

The relationship between Operational Risk Management and Business Continuity Management: A case study of a selected financial institution in South Africa.

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DECLARATION

"I, Gelvas Bhekabambo Sensoesihle Mkhize hereby declare that the work contained in this treatise is my own original work, except as indicated in the acknowledgements, the text and the complete references table and that it has not been previously submitted for assessment or completion of any postgraduate qualification to another University or for another qualification.



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5 March 2017

Date

ABSTRACT

The disruption of a leading financial services company because of internal or external risks has huge negative impact on the business bottom-line and the South African Financial Services industry at large. The Basel Accord defined operational risk as one of the key risk to manage in an attempt to minimise risk within a bank. Business Continuity Management (BCM) is a key component of enabling a business to prepare for disruptions and yet BCM remains poorly integrated with Operational Risk Management (ORM) in most financial institutions.

Qualitative research focuses on gathering and interpreting data through quotation, description and narration was undertaken to explore opportunities for integration of tools and methodologies used by these two risk types. This type of research is concerned with capturing conversations, experiences, perspectives, voices and meanings typically from small samples purposively selected

The study findings are based on a sample of 9 respondents. Most of the respondents indicated that the bank is guided by the Basel, Advanced Measurement Approach (AMA) accreditation to the South African Reserve Bank (SARB) and the three lines of defense. There were many integration points identified by respondent and three recommendations were made to address the research objectives.

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Acronyms

BCM	Business Continuity Management
BCP	Business Continuity Plan
BCMS	Business Continuity Management System
COSO	Committee of Sponsoring Organisations
ERM	Enterprise Risk Management
ORM	Operations Risk Management
SARB	South African Reserve Bank

INTRODUCTION AND PROBLEM STATEMENT

1.1 Introduction

The lack of effective integration between business continuity management (BCM) and operational risk management (ORM) methodologies and processes curtails organizational performance and limits the organization's ability to anticipate and address business risk (Woods, 2011). It is this observation, especially in the financial sector that has led to this research study.

Zhang & McMurray (2013) suggest that BCM could be viewed as a type of risk management that serves to enhance organizational resilience. However, the risk assessments of ORM and BCM (risk and control self-assessment and business impact analysis) tend to be undertaken in isolation of each other within organizations. The failure to synergize ORM and business continuity methodologies, tools and processes often causes duplication, lack of focus and weak risk management.

The readiness of a company to react to disruptive events is of vital importance. This readiness is dependent on management's active embracing of a business continuity plan, and the effectiveness of the company's risk management practices (Järveläinen, 2013). The methodologies of the key concepts of ORM and BCM can be independently assessed and integrated, facilitating extraction of information from business in order to identify key risks and guide the design of key responses controls to identified risk (Woods, 2011).

This is an interpretivist research study and thus a qualitative approach will be taken for its purposes. The outcome is meant to contribute to the effective management of risk in a financial institution in South Africa.

1.2 Problem Statement

The disruption of business due to internal or external risks has negative impact on the business' bottom-line. Despite this fact, BCM remains poorly integrated with ORM in most financial institutions. There is a need to align the tools and methodologies utilized in both

BCM and ORM in order to eliminate duplication, and thus enhance efficiency. The examples below indicate how focus has been placed on BCM and ORM in isolation of each other to the detriment of many companies.

Between 2011 and 2015 the USA financial institutions lost over \$233 billion, attributable to regulatory fines, legal settlements and provision taken for operational risk related events. Of this, \$196 billion can be attributed to banks based in two countries: the USA and the UK (McConnell & Blacker, 2015). The Operational Riskdata Exchange Association (ORX) data for the period between 2008 and 2013 reflected that \$182 billion loss was recorded by its member banks, of which \$111 billion was the result of “clients, products & business practices” loss event type. The same data reported that \$108 billion of the \$182 billion was within the “Retail Banking” business line as defined by Basel II (Dutta & Babbel, 2013).

The Horizon Scan Report (2016) issued by the Business Continuity Institute cited Cyber Attack and Data Breach as the top two causes of business disruption in its annual survey for 2015. Fifty-five per cent of these companies have annual revenues in excess of \$100 million, are in the financial services industry, and at least one of the two causes are present on more than one continent. An organization that can manage its risk better than its competitors can often create a competitive advantage and gain more customers due to effective organizational resilience (International Organization for Standardization, 2015).

Organizations are complex network of people, places, and resources, and they must invest in their risk management capabilities. Given the recurring financial crises and rapidly changing political and business environment threats, this presents several challenges (Lee, Vargo, & Seville, 2013). For instance, although the financial industry has several risk management frameworks, none are regulatory requirements across the continents. The global nature of financial institutions results in exposure to different risks in different locations, where lack of standardization of risk management creates duplication, lack of clarity and deeper exposure to risk, overall (Dionne, 2013).

Basel Committee on Banking Supervision (2010), which is a committee of the Bank for International Settlements (an international organization whose members are central banks from 60 participating countries that account for 95% of the world's GDP) described four dimensions of operational risk. These are losses due to inadequate, or failed: a) Processes, b) People, c) Systems and/or d) External Events. These are not further defined in scope, however, Basel III described seven loss event types that could bring about these four dimensions, one of which is business disruption and system failure (McConnell & Blacker, 2010). Business disruption and system failure is a BCM event which can be directly linked to operational risk definition, according to the Basel Committee on Banking Supervision (2010).

Recent research on BCM has either focused on BCM frameworks, the automation of BCM framework and its lifecycle, or the alignment of BCM to IT disaster recovery or other risk types - especially after the 2008 global financial crisis. King Code introduced the term "business continuity culture" in 2003 and underscored the now famous term that "if you fail to plan, you plan to fail", latest view upheld in the most recent King Code released in 2016. Sahebjamnia, Torabi, & Mansouri (2015) argued that through implementing a Business Continuity Management System (BCMS), suitable Business Continuity Plans (BCP) are provided to respond to possible incidents in an efficient and effective way. Järveläinen (2013) undertook a study that focused on a framework for BCM, and extended it to the context of information systems. The results suggested that the embeddedness of continuity practices in an organization may have perceived business impacts, whereas, in contradiction of previous theories, there was no such direct relation in the case of organizational preparedness to respond to disruptions. Torabi, Giah, & Sahebjamnia (2016) argued that BCM is one of the most recent risk management frameworks, which enables organizations to improve resilience to cope with identified risks. Torabi *et al.* (2016) proposed an enhanced framework for managing BCM benefits from a suite of analytic techniques. These enhance and facilitate the risk assessment and management within the well-known four-step framework of identification, analysis, evaluation and response to risks.

These studies cited above focus primarily on BCM either from a framework implementation and alignment perspective at an organizational level. However, these fail to provide potential integration solutions and fail to deal with the elimination of duplication between OPM and BCM tools and methodologies. An attempt will be made in this study to explore these opportunities and provide effective tools to management for consideration.

1.3 Research objectives

1.3.1 Primary Research Objective

This study determined the significance of the relationship between ORM and BCM in a financial institution in South Africa and explored opportunities for integration of ORM and BCM methodologies and processes.

1.3.2 Secondary Research Objectives

These, stated below, needed to be achieved to realize the primary research objective:

1. Explored perceptions of bank senior management regarding the relationship between ORM and BCM.
2. Examined BCM practices in general, as well as specific to a South African financial services institution.
3. Examined ORM practices in general, as well as specific to a South African financial services institution.
4. Determined an approach to be utilized in the integration of ORM and BCM specific to a South African financial service institution. Recommended ways in which ORM and BCM could operate in an integrated manner specific to a South African financial services institution.

1.4 Research Delimitation

The research was limited to a particular financial institution in South African based in a selected geographical area, namely, Johannesburg.

1.5 Research Alignment Plan

The study addressed the primary and secondary research objectives at various stages. Table 1.1 below shows the alignment of research objectives and the study chapters in which they will be addressed.

Table 1: Research Alignment Plan

Research Objective	Chapter
The Primary Research Objective: determined the significance of the relationships between ORM and BCM and Explore opportunities for integration of methodologies and processes.	All Chapters
Examined BCM practices in general as well as for the financial services institution in South Africa	Chapter 2: Literature Review
Examined ORM practices in general as well as for the financial services in South Africa	Chapter 2: Literature Review
Explored perceptions by bank senior management of the link between ORM and BCM.	Chapter 4: Data analysis, interpretation and results
Determined an approach to be utilized in the integration of ORM and BCM for a financial service in South Africa	Chapter 4: Data analysis, interpretation and results
Recommended ways in which ORM and BCM could operate in an integrated manner for a financial services institution in South Africa	Chapter 5: Recommendations and Conclusions

1.6 Research Methodology and Design

1.6.1 Research Paradigm

Qualitative studies may follow a single-data collection (known as mono-method) or use more than one means of qualitative data collection (known as multi-method). and can include a methodical variation due to its subjective nature (Bordens, Abbott, Indiana, & Wayne, 2013). Qualitative studies consist of written records of observed behaviour that has been analyzed qualitatively. Information is generally gathered by means of personal interviews, focus groups, and questionnaires (Saunders, Lewis, & Thornhill, 2012).

The aim of this study was two-fold: (a) establish a causal relationship between the two variables namely, ORM and BCM; and (b) evaluate how well the current relations between the two methodologies work. Thus, this is an explanatory and evaluative interpretivist research study.

1.6.2 Research Approach

A *case study* approach was engaged to achieve the research objectives, as the focus of the study was on a single financial institution. A case study approach can be used for both quantitative and qualitative research and focuses on intense capacity to generate insight from key respondents in various forms of data collection (Saunders, Lewis, & Thornhill, 2012). In this case, the study utilized qualitative methods of data collection.

1.6.3 Sampling Design

A sample from the population of managers from the selected financial institution in South Africa was chosen. A non-probabilistic judgmental sampling style was used for purposefully selected respondents to be invited for interviews and focus groups in order to address the research questions identified.

1.6.4 Data Collection Method

The data was collected by means of individual interviews and focus groups guided by approved semi-structured interview guides based on the research objectives.

1.7 Study Outline

This treatise is organized into five chapters as outlined below.

1.7.1 Chapter 1: Introduction and Problem Statement

Chapter 1 is the introduction chapter and outlines the problem statement, the research objectives, the research questions and the delimitations. The chapter also outlines the research alignment plan, research methodology, and the significance of the topic, the study outline, and key terminology of this study.

1.7.2 Chapter 2: Literature Review

Chapter 2 will provide a review and synthesis of literature on BCM and ORM. Specifically, the review examines the BCM and ORM practices in general as well as for the financial services institution in South Africa.

1.7.3 Chapter 3: Research Methodology

Chapter 3 provides a detailed description of how the research was conducted including the research design; research approach and methods; sampling and data collection process; limitations of the research; and research ethics.

1.7.4 Chapter 4: Research Findings and Analysis

Chapter 4 presents and discusses the results of this qualitative study. This includes determining the perceptions by bank senior management of the link between ORM and BCM. The discussion also forms the basis of an approach to be utilized in the integration of ORM and BCM for a financial service-provider in South Africa.

1.7.5 Chapter 5: Discussion, Recommendations and Conclusions

Chapter 5 provides a synopsis of the research by discussing each research question and the associated results. The contributions of this study, and opportunities for future research in this field are detailed. This chapter also makes mention of the inevitable limitations of the study. Practical and easily implementable suggestions are made for the financial sector in South Africa.

1.8 Terminology

1.8.1 Risk

“Risk” is defined as the effect of uncertainty on objectives” and an effect is a positive or negative deviation from what is expected (ISO 31000 risk management definitions in plain English, 2010). “A situation that involves exposure to danger” (The Oxford Dictionary).

1.8.2 Risk Management

“Risk Management” refers to a co-ordinated set of activities and methods that are used to direct an organization and to control the many risks that can affect its ability to achieve its objectives (ISO 31000 risk management definitions in plain English, 2010).

1.8.3 Operational Risk Management (ORM)

This is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events (ISO 31000 risk management definitions in plain English, 2010).

1.8.4 Business Continuity Management (BCM)

BCM is defined as a holistic management process that is used to ensure that operations continue, and that products and services are delivered at predefined levels, that brands and value-creating activities are protected, and that the reputations and interests of key stakeholders are safeguarded whenever disruptive incidents occur. This is achieved by identifying potential threats, by analysing possible impacts, and by taking steps to build organizational resilience (International Organization for Standardization, 2015).

1.8.5 Risk Assessment

The Basel Committee on Banking Supervision (2010) defines risk assessment as a process that is, in turn, made up of three processes: risk identification, risk analysis, and risk evaluation.

- *Risk identification* is a process that is used to find, recognize, and describe the risks that could affect the achievement of objectives.
- *Risk analysis* is a process that is used to understand the nature, sources, and causes of the risks that you have identified and to estimate the level of risk. It is also used to study impacts and consequences and to examine the controls that currently exist.

- *Risk evaluation* is a process that is used to compare risk analysis results with risk criteria in order to determine whether or not a specified level of risk is acceptable or tolerable.

1.8.6 Business Impact Analysis (BIA)

BIA is a process used by organizations to analyse the effect a business disruption could have on activities that support the provision of products and services. The results of this analysis are used to set business continuity and recovery priorities, objectives, and targets (International Organization for Standardization, 2015).

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This purpose of this chapter is to provide a review of existing literature on the relationship between Operational Risk Management (ORM) and Business Continuity Management (BCM). The literature review commences by presenting a theoretical background to the concepts of risk, risk management and operational risk, business continuity and BCM. The chapter then focusses on the relationship between ORM and BCM with a focus on the key attributes of both concepts. The ORM and BCM frameworks and processes are also detailed with particular emphasis on the similarities and complementing capabilities between them. Beyond the similarities the literature review also discusses the 'Three Lines of Defense' model which is unique to ORM. The literature review concludes with a summary of the similarities of ORM and BCM based on the definitions, tools and techniques. The literature review was used as a benchmark during data analysis to determine the relationship between ORM and BCM in a banking institution in South Africa.

2.2 The Key Concepts of ORM and BCM

The application of ORM and BCM is based on the understanding of risk. Thus, it is necessary to define the concept of risk. Risk is inherent in business and the term is commonly used in the finance, insurance and banking sectors. And yet there is no universally agreed definition of risk (Berg, 2010). In this study, key concepts identified are: Risk Management, Business Continuity Management and Operational Risk Management. The discussion of these concepts assisted in determining the significance of the relationships between ORM and BCM in a financial institution in South Africa, and served as the basis for the exploration of opportunities for integration of these methodologies and processes.

2.2.1 Risk Management

In general terms risk refers to exposure to loss or uncertainty that is introduced in a system or institution in ways that are unknown and with unknown consequences

(International Standards Organisation, 2009). Uncertainty is usually introduced when there is inadequate information to understand a risk factor or the likelihood of risk and the potential consequences (Berg, 2010). Risk is based on the likelihood of consequences of real or potential future events affecting the achievement of strategic, operational and financial objectives. When defined from a probability perspective risk is viewed as a future event that may or may not occur (Berg, 2010). Therefore, the inherent nature of risk in all business operations drives organisations to prioritise the detection and management of risk.

The nature of the consequences of risk is invariably negative, hence the need for risk management (Berg, 2010). From a historical perspective, the failure of governance that led to the collapse of some major financial corporations in the USA and UK in recent years catapulted risk management to prominence, especially in the financial sector. Investors and shareholders incurred massive losses prompting the introduction of risk management as a key aspect of good corporate governance (Collier *et al.*, 2007). Thus, risk management constitutes a strategy for identifying and controlling risk to minimise its negative impact on company resources, assets and personnel (Hassan, 2012). From another perspective, risk management “involves coordinating activities to direct and control an organisation with regard to risk” (ISO, 2012). Risk management is concerned with understanding and managing risk in a manner that enables the organisation to achieve its corporate objectives. It also includes organisational risk management principles, risk management framework and risk management processes (Hassan, 2012).

For effective risk management, organisations should be able to identify risks, assess the risk, and treat or respond to the risk (Engemann & Henderson, 2012). Risk identification relates to identifying areas susceptible to risks across all levels of the company. Risk assessment relates to the evaluation of the severity of loss or the likelihood that the risk will occur (Hassan, 2012). After assessing the risk, the organisation must select and implement measures to address the risk. According to Chorafas (2008), there are several ways to respond to the risk event, including the following: avoiding the risk; implementing measures to reduce the risk; tolerating the risk, especially in cases where the cost of

remedial action is higher than the losses suffered; and passing on or transferring the risk to another party.

There are various types of risk, but the types commonly cited in financial institutions include operational, financial, legal compliance, information and personnel (CIMA, 2005). For the purpose of this study, the focus will be primarily operational risk.

2.2.2 Operational Risk

Operational risk is a category of risk that has been created in recent years to cover a variety of risks at various levels of within the business operational processes. The term 'operational risk' was developed by the Bank for International Settlements (BIS) and introduced in the Basel II Accords (Basel Committee on Banking Supervision, 2011).

The risks that now fall under the umbrella term 'operational risks' had not been previously categorised in a distinct manner such as strategic, credit and market risk (Hong Kong Institute of Bankers, 2013). The emphasis on operational risk has remained predominantly in the banking sector following various fraudulent activities and scandals that lost several banks billions of dollars. For example, Daiwa Bank lost US\$1.1 billion between 1993 and 1995 due to unauthorised trading by an employee; Citigroup lost US\$70 million in 2004 due to failure to comply with federal lending regulations; and Bernard Madoff Investment Services LLC lost US\$50 billion in 2008 due to securities fraud (Cagan, 2009).

Apart from fraud there are other risks that banks are exposed to that are grouped under operational risk. The interruption of business processes can prevent the organisation from meeting its objectives. Employees can deliberately or otherwise cause incidents that can result in the failure of infrastructure and IT systems. These incidents, including staff turnover and lack of succession planning, also increase operational risk and thus negatively affect business (CIMA, 2008). According to Moosa (2007), the increasing dependency of financial and other institutions on technology has also increased exposure to operational risk.

Based on the aforementioned, operational risk is defined as “the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events” (Basel Committee on Banking Supervision, 2011:3). Examples of business process risks include human error in capturing information or lack of procedures and guidelines. Risks related to people include high staff turnover, fraud, or sabotage by suppliers or service providers. Regarding systems the risks here relate to damage to hardware or cyber-attacks that may corrupt systems or steal information. External risks are varied and include political and legislative issues, criminal activities, workplace issues and destruction of institutional assets by natural and man-made hazards (Hong Kong Institute of Bankers, 2013). Business operation can be significantly affected by these risks if they are not timeously addressed (Graham & Kaye, 2006).

2.2.3 Business Continuity Management

Many organisations, both in the private sector and public sector, have had to adjust to the rapidly changing operating environment in recent years. The level of uncertainty and competition has dramatically increased (Wang, Guidice, Tansky & Wang, 2010) and disruptive technological changes (Banker, Wattal & PlehnDujowich, 2011) continue to impact on business profitability (Singh, 2011). These and similar events (including the recent financial recession) have resulted in the disruption of business operations in many organisations, including banking institutions. Therefore, the need for businesses to anticipate risks and be prepared to respond and sustain business operations is very important. Essentially, this is the basis of business continuity. Business continuity relates to the ability of an organisation to continue to operate at an acceptable level after disruptive incidents have occurred (Zhang & McMurray, 2015).

Business may be disrupted through loss of assets or physical infrastructure such as buildings, or lose business suppliers or clients or even its reputation. Furthermore, it is also estimated that up to 50% of business never recover after a major incident (Broder & Tucker, 2012). The definition of BCM is therefore related to disaster management, crisis management and risk management (Zhang & McMurray, 2015).

According to Engemann and Henderson (2012) business continuity management (BCM) is one of the methods that organisations can use to respond to the impact of disruptive events. The ISO (2012:2) defines business continuity management as “a holistic management process that identifies potential threats to an organisation and the impacts to business operations those threats, if realized, might cause, and which provides a framework for building organisational resilience with the capability of an effective response that safeguards the interests of its key stakeholders, reputation, brand and value-creating activities.” Effective BCM is also critical for the safety and security of employees and assigns roles and responsibilities for the recovery process (Broder & Tucker, 2012).

2.3 Risk Management Frameworks and Methodologies

The discussion up to this point has described the key concepts characterizing ORM and BCM. The application of ORM and BCM within organisations follows independent - albeit similar - procedures and methodologies. Therefore, different frameworks have been developed for each of these concepts over time. This section highlights the “Three Lines of Defense” Model and discusses different frameworks for ORM and BCM with the intention of demonstrating the similarity between ORM and BCM.

2.3.1 Three Lines of Defense Model

According to the Institute of Internal Auditors (2013), the Three Lines of Defense model provides a simple and effective way to enhance communications on risk management and control by clarifying essential roles and duties. This approach can be used in a variety of institutions including banks to improve the risk management functions. The Three Lines of Defense are: Operational Management; Risk Management; and Internal Audit. These are discussed below in turn.

A. The first line of defense: Operational Management

The first line of defense involves operational managers who own and manage risks. This function is executed daily. The role of this function is to identify, assess and execute risk mitigation or corrective processes. In so doing, operational managers are expected to

maintain effective internal controls. The leadership hierarchy should be clear to ensure effective assignment of roles and responsibilities at each level. The first line of defense is critical as this is where risk management systems and processes are designed and implemented (Institute of Internal Auditors, 2013).

B. The second line of defense: Risk Management

The second line of defense is responsible for establishing risk management and compliance functions to support the controls put in place at the first line of defense. This is often done through establishing a risk management committee. This committee facilitates and monitors the implementation of effective risk management practices by operational management, and assists risk owners in defining the target risk exposure and reporting adequate risk-related information throughout the organization.

With regards to compliance the second line of defense plays a monitoring function and reports any deficiencies to senior management. This function is also shared across divisions to ensure compliance with various regulations and requirements. Examples include compliance to health and safety, supply chain and environmental standards. The second line of defense also monitors financial risks and financial reporting issues. As management functions, they may intervene directly in modifying and developing the internal control and risk systems (Institute of Internal Auditors, 2013).

C. The third line of defense: Internal Audit

The role of internal auditors is to provide independent and objective assurance to senior management regarding risk management, internal controls and governance. This is critical because the first two lines do not exercise independent judgement by the nature of their functions.

The internal audit function is critical for organisational governance. The internal audit team must be sufficiently independent and professional to perform this function effectively. Some of their specific functions are:

- Acting in accordance with recognized international standards for the practice of internal auditing.

- Reporting to a sufficiently elevated level in the organization to be able to perform its duties independently.
- Having an active and effective reporting line to the governing body (Institute of Internal Auditors, 2013).

2.3.2 Frameworks for ORM

The ORM processes and methodologies in practice were developed in response to risks that resulted in major losses for investors, shareholders and institutions. Thus, the application of ORM is based on international frameworks and regulations. These include the COSO Framework, the Basel Capital Accords (Basel I, Basel II and Basel III) and standards such as the ISO 3000. These are discussed in further detail in the sections that follow.

A. ISO 31000

The AS/NSZ 4360 Standard was the first risk management standard and was jointly issued by the Australia and New Zealand risk bodies in 1995. Based on this standard the COSO framework came out in 2004 and was followed by the ISO 31000 IN 2009 (Woods, 2011). The ISO 31000 has been adopted worldwide as a standard for risk management.

The ISO 31000 is a generic risk management standard which is applicable to a variety of organisations in different industries and facing different types of risks. The standard provides the fundamentals in risk management that any organisation can use to develop risk management processes, tools and activities.

The ISO 3100 standards comprise of three components: Risk management principles, Risk management framework, and Risk management process. The interaction between the three components starts with principles as an input into the framework and then the process and framework interact continuously. At a functional level the risk management framework provides guidance on the development of risk management plans, establishing relationships and accountabilities, prioritising and allocating resources and implementing

and managing risk-management processes. The risk management framework is depicted in Figure 1 below.



Figure 1: Operational Risk Management Framework

B. The COSO Framework

The COSO framework came into existence in 1992 with a specific focus on providing organisations with a framework for assessing the effectiveness of internal controls. The framework was updated in 2004 and again in 2013 (Figure 2). The updates have generally been necessitated by the changes in the business operating environment, increasing complexity and reliance on evolving technologies, as well as expectations for governance function and prevention and detection of risks. The updates include the expansion of operational and reporting objectives, additional tools and examples for compliance reporting including non-financial objectives. However, the core framework remains the most comprehensive framework designed to provide guidance to organisations with respect to identifying, measuring, prioritising and responding to risk (COSO, 2013).

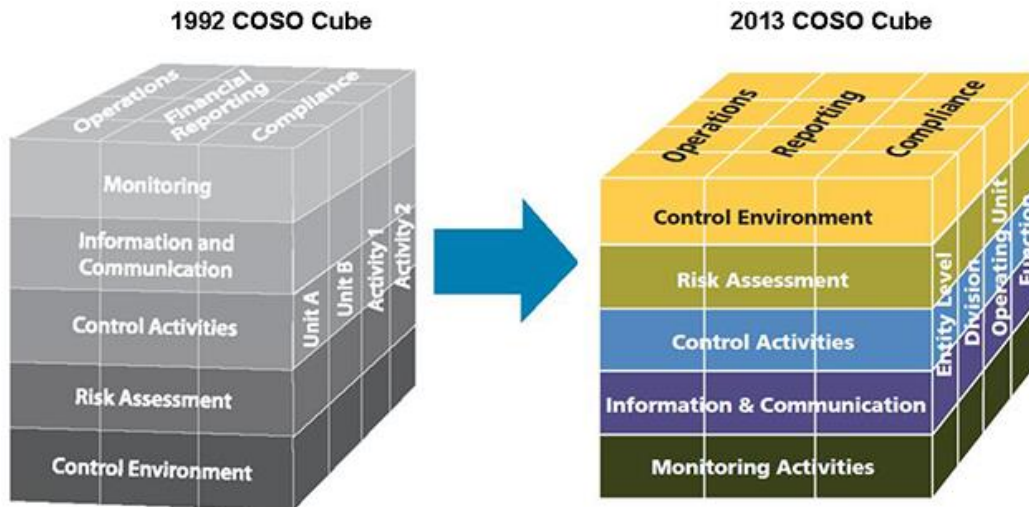


Figure 2: Changes in the COSO Framework from 1992 to 2013

The focus and emphasis on internal control remains the foundational aspect of the framework. Internal control is defined as “a process, effected by an entity’s board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance” (COSO, 2013).

The framework uses a three-dimensional cube to depict the key areas of internal control that institutions should look at to ensure efficacy of internal systems and enable management to make sound decisions for the attainment of organisational objectives. The framework defines five components of internal control, focuses on four levels of organisational structure and three categories of objectives. These dimensions are integrated and should function together to reduce exposure to risk within organisations.

Despite the best internal control system being in place there is only a reasonable (not absolute) guarantee that operations, reporting and compliance objectives can all be satisfied all the time (COSO, 2013). It is worth noting that even though the Sarbanes Oxley Act of 2002 (SOA), which has rigorous regulatory internal controls requirements in place, the 2008 collapse of the banking and financial institutions still occurred in the USA.

C. Basel Capital Accords

According to the Hong Kong Institute of Bankers (2013), the Basel Capital Accords outline a regulatory framework for banks and banking systems. The initial focus of the Basel Accord (when it was first proposed in 1988) was on credit risk in the banking sector (BIS, 2004). The Basel Accord required banks to hold capital against credit risk at a factor of 8%. In 2001, the initial Basel Accord was replaced by the Basel II in order to improve the regulation and supervision of financial institutions (BCBS, 2010). Basel II was released in 2004 and provided a framework for enabling regulatory capital requirements to reflect key bank risks (Basel Committee on Banking Supervision (BCBS), 2001). The BCBS has remained relentless in their effort to make it a mandatory requirement for banks to identify, measure and manage these risks and hold capital against operational risk. The Basel III is the latest framework released in 2012. Basel III has more stringent requirements in terms of the calculation of regulatory capital and provides innovation with respect to leverage ratios, liquidity ratios and risks coverage (Birovljev, Davidović & Štavljanin, 2012).

These accords are based on three pillars as follows:

- Pillar 1 – Calculation of operational risk capital charge
- Pillar 2 – Supervisory review of capital adequacy of banks and
- Pillar 3 – Market discipline and public disclosure (BCBS, 2010).

There are also three approaches outlined for the management of operations risk as outlined below:

- Basic Indicator Approach – A fixed percentage of capital is held by the banks
- Standardised Approach – Slightly enhanced than the above and further links the percentage to each identified business lines.
- Advanced management approach – considers internal control environments and uses models to calculate capital to be held by the bank (BCBS, 2012)

The South African Reserve Bank (SARB) adopted the Basel III framework in 2013 to improve the identification of the liquidity and capital adequacy levels of each of the banks,

thereby preventing the SARB from entering the stage of administration of a bank due to reaching a point of non-viability. The SARB has taken this stance to ensure that no financial institution in South Africa faces a recurrence of the 2008 collapse of banking and financial institutions in the USA. As a BIS member, the SARB is committed to the inclusion of Basel requirements as minimum standards for all banks in South Africa for effective risk management (SARB Guidance Note, 2012).

2.3.3 Frameworks for BCM

The risk that an organisation may face will cause varying degrees of operational failure or business disruption. Implementation of BCM is similar to the risk management process and follows a series of integrated steps to accomplish. The BCM process commences with risk assessment in order to identify the business risks (Figure 3). The next stage is the business impact analysis, to determine the impact of the risk on business processes. Following identification and impact analysis, the next stage is to develop mitigation strategies. A strategy execution plan is formulated, and responsibilities and accountabilities assigned, as in the risk management process. Lastly, the effectiveness of the risk mitigation strategies must be determined. This stage also involves constantly testing the risk management system and upgrading to ensure organisational readiness in the event of any risk occurring



Figure 3: The BCM Lifecycle

Emphasis is placed on the fact that any recovery effort during the BCM intervention must first consider the safety of personnel in the organisation before putting in place necessary procedures to restore business operations (Engemann & Henderson, 2012:38).

A. ISO 22301 Business Continuity Standard

The ISO 22301 standard provides a set of standards, guidance and procedures that are required in BCM. The standard specifically provides requirements for setting the context of the BCM; the purpose and role of leadership; planning processes; support processes; operational procedures for BCM; evaluation standards; and continuous improvement of BCP and the BCM in their entirety.

B. ISO 22301 Audit Tool

The ISO 22301 BCM standard can be used by any organisation to guide their BCM. There is no requirement for institutions to be certified according to this standard. However, companies can use the audit tool to determine their level of compliance and close any gaps in their organisational BCM. Only institutions that are compliant can be certified. The audit tool described above can also be used to for Gap Analysis, used to identify the BCM gaps that exist within the organisation. The analysis thus informs the development of a business continuity management system (BCMS). The audit tool can then be used again to check and test for compliance to the ISO standard.

2.4 Processes of ORM and BCM

To set the context it is necessary to indicate that risk management has been largely focused at the enterprise level. This focus on enterprise risk management (ERM) has been found to be an integrated way of addressing risk from various perspectives by regulators, board audit committees, rating agencies, and shareholders alike (Beasley *et al.*, 2005). According to DeLoach (2000), ERM is a structured and disciplined approach to risk management as it looks at organisational strategy, processes, people, technology and knowledge in the process of assessing all financial and non-financial risks and determining how to deal with them.

According to the Committee of Sponsoring Organisations of the Treadway Commission (COSO) (2004), ERM is a process effected by an institution's board of directors and management manages risk across the enterprise and within its risk appetite, to provide reasonable assurance to shareholders and other stakeholders regarding the achievement of the enterprise' objectives. Thus, ERM provides avenues for institutions to manage operational risks in a manner that enhances the attainment of business objectives on performance and profitability (Woods, 2011).

The process of assessing risk is similar across different industries. What may vary is the *nature* and the *level* of the risk being assessed. The risk management process is also similar and complementary to the BCM process highlighted above. The risk management process follows five main steps (ISO, 2012).

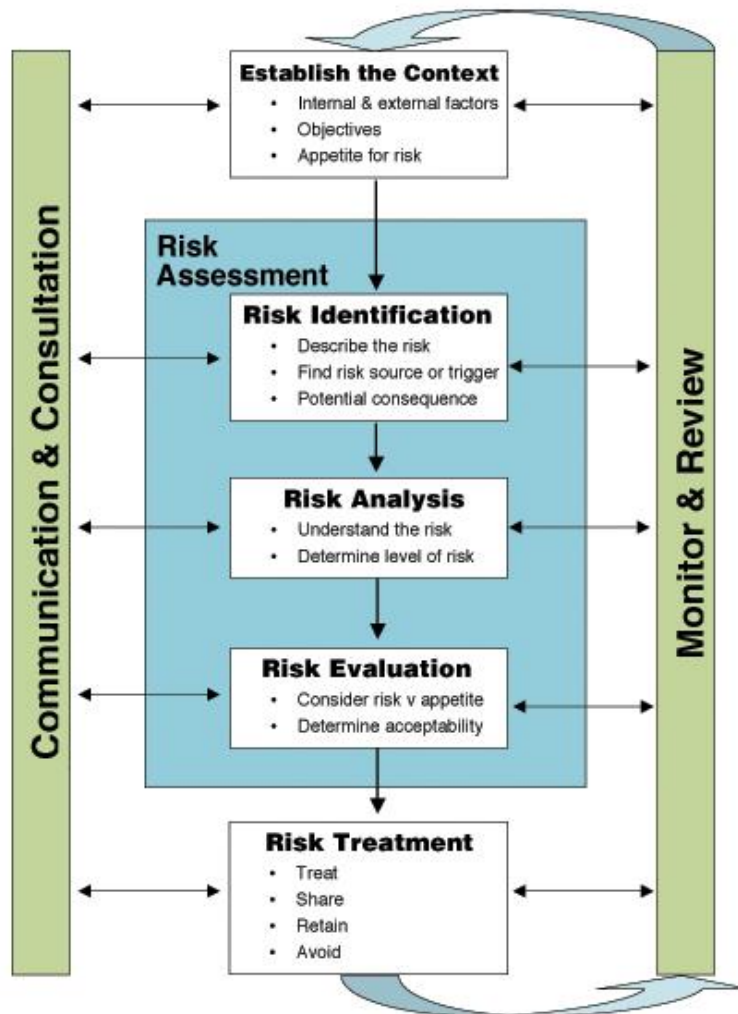


Figure 4: Risk Management Process

There are five steps reflected for both ORM and BCM processes respectively, and these are discussed in the detailed steps below.

A. Step 1: Establish Context / Identify

According to ISO 31000 (2009) the context is critical when an organisation is in the process of developing a risk management policy or program. Thus, establishing this context provides a foundation upon which all other subsequent steps are based. The context is both external and internal. The external context includes all factors that drive or influence the organisation’s ability to achieve its objectives. Such factors could include government regulations, a competitive business environment, and stakeholder perceptions.

The internal context includes all factors that impact on how risk management is performed within the organisation. Thus, there is a need to review organisational risk management policies and procedures to determine their efficacy as well as address any shortcomings identified. Governance issues including organisational capability, decision making process and operational standards must also be reviewed to ensure that risk management processes are executed with proper support structures and systems (ISO, 2012).

In the BCM process this first step is called 'programme initiation'. The programme initiation phase is similar to establishing the context as explained above. Therefore, the same information can be utilised in the BCM planning. However, it is still necessary to emphasise that the programme initiation phase should take into account the organisation's strategic objectives, its risk appetite, and any regulatory, contractual and stakeholder obligations (Engemann & Henderson, 2012:8). This phase is critical in that it will direct the organisation's focus on the relevant and critical business areas that require protection and recovery procedures.

B. Step 2: Risk Assessment / Analysis

The second step consists of three elements: risk identification, risk analysis and risk evaluation. Collectively these elements facilitate a determination of risks that could prevent the achievement of objectives. The first element, risk identification, involves identifying and describing risks. It also involves establishing the sources of risk as well as the likely consequences, and requires multiple organization-wide sources of information (ISO, 2012).

Once the risk is known, the second aspect involves risk analysis in order to understand it in greater depth in terms of its sources and causes. This also involves determining the level or severity of the risk before any decisions are made regarding how to deal with it, and evaluating the efficacy of existing controls (Engemann & Henderson, 2012).

The third and final element is risk evaluation. Organisational risk 'appetite' is evaluated, and the acceptability of each risk identified. This involves comparing the results of risk analysis with set criteria to determine if the risk can be accepted or tolerated. According to ISO (2012:8), 'risk appetite' is the amount and type of risk that an organisation is prepared to accept before action is necessary to reduce it to an acceptable level. Risk evaluation also includes conducting a cost-benefit analysis to determine the most appropriate option to address the risk later on (Broder & Tucker, 2012).

In the BCM process the second step is business impact analysis. The link between BCM and the risk management process is more pronounced during this phase. Risk assessment strengthens the BCM by establishing the risks that can disrupt business processes (Zhang & McMurray, 2015).

In the phase the focus is on determining the impact on business following a disruptive incident, particularly on critical business support activities (Hassan, 2012). This provides the basis for prioritising business operations for recovery. Each business operation is evaluated for impact over time, and the importance of each business operation in relation to objectives and targets is established. The impact is determined by estimating the loss or damage incurred by the business during the disruption. Organisations use criteria to rank the impact on business operations in order to determine which operations will require priority and urgent focus to resume business (Engemann & Henderson, 2012).

After establishing critical business operations, the business impact assessment also determines and assigns roles and responsibilities to staff to implement recovery processes. This includes determining what resources are required, which IT systems, office locations, and other relevant information (Zhang & McMurray, 2015).

C. Step 3: Risk Treatment / Design

After the risks have been identified, properly evaluated and prioritised, the appropriate mitigation measures must be assigned per risk. Risk treatment thus includes selecting and implementing the most suitable option or a combination of options. There are

generally four acknowledged ways of treating risk. These are: avoiding the risk, accepting the risk, transferring or sharing the risk with another party, and reducing the severity or likelihood of the loss (Engemann & Henderson, 2012:306). According to ISO 31000, risk treatments should be based on a risk treatment plan, and should be documented and discussed with stakeholders.

In the BCM process this step is called 'strategy development'. This phase focuses on developing strategies for business recovery in order to ensure continuity of each business operation that may have been disrupted. These strategies are designed to be within the organisational capacity in order to effectively recover from business disruptions (Engemann & Henderson, 2012:60). The strategy also takes note of the prioritised business activities that must not stop even during the disruption. In that vein the strategy development provides definite courses of action if the location of business is rendered unusable during the disruption or if the IT infrastructure becomes unavailable or when staff required to perform certain critical functions are not available. However, each strategy should be assessed to determine how long it takes to implement, its effectiveness and the associated cost (Engemann & Henderson, 2012:60).

The outcome of this process is a Business Continuity Plan (BCP) that details the procedures to be followed and specific activities to be performed when business is disrupted in order to restore operations. Examples include arranging for staff to work from a remote location or increasing work efficiency and installing backup power supply in the case of electrical outage (Engemann & Henderson, 2012).

D. Step 4: Communicate and Consult / Execute

There must be communication and consultation with stakeholders throughout the risk management process. A consultative approach enables the development of a comprehensive risk profile and thereby creates conditions for the achievement of stated objectives. Although consultation is vital, the organisation must make its own independent decision regarding risk management based on other internal variables such as risk appetite, available resources and commitment (ISO, 2012).

E. Step 5: Monitor and Review / Measure

Once a risk treatment option or combination of options have been selected and implemented, it is necessary to continuously monitor performance and review the risk management framework and process. Monitoring entails supervision to ensure that all activities are being implemented as planned and that corrective measures are embedded where there are deficiencies. Reviewing entails assessing whether the risk management policy, plans, controls and risk treatments are adequately and effectively leading to the desired results. This step is significant given the dynamic nature of the business operating environment. The changes in the business environment impact on the risk management practices of an organisation and as such they must be reviewed regularly (ISO, 2012).

In the BCM process, the final phase involves the actual implementation of the BCM strategies, on-going testing and updating. This process is also accompanied by continuous raising of awareness of business continuity among staff. This might also include training of staff to be able to respond to risks timeously and effectively (Graham & Kaye, 2006:87). As discussed, risk management continues to be closely linked to BCM by continuously scanning the internal and external environment to establish any potential risks that might disrupt business operations (Hassan, 2012).

The BCP is designed to be a proactive approach to risk management. Thus, the regular testing of the plan is meant to keep the organisation prepared to deal with any risk event. However, the BCP will only be implemented when the risk event is critical for business operations.

2.5 The Relationship Between ORM and BCM

There is still limited awareness of operational risk in many countries. Furthermore, operational risk is still largely associated with the banking industry. However, the principles of operational risk management can also be applied in public and development sector institutions (Hong Kong Institute of Bankers, 2013). The significance of this is that

operational risk management enables institutions to identify, assess and develop strategies to mitigate risks (Engemann & Henderson 2012).

The financial industry is comprised of a variety of institutions that deal with the management of money. These include banks, credit card companies, consumer finance, investment funds, insurance companies, stock brokerages and some government sponsored enterprises (Berg, 2010).

Sound fiscal management is at the heart of stable economies. The financial sector is critical in driving investments and for managing and sustaining economic growth. However, the financial sector faces many risks apart from operational risk. The common element that binds ORM and BCM together is the concept of risk. At the core of both ORM and BCM is the overall goal of identifying and preventing or minimising risk that could disrupt business operations and result in losses at various levels (ISO, 2012).

The common element that binds ORM and BCM together is the concept of risk. At the core of both ORM and BCM is the overall goal of identifying and preventing or minimising risk that could disrupt business operations and result in losses at various levels. Operational risk remains the most challenging and complicated risk to deal with, especially when banks attempt to identify, quantify and mitigate the risk. This is partly because of the dynamic environment in which banks operate, including regulatory processes and changing customer preferences (Vysya & Gill, 2015). It has been observed that ORM reporting in most banks is conducted in silos and business units operate in silos. As a result, the risk identification process is not efficient and leads to incorrect risk identification and quantification. (The Institute of Internal Auditors, 2013). Furthermore, the quantity of transactions that banks must deal with has increased enormously resulting in banking systems failing to cope. This is compounded by a lack of centralised data management systems in some banks, which leads to the incorrect estimation of the severity of risk impact (Vysya & Gill, 2015). However, to address this Vysya and Gill (2015) propose that banks must enhance their risk coverage, integrate operational risk management and de-centralise operational risks.

Operational risk management is focused on those risks arising from the execution of an institution's business functions. As such operational risks tend to be within the sphere of control of the institution (Matthews, 2008). Operational risk management raises awareness amongst institutions about potential risks that may affect business operations, and to take necessary action to address the risk to ensure that institutional objectives are still met (Woods, 2011). When institutions fully embrace operational risk management as a management tool they practice good corporate governance, effective leadership and risk management (Institute of Directors in Southern African, 2009).

According to Zhang and McMurray (2015), BCM is a proactive and continuous management process whose aim is to limit the impact of disruptive events and ensure the continuity of the business. This means that organisations need to establish the minimum acceptable level of business operations following a disruptive event. This is important because below this threshold the business may no longer be able to fulfil its objectives (ISO, 2012).

Zhang and McMurray (2015) further state that BCM and operational risk are closely linked by characterising business disruption as an operational risk. Thus, BCM focusses on the impact of business disruption and determines potential ways of instituting business recovery within the shortest possible time to ensure business continuity. According to Engemann and Henderson (2012), BCM is geared towards enabling an organisation to continue operating even during a disruptive event as well as recover from any operational failure. The application of BCM places significant emphasis on the notion of a holistic approach which to provide clarity on the fact that it is an organisation-wide process (Akram, 2011). This unlike its predecessors like disaster recovery, which focused on restoring data and information technology infrastructure after a business disruptive event (Posta & Wynes, 2011).

The foregoing demonstrates the close link and complementarity between ORM and BCM, from functional point of view. Risk management, which underlies these concepts, is

crucial in identifying the risks and BCM enables organisations to assess the impact of such risks and establishing effective recovery plans. It is therefore, emphasized that risk management and BCM methodologies must be integrated to build resilient organisations (Hassan, 2012).

2.6 Summary

The literature review has arguably demonstrated that there is a relationship between ORM and BCM. The similarities are both in terms of the definitions and the tools and processes. Figure 5 shows that ORM and BCM definitions both are both inclined towards identifying risk and protecting the organisation from the impact of such potential risk.

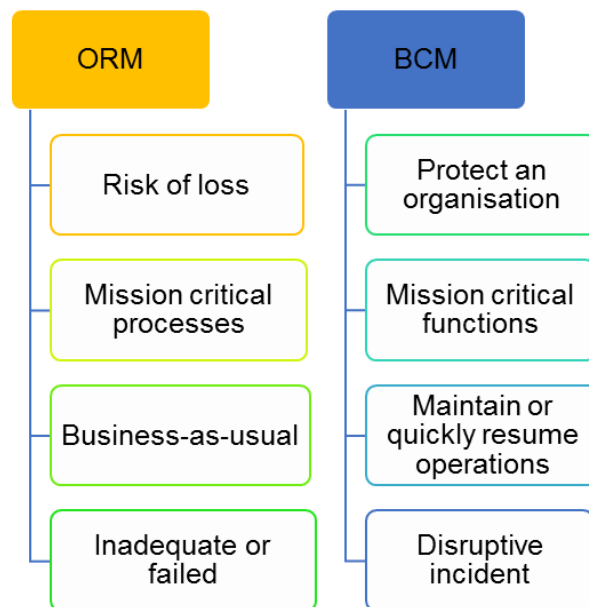


Figure 5: Similarities in objectives of ORM and BCM

Further similarities between ORM and BCM can also be observed in the tools and processes. For instance, where the BCM process uses business impact analysis technique the ORM risk management process focuses on establishing the context. Where the BCM process develops strategies to resume or keep business functions in operation, the ORM risk management process focusses on determining the appropriate risk response (Figure 6).



Figure 6: Similarities of tools and techniques between ORM and BCM

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter provides a description of the research design and methodology used to address the research objectives. Qualitative research was chosen as the appropriate method for the research and is described in detail. The chapter also describes the sampling design, population, sampling method and the sample size. The data collection tools are also presented including a description of the data analysis method. The chapter goes further to highlight the concepts of reliability, validity and trustworthiness and how these were addressed during the research. The limitations of the study are also described to determine the extent to which the findings can be interpreted. Finally, ethical considerations in conducting research are also described, and the limitations of the study are described to provide the scope within which the results of the study can be interpreted.

3.2 RESEARCH DESIGN

Research design is the critical process that transforms an idea or research question into a meaningful and purposeful inquiry (Gatrell, Bierly & Jensen, 2005). According to Yin (1991) research design is the logic that links the data collected with initial questions of the research, as well as the action plan that will be followed in order to reach conclusions from the original questions. According to Nachmias and Nachmias (2008), the research design provides the link between theory that informed the research and argument supported by the data collected. According to Jankowicz (2005), the design process helps the researcher to: explain the choice of research methods and sampling techniques; indicate the methodology of the design; describe how the data was analysed and offer a rationale for the chosen analytical framework; and define the data management procedures that were applied in the research.

There are various research designs such as experimental, descriptive, explanatory, and exploratory (Jankowicz, 2005; Hair, Bush & Ortinau, 2000). The primary research objective of this study was to determine the significance of the relationships between

ORM and BCM in a financial institution in South Africa and explore opportunities for integration of methodologies and processes. Thus, this study adopted an explanatory or causal research design.

3.3 RESEARCH APPROACHES

This research followed the deductive approach, via qualitative research focusing on a case study, and the line of questioning in the study was open-ended to allow participants to express their viewpoints and experience for capture in this thesis. 'Case study' relates to the choice of focus of the study being on a single specific South African financial institution. This approach can be used for both quantitative and qualitative research and focuses on intense capacity to generate insight from key respondents in various forms of data collection (Saunders, Lewis, & Thornhill, 2012).

A. Primary and Secondary Data

Primary data is collected for a specific research problem in question, using procedures that best fit the research problem for the research, for example answers to a research survey questionnaire. In contrast, secondary data is data already available, collected for previous needs, and available via publication. This is often archived and can later be made available for other researchers, e.g. Statistics South Africa reports. Any primary data can be made available later and thus converted into secondary data.

B. Case Study

This approach has its roots in the field of Psychology. In contrast to sample-based research, the case study forms a single focus, on which an in-depth analysis is undertaken. Cases are often bound by time using various data collection procedures (Yin, 2012). A case study is defined as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between 'phenomenon' and 'context' are not clearly defined. Although case studies are typically considered to be part of qualitative research they can also be utilized in quantitative studies (Starman, 2013).

C. Phenomenological Research

This method has its roots in Philosophy and Psychology, and describes an approach in which the researcher describes the lived experiences of people reflecting on a phenomenon under the enquiry. This reflection by participants is their firsthand experiences on this phenomenon (Giorgi, 2009).

D. Ethnography

This type of approach compels the researcher to immerse themselves in the social system being studied, as is typical in Anthropology or Sociology (Berg, 2009). The role of the researcher in this case is to make careful observations and document social structure of the group being studied. The researcher can observe either as a participant or a non-participant in the execution of tasks in the social structure. Ethnographic data may be analyzed by coding any systematic pattern in the notes and consider undertaking an in-depth content analysis.

E. Grounded Theory

Rooted in Sociology, this method requires the researcher to derive a general theory of a process or interaction grounded in the view of participants. There are a number of stages involved in data collection and further refinement of the inter-relationship of categories of information collected (Corbin & Strauss, 2007)

F. Narrative Research

This research stems from the Humanities, and pertains to a style in which the researcher studies the lives of people and requests one or more participants to provide stories about their lives. This is then retold by the researcher as a collaborated narrative chronology.

G. Content Analysis

Leedy and Ormrod (2005a) describe content analysis as a detailed and systematic examination of the contents of a particular body of material for the purpose of identifying patterns, themes, or biases. Content analysis is used to analyse qualitative data. In order to perform content analysis, the interviews from this study were first transcribed. Content

analysis was then performed by analysing and examining, organising, combining and categorising data in themes and sub-themes. The process is iterative and as such was repeated until there were no more sub-themes.

3.4 RESEARCH PARADIGM

The term “paradigm” refers to a whole system of thinking (Neuman, 2011:94) or established knowledge and systems in a particular discipline (De Vos and Strydom,2011:40). According to Babbie (2010) and Rubin and Babbie (2010), a paradigm includes accepted theories, traditions, approaches, models, frames of reference, bodies of research and methodologies. The paradigm affects the research and therefore it should be explicitly stated. This section will provide brief descriptions of the following paradigms: positivism, post-positivism, interpretivism, realism and critical approach.

3.4.1 Positivism

Positivism is an approach that is based on the notion that humans are subjective. The paradigm is also rooted in natural sciences and is therefore considered to be a scientific approach (Denscombe, 2010b). Positivism is premised on the belief that knowledge can only be valid if it can be observed, recorded and measured. Furthermore, valid knowledge can only be achieved through verification of facts (Bryman, 2005:15). In the research process this paradigm begins with the formulation of a hypothesis, and then requires the researcher to test this hypothesis by means of empirical research (De Vos et al. (2011b). The purpose of positivism in this regard is also seen as seeking generalisations based on scientific testing. In the research process positivism utilises quantitative methods with control groups constituted for rigorous analysis (Gratton & Jones, 2010). However, positivism has been challenged by various authors and hence the emergence of other paradigms described in the following sections.

3.4.2 Post-positivism

Post-positivism is an extension of positivism and challenges the notion of absolute and objective truth in the social sciences (Creswell, 2009). Thus, post-positivism

encompasses both quantitative and qualitative methods as complementary in establishing reality (Gratton & Jones, 2010). It is therefore accepted through this paradigm that there are multiple perspectives to reality. Based on this paradigm the phenomena are understood as the research process unravels. The use of research questions or hypotheses as a starting point for research is typical in post-positivism.

3.4.3 Interpretivism

The interpretive paradigm is also called the 'phenomenological approach'. This paradigm is based on trying to understand human experiences and the meanings ascribed to these experiences (Neuman, 2011). The interpretive paradigm further explores complex social phenomena based on the subjective interpretations of individuals. The subjectivity is introduced through individual perceptions and values (Rubin & Babbie, 2010). The interpretivism paradigm is based on the following three principles (Blumberg et al., 2011):

- The social world is constructed and given meaning subjectively by people based on their knowledge and experiences in relation to the social world;
- The researcher is part of what is observed; and
- Research is driven by interests.

The research process thus becomes an interactive process that seeks to offer meaning to and explanations of human experiences. The interpretivist paradigm is more inclined towards qualitative data collections methods that relies on approaches such as interviews or focus groups

3.4.4 Realism

The realism paradigm is based on the principles of both the positivism and interpretivism paradigms. In other words, the paradigm acknowledges objective fact-seeking when analysing phenomena, as well as considering the subjective interpretations and meaning ascribed to experiences by individuals (Blumberg *et al.*, 2011). The paradigm further accepts that there are external factors that collectively affect people even though individuals then utilize their individual experiences to subjectively interpret their

circumstances. This in research process realists state that both empirical evidence and qualitative explanations are required to understand the world (Livesey, 2011c). Focus groups and in-depth interviews are both suitable within the realism paradigm.

3.4.5 The Critical Approach

The critical approach places emphasis on historical and social contexts, in order to understand social phenomena (Lincoln *et al.*, 2011). This approach seeks to understand society and influence it by questioning community knowledge through research and evaluation (De Vos *et al.*, 2011b). A key premise of the critical approach is the need to criticize and challenge society based on reason. Even though there may be subjective intentions which introduce bias, it is still acceptable as a philosophy (Blaikie, 2007). Given that society is not static, the critical approach supports the notion that society is continuously influenced and affected by social, political and cultural factors (Neuman, 2011). As such, the purpose of critical approach is to understand everyday lives of individuals, challenge these views and thus attempt to bring about transformation in how people view the world. In the research process, the critical approach relies on participatory approaches including activism.

3.7 RESEARCH METHODOLOGY

There are two types of research methods: qualitative and quantitative. The research methodology forms the foundation of any research project, and details the processes followed in collecting data (Clarke, 2005). According to Polit and Hungler (2004:233), methodology refers to ways of obtaining, organising and analysing data. The research describes the method used to achieve the outcome of this research (Henning, 2004:36). A methodology is merely an operational framework within which facts are placed so that their meaning is clear (Holloway, 2005:293). A sound methodological paradigm is necessary because it directs the entire research study. By using a clear and sound methodology it is possible to interpret data in such a way that meaningful conclusions are drawn, and inferences become consistent, reliable and valid. This research study specifically falls within the interpretivist or qualitative paradigm.

3.7.1 Quantitative Methodology

This type of research focuses on the description and explanation of concepts and has a bigger sample size requirement compared to qualitative research that is descriptive in nature (Neuman, 2011). The nature of the research design is determined before the commencement of the process (Collins & Hussey, 2014). The data analysis process utilizes computerized statistical and mathematical methods with limited reliance on human analysis (Saunders *et al.*, 2012). Thus, quantitative research has the advantage of minimizing researcher bias.

3.7.2 Qualitative Methodology

This methodology relies on naturalistic methods of data collection. These include personal interviews, observation and analysis of records. Qualitative studies may follow a single-data collection (mono-method) or use more than one qualitative data collection (multi-method) and are highly subjective (Bordens *et al.*, 2013). Qualitative research offers insight into social, emotional and experiential phenomena (Giacomini, 2000). The intention of qualitative research is to enable researchers to answer questions about complex phenomena (Leedy & Ormrod, 2005a).

Qualitative research is a systematic, subjective approach used to describe life experiences and give them meaning (Burns & Grove, 2003). Qualitative research is mostly associated with words, language and experiences rather than measurements, statistics and numerical figures. In this research, the focus is on describing and understanding the relationship between ORM and BCM from the managers' perspectives. Qualitative methods such as personal interviews enable respondents to speak freely in their own terms based on their experiences.

Qualitative research focuses on gathering and interpreting data through quotation, description and narration. This type of research is concerned with capturing conversations, experiences, perspectives, voices and meanings typically from small samples purposively selected (Creswell, 2014; Delpont & De Vos, 2011:65). The nature of the research design may evolve or change during the research with limited consistency

(Saunders, Lewis, & Thornhill, 2012). There is a high reliance on human analysis of data collected with quicker turnaround time on data collection due to the smaller sample of research participants (Neuman, 2011).

Some of the major characteristics of the qualitative paradigm are that it makes extensive use of descriptive data; the emphasis is more on the process than the result; it is based on inductive logic; and it focuses on the search for meaning (Creswell, 2009; Leedy & Ormrod, 2010; Kumar, 2011). The qualitative research approach will consist of data and information that will be gathered through personal interviews, focus group discussions and secondary data available within the bank on ORM and BCM (Saunders *et al.*, 2012).

3.7.2.1 Advantages of Qualitative Research Method

Conducting face-face or telephonic interviews guided by open-ended questions permitted the managers selected for the study to explain the relationship between ORM and BCM from their own individual perspectives. The interview methods were flexible and semi-structured thereby enabling the researcher to gather substantial amounts of data (Brink & Wood, 1998). The qualitative methods also provided the researcher with control of the interview process (Creswell, 2002). The interviewees also had the flexibility to respond to questions as they choose, without being constrained by pre-determined categories of responses. This also enabled the researcher to probe respondents to provide more information or details on specific topics. Consequently, this increased the likelihood of achieving the research objectives.

Qualitative research has the following key advantages:

- It studies people in terms of their own definitions of the world;
- It focuses on the subjective experiences of individuals;
- It is sensitive to the contexts in which people interact with each other (Mouton, 2001b:194); and
- It generates narrative accounts, explanations, typologies of phenomena, and conceptual frameworks (Giacomini, 2000).

3.7.2.2 Disadvantages of Qualitative Research

There are a number of disadvantages associated with qualitative methods. One of the disadvantages is that respondents provide subjective responses that will vary between individuals. The respondents may also emphasize different aspects based on their experiences. According to Leedy and Ormond (2005a) the presence of the researcher during interviews could introduce bias on the part of the respondent. Finn & Jacobson (2008) further state that interviews are time consuming and expensive compared to other forms of data collection.

However, the above disadvantages were offset by the ability of the researcher to be sensitive and skillfully conduct interviews. The researcher has a deeper understanding of the study and was thus be able to gather, analyse and interpret the information (Ghuri, 2002; Giacomini, 2000).

3.8 RESEARCH QUESTIONS

According to Bryman and Bell (2007:83), research questions are crucial in guiding the research activities and processes. A research question is a hypothesis essentially asked in a form of a question. According to Bryman and Bell (2007:83) research questions are crucial because they will:

- Guide the literature search;
- Guide the decisions about what data to collect and from whom;
- Guide the analysis of the data; and
- Guide the writing up of the data.

The research was guided by the following key questions:

- How are Business Continuity Management principles and methodologies applied in a financial institution in South Africa?
- How are Operational Risk Management principles and methodologies applied in a financial institution in South Africa?
- What is Management's feedback with regards to the current status quo and the possible value add of integration?

- Where do Operational Risk Management and Business Continuity Management processes interact and functionally sit, organizationally, for reporting purposes?
- To what extent do Operational Risk Management and Business Continuity Management processes integrate for effective operation?

3.9 SAMPLING DESIGN

According to Saunders *et al.* (2007:207), sampling methods are grouped under 'probability' or 'representative sampling', and 'non-probability' or 'judgmental sampling'. In probability sampling each person in the population has the same known probability of being selected. This method increases the likelihood of obtaining samples that are representative of the population (Green, 2010). In non-probability sampling the chance of selection for each element in the population is unknown, and zero for some elements. This approach is suitable where subjective criteria are used to select elements to constitute a sample (De Vos, 2002). For this study, judgmental sampling was used to purposively sample managers in specific departments with specific knowledge on ORM and BCM.

3.9.1 Target Population

A population is a group of elements or cases, whether individuals, objects, or events, that conform to specific criteria, and to which we intend to generalize the results of the research (McMillan & Schumacher, 2006:119). The target population refers to the general population from which the sample is taken and accessible population refers to the sections of the population to whom the researcher has access (Neil, 2015:3). For this study the population consisted of senior managers in business operations and risk management within the selected financial institution, countrywide.

3.9.2 Sample

A sample from the population of managers at the selected financial institution in South Africa was chosen. A non-probabilistic judgmental sampling style will be used for

purposefully selected respondents to be invited for interviews and focus groups to address the research questions.

3.9.3 Sample Size

A sample refers to the selected elements chosen for participation in a study. The target sample size was 15 - 20 managers for individual interviews. In addition, three focus groups were conducted, each consisting of five to eight managers.

3.10 DATA COLLECTION

3.10.1 Semi-structured interview guides

A data collection tool is defined as a measurement tool for a research study. This tool must be reliable and valid (Saunders *et al.*, 2007:145). For this study semi-structured interview guides were used for the face-to-face or telephonic interviews with selected managers. The interviewer had a list of themes and some key questions to guide the conversation. The semi-structured interview guides permitted respondents to express themselves without restriction and enabled the researcher to probe further to gather more detail.

3.10.2 Participatory Observation

The extent of participatory observation varies from pure observation to full participation and has its roots in Social Anthropology. The researcher enters the world of research participants and observes, including personally participating in executing tasks, with the objective to gather and collect data for research purposes. (Jaimangal-Jones, 2014). Therefore, using this approach enables the researcher to gain insights concerning the behaviour, motivations, attitudes and perceptions of people within the culture in question. Participatory observation also entails watching and recording all the events, interactions and participants within the situation as well as the setting itself (Jaimangal-Jones, 2014).

3.11 DATA ANALYSIS

Data analysis is a way of gathering, modelling and transforming data with the aim of highlighting information (Babbie, 2008). According to Babbie (2008) the basic steps of data analysis include: categorising data; coding data; and calculating appropriate statistics. The data gathered from the study was predominantly qualitative in nature. Qualitative data is all the non-numeric data gathered through personal interviews and focus groups using semi-structured questionnaires. The researcher transcribed the interviews and summarized the focus group discussions. Content analysis was then used to categorize data according to predetermined and emerging themes.

3.12 RELIABILITY, VALIDITY AND TRUSTWORTHINESS

3.12.1 Reliability

Reliability of research is defined as how closely the same constructs in a research instrument replicate similar results (Tavakol & Dennick, 2011:447). According to Delport and Roestenburg (2011:177) reliability deals with what is being measured. Given that there is always some magnitude of error in research (Muijs, 2011:61) the purpose of reliability is to minimize or eliminate such error. According to Greener (2008:37), research results must be auditable, which means that the research instrument must consistently produce the same results. This consistency instils confidence that the results are reliable. There are various techniques that can be used to ensure the reliability of research results. These include the test and retest method, Alternative-Form method, Split-Halves method, internal consistency method and correction for attenuation (Carmines & Zeller 1999:37). The researcher ensured that questions included in the semi-structured interview guides elicited the same or similar interpretation by the respondents. The researcher also ensured that the questions were posed in the same way to ensure consistency. The semi-structured interview guides were pilot tested to ensure that the questions did elicit the desired information reliably. Adjustments to the interview schedule were made based on the pilot test results.

3.12.2 Validity

Validity is the extent to which a test or indicator measures what it claims to measure. Validity is important for the results to be accurately interpreted (Bryman & Bell, 2007:165). There are three types of validity: content validity, criterion validity and construct validity (Carmines & Zeller, 1999:17). The content validity determines whether the instrument fully measures the objectives of the research (Miller, 2012:3). Criterion validity refers to whether the measurement predicts the research outcomes, and construct validity refers to the extent to which the measurement reflects the intended construct. Thus, content validity was ascertained through the pilot study. The interview schedule was adjusted accordingly to ensure that the questions satisfactorily addressed the research objectives.

3.12.3 Trustworthiness

Trustworthiness in qualitative research refers to the demonstration that the evidence for the results reported is sound. Lincoln and Guba (1985) refer to the “trustworthiness” of qualitative research in relation to the credibility, transferability, dependability, and conformability of the results. Credibility deals with the accuracy of identifying and describing the subject of the study; transferability deals with the applicability of the findings to another context; while dependability is the researcher’s account of the changes inherent in any setting, as well as changes to the research design as learning unfolded. Confirmability is concerned with whether the findings could be confirmed by another researcher, thus removing some of the researcher subjectivity.

In this study the researcher was objective when gathering data and interpreting findings. The researcher ensured that the findings were interpreted within a specific context and would not necessarily be generalized to other institutions.

3.13 ETHICAL CONSIDERATIONS

According to Polit and Beck (2010), ethical issues always arise when research studies involve interaction with human beings. The researcher sought permission to conduct the

research within the institution. The questions were approved to ensure that there were no aspects that could offend, embarrass or upset the participants.

It is acknowledged that research studies ought to be designed in such a manner that the respondent does not suffer physical harm, discomfort, pain, embarrassment or loss of privacy (Blumberg *et al.*, 2005:156). The following ethical concerns were addressed: informed consent, anonymity, confidentiality, and voluntary participation (Henn *et al.*, 2009).

3.13.1 Informed consent

The researcher sought the consent of the participants before the interviews. Consent letters were sent out to the managers to inform them about the purpose of the research. The participants were also free to abort the interview or focus groups had they wished to. All participants in the study were informed ahead of time to ensure that they had ample time to satisfy themselves about the purpose of the study and make an informed decision whether to participate or not (Thavhanyedza, 2009).

3.13.2 Anonymity and Confidentiality

The researcher ensured that participants' anonymity was protected and protected the confidentiality of both interviews and focus groups. The names of the managers were also not used in reporting the findings. While the findings of this research will be reported here, and will be available to participants should they request the information, the results cannot be linked to any specific individual. All original documentation and transcripts have been scanned and stored in password protected files. This original documentation will be stored for a period of five years, only for the purposes of academic review, and will not be shared with any individual other than the supervisor to this study.

3.13.3 Voluntary Participation

The researcher encouraged managers to participate voluntarily in the study. Furthermore, the researcher neither offered incentives nor coerced the managers to participate.

3.14 SUMMARY

The research design, approach and methodology were discussed in this chapter. The explanatory or causal research design was selected for the study. The research is located within the interpretivist paradigm and the case study approach was found to be appropriate based on the nature of the study. The target sample, sampling strategy and sample size for the face-face interviews and focus groups was described. The reliability, validity and trustworthiness of the research process and research tools was also discussed including the ethical considerations.

In the next chapter the research findings are presented.

CHAPTER 4

RESEARCH FINDINGS AND ANALYSIS

4.1 Introduction

This chapter presents the findings of the research study. These findings are based on interviews conducted with nine (9) respondents guided by a semi-structured interview guide with open ended questions. The first section provides a description of sample profile and focusses on presenting key biographical attributes of the respondents. The second section is focused on the presentation of the study findings and it is divided into three sub-sections. The first sub-section presents the findings on ORM based on a series of questions answered by the respondents. The second sub-section presents the findings on BCM and the third sub-section presents findings on the integration of ORM and BCM.

The next section provides a discussion on the findings to provide context and meaning. This is enhanced by determining to what extent the study findings answer the research questions that guided the study. The chapter concludes with a summary of the findings.

4.2 Presentation of Research Findings

The research findings are based on semi-structured interviews with 9 respondents in senior and top management. The format for presenting the study findings follows the sequence of the questions on the ORM, BCM and integration of ORM and BCM. For each question the responses will be paraphrased and quoted verbatim where necessary. The quotations are intended to express the respondents' views in a way that demonstrated the importance or strength of their perception regarding the issue at hand. No interpretation or discussion will be conducted in this section as the underlying idea is to state and present what the respondents said. A separate section for discussion will follow after the presentation of findings.

4.2.1 Study sample profile

The study findings are based on a sample of nine (n=9) respondents. The majority of the respondents (77.8%; n = 7) were aged between 36 and 59 years and only two (22.2%)

were aged above 50 years. The age range of the respondents suggests a certain level of maturity. The gender composition of the sample is disproportionately tilted towards male dominance. It should be noted that the researcher sought to have a balanced sample, but the response rate was low from female managers. The majority of the respondents were African (66.7%; n = 6) with only two white and one Indian (Table 2).

Table 2: Age, gender and racial profile of respondents

Variable	Options	Number	%
Age (years)	below 25	0	0
	26 to 35	0	0
	36 to 50	7	77.8%
	≥ 50	2	22.2%
Gender	Male	8	88.9%
	Female	1	11.1%
Race	African	6	66.7%
	Indian	1	11.1%
	Coloured	0	0
	White	2	22.2%

With regards to educational qualifications, five (5) of the respondents are degreed and the remaining four (4) hold a post graduate qualification. Having tertiary education could imply that the respondents have sufficient technical knowledge of ORM and BCM to contribute to the study objectives (Table 3).

Table 3: Level of education of participants

Variable	Options	Number	%
Education	Matric	0	
	Certificate	0	

	Diploma	0	
	Degree	5	55.6%
	Post-Grad	4	44.4%

Table 4: Office base

Variable	Options	Number	%
Office Base			
	30 Baker	6	66.7%
	Simmonds	3	33.3%
	CVOP	0	0

The majority of the respondents (88.9%; n = 8) have been in the bank for over 20 years. The long service indicates that respondents have a wealth of experience and institutional memory to discuss the banks experiences with ORM and BCM. Only one respondent had been with the bank for between 11 and 20 years (Table 3).

Table 5: Respondents' working experience

Variable	Options	Number	%
Working Experience	Less than 5 years	0	0
	5 to 10 Years	0	0
	11 to 20 Years	1	11,1%
	>20 Years	8	88.9%

The sample consisted of four senior and four top managers (Table 6). One respondent did not state their level of operation. However, given the level of seniority of the respondents the researcher had assurance that they have a sound grasp of the issues and trends of ORM and BCM within the bank.

Table 6: Respondent's level of operation

Level of Operation			
	Non-Manager	0	

	Junior Manager	0	
	Middle Manager	0	
	Senior Manager	4	44.4%
	Top Manager	4	44.4%

4.2.2 Findings on ORM

The questions for this section focused on establishing the bank’s ORM framework, awareness and understanding of the risk management within the bank, roles, responsibility and accountability for risk management. The questions also sought to establish how the bank keeps up to date with trends in risk management, determine risk identification methods used and the type of capacity building provided to staff to ensure effective risk management. Lastly, the questions sought to establish the respondents’ perceptions of the value or benefits of effective risk management to the bank.

- a) Briefly describe the bank’s risk management program and framework. Are risk management policies clearly documented?

More than 50% of the respondents indicated that the bank is guided by the Basel, Advanced Measurement Approach (AMA) accreditation to the South African Reserve Bank (SARB) and the three lines of defense. Respondent 1 stated this as follows:

“We are guided by Basel and our SARB accreditation of AMA in terms of our commitment to the risk management program. Largely it is 3 lines of defense model that is clearly articulated through our (risk management) Framework, Policy and Standards.”

Respondent 5 only noted the Basel framework and the AMA accreditation. This was articulated as follows:

“It is a framework aligned to Basel in line with our AMA requirements to help the organization manage risk.”

Other respondents only mention the three lines of defense and the AMA accreditation and were silent on the alignment of risk management with Basel codes. For example, Respondent 9 indicated that:

“The bank employs the 3 lines of defense model. I believe it is also signed off by the SARB in line with our AMA accreditation.”

The response by Respondent 2 indicated that the bank mainly uses the three lines of defense:

“It is the 3 lines of defense framework. Policies are defined and signed off at the correct board and sub-board committees.”

Other respondents did not mention any framework but explained how risk management is structured within the bank. For example, Respondent 3 stated it as follows:

“The risk structure is a group structure removed from business. This, as I understand is for independence purposes. Risk management, however remains line management’s responsibility.”

This assertion was also echoed by Respondent 7 who expressed it as follows:

“(Risk management program) is owned by line management with guidance from the group structure with its mandate through frameworks and policies.”

b) Do you think that the risk management process for your bank is adequate or effective? What are the gaps?

All the respondents generally agreed that the risk management process was effective. However, they noted that there were some gaps that needed to be addressed. For instance, Respondent 3 felt that:

“There can be some improvements though. The risk structure should be closer to business.”

Respondent 6 also expressed similar sentiments by indicating that “there were gaps relating to line management support in risk management”.

The two respondents were placing further emphasis on the silos that exist within the bank with respect to risk management.

Respondent 9 suggested looking at other risk management models to address the shortcomings of current models being used. The response was stated as follows:

“The three lines of defense is not perfect, but it is effective. Perhaps some focus needs to be placed on a more relevant model for an emerging bank in the African continent.”

Although Respondent 2 agreed that the three lines of defense model was effective, there was a suggestion that the first and second line need to be closer. At a broader level Respondent 1 suggested that the bank needs to keep up with trends in globalization and technology to remain relevant and effective.

c) Is there a mutual understanding of risk management program across the bank?

The respondents were in general agreement that there is some level of understanding of the risk management program within the bank but that understanding is confined within the senior management. In response to the question, Respondent 1 answered as follows:

“High level yes however, there are gaps. Ownership of risk at source has always been a problem but we have seen huge improvements over the years.”

Respondent 9 also shared a similar view by stating that:

“No (there is no mutual understanding of risk management program across the bank), (it exists within the) C-suite and the operational risk structures, however not the same throughout (the bank).”

The reason for this lack of common understanding of the risk management program across the bank was alluded to by Respondent 3, who said:

“(Risk management) policies are set from the top however some things get lost in translation.”

However, according to Respondent 7, whether or not there is no mutual understanding of the risk program, there is a need for more agility and relevance of risk management in order to conform to changing banking needs.”

- d) Are the roles and responsibilities for risk management clearly set out and well understood across the bank?

There was general agreement among the respondents that the roles and responsibilities for risk management are clear and understood across the bank. However, Respondent 1 expressed the view that more awareness would be beneficial to the bank:

“(The roles and responsibilities are) well defined and documented, (however) more awareness can always help embed this better.”

Respondent 9 also expressed the same view that even though roles and responsibilities for risk management are known, more awareness is required to further enhance understanding across the bank.

- e) Is accountability for risk management clearly set out and well understood across the bank?

All the respondents agreed that the accountability for risk management is clearly set out and well understood. Only Respondent 9 stated that this was not understood throughout the bank. Whilst top management understands this concept, not all staff across the organization are well versed accountability of Risk Management.

f) How does the bank keep up to date with the trends and best practice in risk management?

The bank adopts engages in various activities in order to keep up with the trends and best practice in risk management. The responses indicate that attending conferences is a major part of this drive to keep up to date with global trends. Research and thought leadership were also stated as key in keeping up-to-date with issues in risk management. Executive programs, training and continued education were also mentioned as ways of ensuring that the bank is always aware of any new developments in risk management.

g) What are the risk identification methods used by your bank? Why? How effective?

According to six respondents, the bank uses the RCSA process for risk identification. Other respondents stated that the bank uses its own framework and scenarios. The responses are shown in Table 7

Table 7: Risk identification methods used by the bank

	Risk identification methods used by the bank
Respondent 1:	We use RCSA process
Respondent 2:	framework of the bank
Respondent 3:	We undertake risk self-assessment regularly.
Respondent 4:	the risk assessment tool
Respondent 5:	RCSA and scenarios
Respondent 6:	the bank employs the RCSA method
Respondent 7:	the risk assessment process

Respondent 8:	RCSA
Respondent 9:	RCSA

h) Does the bank provide training in or recruit staff experienced in risk management?

The respondents confirmed that the bank provides training in risk management to staff. According to Respondent 1 the training is often undertaken through Continued Professional Development (CPD) and attendance at conferences. Respondent 2 stated that the training is mostly on the job training and according to Respondent 5 the training has to be aligned to the bank policy and requirements.

i) What value or benefit does effective risk management bring to the bank's success?

According to the respondents the value or benefit of effective risk management is mostly strategic in nature this enables the bank to have a competitive advantage over competitors. Without an effective risk management programme the bank would lose its license or collapse through being defrauded. The specific responses are presented in Table 6 below.

Table 8: Value and benefit of effective risk management to the business

	Value and benefit of effective risk management
Respondent 1:	Capital adequacy management and strategic influence of group objectives
Respondent 2:	strategic direction
Respondent 3:	Immense value especially if it's done well.
Respondent 4:	Huge, lack of risk management can cripple the company
Respondent 5:	Without effective risk management, the bank will lose its license, defrauded and or fail

Respondent 6:	Really good value, if risk is not managed then the organization can fail.
Respondent 7:	Substantial. If its executed correctly it truly cam be a competitive advantage
Respondent 8:	Really good. Effective risk management makes business successful
Respondent 9:	Enables achievement of strategic goals

4.2.3 Findings on BCM

The study sought to provide an independent view of how the BCM program functions in the bank. The respondents were asked a series of questions that sought to establish the BCM framework, clarity of roles, responsibilities and accountability, as well as aspects related to the awareness and capacity of the bank to implement relevant BCM operations. The findings were generally presented verbatim but in some cases summaries are provided where similar responses are provided by more than three respondents. The responses said by each respondent are indicated for each question to show their diversity and convergence of perceptions regarding BCM issues.

- a) Describe the business continuity program and framework and outline its objectives? Are BCM policies clearly documented?

Most of the respondents stated that the objectives of BCM were to prepare for disruption or disaster and to be able to continue with the business after the event. Other respondents emphasized other elements, for example, Respondent 3 and Respondent 6 included the aspect of staff safety during a disaster in order to preserve lives. The specific responses are presented in Table 7.

Table 9: BCM framework and objectives

	BCM framework and objectives
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Respondent 1:	Preparation for disruption and ensuring ability to respond and continue
Respondent 2:	Group wide program to respond and continue after disruption
Respondent 3:	BCM is about safety of staff during emergencies and planning for business impact on disruptions
Respondent 4:	Its frameworks to help up prepare for disaster
Respondent 5:	Its aligned to Ops risk framework and the ISO standards for BCM
Respondent 6:	It's linked to operational risk framework to preserve people's life at work and plan for business disruption.
Respondent 7:	No to all
Respondent 8:	Is linked to ISO standards and the group ops risk framework
Respondent 9:	Plans and framework aligned to industry standards to enable business to respond to incidents

b) Are the roles and responsibilities for BCM clearly set out and well understood across the bank?

All the respondents agreed that the roles and responsibilities for BCM were clearly set out. Six of the respondents stated that these roles and responsibilities are well understood across the bank and three respondents disagreed.

c) Is accountability for BCM clearly set out and well understood across the bank?

All the respondents agreed that the accountability for BCM was clearly set out. Six of the respondents agreed that accountability for BCM is well understood across the bank. Three respondents disagreed. Respondent 7 stated the disagreement this way:

“Accountability is clear, however, responsibility, clarity and understanding is lacking.”

Respondent 2 said that understanding of accountability is not the same across the bank.

d) Is the BCM program adequate and or effective? Where are the gaps?

All the respondents agreed that the BCM program is adequate and effective. However, they further stated that there is still room for improvement. According to Respondent 1:

“(The BCM program is) adequate for the group’s resilience, however can be made better for business areas.”

Respondent 3 agreed and also made a suggestion as follows:

“It’s effective but improvements are needed on new risks such as cyber-attacks.”

There were also suggestions by Respondent 3 to improve the communication around BCM in order to ensure that it is embedded within the bank’s structures. However, according to Respondent 7 there is no awareness of how effective the BCM is because of poor communication on the framework.

e) Which disaster are you most prepared to respond to? What are the recovery strategies in place to mitigate against the disaster?

The most common disaster that the bank is prepared to respond to pertains to staff safety according to the respondents. The respondents also indicated that the bank is prepared to respond to any event that might affect premises and infrastructure. Only two respondents mentioned that the bank was ready to respond to a threat on technology.

Table 10: Disaster which the bank is most prepared to respond to

	Which disaster are you most prepared to respond to?
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Respondent 1:	People, technology, premises.
Respondent 2:	People and business disruption
Respondent 3:	Staff safety or physical, premises threat
Respondent 4:	People epidemic, pandemic and BCM related incidents
Respondent 5:	People, premises, infrastructure, IT.
Respondent 6:	Peoples life and business interruptions
Respondent 7:	Staff life, electricity blackout, water shortage, demonstrations.
Respondent 8:	Staff, infrastructure failures.
Respondent 9:	People and normal business incidents.

f) How does the bank keep up to date with the trends and best practice in BCM?

As in risk management, respondents indicated that the banks used conferences and training to keep staff up to date with trends and best practice in BCM. According to Respondent 5 and Respondent 6, the training is provided by external facilitators. Respondent 1 mentioned research and education while Respondent 3 and Respondent 7 stated that they were not sure how the bank keeps up date with new developments in BCM.

g) What training does the bank provide for BCM in the bank?

The bank does offer training on BCM to staff. The table indicates the types of training offered.

Table 11: BCM training offered by the bank

	BCM training offered by the bank
Respondent 1:	CBCI and MBCI bursary
Respondent 2:	Internal framework alignment training
Respondent 3:	E learning

Respondent 4:	On network & electronic training
Respondent 5:	E-learning and two day classroom for BCM coordinators
Respondent 6:	E-learning course
Respondent 7:	E-learning and two day classroom
Respondent 8:	2 days BCM coordinator training
Respondent 9:	BCM training

h) What value or benefits does effective BCM bring to the bank?

The respondents indicated that the value brought about by effective BCM to the bank includes the ability to prepare and respond to events or disasters, and ensure that business operations continue. Furthermore, the bank is able to take calculated risks when BCM implementation is effective. The specific responses are shown in Table 10.

Table 12: Value or benefit of effective BCM to the bank

	Value or benefit of effective BCM to the bank
Respondent 1:	Preparing for disruption and ensuring continuity
Respondent 2:	Ability to continue operations after a disruption
Respondent 3:	Help us to get ready for disruptions
Respondent 4:	If responses to business disruptions are not planned for, there will be problems.
Respondent 5:	Enables business to take calculated risks
Respondent 6:	Really big, if no plan for disruption then by default is a plan to fail
Respondent 7:	significant if well understood
Respondent 8:	Ability to be prepared to respond to disasters
Respondent 9:	Strategic value

- i) Does your bank have the necessary capacity and capability to perform critical operations to restore business in the event of a disruptive event?

According to seven respondents, the bank has the capacity and ability to perform critical operations to restore business in the event of a disruptive event. According to Respondent 6, the bank has tested the process through simulation and thus there is confidence that the bank can restore business operations if disaster strikes. Respondent 9 based their response by stating that the bank can restore operations after a disruptive event because it has a strong balance sheet. Respondent 2 and Respondent 6 were not sure if the bank has that capacity and ability.

4.2.4 Findings on BCM and ORM integration

The study sought to find out the extent to which ORM and BCM are integrated within the bank. A series of questions were asked to establish the level of integration. The literature presented in Chapter 2 places emphasis on the integration of these two frameworks as a basis for a holistic approach to risk identification and management. The integration of ORM and BCM ensures that the bank is aware of the potential risks and is always prepared to respond and restore business operations in case of a disruptive event occurring. Therefore, the findings below are a significant part of this study and will enable the researcher to reach credible conclusions regarding the study objectives.

- a) To what extent is risk management and BCM systems and tools integrated in your bank?

According to Respondent 1 there is no integration between risk management and BCM systems. There is a tendency for different units to operate in silos. This sentiment was also expressed by Respondent 2 who stated that:

“(There is) no integration currently, it’s dealt as two separate disciplines”.

All the respondents were in agreement that the two systems are currently not integrated. According to Respondent 9, only the managers who work with both systems are aware

of the functions of each system. However, some respondents indicated that there were opportunities for integration. Respondent 6 stated it as follows:

“(There is) not much integration but there are opportunities for integration of tools and risk assessment meetings”

This was also supported by Respondent 5 who indicated that more effort could be directed towards integrating the two systems for greater efficiency.

- b) Is there common understanding across departments regarding complementarity of ORM and BCM functions in the bank?

According to Respondent 1 the complementarity of ORM and BCM functions are understood by senior management. The respondent stated this as follows:

“At the high level yes (there is common understanding), but there is a need for a more closer working relationship”.

Respondent 6 also agreed that there was some common understanding regarding the complementarity of ORM and BCM but stated that it was not across all the departments.

According to Respondent 2 ORM and BCM functions are seen as separate with no common understanding across the departments involved. Respondent 9 reiterated that the two departments work in silos and as such there is no awareness of the complementarity that exists. All the other respondents echoed the same sentiment that there is no common understanding of the complementarity of ORM and BCM functions across departments. However, Respondent 5 indicated that there could be interventions to address this situation.

- c) What else can be done to increase the level of integration and synergies?

The respondents indicated that there are several ways of addressing the current silo work processes and start moving towards integration of risk management processes. For instance, Respondent 8 stated that departments should focus on the:

“...identification of common tools, language and (also) look for opportunities to collaborate and integrate.”

Respondent 9 also stated a similar view by saying:

“Identify commonalities and reduce possible duplications for business”.

4.3 Summary

The chapter presented the findings of the study. The findings indicate that the roles, responsibility and accountability for ORM and BCM frameworks are generally known but not well understood across the bank. Independently, ORM and BCM have been found to be effective although this can be further improved. However, the two are not adequately integrated.

CHAPTER 5

DISCUSSION, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This chapter presents the conclusion of the study. The purpose of the study was to establish the relationship between ORM and BCM in a financial institution. Thus, the discussion of findings and then a review of the research questions followed by a review of the secondary research objectives. The next section presents the study limitations to indicate the extent to which results can be generalized. Then the study recommendations are suggested followed by the conclusion for the study.

5.2 Discussion

The findings confirm that the bank utilizes internationally approved frameworks for risk management such as the Basel Codes and Three Lines of Defense. The bank is also compliant to local frameworks accredited to the South African Reserve Bank. The understanding of risk management showed that knowledge is centralized in the higher echelons of the organization and the lower levels are not privy to some of the details. This is further supported by the perception that management is not providing adequate support to staff regarding risk management functions.

The risk management programme seems to be well set and clearly articulated. However, the recurring challenge is that there is no mutual understanding throughout the bank due to poor communication. Policies are made, but they are not adequately communicated to the lower rungs of the management ladder. The roles and responsibilities are clearly laid out, but there is not enough support across the bank.

The findings also indicate that there is a general understanding of the functions and objectives of BCM. The roles and responsibilities, and accountability for BCM functions are clearly articulated. However, there are signs that although this is the case there is no common understanding of these across the bank. The key finding here is that this

knowledge only resides with the senior management. Management has not adequately communicated these aspects across the bank. In circumstances such as these where there is a monopoly of knowledge, the whole organization is compromised. Respondents suggested improving communication so that information cascades down to all staff and insodoing, improving BCM functions.

At the moment there is agreement that the BCM program is adequate and effective. However, given the dynamic nature of business, continued learning and upgrading of the programme is necessary. The bank seems to be following best practices in BCM given that conference attendance and training were mentioned in that regard. The preparedness of the bank for a disruptive event is skewed towards staff safety. There were strong sentiments that the bank has capacity to restore business should a disaster occur even though there were undertones of doubt by some respondents.

5.2.1 Review of Research Questions

Five research questions guided the research. The nine respondents answered the semi-structured questions in detail and gave insightful responses of their views and opinions as leaders. The summary of their responses is as follows:

A. *RQ1: How are BCM principles and methodologies applied in a financial institution in South Africa?*

The analysis of respondents' comments revealed that the principles and methodologies are applied by using the banks framework and utilising industry aligned tools to identify BCM related risks. The governance documents are in place to guide the implementation of BCM and they are specific as to the objectives of BCM, which is to prepare for disruptions whilst others include detail around safety of staff and information technology disruptions.

B. RQ2: How are ORM principles and methodologies applied in a financial institution in South Africa?

RCSA and Scenario tools are the primary methodologies used to apply ORM within the bank. Responses also confirmed use of the banks framework which is signed off and accredited by the SARB.

C. RQ3: What is management feedback with regards to the current status quo and the possible value add of integration?

There was a general sense that ORM and BCM are operating independent of each other. The two were viewed as separate and independent entities and the staff involved also operate in silos. There are gaps in communication regarding the complementary functions of ORM and BCM. Only senior management and those managers who participate in both the ORM and BCM programs are aware of their complementary nature. While each entity delivers value to the bank independently, there is recognition that the two systems need to be integrated to deliver even greater value for the bank's success. The value that comes with integration include ensuring that the bank maintains its operations with the likelihood of increasing profitability through effective risk management operations and preparedness to restore business operations should a disruptive event occur.

D. RQ4: Where do ORM and BCM processes interact and functionally sit organisationally for reporting purposes?

The respondents answered that ORM and BCM are both in the second lines of defense. The interaction occurs in the second line for the first time, where framework, policies and standards are signed off by the same governance structure and then in the first line of defense where both functions undertake risk assessments to the same audience and attempt to embed their different framework requirements in silos. This is clearly identified and seen as a potential area of improvement or better integration.

E. *RQ5: To what extent do ORM and BCM processes integrate for effective operation?*

The responses clearly reflect that ORM and BCM processes seem to work independently but still achieve their purpose of safeguarding the assets of the bank and ensuring business functions are not compromised. There is evidence to suggest that synergy can be created if a deliberate effort is made by the bank to create an inclusive platform where all those involved in ORM and BCM interact. This interaction could bring about efficiencies in risk management by eliminating overlaps, duplication of effort and reduction on executive time demands by risk management department.

F. *Conclusions on ORM and BCM*

The study draws the following conclusions on ORM and BCM functions in the bank:

- ORM and BCM programs are well articulated, effective and adequate
- Awareness of roles, responsibilities and accountability requires improvement
- Management support and communication with staff is limited
- Understanding of ORM and BCM programs is skewed towards senior management
- The bank makes significant effort to keep up to date with global trends in the practice of ORM and BCM

G. *Conclusions on ORM and BCM integration*

- ORM and BCM function independently
- Integration of ORM and BCM not clearly articulated

5.2.2 Review of Secondary Research Objectives

The primary research objective of this study was to determine the significance of the relationships between ORM and BCM in a financial institution in South Africa and explored opportunities for integration of methodologies and processes. The study also attempted to address the following secondary objectives:

A. *Explore perceptions by bank senior management of the relationship between ORM and BCM.*

This secondary objective has been achieved by undertaking nine one-on-one interviews with senior and top management from the chosen financial institution in South Africa. The semi-structured questionnaire was crafted with a view to elicit perception of these respondents about ORM and BCM. All nine individuals provided a view on what the *status quo* is and how these disciplines can be further integrated.

B. *Examine BCM practices in general as well as for the financial services institution in South Africa.*

This secondary objective was tackled as part of the literature review documented in chapter three. This chapter aimed to understand tools, methodologies and the body of knowledge available on this topic and whether a similar study had been previously undertaken.

C. *Examine ORM practices in general as well as for the financial services in South Africa.*

This secondary objective was also achieved through the research undertaken in chapter 3.

D. *Determine an approach to be utilized in the integration of ORM and BCM for a financial service in South Africa.*

Through data collection and response analysis, the researcher identified that ORM and BCM are indeed managed and operated in silos. Whilst no approach *per se* was defined on the possible integration model for ORM and BCM, a detailed 3-point recommendation was reached.

E. Make recommendations on how ORM and BCM can operate in an integrated manner for a financial services institution in South Africa.

This was achieved in chapter 5, as the research recommended areas of integration guided by the respondents and the associated literature.

5.3 Limitations of the study

A shortcoming of this study was that a sample of nine respondents in a specific community was used. Therefore, the findings may not be generalizable to other contexts. However, the participants were personnel of high caliber and industry leaders, holding roles in either senior or top management.

An approach for integration of ORM and BCM was not reached by this study. Future studies should focus on designing a model for ORM and BCM integration.

The research method used was a semi-structured one-on-one interview, supported by semi-structured questions. This was undertaken by the researcher who may have missed or misinterpreted some of the responses provided. Against this background, it is recommended that the study be replicated in other settings to validate the findings in a different environment.

5.4 Recommendation

This section presents the three key recommendations based on the study findings. These recommendations are intended for the bank to consider in order to address the key challenges observed in the study. These recommendations will require to be adapted to the banks ORM and BCM processes to be implementable and effective.

A. *Recommendation 1: Facilitate the alignment of Framework, Policies and Methodologies*

The findings indicated that there is minimal integration of ORM and BCM within the bank even though risk management is being achieved. To enable greater efficiency in the processes and procedures it is recommended that the ORM and BCM framework, policies and methodologies be aligned. This will require top management to mobilise key staff and engage both departments in a process of streamlining their programmes and finding points of connection to produce a seamless bank-wide ORM and BCM program. This process can be piloted in selected branches before being rolled out across the bank.

B. *Recommendation 2: Facilitate the alignment of taxonomy, processes and tools*

This recommendation also emanates from the lack of integration of ORM and BCM processes. If integration is going to be effective there is a need to standardise the taxonomy for ORM and BCM so that there is common and mutual understanding; to harmonise ORM and BCM processes and tools to ensure alignment and efficiency.

C. *Recommendation 3: Improve awareness and communication of ORM and BCM across the organisation*

There was consistent expression by the respondents that communication was poor between departments, and from managers to staff. It is therefore recommended that management, and those with the responsibility for ORM and BCM in the bank, implement an awareness campaign around key risk management issues. The focus of the awareness campaign should be improving and embedding a culture of communication across the bank in order to create a vibrant network of ORM and BCM practitioners. Improving communication will collapse the current silos and create an open system where there is common and mutual understanding of risk management processes within the bank.

5.5 Conclusion

The primary research objective of this study was to determine the significance of the relationships between ORM and BCM in a financial institution in South Africa and explore opportunities for integration of methodologies and processes. The study was guided by the following research questions:

- **RQ₁:** How are BCM principles and methodologies applied in a financial institution in South Africa?
- **RQ₂:** How are ORM principles and methodologies applied in a financial institution in South Africa?
- **RQ₃:** What is management feedback with regards to the current status quo and the possible value add of integration?
- **RQ₄:** Where do ORM and BCM processes interact and functionally sit organizationally for reporting purposes?
- **RQ₅:** To what extent do ORM and BCM processes integrate for effective operation?

The findings were based on interviews conducted with nine senior and top managers in a bank. Most of these participants had over 29 years of working experience and were aged between 36 and 50 years. The majority were male and of African descent. They all had at least a degree qualification.

The study was premised on the notion that studies on ORM and BCM tend to focus on the structure of the framework or implementation thereof. These studies often fail to demonstrate the value of integration of the frameworks, methodologies and tools. This study sought to explore these opportunities in a bank in South Africa.

The study concluded that: ORM and BCM programs are well articulated, effective and adequate; awareness of roles, responsibilities and accountability requires improvement; management support and communication with staff is limited; and understanding of ORM

and BCM programs skewed towards senior management. The study also concluded that ORM and BCM function independent of each other and their integration is not clearly articulated.

The study revealed that: the bank's ORM and BCM programs are guided by internationally approved and locally accredited frameworks. The ORM and BCM functions are clearly set out but are not collectively understood across the bank. Management has monopoly of knowledge regarding ORM and BCM while support and communication with staff is limited. The ORM and BCM programs are adequate and effective although there is room for further improvement. The bank stays abreast of trends and best practice of ORM and BCM through attendance at conferences and through training, research and thought leadership. The bank is well prepared for disruptive events related to staff safety, premises and infrastructure and respondents confirmed that the bank has the capacity to restore business operations should a disaster event occur. Although ORM and BCM are effective the two operate independently and are not adequately integrated. The bank could improve the efficiency of these two by facilitating their integration.

With respect to the recommendations, the study suggested that the financial institution should undertake the following in terms of ORM and BCM:

I. Facilitate the alignment of framework, policies and methodologies

The study revealed opportunities for alignment of framework, policies and methodologies. The ORM process and BCM lifecycle align with their five steps as explored in the second chapter. The audience involved in undertaking risk assessment is the same and thus the alignment would enable better integration of the two risk types without compromising one or the other.

II. Facilitate the alignment of taxonomy, processes and tools

The use of different taxonomies makes it challenging to understand the link between the two risk types. The alignment of taxonomy, processes and tools would allow for ease of understanding for the audience and enable greater efficiency in embedding processes through aligned tools whilst focusing on different requirements.

III. Improve awareness and communication

The study clearly identified gaps in the understanding of the two concepts. Whilst frameworks and policies are documented and signoff at the right governance structures, there needs to be a focus on awareness across the organization to the lowest levels possible.

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ANNEXURES

A. Semi-structured Questionnaire

NMMU MBA Treatise

BCM and ORM

Semi-Structured Questionnaire

Part 1 - Demographic

1. Age

below 25	26 to 35	36 to 50	≥ 50

2. Gender

Male	Female

3. Race

African	Indian	Coloured	White

4. Education

Matric	Certificate	Diploma	Degree	Post-Grad

5. Office Base

Head Office	30 Baker	Simmonds	CVOP
Base			

6. Working Experience

Number of working years	5 to 10	11 to 20	>20 Year

7. Level of Operation

Non-Manager	Junior Manager	Middle Manager	Senior Manager	Top Manager

Part 2: Operational Risk Management

8. Briefly describe the bank's risk management program and framework. Are risk management policies clearly documented?
9. Do you think that the risk management process for your bank is adequate or effective? What are the gaps? Explain your response.
10. Is there a mutual understanding of risk management program across the bank? Please explain your response.
11. Are the roles and responsibilities for risk management clearly set out and well understood across the bank? Please explain your response.
12. Is accountability for risk management clearly set out and well understood across the bank? Please explain your response.
13. How does the bank keep up to date with the trends and best practice in risk management? Please explain your response.
14. What are the risk identification methods used by your bank? Why? How effective are these methods?
15. Does the bank provide training in or recruit staff experienced in risk management?
16. What value or benefit does effective risk management bring to the bank's success?

Part 3: Business Continuity Management

17. Describe the business continuity program and framework and outline its objectives?
Are BCM policies clearly documented?
18. Are the roles and responsibilities for BCM clearly set out and well understood across the bank? Please explain your response
19. Is accountability for BCM clearly set out and well understood across the bank?
Please explain your response.
20. Is the BCM program adequate and or effective? Where are the gaps?
21. Which disaster are you most prepared to respond to? What are the recovery strategies in place to mitigate against the disaster?
22. How does the bank keep up to date with the trends and best practice in BCM?
Please explain your response.
23. What training does the bank provide for BCM in the bank?
24. What value or benefits does effective BCM bring to the bank?
25. Does your bank have the necessary capacity and capability to perform critical operations to restore business in the event of a disruptive event?

Part 4: ORM and BCM integration

26. To what extent is risk management and BCM systems and tools integrated in your bank? Please explain your response
27. Is there common understanding across departments regarding complementarity of ORM and BCM functions in the bank? Please explain
28. What else can be done to increase the level of integration and synergies?



ETHICS CLEARANCE FOR TREATISES/DISSERTATIONS/THESES

Please type or complete in black ink

FACULTY: _____ NMMU Graduate School _____

SCHOOL/DEPARTMENT: _____ Business School _____

I, (surname and initials of supervisor) _____ Dr V Msuthwana _____

the supervisor for (surname and initials of candidate) _____ GBS Mkhize _____

_____ (student number) _____ 9850495 _____

a candidate for the degree of _____ Masters Business Administration _____

with a treatise/dissertation/thesis entitled (full title of treatise/dissertation/thesis):

The relationship between Operational Risk Management and Business Continuity Management: A case study of a selected financial institution in South Africa. _____

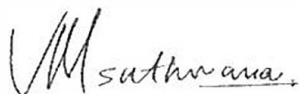
considered the following ethics criteria (*please tick the appropriate block*):

	YES	NO
1. Is there any risk of harm, embarrassment of offence, however slight or temporary, to the participant, third parties or to the communities at large?		X
2. Is the study based on a research population defined as 'vulnerable' in terms of age, physical characteristics and/or disease status?		X
2.1 Are subjects/participants/respondents of your study:		
(a) Children under the age of 18?		X
(b) NMMU staff?		X
(c) NMMU students?		X
(d) The elderly/persons over the age of 60?		X
(e) A sample from an institution (e.g. hospital/school)?		X

(f) Handicapped (e.g. mentally or physically)?		X
3. Does the data that will be collected require consent of an institutional authority for this study? (An institutional authority refers to an organisation that is established by government to protect vulnerable people)		X
3.1 Are you intending to access participant data from an existing, stored repository (e.g. school, institutional or university records)?		X
4. Will the participant's privacy, anonymity or confidentiality be compromised?		X
4.1 Are you administering a questionnaire/survey that:		
(a) Collects sensitive/identifiable data from participants?		X
(b) Does not guarantee the anonymity of the participant?		X
(c) Does not guarantee the confidentiality of the participant and the data?		X
(d) Will offer an incentive to respondents to participate, i.e. a lucky draw or any other prize?		X
(e) Will create doubt whether sample control measures are in place?		X
(f) Will be distributed electronically via email (and requesting an email response)?		X
Note:		
• If your questionnaire DOES NOT request respondents' identification, is distributed electronically and you request respondents to return it <i>manually</i> (print out and deliver/mail); AND respondent anonymity can be guaranteed, your answer will be NO.		
• If your questionnaire DOES NOT request respondents' identification, is <i>distributed via an email link and works through a web response system (e.g. the university survey system)</i> ; AND respondent anonymity can be guaranteed, your answer will be NO.		

Please note that if ANY of the questions above have been answered in the affirmative (YES) the student will need to complete the full ethics clearance form (REC-H application) and submit it with the relevant documentation to the Faculty RECH (Ethics) representative.

and hereby certify that the student has given his/her research ethical consideration and full ethics approval is not required.



SUPERVISOR(S)

12 Apr 2017
DATE



HEAD OF DEPARTMENT

2nd May 2017
DATE



STUDENT(S)

12 April 2017.
DATE

Please ensure that the research methodology section from the proposal is attached to this form.

Please note that by following this Proforma ethics route, the study will NOT be allocated an ethics clearance number.