better satisfying the customer, and creating institutional resilience within an evolving market.

8.3 COMPONENTS OF THE MODEL

8.3.1 Strategic Alignment Layer

Strategic alignment is at the core of the OE model upon which operational excellence efforts are established. Strategic alignment ensures that every activity of improvement is strategically directed and is aligned to the purpose, vision, and long-term goals of the business. Without this alignment, OE efforts shall be misguided or disconnected and therefore cannot deliver value or have an effect.

In the insurance industry, it is even more essential to be strategically aligned because the industry is under pressure from both external forces like changes in consumers' behaviors, technological disruption, regulatory compliance requirements, and macroeconomic uncertainty. Strategic alignment is the compass that directs insurers to navigate this bumpy terrain by giving precedence to efforts that promote operational efficiency as much as competitive positioning and customer trust.

Vision, Mission, and Core Values: Operational excellence must be an extension of the company's strategy objectives. Vision sets the future that the company aims to achieve, the mission describes its core purpose, and the core values indicate mandatory behavior and norms of decision-making. OE practices must support these by underpinning practices that ensure ethical levels, corporate culture, and customer

commitment.

Customer Objectives: Insurance customers anticipate faster, more tailored, and more transparent products and services. OE objectives are created with the backdrop of customer experience first while ensuring strategic alignment. That translates to increasing first-contact resolution, reducing processing times of claims, and anticipating customers' needs. One can track initiatives to customer needs with customer surveys and Net Promoter Scores (NPS) as points of references.

Regulatory compliance: Insurance companies in South Africa are regulated by an advanced level of legislation influenced by acts and regulations such as the Financial Sector Conduct Authority (FSCA) regulations, the Protection of Personal Information Act (POPIA), and the Treating Customers Fairly (TCF) principles. Strategic alignment at this level ensures that all OE initiatives are not only effective but compliant as well. Operational excellence must foster proactive management of risk, reduce regulatory infringements, and promote an openness and accountability culture.

These elements of strategic fit combined make up the key first layer of the OE model. They establish a shared purpose that unifies corporate aspiration and operational capability, ensuring everyone has an important part to play to deliver sustainability-driven success.

These are the thematic priority areas for operationalizing OE across the insurance value chain.

8.4 OPERATIONAL EXCELLENCE PILLARS

Operational Excellence Pillars are the foremost thematic areas by which insurance companies can introduce the culture of performance, innovation, and sustainability into their organizations. The pillars translate aspirational intent into tangible, concrete actions that drive OE initiatives to the last mile of the insurance value chain.

Customer Centricity: Insurance is customer-focused, and OE demands unremitting commitment to understanding and over-delivering on their expectations. The insurers must implement systems and procedures to enable service to be more responsive, personalized, and consistent. These include journey mapping to identify pain points, building omnichannel communications platforms, and using customer data analytics to predict needs and personalize products.

Lean, waste-free process: Process efficiency is a function of cost discipline, agility, and service excellence. Lean principles applied by insurers—value stream mapping, root cause analysis, and Kaizen (ongoing process improvement)—make it possible for them to identify wastefulness, eliminate bottlenecks, and shorten cycle times through claims processing, underwriting, and onboarding, to mention but a few. Well-implemented processes make scalability, as well as compliance, easier.

Data-Driven Decision Making: A high-performing OE is predicated on having the right data at the right time and an analytics-driven mindset to unlock operational and strategic insights. Application of key performance indicators (KPIs), dashboards, and predictive modelling capabilities empowers decision makers to measure performance trends, forecast risk, monitor compliance, and make informed resource decisions through intelligence. The pillar positions data at the forefront as an operational strategic resource, as opposed to an operational byproduct.

Employee empowerment: The key to operational excellence and sustaining it lies with people. Employee empowerment is about giving employees at every level the tools, the awareness, and the autonomy to identify the problems and assist in defining the solutions. Training and development programs, employee suggestion programs, reward and recognition programs, and leadership development programs create an active, responsible, and motivated force to drive OE initiatives.

Digital Enablement: The insurance industry of today is going through an intense digital revolution. OE is unthinkable without embracing technologies such as Artificial Intelligence (AI), Robotic Process Automation (RPA), systems of Customer Relationship Management (CRM), cloud computing, and mobile applications. These technologies enable higher velocity, precision, customizability, as well as availability and automated handling of repetitive tasks so that human resources can perform higher value-added tasks.

8.5 LEAN SIX SIGMA METHODOLOGY

Lean Six Sigma (LSS) is the process that is at the foundation of the Operational Excellence (OE) methodology, offering a systematic, data-driven process to bring about long-term process change. LSS combines two prevailing schools of thought: Lean, to eliminate waste to create value, and Six Sigma, to eliminate flaws and reduce process variability. In the South African insurance industry where efficiency, accuracy, and compliance are the key, LSS is the perfect methodology to drive high-priority operational excellence.

The cornerstone of LSS is the DMAIC cycle—a five-step, iterative process that guides organizations through performance-improvement efforts with precision and discipline:

This step is about defining the specific problem to be solved, the aims of the improvement initiative, as well as the needs of the internal stakeholders and external stakeholders. In insurance, for instance, it may be defining customer complaints related to service, long claims response times, or policy underwriting inefficiencies. Well-defined problem statements, project charters, and stakeholder analysis are key deliverables at this stage.

Measure: Measurement is necessary in order to be able to comprehend current performance in addition to creating baseline data. Quantitative and qualitative data concerning the process being examined are

gathered during this phase. Insurers, for instance, may take measures on average claims settlement time, call-center response rates, or policy lapses trends. Process mapping and statistical tools such as control charts are used heavily to illustrate status quo performance in addition to measuring it.

This level is focused on exposing the underlying reasons for delay, inefficiencies, or faults. The tools of insurers at this level are regression analysis, Pareto charts, and charts of cause-and-effect to expose patterns and correlations of data. Having exposed the underlying problems—slow systems, duplicate approvals, or unclear protocols—focused interventions can be made rather than patching the surface.

In this stage, following analysis, solutions that eliminate the underlying causes of problems are formulated, pilot-tested, and applied. Solutions extend to process redesign, automation, task redistribution, or change to policy guidelines. Pilot testing, as well as risk analysis tools (i.e., FMEA), are used to validate proposed improvements before direct application.

Control: The last phase makes sure that the gains made using the Improve template are maintained in the long term. These include establishing standard operating procedures (SOPs), instituting performance dashboards, training individuals on new procedures, and instituting routine review habits. Statistical process control and visual management techniques can be used to track current performance and signal possible problems before they become serious.

Not only do the DMAIC cycle fuel operational improvements but it promotes reality-based problem-solving throughout an organization at various levels. Integrated into daily habits, Lean Six Sigma empowers insurance organizations to deliver high-quality, reliable services, reduce operational costs, and respond more quickly to marketplace and regulatory pressures.

8.5.1 Change Management Integration

Change management is the key to success of Operational Excellence initiative deployment. Operational Excellence for the insurance industry in South Africa is more than process redesign or technology integration—there is equally an element of creating the culture where employees across levels are motivated, committed, and equipped to deal with the nuances of change. Change management is about addressing the people and organisation element of this process to enable employees, as well as the organisation, to move smoothly and successfully to different ways of working.

Utilization of formal change management methods is at the core of managing resistance and achieving buy-in. The following are essential to integrating change management into OE initiative activities:

8.5.2 Kotter's 8-Step Model

These accepted change models provide systematic approaches to leading companies through change. Kotter's 8-Step Model focuses on building urgency, creating strong coalitions, developing a vision for change, and empowering action toward change. Some of the key steps involve:

- Creating urgency: Communicating about why change is necessary, particularly in an industry like insurance that is competitive and compliance-driven.
- Formation of a guiding coalition: Developing a core group to lead change.
- Creating vision and strategy: Integrating the OE vision into corporate goals and culture.
- Empower employees to act across the board: Overcome obstacles and furnish the resources needed to innovate.
- Consolidating the gains and creating additional change: Sustaining changes and creating additional.

The ADKAR Model (Awareness, Desire, Knowledge, Ability, and Reinforcement) focuses more on individual change and emphasizes creating awareness about the necessity to change, creating desire to change, providing knowledge and ability to change, enabling the employees to apply the changes, and reinforcing the change to make it last.

8.5.3 Stakeholder Engagement

Effective change management must be supported at every level. Not only senior management but mid-level management, front-line employees, and even external stakeholders like customers and regulators. Involvement of these groups early on tends to create a sense of shared vision and trust. When employees are involved in change, they are more apt to adopt it as their own. Involvement of stakeholders can be achieved through:

- Regular Communication: Open communications on purpose, progress, and effects of OE initiatives.
- Feedback mechanisms: Allowing stakeholders to raise ideas and concerns refines the strategy and reduces resistance.
- Involvement in decision-making: Involving employees at the stage of planning and implementing OE practice contributes to the inclusion of their opinions and fostering a spirit of cooperation.
- Communication and Training Plans: Communication is essential so that change is effective. A sound communications plan guarantees that those involved are informed about what, why, and how the change process is to be undertaken. These involve:
 - Clear, consistent messaging: Explaining the purpose of OE initiatives, what is anticipated as a result, and why it furthers the organization's vision.
 - Tailored communications: Different stakeholders will need various types of information. Senior

management, for example, may be interested at the strategic level, while front-line employees may only require operational-level information about new procedures.

Employee training programs are required to equip the employees with the requisite know-how and skills to adapt to emerging procedures, technology, and methodologies. Training should be:

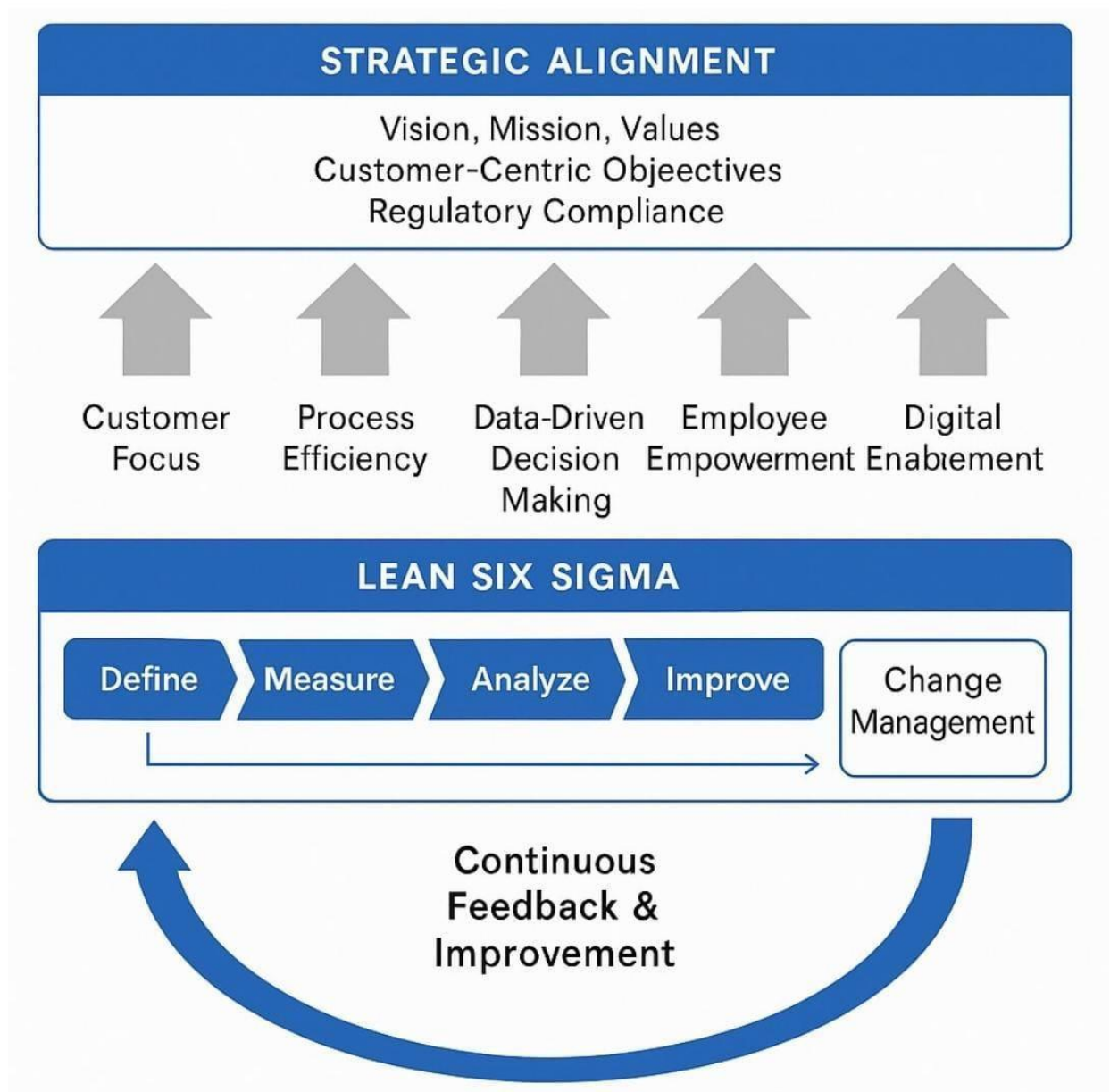
- **Role-oriented:** Ensuring that each employee understands how changes connect to his/her own job within the firm.
- **Experiential learning:** By using workshops, simulation, and e-learning modules to provide hands-on experience with emerging procedures and tools.
- **Ongoing:** Providing refresher courses and advanced training as the practices of OE evolve.

Insurance companies can increase employee engagement, minimize resistance, and finally achieve the desired outcomes of operational excellence by implementing change management principles to OE initiatives.

8.5.4 Continuous Feedback and Improvement Loop

Sustainable OE requires an embedded mechanism for continuous learning and adaptation.

- **Internal Performance Audits:** Regular reviews of process efficiency and compliance.
- **Customer Feedback Systems:** Mechanisms such as surveys and complaint analysis to gather insights and inform process refinement.
- **Quarterly and Annual OE Reviews:** Structured evaluation of OE initiatives to track progress, adjust strategies, and celebrate wins.



OPERATIONAL EXCELLENCE IMPLEMENTATION MODEL FOR UF INSURANCE INDUSTRY IN SOUTH AFRICA.

Figure 8.1: Integrated OE model created by the researcher

8.6 VISUAL REPRESENTATION

The OE implementation model is graphically portrayed below as a dynamic system. The base is the strategic alignment that is responsible for driving the operational pillars. The operational pillars give input to Lean Six Sigma processes, supported by change management practices. The model is perpetually

adaptive and responsive due to continuous feedback loops.

8.7 APPLICATION AND RELEVANCE

The South African insurance industry is grappling with regulatory compliance, technological disruption, and heightened customer expectations. The proposed model is poised to address these challenges in an organized manner. The model can be applied across different operations areas such as claims handling, underwriting, and customer service to increase efficiency, product excellence, and responsiveness. The model is equally viable for insurers of different sizes and operational maturity levels.

8.8 CONCLUSION

This research model presents theoretically grounded but practically functional template for operational excellence implementation in the insurance industry of South Africa. By integrating Lean Six Sigma tools, strategy planning, employee engagement, and digitalization into one process of constant betterment, the model is an exhaustive paradigm for sustainable implementation of operational excellence. The proposed model is to be tested and validated by future research through consultation of industry stakeholders and case analysis.

CHAPTER 9: CONCLUSION AND RECOMMENDATION

9.1 INTRODUCTION

This final chapter has the summary of results, managerial implications and future research direction of the findings of the integrated quantitative and qualitative analysis. The findings of the analysis probed OE among South African insuring organizations and identified determinative, inhibiting, and facilitating means of performance among South African insuring organizations. From an interconnection of empirical findings and theories such as theory of socio-technical systems, theory of dynamic capability approach, and theory of the RBV, the analysis has a comprehensive construct of achieving and maintenance of OE under competing and uncertain business environments by life insuring organizations.

9.2 CONCLUSION

In undertaking this research, the researcher sought to achieve three research objectives, and they are of assistance in enhancing understanding of implementation of OE strategy among South African insurance companies.

During research into the challenge of embedding an OE approach into a VUCA operating environment, findings showed that insurers are confronted with ongoing issues such as change resistance, competencies deficit, market over-saturation, economic instability, and escalating cyber security dangers. The unstable and dynamic character of the VUCA operating environment further exacerbates these challenges because insurers have to keep up with perpetual change in regulation, shifting customer desires, and technology disruption. Successful OE in the environment necessitates flexibility, adaptive leadership, and highly advanced organisational culture responsive to capturing change and improvement.

Second, in comparing the degree to which the implementation of an OE approach in VUCA and traditional environments differs in terms of design and implementation, the research discovered that VUCA environments require more fluid, iterative, and technology-enabled strategies compared to the traditional, formal, and efficiency-oriented methods prevalent in more traditional environments. In a VUCA environment, an organization's practices of implementing an OE are fundamentally dependent on the use of analysis of real-time data, rapid and nimble processes of deciding, and rapid product innovation, and the need for cross-functioning and proactive risk-taking. In a traditional environment, conversely, practices of an OE implementation center on linear plans cycles, formal processes, and incremental changes.

Third, evaluating the effect of an implementation of an OE approach to organisational development, the evidence confirms successful implementation of an OE approach in making a quantifiable positive impact

on results of expansion. These are better customer satisfaction and loyalty, timely settling of claims, cost minimisation, and the capability of exploiting new market niches through exploiting innovative instruments like micro-insurance. Companies embracing an integrated OE into approach and culture of an undertaking identified improved competitiveness, greater sensitivity of the market, and successful exogenous shocks recovery. Strength of these advantages, however, depended substantially on organisational capability of balancing an OE program with strategic goals and definite needs of an operating environment.

Overall, the research findings are that although principles of OE may be universal, design, development, and final impact are extremely context dependent. In VUCA, adaptive strategies are required by OE, technology-driven, and underpinned by robust organisational culture if they are to make a positive contribution to sustainable development.

9.3 CONTRIBUTION TO KNOWLEDGE

The research has several theoretical implications. It validates the Resource-Based View (RBV) of South African insurance sector, substantiating technology and human capital as operational effectiveness' strategic assets. In further extension of theory of the socio-technical system, it also demonstrates that benefits of digitalization are only optimally leveraged if they are supplemented by corresponding changes in leadership and culture. The research also offers empirical backup to theory of dynamic capabilities by demonstrating agility, innovation, and resilience are key drivers of sustainability of OE in turbulent settings.

This study contributes to the upcoming debate on Environmental, Social, and Governance (ESG) integration by insurance entities. According to the study, OE is not only a tool to reduce expenditure and enhance process efficiency but also a tool to achieve sustainable organizational transformation. Insurance institutions that implement OE strategies aligned with ESG objectives can enhance organizational efficiency alongside building ethical governance, responsible business practices, and social responsiveness to customers, employees, and society.

Environmentally, the research identifies that process improvement, digitalization, and paperless insurance operations can lower carbon imprints, waste resources, and promote environmentally friendly behaviors. Socially, OE improves staff engagement, training, inclusion, and workplace safety and satisfies customers through more consistent and accountable service delivery. For governance, OE ensures accountability, compliance, and ethical insurance operations to enhance trust between the regulator, investor, and policyholder.

This study contributes to the body of OE research by introducing a sustainability-focused insurance-specific OE framework. Such a framework aligns long-term value creation with continuous improvement and blends cost efficiency and ESG targets. Such an insurance-specific framework places OE at the strategic helm to help the insurance industry secure operational resilience, stakeholder confidence, and conformity with the UN's sustainability objectives.

Lastly, the results provide managerial implications to insurance leaders and policymakers. By integrating OE principles within ESG plans, insurance companies can maximize claims handling, automate underwriting procedures, minimize operational hazards, and maximize profitability on the one hand and support environmental care, social fairness, and strong governance on the other. This holistic strategy ensures that operational effectiveness stimulates business performance and sustainable growth within the insurance industry.

From the managerial perspective, the study offers executable direction on technology adoption and human capital plans alignment towards enabling the improvement of performance in the long term. The study proposes the necessity of connecting OE projects and processes of risk management and regulatory compliance to ensure stakeholder trust remains intact. The study further acts as an operational guidebook on the alignment of continuous improvement approaches, agile approaches, and adaptive leadership in organizational processes. The study presents the necessity of building culture to create an environment of collaboration, free flow of communication, and active participation to ensure organizations are better positioned to confront industry disruption.

9.4 STUDY LIMITATIONS

Even with the discovery yielding informative insights regarding the adoption of operational excellence (OE) by the insurance organizations within South Africa, the study's limitations ought to be realized.

Firstly, the study focuses on a single industry and national market. Consequently, the outcomes are not necessarily applicable to different industries or territorial locations because the distinctively different regulatory environment, market forces, and socio-economic profile of South Africa almost certainly influence challenges and strategies to adopt OE.

Secondly, the study also heavily relied on the participants' self-report data. This technique is always prone to the pitfalls of biases, among them social desirability, improper recall, and selective reporting that would undermine the validity and completeness of the returns.

Third, the cross-section design measures the enactment of the OE strategy at just one time period and thus does not permit analysis of temporal change, adaptive strategy and long-run success, particularly to volatile, uncertain, complex, and ambiguous (VUCA) environments. A longitudinal design would have

yielded more fine-grained evidence on strategy progression over time, organizational resilience and sustainability follow-through. Fourth, while the mixed-methods research permitted the juxtaposing of quantitative regularity and qualitative richness, the qualitative sample remained quite limited. Opinion from small insurers, new market entrants, or niche market participants could not be represented extensively and thus the range of the insights included could be limited.

Fifth, while the study explored operational effectiveness and not effectiveness more generally, it did not make an extensive analysis of other ESG and sustainability dimensions, including environmental responsibility, social accountability, ethical leadership and staff welfare. All these dimensions are becoming increasingly critical to long-term value creation and risk management across the insurance sector and could limit the determination of the overall contribution of OE to sustainable organizational performance.

Finally, the study did not specifically test the interrelationship between the strategies of OE and corporate sustainability targets or ESG compliance strategies that are vital to operational effectiveness alignment with regulation and societal expectations. Future studies should consider these areas to measure the convergence between the integration of sustainable business and OE and its resultant implication on financial performance and value to stakeholders.

By recognizing these methodological and conceptual shortcomings, future research is invited to embrace larger and more diverse sample sizes, longitudinal research designs, and multidimensional performance paradigms that encompass ESG considerations to more fully embrace the richness and sustainability effect of operational excellence within the insurance industry.

9.5 RECOMMENDATIONS

As per these findings, various strategic and operational recommendations are made. Insurers need to lead digital transformation through investment in artificial intelligence (AI), automated processes, and advanced data-driven analytics to improve risk assessment, simplify claims handling, and deliver improved customer service. Communication processes need to be improved to deliver clarity, strategic alignment, and culture of feedback. Employees' skills and motivation can be improved through frequent training in digital skills, data analytics, and customer relationship management, underpinned by consultative style of decision-making to improve motivation and innovation. Rapid approaches and improvement processes like Lean Six Sigma need to be integrated to help in resilience and response mechanisms to changes in the market. Risk and compliance management needs to be proactive through AI-facilitated tracking, frequent compliance training, and good governance arrangements. Capital investment needs to be strategic to enable investment in technology and human capital development, and cybersecurity taken seriously through multi-layered security, AI-driven threat detection, and employees'

awareness programs.

9.6 RECOMMENDATIONS FOR FUTURE RESEARCH

Future studies could make sector-wide comparisons of the insurance industry and other sectors of the financial services sector to determine best practice to follow. Longitudinal studies of a more extended period could investigate the extended impacts of digital transformation projects on OE. Studies of customer-centric innovation models, e.g., behaviour and usage-based insurance, could quantify their success rates in building customer loyalty and retention. Studies of cultural transformation could offer data on timescales, leadership approaches, and best organizational practices to take entrenched cultures to agility and innovation. Finally, studies of environmental, social, and governance (ESG) roles in creating OE and competitiveness would enhance knowledge of sustainability's working impacts.

9.7 SUMMARY OF THE CHAPTER

This chapter has distilled the findings of study, practical contributions, and future research directions into readable findings, practical contributions, and future research directions. This warrants the proposition that attaining OE in South African insurance organizations entails an effort of diverse dimensions, depending on the interdependence of sophisticated technology, qualified and motivated individuals, creative and accommodative approaches, and fit mechanisms of governance. Practitioners are offered a guidebook of practical improvement of operational performance in the form of recommendations, but theoretical and managerial implications hone knowledge at the level of research and a path of future research.

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LIST OF APPENDICES

APPENDIX A: INFORMED CONSENT DOCUMENT

UNIVERSITY OF KWAZULU-NATAL GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

Researcher: Mr. Sahil Dwarika Parsad [REDACTED] Supervisor: Prof B.Z Chummun (031 260 8943) Research Office: Mr Simangele Shezi 031-2603587 DBA Research Project

Dear Participant,

My name is Sahil Dwarika Parsad, student number 209509906. I am a DBA candidate studying at the UKZN Westville Graduate School of Business & Leadership. The title of my research is, **“Developing an Operational Excellence Implementation Model for the Insurance Industry in South Africa”**.

The aim of the study is as follows: By using a mixed method research strategy that will integrate in-depth interviews with surveys in order to support Operational Excellence implementation in the insurance industry, the study aims to develop an Operational Excellence strategy implementation model for organisational growth in a VUCA environment.

Please note that:

- The information that you provide will be used for scholarly research only.
- Your participation is entirely voluntary. You have a choice to participate, not to participate or stop participating in the research. You will not be penalized for taking such an action.
- Your views in this interview will be presented anonymously. Neither your name nor identity will be disclosed in any form in the study.
- The interview will take about 10 minutes.
- The record as well as other items associated with the interview will be held in a password-protected file accessible only to myself and my supervisors. After a period of 5 years, in line with the rules of the university, it will be disposed of by shredding and burning.
- If you agree to participate, please sign the declaration attached to this statement (a separate sheet will be provided for signatures)

I can be contacted at: University of KwaZulu-Natal, Graduate School of Business and Leadership, Westville Campus, Durban.

Email: 209509906@stu.ukzn.ac.za

Cell : [REDACTED]

My supervisor is Prof Bibi Zaheenah Chummun who is located at the University of KwaZulu-Natal, Graduate School of Business and Leadership, Westville Campus, Durban.

Contact details: chummunb@ukzn.ac.za and phone number [031 260 2784](tel:0312602784).

Research Ethics Committee contact details are as follows: Mr Simangele Shezi, University of KwaZulu-Natal, Research Office, Email: HSSREC@ukzn.ac.za, Phone number 031 260 35 87.

Thank you for your contribution to this research.

DECLARATION

I.....(*full names of participant*)
hereby confirm that I understand the contents of this document and the nature of the research project,
and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire. I understand the intention of the research. I hereby agree to participate.

I consent / do not consent to have this interview recorded (if applicable)

SIGNATURE OF PARTICIPANT

DATE

.....

APPENDIX B: QUANTITATIVE QUESTIONNAIRE

QUESTIONNAIRE FOR RESEARCH SURVEY

Purpose. This questionnaire seeks insights into the commitment by top management, Customer perception, participation, and views on milestones, success and challenges since the Operational Excellence Strategy implementation. It may take approximately 15 minutes of your time to complete. Tick the most appropriate box of your answers.

SECTION A: Demographic Information

i) What is your gender?

a) Male ☐

b) Female ☐

c) Other ☐

iii) What is your highest qualification?

Qualification level Tick highest level

a) Grade 12 ☐

b) Diploma ☐

c) Degree ☐

d) Postgrad. degree ☐

e) PhD ☐

v) What is your age (in years)?

a) Below 25 years ☐

b) 26 -30 years ☐

c) 31-40 years ☐

d) 41-50 years ☐

e) 51-60 years ☐

f) Over 60 years ☐

Vi) How long are you with this organisation?

a) Below 5 years ☐

b) 6 – 10 years ☐

c) 11 -15 years ☐

d) 16 -20 years ☐

e) 21 and over ☐

vii) What is your race?

a) African ☐

b) White ☐

c) Black ☐

d) Coloured☐

e) Indian☐

A) OPERATIONAL EXCELLENCE (OE) STRATEGY IMPLEMENTATION

Operational Excellence Strategy is philosophy of organisational leadership that stresses the application of a variety of principles, systems and tools toward the sustainable improvement of key performance metrics to gain competitive advantage. Doing things right, in the right way, in the right order, at the right time, consistently.

This section seeks to understand the extent to which People, Process/Technology, and Product/services enhanced organisational growth?

Scoring: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree

People, Technology/Processes and Product/Services (1) (2) (3) (4) (5)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1) Customer received full training on OE strategy implementation					
2) Customer now take ownership to improve operational efficiencies for growth					
3) OE has transformed employee work culture, ethics, values and mindset					
4) OE has impacted positively to customer satisfaction					
5) OE has opened new opportunities					
6) Morale is very high among employees and management					
7) Technology is at the centre stage of successful OE implementation					
8) Innovation and continuous					

improvements initiatives drive OE strategy					
9) Information technology/systems influenced success in OE implementation					
10) OE strategy Implementation complemented the traditional operational improvement systems to overcome challenges and barriers for growth.					
11) Effective communication with stakeholders enabled OE strategy implementation					

B) IMPLEMENTATION ROADMAP EVALUATION

A roadmap is a plan of intention to achieve particular strategic short-term and long-term goals. The plan must have specific and systematic solutions overcome turbulences along the journey to desired destination.

This section seeks to establish if effective roadmap fundamentals were clearly articulated for successful OE implementation for growth, to what extent did these fundamentals unlocked value?

Scoring: (1) no extent, (2) little extent, (3) moderate extent, (4) great extent, and (5) very great extent.

	No extent	Little Extent	Moderate Extent	Great Extent	Very Great
12) Top management has defined and communicated the vision and mission clearly.					
13) OE strategy implementation rollout was steered and supported by top management					
14) A comprehensive consultative, brainstorming was					

conducted in adoption of new strategies					
15) The organisation has gained competitive advantage in the market place					
16) I was consulted and had inputs in the strategy selection hence there was holistic concerted effort across all					
17) Leadership motivated customer to own OE strategy implementation while taking pride of their achievements					
18) Leadership has cultivated an operation excellence culture through shared values					

C) VUCA BUSINESS ENVIRONMENT

The acronym VUCA stands for volatile, uncertain, complex and ambiguous characteristics of the business environments that are interdependent, inter-twined within a system and between systems and their environments. These intricate and multivariate characteristics place greater pressure, instability, turbulence on decision- making, responsibility, and accountability to drive the organisational visions.

This section seeks to establish if generic operational excellence strategy models suitable for stable or regular environments, are also suitable in a VUCA (volatile, uncertain, complex, and ambiguous) environment like the South Africa business environment?

Scoring: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree

Business environmental factors 1 2 3 4 5

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
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19) OE strategy implementation is facing serious external VUCA environmental forces (political, economic, social, technological and environmental legislatives)					
20) There are serious internal barriers and obstacles that impede successful OE strategy implementation e.g. human resistance, aging equipment, non-optimisation					
21) Allocated Resources and financial budgets are influencing OE Strategy performance; there is adequate finance for training, consultants' services and others.					
22) OE strategy is inconsistent, adaptive to environmental and competitors game changes					
23) OE strategy was not communicated effectively and					

external VUCA turbulences are speedily affecting operations before internal adjustments are done.					
24) There is no asymmetric harmonised teamwork driven by excellent stewardship for the upholding OE strategy implementation sustainability					
25) This company lacks dynamic response changes internally and externally with agility and resilience.					

STATUS QUO OF OPERATIONAL EXCELLENCE MODEL

Operational excellence models are conceptualised scientifically tested variables that interact to produce a phenomenon, they are usually represented as diagrams or pictorials. Different models have been designed, adopted and implemented by different organisations. This section seeks to establish and evaluate how current OE strategy implementation influence organisational functions across the value chain to effect growth?

Matrix Scoring: (1) Very dissatisfactory, (2) dissatisfactory, (3) mediocre, (4) satisfactory, (5) very satisfactory

Model Effectiveness Evaluation 1 2 3 4 5

	Very Dissatisfactory	Dissatisfactory,	Mediocre	Satisfactory	Very Satisfactory
26) Structure and governance systems support OE					

strategy implementa tion					
27) Entire Sales and operational planning is synchronise d for cost effectivenes s					
28) OE strategy implement ation is aligned with organisatio n vision and mission					
29) Plant efficiencies and throughput s have improved, efficiencies are up					
30) Product quality is good and less wastages, scraps					
31) Mainten ance schedules are adhered to					
32) Deliveries are now on time and in full and I am delighted of their services					

OPERATIONAL EXCELLENCE SUSTAINABILITY

OE sustainability is the ability of strategy model to continue to drive desired goals (growth) and its holistic benefits, after the projected initial phase implementation time. This section seeks to establish if OE Strategy implementation is sustainable in a VUCA business environment or what enable OE strategy survival over time.

Scoring: (1) not true, (2) less true, (3) neutral, (4) true, (5) very true

Futuristic views 1 2 3 4 5

	Not true	Less True	Neutral	True	Very True
33) OE can drive performance improvements, change management into the future					
34) OE require more funding to keep systems ongoing					
35) Continuous improvement and innovation is key for OE sustainability					
36) OE sustainability remains at risk due to internal and external factors if not monitored					
37) Owing the nature of the VUCA environment enablers must be in place for OE success					
38) Leadership and governance is key to OE strategy implementation in VUCA environments					

Thank you very for your participation, the researcher wishes you and your organisation well.

APPENDIX C: QUALITATIVE QUESTIONNAIRE

INTERVIEW SCHEDULE

1. Your position:
2. Name of the Company:
3. Years of Experience:
4. Your Key Focus Area:
5. Please explain how your company enhances customer experience?
6. How has Operational Excellence Been Key to Driving Your Vision and Mission in your organization?
7. How do you perceive the effectiveness of OE in influencing organizational change, culture, values, and mindset change?
8. How do you implement OE Strategies in your organisation?
9. Please explain the success factors for implementing OE strategy in your organization.
10. What are the Barriers and Challenges Faced by South African Insurance Companies? Please elaborate.
11. How do you see the South African Insurance Sector in the context of VUCA word?

12. Explain the complexity of the South African Business Environment.
13. What are the enablers for Business Growth in the Insurance Sector in South Africa? Please explain.
14. What would you recommend obtaining OE at a sustainable level? Please explain.

APPENDIX D: GATE KEEPER LETTER



RDP INSURANCE BROKERS

This is to certify that RDP Insurance Brokers approve your application to conduct research involving the clients of our brokerage for research purposes.

This certification is being issued to UKZN Westville student for whatever research purpose it may serve.

Given this 12th day of September, 2023 at 244 Marine Drive, Bluff.

Mckayla Perumal Financial Manager



_____,
Bluff, Durban.



Tel:



at _____

APPENDIX E: EDITING CERTIFICATE



RS WEB SOLUTIONS
MEDIA & EDITING SERVICES



CERTIFICATE OF EDITING

This document certifies that a copy of the thesis whose title appears below was edited for proper English language usage, grammar, punctuation, spelling, and overall style by Shamiel Johnson whose academic qualifications appear in the footer of this document. The research content and the author's intentions were not altered during the editing process.

TITLE:

Developing an operational excellence implementation model for the insurance industry in South Africa

STUDENT:

Sahil Dwarika Parsad
209509906

Yours faithfully



Shamiel Johnson

28 November 2025

BSc Mech Eng (Hons) UCT

Master of Business Administration (M.B.A.) NMMU Business School

APPENDIX F: ETHICS APPROVAL



26 July 2024

Sahil Dwarika Parsad (209509906)
Grad School of Bus & Leadership
Westville Campus

Dear SD Parsad,

Protocol reference number: HSSREC/00007309/2024

Project title: Developing an operational excellence implementation model for the insurance industry in South Africa

Degree: DBA

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 27 June 2024 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

Incidents of adverse events and serious adverse events (AEs and SAEs) should be reported in writing to HSSREC, the study sponsors, and any regulatory authority (where appropriate), within 7 working days of the occurrence for local sites and 14 days for all other South African sites.

This approval is valid until 26 July 2025.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

HSSREC is registered with the South African National Health Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane Hlalele (Chair)
/nmg

Humanities and Social Sciences Research Ethics Committee

Postal Address: Private Bag X34001, Durban, 4000, South Africa

Telephone: +27 (0)31 260 8355/4557/3587 Email: hssrec@ukzn.ac.za Website: <http://research.ukzn.ac.za/Research-Ethics>

Founding Colleges:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

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