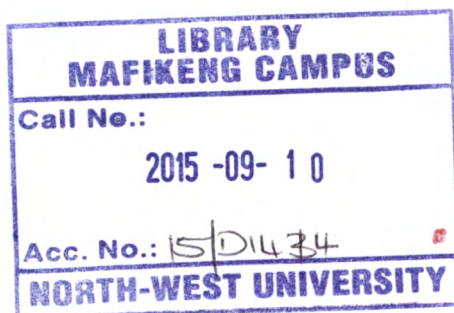


**AN EVALUATION OF ENTERPRISE RISK MANAGEMENT  
IN THE FINANCIAL OFFICE, NORTHWEST UNIVERSITY,  
MAFIKENG CAMPUS**

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**Mini-dissertation submitted in partial fulfilment of the requirements for the Master's  
degree in Business Administration at the Graduate School of Business and  
Leadership of the North West University, Mafikeng Campus**



**Supervisor: Prof S Lubbe**

**Date: May 2014**

## **DECLARATION**

I, **Thebe Monakwane**, hereby declare that this dissertation entitled, **AN EVALUATION OF ENTERPRISE RISK MANAGEMENT IN THE FINANCIAL OFFICE, NORTHWEST UNIVERSITY, MAFIKENG**, is an original piece of work produced by myself, and all references and sources have been accurately reported and acknowledged, and that this document has not previously, in its entirety or in part, been submitted to any University in order to obtain an Academic qualification.

**Thebe Monakwane**

**Date: May 2014**

## **ABSTRACT**

Any business operation/transaction is known as risk for reward. It is the objective of any business to reduce risks that hinder business operation in order to increase return. This is the case in any business irrespective of size, industry and location. Risks are inherent in every business. In recent years, implementation of Enterprise Risk Management (ERM) is being perceived as a necessity; in order to manage enterprise wide risks, to create risk awareness amongst employees and be more proactive in managing risks. The need for this study came as a result of a need to measure and optimise ERM as a business enabler. This study evaluates the effectiveness and appropriateness of ERM within the financial office, North West University Mafikeng Campus. This study also evaluated ERM frameworks that can be used in risk identification and management. These frameworks can be used to ease implementation, monitoring and evaluating ERM process, without a framework management it will be difficult or more complicated to manage risks effectively.

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# TABLE OF CONTENTS

Declaration	i
Abstract	ii
Acknowledgements	iii
<b>CHAPTER 1: OVERVIEW OF THE STUDY</b>	
1.1 Introduction	1
1.2 Background of the Problem Statement	1
1.3 Problem Statement	2
1.4 Research Objectives	3
1.5 Research Design	3
1.6 Significance of the Study	4
1.7 Layout of the Study	4
1.8 Conclusion	4
<b>CHAPTER 2: LITERATURE REVIEW</b>	
2.1 Introduction	5
2.2 Enterprise Risk Management	5
2.3 ERM Framework	8
2.3.1 COSO	9
2.3.2 ISO 31000	13
2.4 Corporate Governance	19
2.5 King Report	20
2.6 Ethical Leadership and Corporate Citizenship	21
2.7 PESTEL Analysis	23
2.8 Research Questions	25
2.9 Conclusion	25
<b>CHAPTER 3: RESEARCH METHODOLOGY</b>	
3.1 Introduction	26
3.2 Types of Research	26
3.3 The Likert Scale	29

3.4 Population and Sample Size	29
3.5 Data Collection Method	29
3.6 Validity and Reliability	30
3.7 Data Analysis	30
3.8 Elimination of Bias	30
3.9 Conclusion	31
<b>CHAPTER 4: DATA COLLECTION</b>	
4.1 Introduction	32
4.2 Response Rate	32
4.3 Demographics	33
4.4 Measures of Association	45
4.5 Correlation	45
4.6 Conclusion	47
<b>CHAPTER 5</b>	
5.1 Introduction	48
5.2 Summary of the Study	48
5.3 Response to Research Questions	49
5.3.1 To what extent is the ERM system reliable and relevant to the risk management within the organisation?	49
5.3.2 To what extent are the ERM functions within the organisation?	50
5.3.3 To what extent is the ERM project progress and success quality within the organisation?	52
5.4 Limitations	53
5.5 Managerial Guidelines	54
5.6 Conclusion	55

<b>References</b>	<b>56</b>
<b>Appendix A: Matrix</b>	<b>60</b>
<b>Appendix B: Table of Contents</b>	<b>63</b>
<b>Appendix C: Questionnaire</b>	<b>67</b>
<b>Appendix D: Correlation</b>	<b>71</b>

## **LIST OF TABLES**

3.1 Overview of the difference between quantitative and qualitative research	27
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## LIST OF FIGURES

Figure 2.1	Key components in an ERM framework explained	11
Figure 2.2	Framework for implementation risk management by Matthw Allen	15
Figure 2.3	Entity objectives can be viewed in th context of four categories	16
Figure 2.4	PESTEL Analysis	23
Figure 4.1	Gender Distribution	33
Figure 4.2	Age Distribution	33
Figure 4.3	Ethnics of Respondents	34
Figure 4.4	Is ERM reliable?	34
Figure 4.5	Do you worry about loss as when you apply the ERM?	35
Figure 4.6	Do you find errors when using the ERM system?	35
Figure 4.7	Is the usage of ERM ssystem relevant?	36
Figure 4.8	Do you experience difficulty in using the ERM systems in all departments?	36
Figure 4.9	Does ERM increase the company business value and productivity?	37
Figure 4.10	Does the use of ERM improve performance and productivity?	37
Figure 4.11	Does the use of ERM improve effectiveness?	38
Figure 4.12	Overall, using the ERM is very useful in my job?	38
Figure 4.13	Is interaction with the ERM clear and understandable?	39
Figure 4.14	Are you satisfied with the quality of the ERM system?	40
Figure 4.15	Did the ERM implementation complete on time?	41
Figure 4.16	Did the ERM implementation project complete within the budget as initially planned?	41
Figure 4.17	Is the scope of your ERM well with our company needs?	42
Figure 4.18	Do you feel the consultant led you in the right direction during ERM implementation?	43
Figure 4.19	Are the management reports from ERM very useful?	43
Figure 4.20	Is the quality of the ouput from ERM high?	44

## **LIST OF ABBREVIATIONS AND ACRONYMS**

ANOVA:	ANalysis Of VAriances
COSO:	Committee Of Sponsoring Organisations of Treadway Commission
ERM:	Enterprise Risk Management
ISO:	International Standardisation of Organisations
KM:	Knowlegde Management
NWU:	North West University
PESTEL:	Political, Economic, Social, Technological, Environment and Legal
SKU:	Stock Keeping Units
SPEED:	Socio – Political Environment of Energy Deployment

# **CHAPTER 1**

## **OVERVIEW OF THE STUDY**

### **1.1 INTRODUCTION**

Morris and Venkatesh (2010) are in agreement that one of the most pervasive organisational change activities in the last decade or so has been the implementation of enterprise wide information technologies. Enterprise Risk Management (ERM) accounts for many change activities in organisation today.

Over the decade, our world has changed dramatically due to the growing of globalisation and revolution in risk. There is a demand on companies to lower cost, enlarge product assortment, improve product quality and provide reliable delivery dates through effective coordination of production and distribution activities. To achieve these goals organisations must constantly engineer or change their business practices and employ systems (Gupta & Kohli, 2006).

### **1.2 BACKGROUND TO THE STUDY**

Over the past years the rapid change and risk as well as global competition has intensified the need for a new organisational design. Firms are interested in creating, facilitating and maintaining cooperation between various financial areas. The horizontal shift has put a deal of pressure upon organisations for a level of cross functional integration (Amrani et al., 2004).

It seems the ace, magnitude and direction of change will continue to accelerate. Therefore organisations need to adapt to the changes by assuming a powerful and prominent role in many countries and economies around the globe. Some of the factors driving organisations to consider Enterprise Risk Management include the need to service and trying to achieve sustainable competitive advantage (Urban & Mashinini, 2008).

Debrecency et al. (2005) state that one of the developments in business systems over the last couple of years is the adoption by medium and large scale organisation. These are generic risk management systems that facilitate an enterprise's transaction requirements across its supply chain. ERM only encompasses traditional transaction processing elements of management support systems and knowledge management.

Calitz and Calitz (2009) are in agreement that ERM implementations are often associated with changes to existing business processes. ERM includes application areas such as sales and distribution, finance human resource and materials management. Newlin (2006) asserts that organisations justify ERM based on the desire for process improvement, operating cost reductions and increased responsiveness to customers through improvement in strategic decision making. Furthermore, a study conducted by Deloitte Consulting found that motivation for ERM can be a resolution of problems and a vehicle for solving operational problems such as non-competitive business performance and ineffective business processes. Others chose to implement ERM because of its seamless integration (Newlin, 2000).

### **1.3 PROBLEM STATEMENT**

The problem to be investigated is to determine the impact on Enterprise Risk Management system in the Finance Office, NWU. Kansal (2006) argues that ERM implementation is a socio challenge that requires fundamentally different outlook from innovation. It will depend on a balance perspective where the organisation as a total system is considered. Furthermore, many organisations adopting ERM show conflict with business strategies and majorities of ERM projects are often characterised by delays and cost overruns (Kansal, 2006).

Despite an increased need for professionals with exposure to ERM, universities and colleges have been slow to incorporate technical aspects of ERM and concepts in their curricula. Such delay had increased the gap between risk skills that organisations require (Boyle, 2007). Seymour and Roode (2008) concur that the implementation of an ERM system generally has disruptive implications for the workforce directly affected by them. Urban and Mashinini (2008) concur that despite the widespread adoption of ERM and corresponding benefits, some ERM systems fail and face implementation difficulties because of workers resistance to adapt to changes. Furthermore, innumerable projects fall short of their goals because they fail to grasp the reality of managing change and selling the concept inside the company. In many instances the critical problems were not technical but rather the software or people side, which has been neglected leading to the system being resisted (Urban and Mashinini, 2008).

Urban and Mashinini (2008) describe the major problem areas in selecting and implementing the correct ERM approach as, inadequate financial research, functional constraints, times constraints, complacency, selection committees, scalability and role of consultants. Despite the wide adoption of ERM systems and corresponding benefits, many ERM systems fail and face implementation difficulties because of worker's resistance to adapt to changes.

Ngai, Law and Wat (2008) indicate that the implementation of ERM is a complex exercise and many adopters have encountered problems in different phases. Many cases of failure to implement ERM because of either cancellations or cost/time overruns have been reported. The high failure rate in the implementation of ERM calls for better understanding of the process (Nga, Law & Wat, 2008).

#### **1.4 RESEARCH OBJECTIVE**

The aim of this study is to investigate the impact of ERM, Finance Office, NWU. The objectives of the study therefore are:

- To identify and analyse critical factors that need to be considered to ensure ERM success.
- To describe and analyse the development and implementation of the ERM.
- To identify and analyse critical factors that need to be considered to ensure successful ERM implementation for NWU.

#### **1.5 RESEARCH DESIGN**

The design of the study is largely exploratory and cross sectional and data was collected using a structured questionnaire. Exploratory studies are valuable means of finding out what is happening and to ask questions to access phenomena in a new light (Saunders et al., 2007). The theoretical foundation to be established during the literature research will sourced a frame of reference to emerge (Urban & Mashinini, 2008). For a quantitative measure, questionnaires was distributed to a representative sample of respondents. The rationale to use questionnaires is the validation of information that was gathered.

## **1.6 SIGNIFICANCE OF THE STUDY**

The outcome of this study is to make a contribution with regard to ERM, Finance Office, NWU Office. The study may assist NWU to enhance ERM.

## **1.7 LAYOUT OUT OF THE STUDY**

The study is divided into five chapters that include, after this introductory chapter,

Chapter 2: This chapter reviews literature and provides an outline of ERM in terms of definitions, effectiveness and efficiency of ERM, challenges, of ERM change management, implementation, and cost of ERM and success factors for ERM implementation. The objective is to determine the impact of ERM as it relates to the effectiveness of the company.

Chapter 3: This chapter presents research Methodology followed by this study.

Chapter 4: This chapter provides a detailed chronology of results obtained from the ERM in NWU and an analysis of these results in terms of the literature presented and findings will be discussed.

Chapter 5: This chapter establishes a link between literature and the study, with the data that was collected and presented. It also presents conclusion and recommendations for further study.

## **1.8 CONCLUSION**

By implementing ERM, organisations are supposedly able to connect different divisions and functions together, thus many problems associated with using diverse legacy systems can be ameliorated, if not solved. ERM are believed to have had the most profound effect on an organisation (Newman and Zhao, 2008). ERM is a managerial system that integrates all sectors of a modern business. However, ERM is not an easy task (Tsai & Hung, 2008).

# **CHAPTER 2**

## **LITERATURE REVIEW**

### **2.1 INTRODUCTION**

In the past, businesses viewed risk as an evil that should be minimised or mitigated whenever possible. Recently, increased regulatory requirements force businesses to expand significant resources to address risk, and shareholders in turn have begun to scrutinise whether businesses have the right controls in place (Jourdan & Atkinson 2008:3).

Organisations have long practiced what is now called Enterprise Risk Management thus treating risks by transferring it through insurance or other financial products which has long been common practice. In recent years however, corporate risk management has expanded well beyond insurance and hedging of financial exposures to include other kinds of risks like, operational risk, reputational risk and most recently strategic risk (Quon, 264: 2012).

To search for literature keywords such as ERM, enterprise, risk management were used and search engines such as Google Scholar, Science Direct and DuckDuckgo were use. The layout includes ERM, cost, ERM Framework, COSO, risk, ISO 3000, King Report, PESTEL, research questions and a conclusion

### **2.2 ENTERPRISE RISK MANAGEMENT (ERM)**

ERM is a management process that requires management to identify, and assess the collective risks that affect the firm value and apply an enterprise wide strategy to manage those risks in order to establish an effective risk management (Quon, 2012). Enterprise Risk Management is an enabling system that ensures that the organisation deals with uncertainty and associated risk and enhances the organisation's capacity to build value (Dalton, 2013).

ERM is a structured and disciplined approach to managing risk and aligns strategy, processes, people, technology and knowledge with the purpose of evaluating and managing the uncertainties the enterprise faces as it implements and achieves its strategy, goals and objectives (Young, 2009). ERM is a structured and systematic process that is placed into

the existing management responsibilities. It provides a framework for analysing risks and opportunities, with an ultimate objective of creating value for the shareholders (Valsamakis et al., 2005).

According to Gunderson (2001), ERM is a process which is, implemented and driven by the entity's board of directors, management and other personnel; applied in strategy-setting and across the enterprise, established to identify potential events that may harm the entity, and manage risk within the risk appetite and/or risk tolerance, and implemented to provide proximate assurance regarding mitigation, avoidance, and management of risk factors and circumstances, as well as promote opportunities to capitalise on risk events and thresholds.

ERM provides a standard conceptual framework for all employees and departments within the organisation. Consistency and commonality provide improved communication and coordination among employees. ERM also enhances reporting and analysis of risks. Consolidation of risks across the enterprise increases the alertness/awareness of directors and executives, enabling better decisions relative to risk thresholds, risk appetite and risk tolerance. ERM helps to open synergies and potential to increase analysis and assessment of risks.

ERM methodologies and techniques provide an opportunity to identify and assess key performance indicators regarding risks. This allows a method to measure and better quantify risk factors and tolerances. ERM model allows an effective viewpoint of risk and risk practices focus on risk from a perspective of mitigation, acceptance or avoidance. Effective ERM processes gives management a framework which organisations can use to evaluate risk as an opportunity to increase competitive positions and to exploit certain market, operational and related conditions.

Bond rating agencies, financial statement auditors, and other audit activities have begun to inquire, test, and often leverage and utilise monitoring and reporting data from ERM programs. Given the fact that ERM data involves the process to identify and monitor controls and mitigations of risks across the organisation, such information can be used to provide an advantage to leverage and reduce the effort and cost of such audits and reviews. (Gunderson, 2001)



ERM also enhances the cost management and effectiveness relating to audit activities, it also improves management of market, and consolidate the risk management. ERM data and reporting can enable the firm to effectively coordinate with investment custodians and to better manage capital/investment decisions that will help the organisation to make better timely decisions (Dalton, 2012). ERM is capable to reduce the cost of existing risk management processes and function within the organisation.

Gunderson (2001) notes that the management of risk validates the performance of a firm that becomes a strategic driver for the organisation and this makes it an important aspect within the firm and need a new level of consideration. The role of risk managers is rapidly and they now hold the keys of enterprise value. Operations that create value are essential for firms to grow and have a massive impact on corporate image.

Akintoye and MacLeod (1997) note that risk management is essential to construct activities in minimising losses and enhancing profitability. Construction risk is perceived as events that influence project objectives of cost, time and quality. Risk analysis and management in construction depend on intuition, judgement and experience. Formal risk analysis and management techniques are seldom used due to a lack of knowledge and to doubts on the suitability of these techniques for construction industry activities.

Meeting the revenue and profit objectives within the boundaries of the risk appetite is the mission of the executive management team. The assets and human resource involved must therefore be utilised to maintain this balance between generating value and controlling risks (Gunderson, 2001). Risk identification forms an important process in risk management (Valsamakis et al., 2005). Every risk management programme must most importantly be put in motion by the process of risk identification. This is because it is clear that a risk will not be managed if it cannot be identified. Risk identification process must be viewed as the single most important function of the risk management programme. Smith and Merrit (2002) define risk management as the activity of identify and control undesired project outcomes proactively.

Risk management is a function by management aimed at protecting the organisation, its assets, people and profits against the physical and financial losses of risk. Risk management

also involves planning, coordinating and directing the risk control and the risk financing activities in the organisation (Valsamakis et al., 2005).

Risk categorisation that is made up of six types of risks is as follows (Cokins, 2009):

1. Price Risk: Is the risk that an increase in product or service offering or an aggressive price reduction from competitors can force lower prices and consequently lower profits.
2. Market Risk: Is the risk that customer preferences and demand might change suddenly.
3. Credit Risk: Is the risk of a customer not meeting obligations, for example a customer who fails to pay for goods or service acquired on credit, a mortgage holder who defaults on loan repayment, when the organisation fails to settle legal obligation or its own credit.
4. Operational risk: Is the risk of loss by the organisation as a result of inadequate or failed internal processes, including people, and technology, or from external events.
5. Strategic Risk: Is the risk of poor performance resulting from poor strategy selection and execution.
6. Legal Risk: This can be a mixture of risks, includes the financial risk that banks refer to as liquidity risk from insufficient net positive cash flow or from exhausted capital equity-raising or cash-borrowing capability and from non-compliance that carry regulatory authority penalties.

### **2.3 ERM FRAMEWORKS**

It is helpful for the organisation to have a suitable framework as a point of reference. Otherwise, management and the organisation will have to begin with a blank sheet of paper, making it harder for risk managers to develop and implement an effective risk management process (O'Donnell, 2005).

DeLoach (2012) defines ERM as a process affected by an entity's board of directors, management and other personnel. Therefore, ERM is applying a strategy setting across the enterprise that is designed to identify potential events that may affect the entity to manage risk to be within its risk appetite and to provide reasonable assurance regarding the achievement of entity objectives.

Organisations are implementing ERM processes to increase the effectiveness of their risk management activities with the goal of increasing stakeholder value (DeLoach, 2012). Board and senior management leadership on ERM is critical to extensive ERM deployment and other organisational characteristics such as size, auditor type, industry and country of domicile also help to explain the extent of ERM implementation.

Jourdan and Atkinson (2008) state that an organisation's ERM system should be geared towards achieving the following four objectives:

- (1) Strategy: high-level goals, aligned with and supporting the organisation's mission;
- (2) Operations: effective and efficient use of the organisation's resources;
- (3) Reporting: reliability of the organisation's reporting system.
- (4) Compliance: organisational compliance with applicable laws and regulations.

In developing its ERM framework, Jourdan and Atkinson (2008) recognise that the appropriate ERM system will likely vary from firm to firm and they suggests a contingency perspective toward the appropriate ERM system for a particular organisation. The fact that there is no universally ideal ERM system is natural and has been suggested elsewhere. Furthermore, the contingency view of enterprise risk management systems is consistent with the literature that examines the more general notion of management control systems (Jourdan & Atkinson, 2008).

### **2.3.1 COMMITTEE OF SPONSORING ORGANISATIONS OF THE TREADWAY COMMISSION**

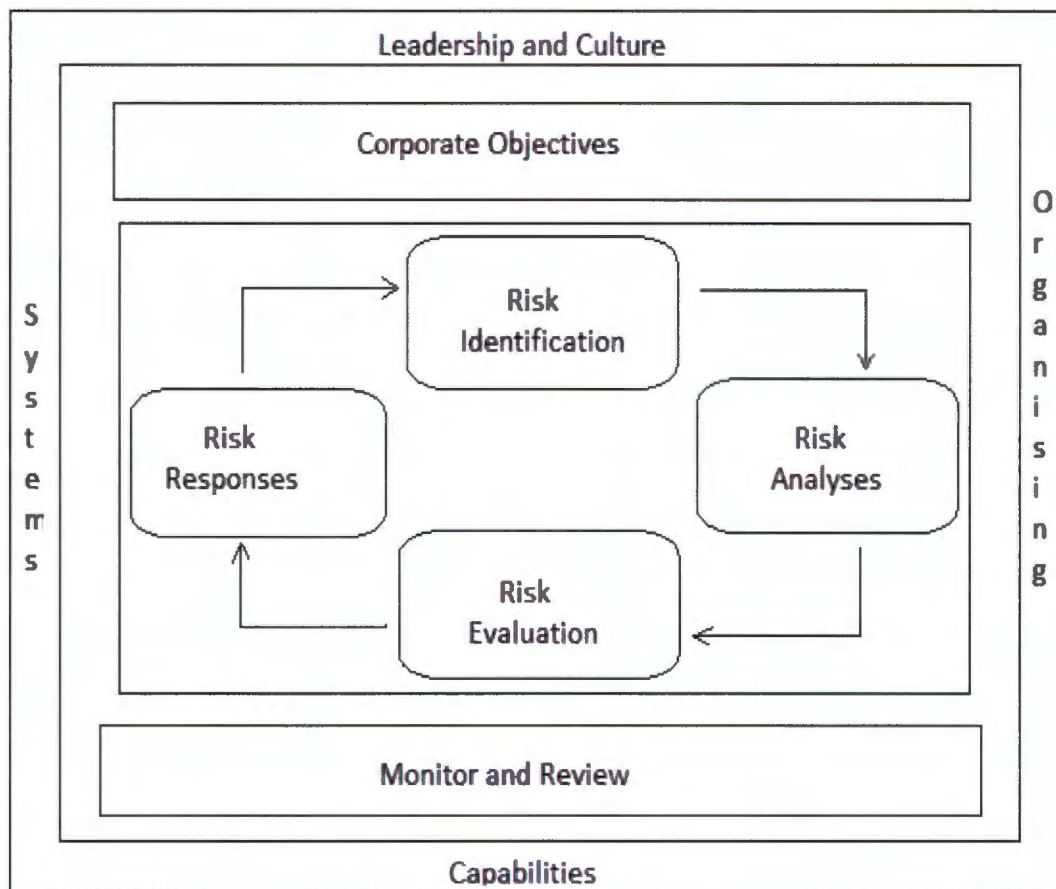
The Committee of Sponsoring Organisations of the Treadway Commission (COSO) is amade up of five private sector namely, The Institute of Internal Auditors and the association of accountants financial professionals in business, American Accounting Associations, Financial Executives International, and is dedicated to provide thought leadership through the development of frameworks and guidance on enterprise risk management, fraud deterrence and internal control (Quon, 264: 2012).

In developing its ERM framework, COSOacknowledges that the ERM system will be most likely differ from one organisation to the other. Most importantly, COSO suggests that an appropriate ERM system must have contingency perspective relevant to the particular organisation. In short there is no universally ideal ERM system.

Lawrence et al. (2009) states that according to COSO an organisation's ERM system should be steered towards achieving the following four objectives:

1. Strategy: the organisation must have high level goals, aligned to support the organisation's mission.
2. Operations: The ERM system must encourage and support the effective and efficient use of the organisations resources.
3. Reporting: The ERM system must enhance the reliability of the organisation's reporting systems.
4. Compliance: The ERM system must support the organisational compliance with applicable laws and regulations.

The main objective of ERM framework is to give the company a structured approach that enables it to be better prepared and effective in embracing, evaluating and managing corporate exposures under uncertain conditions (Andersen & Schroder, 2010). It is the aim of ERM to have an enterprise-wide and integrated approach to manage all key risks and opportunities of the corporation in a systematic manner, with the intent of maximising corporate value (Andersen & Schroder, 2010).



**Figure 2.1:** Key components in an ERM framework explained (Andersen & Schroder, 2010.)

The first step of risk identification is to track corporate risk areas in terms of the potential losses and opportunities. A focus on important risk factors combined with knowledge about the corporate business activities will provide a better understanding of how different events may affect the organisation’s ability to achieve long-term objectives, looking at identified threats and opportunities (Jourdan & Atkinson, 2008).

The organisation must adopt structured measurement methodologies that can support managers in their formal decisions about the effect of identified risks by establishing

common risks barriers, enabling aggregations of exposures and setting targeted risk limits. The input from experienced staff with special expertise is valuable when the assumptions that go into the models are developed (Welman, Kruger & Mitchel, 2005).

Murphy (2008) argues that when different risk factors have been identified, the corporate exposures should be set aside for oversight and assessment. The risk prioritisation identifies a number of unimportant potential risk factors while ensuring a focus on the key risk to be managed, monitored and reported. The ERM framework requires that risk management strategies must be decided in view of the enterprise as a whole, rather than on the basis of small divisional or functional assessment. As a consequence, decision to avoid, retain, reduce, transfer or exploit risks should be evaluated entirely at corporate level and not on a stand-alone basis.

Smith and Merritt (2002) argue that an effective enterprise-wide risk management approach requires an appropriate organisational structure including elements of leadership, culture, organising, capabilities and systems. Imposing an ERM framework on the corporate risk management process requires a change in managerial attitude, and must be supported by senior managers and the board of directors.

A change in the corporate risk management culture to facilitate operational risk management process from managers throughout the organisation may also be required. The ERM framework must start at the top, the board of directors must provide general direction by delegating risk management and outlining the risk appetite of the enterprise, while stipulating general risk management policies (Smith & Merritt, 2002). The senior managers are ultimately responsible for the execution of the risk management process and must give the process corporate priority to ensure support throughout the organisation and setting the standard for a positive risk culture.

Risk awareness is a critical factor for successful implementation of ERM framework. A positive corporate culture is important because it creates an environment where employees can discuss sensitive risk concerns and learn from the past mistakes, while sharing ideas about new opportunities (Smith & Merritt, 2002).

The ERM framework propose that a formal reporting structure outlining specific roles and responsibilities to designated staff members within the organisation is important for successful implementation of enterprise risk management. The central risk management function must be responsible for integrating the management of all risk areas (McLellan & Corder, 2013). For ERM to work effectively, the risk management concepts, process application and needed capabilities must be an important part of the corporate training curriculum.

The requirement for specific capabilities may differ significantly from business to business or industry to industry, because the handling of different types of risk can require diverse set of skills and competencies. Organisational and individual learning practices must be engaged in the implementation of the ERM framework (McLellan & Corder, 2013).

Computerised communication systems, internal information network, Web-based technology solutions, etc., may provide useful support for the ERM efforts, as they enable managers across the company to share risk knowledge and enhance risk management capabilities as well as identifying and controlling exposures across the organisation (Chandra, 2011). It must be noted that, technology is only an enabler, whereas the engagement of people within the organisation is more important when responding to corporate risks.

### **2.3.2 ISO 31000**

The ISO 31000:2009 framework was issued in 2009. ISO 31000 with intend to provide guidance on risk management process and how it should be implemented (DeLoach, 2012). The Iso.org website describes ISO 31000:2009 as the international standard that provides principles and guidelines to effectively manage risks, that is not specific to any industry or sector, must have the ability to be applied to any kind of risk, and be able to be applied to any kind of organisation(DeLoach, 2012).

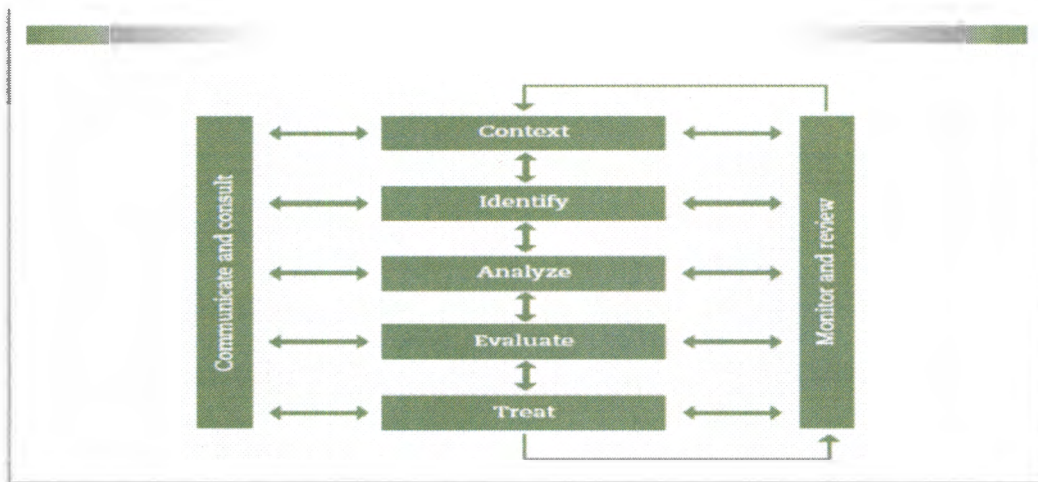
The purpose is to provide a framework, principle and a process for managing risk. It can be used by any organisation regardless of its activity or size. By using ISO 31000 the

organisation can increase the chances of achieving its objectives and improve the identification of opportunities and threats and effectively allocate and use resources for risk management (DeLoach, 2012). ISO 31000 is not for certification purposes, it only provides guidance for external and internal audit programmes. Organisations that use this standard can match their risk management practices against internationally recognised standards, in return providing good principles for effective risk management and corporate governance (DeLoach, 2012).

There are top seventeen benefits for implementing ISO 31000 Risk Management as mentioned on risk management templates (GARP, 2012). ISO 31000 is designed to assist organisations with the following:

1. Increase the probability to achieve objectives
2. Enhance proactive management
3. Create awareness and the need to identify and treat risk throughout the organisation
4. To better identify the opportunities and threats facing the organisation
5. Conform to relevant legal and regulatory authorities
6. Enhance financial reporting
7. Improve corporate governance
8. Improve shareholder confidence
9. Guide decision making and planning
10. Develop effective controls
11. Allocate and use resources for risk treatment effectively
12. Enhance operational effectiveness
13. Improve health and safety performance, and environmental protection
14. Effectively manage incidents and prevents loss
15. Mitigate losses
16. Improve organisational learning
17. Improve organisational resilience.





**Figure 2.2:** Framework for Implementing risk Management by Mathew Allen (GARP, 2012).

This process should make risk management transparent to all across the organisation (Cokins, 2009). Risk management strategies should occur right through the risk management process, and must also include the different perspectives of stakeholders within the process. Risk Management Policy should be understood and observed by all stakeholders. Objectives must be identified and defined, external and internal influences should be established and set the scope and risk criteria for the risk process (Cokins, 2009).

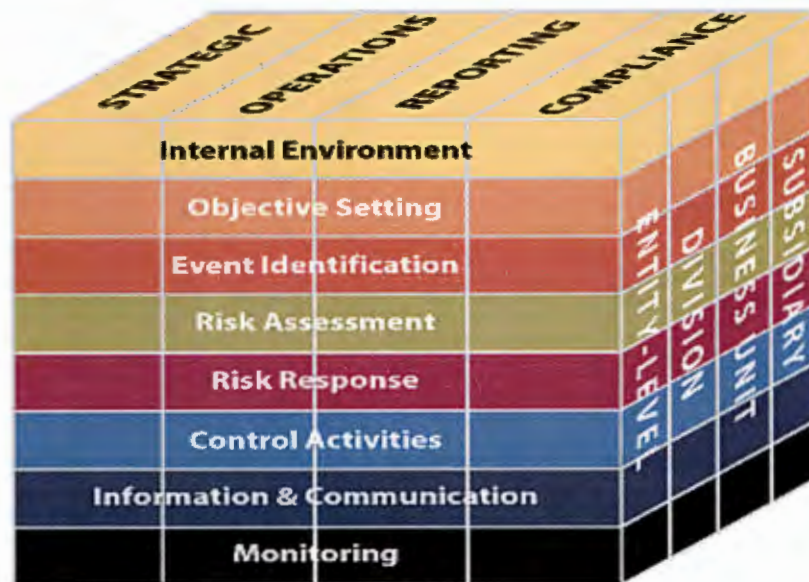
The context against which strategic risks are defined must include all business operations. This process is conducted using the ERMS database for identifying, analysing and evaluating risk at the departmental level (Young, 2009). Identification involves developing a list of risks based on events that may have a negative or positive impact on the organisation in achieving its objectives. It should cover events that are within or may not be within the control of the organisation. Identified risks should be listed in categories to ease reference.

Risk analysis involves depth understanding of the risks and how they might impact the organisation. Analysis should be expressed in terms of the effect and probability. The organisation must also develop a risk matrix (Young, 2009). Evaluation includes decisions about what needs to be done about the risk, to determine appropriate treatment of the risk and the risk appetite/tolerance of the organisation. Risk tolerance must be interpreted accurately by individual managers when making decisions about the acceptance of higher level risks.

It involves the modification of the risk in a way that positive outcomes are maximised, and negative outcomes are minimised. Risk treatment options include:

- a) risk avoidance by ceasing the activity
- b) risk acceptance in order to pursue an opportunity
- c) eliminating the source of risk
- d) making improvements to minimise the likelihood of the unfavourable event occurring
- e) making improvements to minimise the negative consequences from the event
- f) transferring the risks (e.g. via contract or insurance)

This process of monitoring and reviewing entails regular checks or surveillance of risks and their proposed treatment. It monitors whether controls are operating as they were planned. It again continuously reviews if new circumstances have arisen that exposes the organisation to new or increased risk. It also reviews and analyse and lessons learnt from past events. The internal audit function must assess the effectiveness of controls over high risk activities.



**Figure 2.3:** Entity objectives can be viewed in the context of four categories (Dalton, 2013):

- 1) Strategic
- 2) Operations
- 3) Reporting
- 4) Compliance

ERM considers activities at all levels of the organisation; a) Entity-level, b) Division, c) Subsidiary and d) Business unit.

The eight components of the framework are interrelated and listed as the following:

#### 1. Internal Environment

- Establishes an understanding regarding risk management, and recognises that unexpected as well as expected events may occur.
- Determines the entity's risk culture.
- Considers all other aspects and the consequences of the organisation's actions and how they might affect its risk culture.
- 

#### 2. Objective Setting

- Is applied when management considers risks strategy and determining the objectives.
- Is determined by the risk appetite of the entity — a close view of how much risk is the board willing to accept.

#### 3. Event Identification

- Must differentiate between risks and opportunities.
- Identifies those incidents, occurring internally or externally, that could have an impact on strategy and achievement of objectives.
- Addresses internal and external factors and how they combine and interact to influence the risk profile.

#### 4. Risk Assessment

- Gives the organisation an opportunity to understand the extent to which potential events may affect objectives;
- Assesses risks from two perspectives: a) Probability and b) Impact;
- Is used to measure the related objectives;
- Can include a combination of both qualitative and quantitative risk assessment methods.

## 5. Risk Response

- Entails identifying and evaluating possible responses to risk.
- Evaluating options and aligning them to the organisation's risk appetite, cost vs. benefit of potential risk responses, and degree to which a response will mitigate the impact.
- Selecting and executing response based on evaluation of the portfolio of risks and responses.

## 6. Control Activities

- Policies and procedures that will help in ensuring that the risk responses, as well as other organisational objectives, are carried out.
- Must occur throughout the organisation, at all levels and in all operations.
- Entails application and general information technology controls.

## 7. Information and Communication

- Management must identify, capture, and communicate important information in a manner and timeframe that encourages team members to carry out their responsibilities.
- Communication is more efficient when it occurs in a broader sense, flowing down, across, and up throughout the organisation.

## 8. Effective ERM components are monitors through:

- Continuous monitoring of activities.
- Evaluating Separately.
- The two components may be combined when necessary (Dalton, 2012).

## 2.4 CORPORATE GOVERNANCE

The Global Association of Risk Professionals (GARP), refers to Corporate Governance as the processes and structures that guide the affairs of a business organisation and a manner in which they should be directed and managed. The aim is to enable them sustain and grow shareholder/stakeholders value and enhance corporate performance and accountability. Good corporate governance is essential, because it helps to avoid corporate scandals, fraud, civil and criminal liability of the organisation. It is a good course. A positive corporate governance image enhances the reputation of the organisation and attracts more customers, investors and suppliers (Olivier, 2012).

Arjoon (2005) argues that a governance issue from a compliance viewpoint makes a distinction between legal and ethical compliance mechanisms. Also, governance shows that the former has proven to be inadequate as it lacks the ethical firepower to restore confidence and the ability to build trust. The concepts of freedom of indifference and freedom for excellence provide a theoretical basis for explaining why legal compliance mechanisms are insufficient in dealing with fraudulent practices and may not be addressing the real and fundamental issues that inspire ethical behavior (Arjoon, 2005).

The tendency to overemphasise legal compliance mechanisms may result in an attempt to substitute accountability for responsibility and may also result in an attempt to legislate ethics which consequently leads to legal authoritarianism (Arjoon, 2005). The current environments of failures of corporate responsibility are not only failures of legal compliance but more fundamentally failures to do the right ethical entity.

Recently Corporate Governance has been playing an important part in the development of an integrated enterprise wide approach to assessing and managing the business risk that impacts the business' ability to achieve its objectives. O'Donnell (2005) filter states that it has been recognised that co-ordinating and financing levels of organisational risk effectively are important in increasing success irrespective of whether the success is measured in the case of not for profit or profit, education and government organisations by shareholder value or by quality of services provided. Therefore risk management is directly linked to corporate strategy irrespective of the size of the organisation.

Bhimani (2009) argues that risk management and corporate governance issues are influencing public policy debates on enterprise controls. Organisational and management practices including management accounting activities are extensively affected. Therefore, like management accounting, the potential of risk and governance concepts to be made managerially actionable rests on their capacity to be interpreted in technical, analytical and calculable terms (Bhimani, 2009). It is these dimensions also which lend risk and governance concerns prescriptive appeal that is continually being reassessed in the light of economic changes.

Furthermore, enterprises pursue to adopt risk controls and make the deployment of such controls transparent visible to engender better organisational legitimacy. This also makes management accounting, risk management, corporate governance progressively and inseparably interdependent (Bhimani, 2009).

Corporate governance codes expect organisational wide approach will be implemented when managing risk. Organisations should not be caught unaware in high profile corporate failures as internal controls are expected to be based on a thorough and properly structured process for managing risks (Valsamakis et al., 2005).

## **2.5 KING REPORT**

The King Committee on Corporate Governance was formed in 1992, under the auspices of the Institute of Directors, in South Africa. The Commission was headed by former High Court Judge, King and published the first KingReport on corporate governance in November 1994. King I covered a Code of CorporatePractices and Conduct. The purpose of the King Reports is, to promote the highest standards of corporate governance in South Africa (Le Ruox, 2010).

It is important to note that, that King I mentioned the importance of accountability for companies regarding non-financial affairs which includes the employees and the environment to mention just the two. King I was ground breaking and at the forefront of international corporate governance thinking at the time (Le Ruox, 2010).

Three reports have since been issued in King I (1994), King II (2002), and King III (2009). For the purpose of this study, reference is mainly made on the current issue: King III. King Reports are not enforceable on companies by law, but the JSE requires its members to comply with the recommendations (Le Ruox, 2010)

## **2.6 ETHICAL LEADERSHIP AND CORPORATE CITIZENSHIP**

Smyth and Longbottom (2005) argue that change management created a commercial environment of financial and marketing management. The relationship approach eases problems of information asymmetry pre-specification market yet strategic alliance partners tended to be third parties constraining awareness creation of Concrete Information Limited (CIL) as a IS and knowledge management (KM) provider and the transaction approach poses problems for information asymmetry.

The Loblaw category management team determines which stock keeping units (SKUs) within each product category to sell. Current strategies include adding private label products where appropriate (Smyth and Longbottom, 2005). Two principal management techniques are employed, which are (1) comparing product sales in stores with similar demographic markets (especially new stores) that over time can suggest changes in category product mix for a store and (2) using industry data collected by AC Neilson, an independent market research firm.

O'Donnell (2005) notes that based on group analysis and management's gut feeling, Loblaw develops private label products when it finds a market niche within a category where the consumer will purchase a product that is not a national brand. In that case Loblaw can introduce either a premium private-label product and/or a generic product (O'Donnell, 2005). The principal differences between the two are product quality and a unique feature that the premium product has higher quality than the leading national brand and may incorporate some features that cannot be replicated easily by competitors.

Smyth and Longbottom, 2005 mention that Loblaw benefits in two ways from having private-labels: products that are only available at its stores and mark-ups that is consistent and less volatile on these products than on national brands.

The goal of the price-management team at Loblaw is to ensure that Loblaw meets its commitment to competitive pricing while maintaining a profitable, growing business (O'Donnell, 2005). In meeting this objective, Loblaw's price-management team carefully prices each product in a category and considers relative price relationships within the category that is Loblaw's private-label products priced below national brands in any category and for substitute goods that is instant coffee vs. ground coffee. To ensure



competitive pricing, Loblaw carries out a program of extensive price checks at competing stores in each of its markets, however, web technology and e-commerce provide a trim means to create awareness and sample content at low cost to the provider (Smyth and Longbottom, 2005). The web as a medium is suited to IS provision than knowledge management (KM) services which is likely to prevail until the market for knowledge management (KM) matures as the cost for delivering through this channel is high. Yet the web provides an important means to create awareness for knowledge management (KM) services acting as a channel for contact to explore knowledge management (KM) services further.

Akintoye and MacLeod (1997) note that risk elements associated with construction projects influence the time, cost and quality performance of the project. Risk management therefore becomes a continuing activity in project development, from inception and throughout the life of the project.

The responses to responsible leadership: The board must provide effective leadership based on an ethical foundation (Young, 2009). Ethical leaders are expected to:

- a) Direct the strategy and operations to build a sustainable business.
- b) Consider the short- and long-term effects of the strategy on the economy, society and the environment
- c) Conduct ethical business practices
- d) Do not compromise the natural environment sustainability
- e) Consider the company's impact on internal and external stakeholders.
  - 1) King III report has 9 Chapters
  - 2) Ethics and corporate citizenship
  - 3) Boards and director governance
  - 4) Audit governance
  - 5) Risk governance
  - 6) IT governance
  - 7) Compliance
  - 8) Internal audit
  - 9) Stakeholders
  - 10) Integrated reporting



## 2.7 PESTEL ANALYSIS

PESTEL analysis stands for Political, Economic, Social, and Technological, Environmental and Legal analysis (Andersen & Schroder, 2010). It is used to analyse the external environment when developing strategies and doing market research. It guides the organisation on macro-environmental factors to guard against.

External environment factors:



**Figure 2.4:** PESTEL analysis. (Source: Andersen & Schroder, 2010). Political factors entails the level at which the government interferes with the economy. Political factors include areas such as, tariffs, political stability and trade restrictions. Economic factors include factors that might impact on the economy like interest rate, inflation rate, and economic growth in general, with these factors in mind; management can make better business decisions (Andersen and Schroder, 2010).

Recently social factors affected the demand of the organisations goods and services. Social factors include aspects like, career, health consciousness, age, and safety requirements (Andersen and Schroder, 2010). Technological factors include ecological and environmental aspects, automation, technology incentives and the rate of technological change. They can determine barriers to entry, minimum efficient production level and influence outsourcing decisions. Furthermore, technological shifts can affect costs, quality, and lead to innovation.

Environmental factors include weather, climate, and climate change, which may especially affect industries such as tourism, farming, and insurance. Furthermore, growing awareness to climate change is affecting how companies operate and the products they offer--it is both creating new markets and diminishing or destroying existing ones (Andersen and Schroder, 2010). Legal factors include discrimination law, consumer law, antitrust law, employment law, and health and safety law. These factors can affect how a company operates, its costs, and the demand for its products.

Stephens et al. (2008) state that the framework, Socio-Political Evaluation of Energy Deployment, (SPEED) integrates the analysis of laws, regulations, institutions and policy actors as well as varying regional perceptions, levels of awareness about the risks and benefits of emerging energy technologies to facilitate improved understanding of the complex interconnected components of state energy systems.

While this framework has been developed with the U.S. states as a model, the SPEED framework is generalisable to other countries with different sub-national structures. Three research methods that could be applied within the SPEED framework that could be particularly helpful in understanding the integrated socio-political influences on energy technology deployment are: (1) policy review and analysis, (2) media analysis, and (3) focus groups and structured interviews with key stakeholders (Stephens et al., 2008).

By integrating the fields of technology diffusion, environmental policy, comparative analysis of states, and risk perception, future empirical research conducted within this SPEED framework will improve understanding of the interconnected socio-political influences on energy technology deployment to enable energy modelers, policy-makers, energy professionals, state planners and other stakeholders to develop and implement better effective strategies to accelerate the deployment of emerging energy technologies (Stephens et al., 2008).

## **2.8 RESEARCH QUESTIONS**

The research questions aim to identify the deficiencies of variables. However, there are still some items missing and the research questions help with this. These are:

1. To what extent is the ERM system reliable and relevant to the risk management within the organisation?
2. To what extent are the ERM functions within the organisation?
3. To what extent is the ERM project progress and success quality within the organisation

## **2.9 CONCLUSION**

ERM is a systematic process that is placed into the existing management responsibilities and it provides a framework for analysing risks and opportunities with an ultimate objective of creating value for the shareholders (Valsamakis et al., 2005). Researchers feel that intervention strategies do not contain the value-added research information to pursue unique challenges that affect ERM in organisations. The chapter that follows is about research methodology and describes the method that was be used to gather raw data.

# **CHAPTER 3**

## **RESEARCH METHODOLOGY**

### **3.1 INTRODUCTION**

Nicholls (2009:587) states that people are often confused by methodology and have read scientific papers which include a research methodology section and as results suggest that methodology is about the way research study was conducted. Cooper and Schindler (2003) defines methodology as a specific philosophical and ethical approach to developing knowledge, a theory of how research should, or ought, to proceed given the nature of the issue it seeks to address.

This chapter defines the methodology used to give answers to the raised questions. The questionnaire designed provides answers to the research questions developed in Chapter 2. The research questions are: To what extent is the ERM system reliable and relevant to the risk management within the organisation; To what extent are the ERM functions and internal support within the organisation; and To what extent is the ERM project progress and success quality within the organisation?

### **3.2 TYPES OF RESEARCH**

Nicholls (2009:590) argued that qualitative research follows a process of inductive reasoning (where theory is developed) and quantitative research is commonly deductive (where theory is tested). Qualitative researchers use detailed inclusion and exclusion criteria to sample often large numbers of participants with comparable traits. With quantitative research, one commonly begin with questions one want answered, and the study is never allowed to stray from its original purpose (Nicholls, 2009: 590).

Saunders et al. (2007) argue that quantitative research is predominately used as a synonym for any data collection technique (such as a questionnaire) or data analysis procedure (such as graphs or statistics) that generates or uses numerical data.

	<b>Quantitative</b>	<b>Qualitative</b>
Purpose	Test theories Establish facts Show casual relationships Predict outcomes Generalise results to specific populations	Develop concepts Explore meaning Describe multiple realities Critique multiple perspectives Produce generalisable theory
Design	Predetermined Structured Unchanging Prescriptive Reproducible	Evolve through the study Continually under review Rigorous application Un-reproducible Unstructured
Data	Numerical Quantifiable Statistical Measurable Pre-defined variables	Deals with qualities Extensive Wide ranging Texts emerge throughout Limited use of numerical information
Sampling	Subjects Large numbers Structured selection Represent population Control groups and placebo	Participants Small numbers Purposive and theoretical sampling No effort to represent No control groups / placebo
Participant relationships	Detached Distant Objective , try to be free from bias No interaction or influence Research done on subjects	Participatory Trusting and close Subjective , biases incorporated Acknowledge influences Research done with people
Methods	Experiments Quasi-experiments Surveys Questionnaires Incidence studies	Interviews Observation Focus groups Document analysis Theoretical
Instruments and tools	Scales Tests	Researcher Recording equipment

	Inventories Hardware , goniometers , dynamometers	Schedules
Data analysis	Attempt to falsify experimental hypothesis At the end of data collection Deductive Statistical manipulation Computer packages	Theory builds throughout On-going Occurs throughout Repeated re-analysis Inductive
Outcome	Answer specific hypothesis Statistical analysis Compare findings to other studies Often results in guidelines to follow Test establish theory	Critique problems Narrative / linguistic analysis Words not numbers Thick description Development of new theory
Problems	Controlling variables Relevant to reality Reductionist Western	Non-standard procedures Large volume of words Intensity Doesn't give you a simple answer Time consuming

**Table 3.1:** Overview of the difference between quantitative and qualitative research (Nicholls, 2009:591)

The study employs quantitative methodology. Leedy and Ormrod (2005) refer to primary data as the original information that is collected by the researcher specifically for the research study at hand, for example data obtained through interviews and surveys.

Brynard and Hanekom (1997:27) define secondary sources as data that are already in existence, for example, data retrieved from sources such as databases or libraries. Leedy and Ormrod (2005) are in agreement that secondary data refers to information that has been previously gathered by someone else for the purpose which can be reused by the researcher. It includes books, journals, articles and reports among others.

Seroka (1992:21) states that for group administration the target population sample had to be reached in a particular area by using standardised tests, attitudes scales and survey questionnaires that had to be administered to all simultaneously. The survey technique comprises sources of information derived from an empirical quantitative research that observes data gathered through a questionnaire.

### **3.3 THE LIKERT SCALE**

Likert scaling was introduced by Rensis Likert in 1932, and is the most widely used method of measuring personality, social and psychological attitudes. In contemporary usage, the Likert scale present individuals with positively or negatively stated propositions and solicit respondent's opinions about the statements through a set of response keys.

Typically, participants are asked to indicate their level of agreement or disagreement with a proposition on a graded four or five point scale (for example, strongly disagree, disagree, agree, and strongly agree). The fifth point when used, allows for a neutral or undecided selection to be incorporated into the response key as a midpoint (Hodge & Gillespie, 2003:45).

Furthermore, Hodge and Gillespie state that the Likert items do not produce uni-dimensional ordinal responses thus are violating a central measurement tenet. The multiplier dimensions inherent in Likert response items may increase measurements error by increasing the level of cognitive noise, a problem that is accentuated by the use of negatively worded items. Likert scale requires individuals to think across at least two dimensions: content and intensity (Hodge & Gillespie, 2003:45-46).

### **3.4 POPULATION AND SAMPLE SIZE**

Sampling strategy that is design and size depends on the research paradigm. The quantitative method requires random and representative sampling characterised by larger samples (Leedy & Ormrod, 2005). Sampling in quantitative studies is based on qualities rather than quantities, with researchers searching for participants who might offer rich, thick descriptions of the phenomena under study. The researcher used simple random sampling for the purpose of this study. The population consists of all financial workers at Finance Office, NWU. This number will be 20 workers.

### **3.5 DATA COLLECTION METHOD**

To serve the objective of this study, which is to determine the impact on the implementation of ERM in Finance Office, NWU the researcher used questionnaires. In this study primary data will be collected by means of survey using structured questionnaire which were distributed to Finance Office, NWU. This study is based on a questionnaire survey. The simple random sampling will be used for the purpose of this study.

### **3.6 VALIDITY AND RELIABILITY**

Roe and Just (2009:1266) argue that validity is not a single dimensional effort but rather requires integrated effort on several fronts to develop conclusion that may defended as valid. Furthermore Roe and Just define internal validity as the ability of a researcher to argue that observed correlations as casual and the external validity as the ability to generalise the relationships found in the study to other persons, times and setting. Newton and Burgess (2008) highlight that validity refers to the reasons we have for believing truth claims.

### **3.7 DATA ANALYSIS**

Fink (1995:43) asserts that after having collected data, the researcher will compare and contrast the information given and then interpret data for this study, is presented in the forms of tables, diagrams, charts and figures. The reason for using these graphic forms is to take advantage of their ability to present large volumes of data on one page in a way that data can be seen at a glance.

### **3.8 ELIMINATION OF BIAS**

Nicholls (2009:590) assert that in qualitative research, the relationship between the researcher and their participant is natural one that develops with the study. The question of bias that plaque experimental studies and threatens the reliability and validity of their test measures are turned on their head and made into a virtue of the study not a vice.

In quantitative research, the problem of researcher bias is addressed by both a scrupulous attention to the separation between the researcher and the participants, and comprehensive attempt not to influence the outcome of the study. In qualitative research, personal bias is acknowledged as an inevitable feature of humanity and one that is vital if we are to explore the feelings, meanings, and the personal context of participants lived experiences and reflects on their meaning for us (Nicholls, 2009:590).



### **3.9 CONCLUSION**

In this Chapter the research design and the research methodology, including the population and sample size have been discussed. The detailed account of both data collection techniques and data analysis has been presented. Issues of the validity and reliability of the study have been detailed, and the ethical issues and limitations on the research clarified. A discussion of how these were applied in this study was presented.

The following chapter will provide a presentation of findings that would be used in rejecting or accepting the raised questions, a detailed discussion and interpretational and statistical analysis of the data collected from the research methodology described in this chapter. The following chapter will provide a presentation of findings, a detailed discussion and interpretational and statistical analysis of the data collected from the research methodology described in Chapter 3.

# **CHAPTER 4**

## **DATA DISCUSSION**

### **4.1 INRODUCTION**

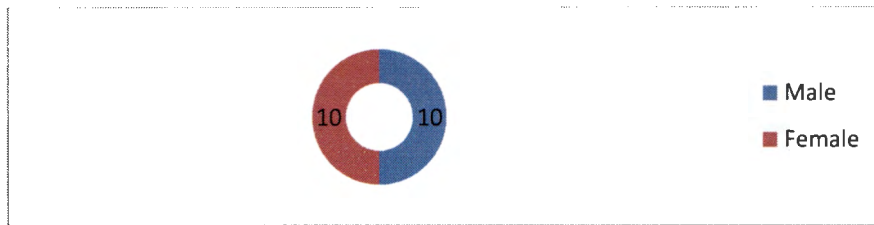
This chapter discusses the research findings and provides analysis and interpretation of data. In the survey, certain specific questions were asked and the analysis was done based on the presentation of Pearson correlation coefficient and value. Diamantopoulos and Schlegelmilch (2004) note that, the Pearson correlation method correlates that are listed variables with each other and indicate which of the resulting relationships are statistically significant. The p-value provides more information on how far down in the substantial region the results lie. In order to detect variances between variables, the ANOVA technique was applied.

The layout of this chapter begins with the rate of return of the questionnaires at 4.2 then 4.3 is the discussion and analysis of variables. Section 4.4 deals with the correlation coefficient analysis for coefficients greater than or equal to 0.5 in the negative and in the positive, while 4.5 is the conclusion.

### **4.2 RESPONSE RATE**

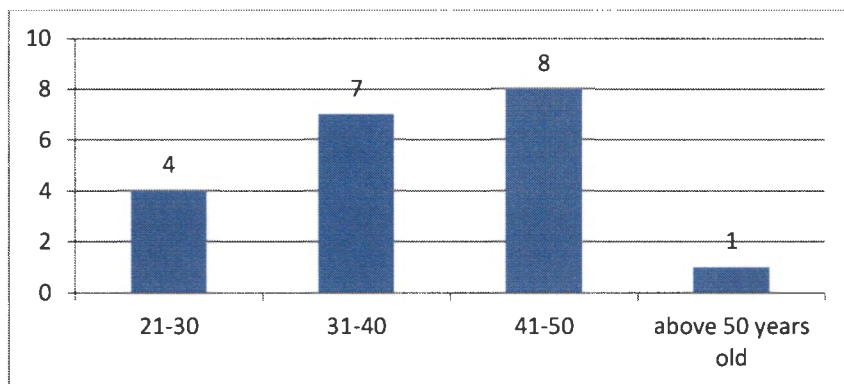
Twenty (20) questionnaires were given out, the researcher had a response rate of 100% signalling a forbearing response rate. The response rate from this study made it meaningful to the variable used. Responses given were useful to the study to be able to make a meaningful conclusion in chapter five. The following statistical sample shows that the sample met the strict rules and it was randomly selected. It is also acknowledged that, so that it can be used to confirm the results.

### 4.3 DEMOGRAPHICS



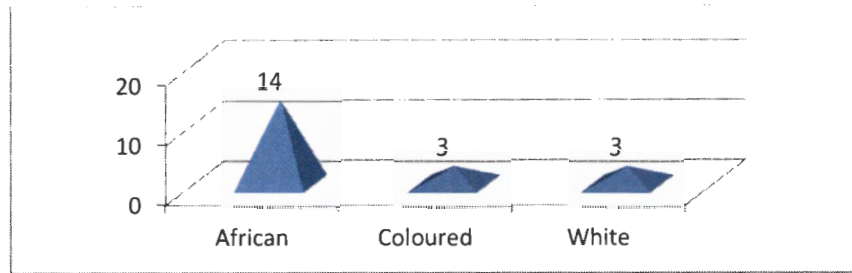
**Figure 4.1:** Gender Distribution

Twenty (20) respondents completed and returned the completed questionnaires. Of these twenty, were ten female and ten male workers. It is evident from the figures above that there is no difference between male and female. Furthermore, the sex distribution of respondents in the sample studied may be seen to represent the sexual distribution. The burden of unemployment falls mainly on the African population because most jobs that exist for them are casual, low-wage and are without benefits (McGrath and Akoojee, 2007).



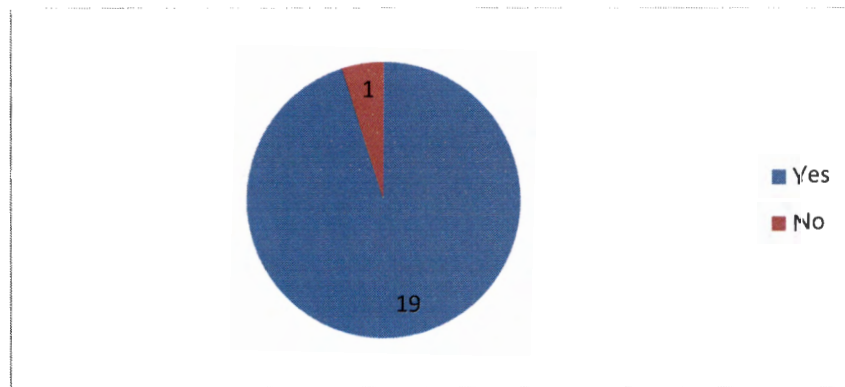
**Figure 4.2:** Age Distribution

According to figure 4.2 from twenty respondents, four respondents were aged 21 to 30 years; seven were aged between 31 and 40 years; eight were ages between 41-50 years and one aged above 50. People that responded mostly were those between 41 and 50 years old. It is important that group (41 – 50) responded, as they are the ones to inform younger and older workers about incorporation into the organisation.



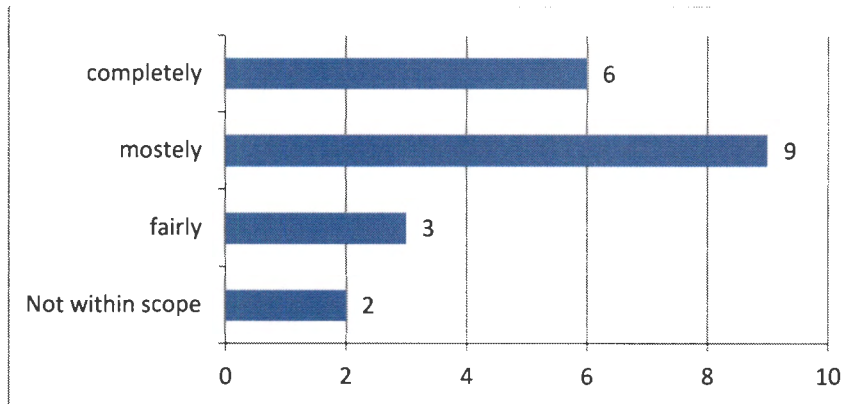
**Figure 4.3:**Ethnics of Respondents?

Figure 4.3 indicates that most respondents are African (14). Three respondents are coloured and three are white in the organisation. Akoojee (2010) argues that the national response to the recession provided little in terms of the strife for equity and thus despite finance emerging from the national skills levy system, the opportunity to induce workplace equity has been missed.



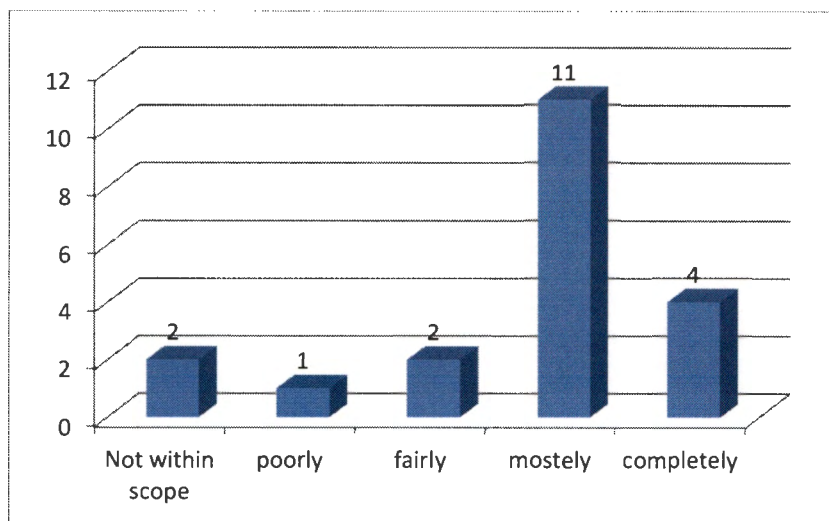
**Figure 4.4:**Is ERM reliable?

Figure 4.4 indicates that most of the respondents (19) do agree that ERM is reliable, whereas one respondent does not agree that ERM is reliable. This is a good spread from the study. Jourdan and Atkinson (2008)states that an organisation’s ERM system should be geared toward achieving the following four objectives such as; strategy: high-level goals, aligned with and supporting the organisation’s mission; operations: effective and efficient use of the organisation’s resources; reporting: reliability of the organisation’s reporting system and compliance: organisational compliance with applicable laws and regulations.



**Figure 4.5:** Do you worry about loss as when you apply the ERM?

Figure 4.5 indicates that nine respondents mostly worry about loss when applying the ERM, six completely worry about loss when applying the ERM, three respondents fairly worry about loss when applying the ERM and two respondents worries about loss when applying the ERM are not in scope.

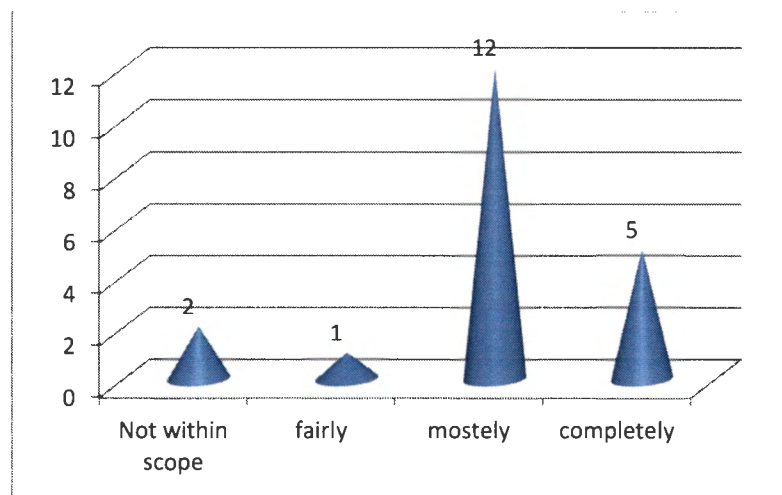


**Figure 4.6:** Do you find errors when using the ERM system?

Figure 4.6 indicates that the majority of respondents (11) did find errors when using the ERM system. Four respondents did completely find errors when using the ERM system. Two respondents agreed that finding errors when using the ERM system was not within scope. One respondent did find errors when using the ERM system poorly. Two respondents did find errors when using the ERM system fairly. Valsamakis et al. (2005) state that integration is the key technology for efficient occurrence information collecting, sharing, dissemination, exploitation and analysis which is critical to assist decision makers in making timely and right decisions during emergencies.

**Figure 4.7:** Is usage of ERM relevant?

Figure 4.7 indicates that all the respondents (20) believe that the usage of ERM is relevant. The quality of data plays a critical role in all business and governmental applications. It is recognised as a relevant performance issue of operating processes of decision-making activities and of inter-organisational cooperation requirements (Gunderson, 2001). IT is perceived as a transformative force bringing about a fundamental redesign of how clients receive care. Furthermore, adoption of computers and computer software to convert, store, protect, transmit and securely retrieve information is changing the practice of professional discipline (Akintoye & MacLeod, 1997).

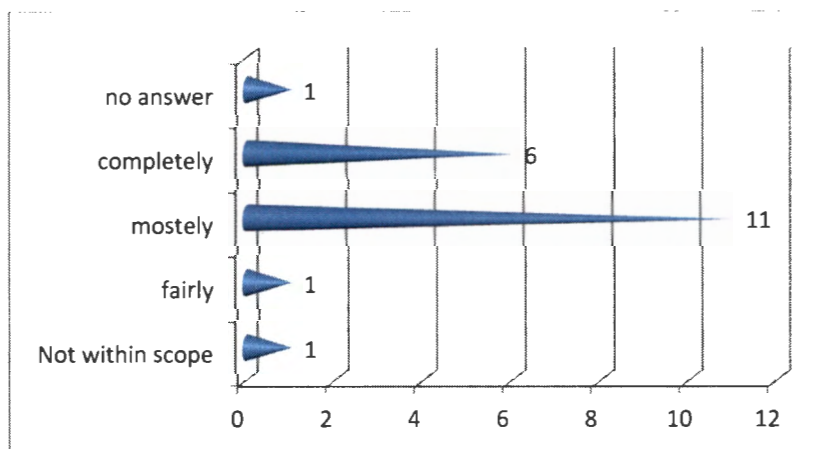


**Figure 4.8:** Do you experience difficulty in using ERM to all departments?

Figure 4.8 shows that most of the respondents (12) mostly experience difficulty in using ERM to all departments. Two respondents believe that their experience in using ERM to all departments is not within scope. One respondent fairly experiences difficulty in using ERM to all departments and five respondents completely experience difficulty in using ERM to all departments. There is a need to address this problematic matter in the organisation. Smyth and Longbottom (2005) argue that the relationship approach eases problems of information asymmetry pre-specification market yet strategic alliance partners tended to be third parties constraining awareness creation of Concrete Information Limited (CIL) as a IS and knowledge management (KM) provider and the transaction approach poses problems for information asymmetry.

**Figure 4.9:** Does ERM increase the company business value and productivity?

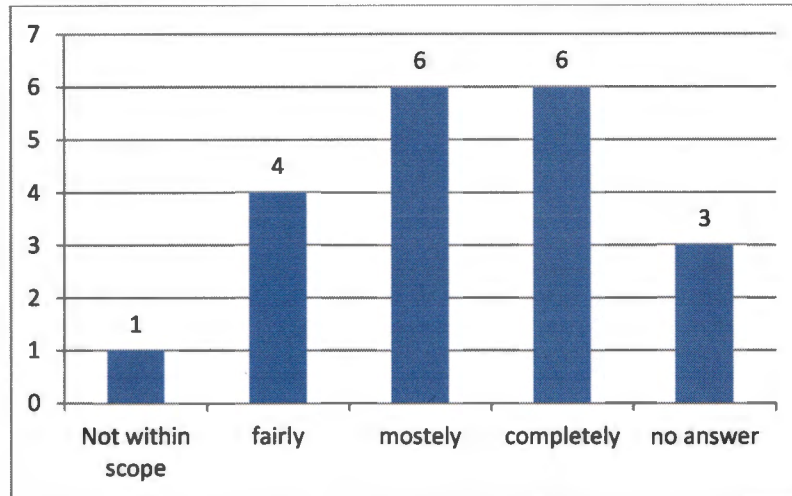
Figure 4.9 indicates that all the respondents (20) believe that ERM increases the company business value and productivity. The findings indicate that there are few obstacles between employees with their training skills, building trust and that as the obstacles become lesser the more they will act on what they believe. The manager's attribute and decisions in all aspects are essential for staff members to function well in their positions. Enterprises may seek to increase productivity to improve energy efficiency or change their price structure.



**Figure 4.10:** Does the use of ERM improve performance and productivity?

Figure 4.10 show that most of the respondents (11) mostly believe that the use of ERM improves performance and productivity. One respondent believes that the use of ERM improves performance and productivity is not within scope, six respondents completely believe that the use of ERM improves performance and productivity, one respondent fairly believes that the use of ERM improves performance and productivity and one respondent did not want to answer this question. This is in agreement with Smith and Merrit (2002) that, this means thatan organisation determines its own ethics and organisation's ethical way is similar to organisational culture; which is a system of shared beliefs and values that influence employee behaviour.

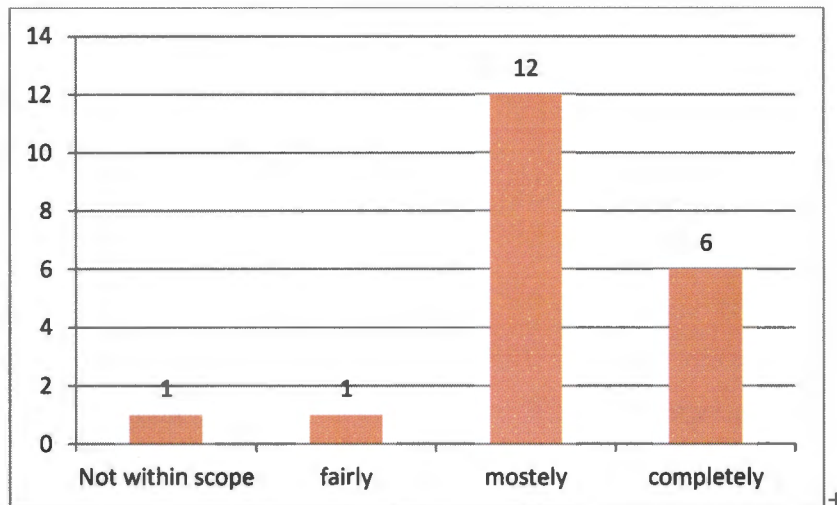




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**Figure 4.11:** Does the use of ERM improve effectiveness?

Figure 4.11 six respondents mostly believe that the use of ERM improves effectiveness. Six respondents completely believe that the use of ERM improves effectiveness. One respondent believe that the use of ERM improves effectiveness is not within scope, four respondents fairly believes that the use of ERM improves effectiveness and three respondents did not want to answer this question. This is a positive result. Therefore, an organisation that seeks to maintain their competitiveness and economic success should strive for better innovation and seek other oppourtunities (Smith & Merrit, 2002).



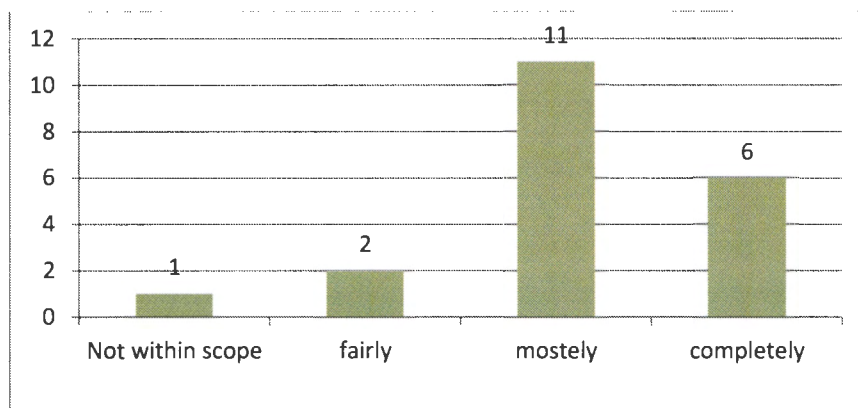
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**Figure 4.12:** Overall, using the ERM is very useful in my job?

Figure 4.12 shows that twelve respondents mostly believe that the use of ERM is very useful in their job. Six respondents completely believe that the use of ERM is very useful in their job. One respondent believe that the use of ERM is very useful in his/her job effectiveness is not within scope, one respondent fairly believes that the use of ERM is

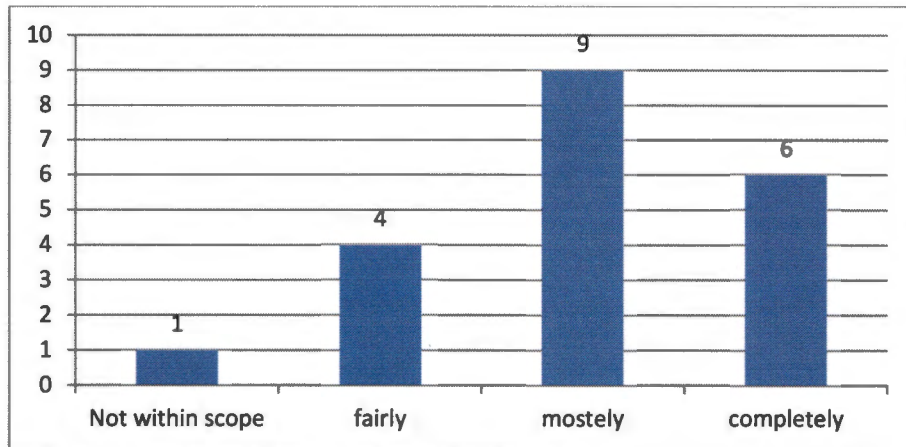


very useful in my job. According to DeLoach (2012), note that information security should be addressed as a corporate responsibility which must involve risk management efforts, reporting and accountability on the part of executive leadership and boards of directors.



**Figure 4.13:** Is interaction with the ERM clear and understandable?

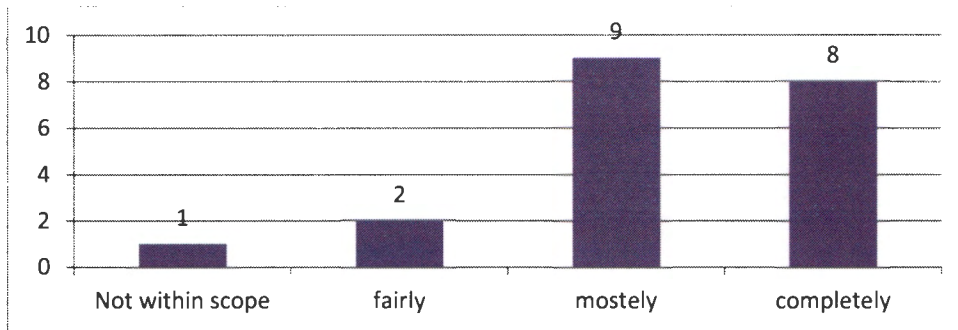
Figure 4.13 shows that eleven respondents mostly believe that interaction with the ERM was clear and understandable. Six respondents completely believe that the interaction with the ERM was clear and understandable. One respondent believes that the interaction with the ERM was clear and understandable is not within scope, two respondents fairly believes that interaction with the ERM was clear and understandable. Dalton (2012) argues that risk identification must differentiate between risks and opportunities. Therefore, ERM identifies those incidents occurring internally or externally that could have an impact on strategy and achievement of objectives. Also, it addresses internal, external factors, how they combine and interact to influence the risk profile.



**Figure 4.14:** Are you satisfied with the quality of the ERM system?

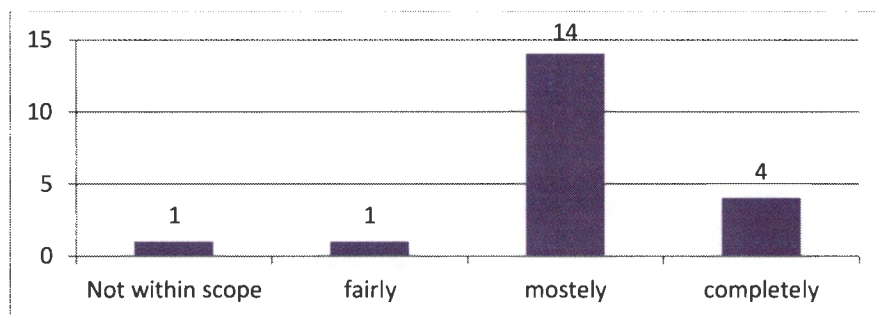
The above graph indicates that most of the respondents (9) mostly were satisfied with the quality of the ERM system. One respondent's satisfaction with the quality of the ERM system was not within scope, four respondents were fairly satisfied with the quality of the ERM system and six respondents were completely satisfied with the quality of the ERM system.

Murphy (2008) argues that when different risk factors have been identified the corporate exposures should be set aside for oversight and assessment. The risk prioritisation identifies a number of unimportant potential risk factors while ensuring a focus on the key risk to be managed, monitored and reported. The ERM framework requires that risk management strategies must be decided in view of the enterprise as a whole rather than on the basis of small divisional or functional assessment. As a consequence, decision to avoid, retain, reduce, transfer or exploit risks should be evaluated entirely at corporate level and not on a stand-alone basis (Murphy, 2008).



**Figure 4.15:** Did the ERM implementation complete on time?

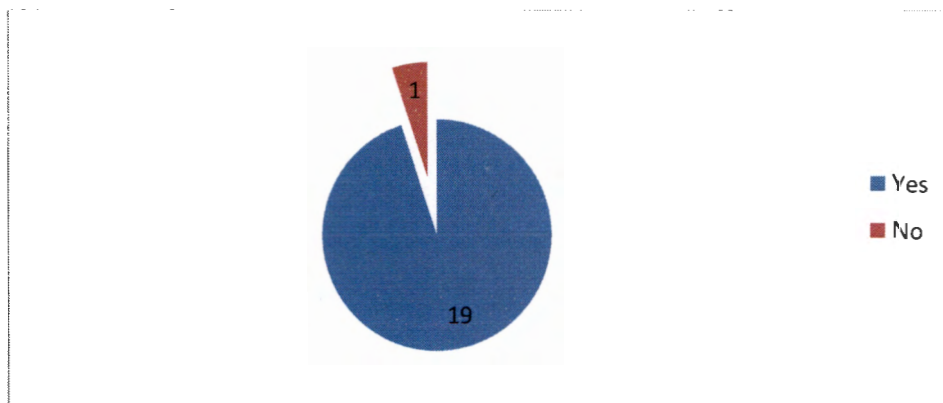
Figure 4.15 shows that most of the respondents (9) mostly believed that ERM implementation was completed on time. Two respondents believed fairly that ERM implementation completed on time, one respondent believed that ERM implementation completed on time was not within scope and eight respondents completely believed that ERM implementation completed on time. The requirement for specific capabilities may differ from business to business or industry to industry, because the handling of different types of risk can require diverse set of skills and competencies. Organisational and individual learning practices must be engaged in the implementation of the ERM framework (McLellan & Corder, 2013). An organisation depends on quality information for effective operations and decision-making. Therefore, quality in management decision plays a vital role and there is a direct and strong relationship between the quality of information used by a decision maker and decision performance (McLellan & Corder, 2013).



**Figure 4.16:** Did the ERM implementation project complete within the budget as initially planned?

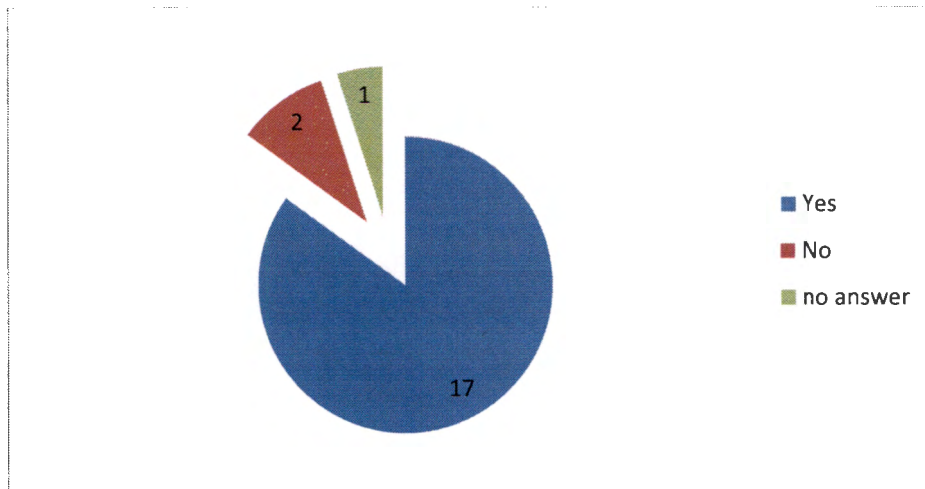
Figure 4.16 indicates that the majority of respondents or most of the respondents (14) mostly believed the ERM implementation project was completed within the budget as initially planned. One respondent believed fairly that the ERM implementation project was completed within the budget as initially planned, one respondent believed that the ERM

implementation project completed within the budget as initially planned was not within scope and four respondents completely believed that the ERM implementation project completed within the budget as initially planned. Corporate governance codes expect organisational wide approach will be implemented when managing risk. Organisations should not be caught unaware in high profile corporate failures as internal controls are expected to be based on a thorough and properly structured process for managing risks (Valsamakis et al., 2005).



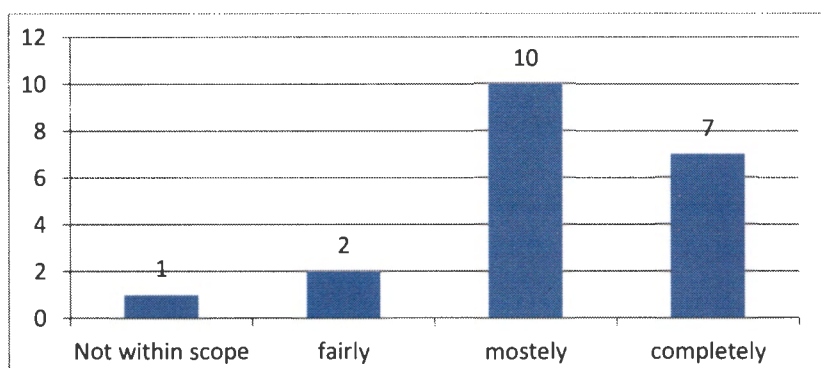
**Figure 4.17:** Is the scope of your ERM well matched with our company needs?

Figure 4.17 indicates that 19 of the respondents agree that the scope of your ERM was well matched with their company needs, whereas one respondent did not agree that the scope of your ERM was well matched with their company needs. O'Donnell (2005) argues that there is a relationship between personal risk appetite and lifestyle decisions. Therefore, individuals will require to take lifestyle decisions based on risk appetite, risk exposure and risk capacity. Decisions are often taken at diverse levels and there are three key levels of management in any organisation: Corporate, Tactical and Operational level.



**Figure 4.18:** Do you think the consultant led you in the right direction during ERM implementation?

Figure 4.18 indicates that 17 of the respondents agree that a consultant led one in the right direction during ERM implementation; two respondents did not agree that a consultant led one in the right direction during ERM implementation and one respondent did not want to answer this question. The principal differences between the two are product quality and a unique feature that is premium product has higher quality than the leading national brand and may incorporate some features that cannot be replicated easily by competitors. Loblaw benefits in two ways from having private-labels: products that are only available at its stores and mark-ups that is consistent and less volatile on these products than on national brands (Smyth and Longbottom, 2005).



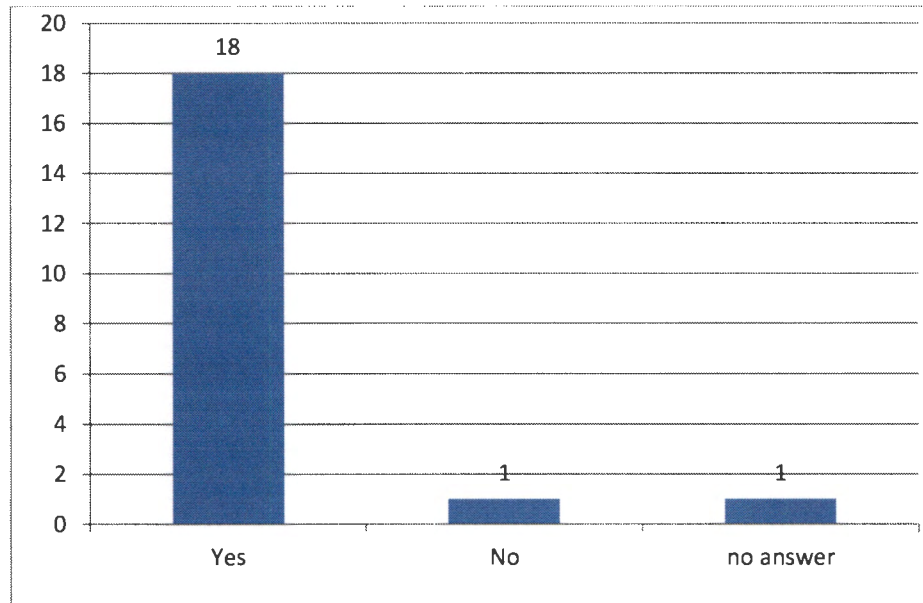
**Figure 4.19:** Are the management reports from ERM very useful?

Figure 4.19 indicates that one respondent is not within scope with the quality of the output from ERM high is very useful. Two respondents fairly believe that the quality of the output from ERM high is very useful. Ten respondents mostly believe that the quality of the

output from ERM high is very useful. Seven respondents completely believe that the quality of the output from ERM high is very useful.

The responses to responsible leadership are that the board must provide effective leadership based on an ethical foundation (Young, 2009). Ethical leaders are expected to: direct the strategy and operations to build a sustainable business; consider the short- and long-term effects of the strategy on the economy, society and the environment; conduct ethical business practices; do not compromise the natural environment sustainability and consider the company's impact on internal and external stakeholders.

The King Committee on Corporate Governance was formed in 1992, under the auspices of the Institute of Directors, in South Africa. The Commission was headed by former High Court Judge, King and published the first King Report on corporate governance in November 1994. King I covered a Code of Corporate Practices and Conduct. The purpose of the King Reports is, to promote the highest standards of corporate governance in South Africa (Le Ruox, 2010).



**Figure 4.20:** Is the quality of the output from ERM high?

Figure 4.20 indicates that 18 of respondents agree that the quality of the output from ERM high, one respondent did not agree that the quality of the output from ERM high and one respondent did not want to answer this question. O'Donnell (2005) states that the principal differences between the two are product quality and a unique feature that is premium

product has higher quality than the leading national brand and may incorporate some features that cannot be replicated easily by competitors.

Akintoye and MacLeod (1997) note that risk elements associated with construction projects influence the time, cost and quality performance of the project. Therefore, risk management becomes a continuing activity in project development from inception and throughout the life of the project. Andersen and Schroder (2010) suggest that technological factors include ecological and environmental aspects, automation, technology incentives and the rate of technological change. They determine barriers to entry, minimum efficient production level and influence outsourcing decisions. Furthermore, technological shifts can affect costs, quality, and lead to innovation.

#### **4.4 MEASURES OF ASSOCIATION**

A measure of the relation between two or more variables defines correlation. The measurement scales used should be at least interval scales but other correlation coefficients are available to handle other types of data. The simplest question one could ask about two continuous variables is whether they vary in related way, is there a correlation between them. Pearson's Correlation Coefficient will be used for data interpretation. Correlation Coefficients can range from -1.00 to +1.00 representing a perfect negative correlation while a value of +1.00 represents perfect positive. A value of 0.00 represents a lack of correlation.

#### **4.5 CORRELATION**

The correlation between what is your age and degree is identified as the extent to which users think that ERM is useful, good, current and accurate shows -0.970. This means that if a person grows older there is a strong chance (that people will have a higher education and better knowledge on using ERM. The correlation between gender and does the use of ERM improve performance and productivity shows +0.777. This means employees are mostly happy with the performance on ERM according to this.

The correlation between ethnics and do you experience difficulty in using ERM to all departments shows - 0.124- a high negative association. This means that most of the employees are generally not happy with their position and the organisations needs to train more employees in the future to keep this up. The correlation between genders and is ERM



reliable shows -0.229- a high negative association. This means that employees are not experienced or able to understand the ERM system and do not trust the Information consistency. The correlation between the use of ERM improve performance and productivity and does one worry about loss when you apply the ERM shows + 0.883- a positive association.

Most employees are well trained to understand the use of ERM and when it comes to Information decisions with adequate management support. The correlation between age and does one find errors when using ERM system shows -0.374 - a negative association. Employees are not happy with the accountability placed on their performance in their decision levels while understanding the ERM system and error findings, especially employees aged between of 41-50 years. The correlation between the years of experience in your position and is the quality of the output from ERM high shows - +0.355 – a positive association. Generally, the employees are satisfied with the consistency of ERM quality used from different sources and this improves their ability to perform well. The correlation between genders and the use of ERM improve effectiveness shows - +0.940 - a high positive association. This means in general, all employees in managerial or non-managerial positions require many sources to make a final decision that will be effective for ERM.

The correlation between the uses of ERM improves effectiveness and the ERM implementation completed on time shows + 0.782 - a high positive association. This shows that employees trust the information to base their decisions effectively, are able to complete and it impacts on ERM while been given the adequate commitment by management. The correlation between age and do you think the consultant led you in the right direction during ERM implementation shows + 0.400 - a positive association.

This means that employees are mostly pleased with the information been provided by the organisation and the consultants are well skilled. The correlation between the uses of ERM improves effectiveness and the ERM implementation completed on time shows - 0.820 - a high negative association. The correlation between the use of ERM improves effectiveness and overall, using the ERM is very useful in my job shows - 0.434 - a high negative association. The correlation between overall, using the ERM is very useful in my job and the Is the quality of the output from ERM high shows + 0.419- a high positive.



The correlation between ethnics and the management reports from ERM systems are very useful shows + 0.834 - a high positive association. This shows that employees trust the information to base their decisions effectively, are able to complete and it impacts on ERM while been given the adequate commitment by management.

#### **4.6 CONCLUSION**

Chapter four provided analysis and interpretation of data gathered using a questionnaire as a method of collecting data, a number of statistics techniques were applied to guide the analysis. Correlation was used to establish meaning of the analysis of data collected. In some instances the use of charts and tables were used to assist in the presentation of the analysis. The findings have also established a link between literature that was reviewed in this study with the data which was collected and presented. The study used a quantitative approach to describe and analyse the findings on the impact of implementation of improvement in NWU, finance office. This was followed by the findings and measures of association statistics.

The next chapter consolidates all the work conducted and consists of the theoretical findings, empirical findings, theoretical and empirical findings, conclusion and recommendations. These recommendations are divided into two; operational findings that will benefit the department under review and academic recommendations as the second.

# **CHAPTER 5**

## **CONCLUSION AND RECOMMENDATIONS**

### **5.1 INTRODUCTION**

This chapter presents the summary and overview followed by recommendations and conclusion. The previous chapter, Chapter 4 has focused on data collection, analysis and interpretation in relation to the research objectives. Strategic planning is important to ensure that businesses are well positioned and enabled to compete well with those of their male counterparts for long term survival and sustainability.

The purpose of this research is to determine the extent of alignment of the financial literacy development. This chapter references the literature discussed in Chapter 2 pertaining to the different functional areas prevailing social, political, and economic. Conditions that the department faces include the alignment of financial literacy. These conditions need to be addressed in order to support the conclusions drawn around the research questions.

This chapter comprises a summary of the study, addresses the findings per research question, provides managerial guidelines for opportunities and highlights future research opportunity in this field of study. Conclusion of the study will be drawn and recommendations will also be outlined.

### **5.2 SUMMARY OF STUDY**

The nature and extent of this alignment is currently unknown. The research was aimed at determining the extent of alignment of the NWU, Finance Office development with the challenges faced by financial literacy development in the Department of Finance. This study analysed the extent of this alignment through the use of research questions in Chapter 4 that focused on the different functional areas.

### **5.3 RESPONSE TO RESEARCH QUESTIONS**

The main findings of this research in relation to each research question will now be discussed. Each question is followed by a discussion of the findings relating to that question.

#### **5.3.1 To what extent is the ERM system reliable and relevant to the risk management within the organisation?**

Enterprise Risk Management handles risks by transferring it through insurance or other financial products has long been common practice. Therefore, corporate risk management has expanded well beyond insurance and hedging of financial exposures to include other kinds of risks such as operational risk, reputational risk and strategic risk (Quon, 264: 2012). COSO acknowledges that the ERM system will differ from one organisation to the other.

COSO suggests that an appropriate ERM system must have contingency perspective relevant to the particular organisation. In short there is no universally ideal ERM system. ISO 31000 provides guidance for external and internal audit programmes. Organisations that use this standard can match their risk management practices against internationally recognised standards, in return providing good principles for effective risk management and corporate governance (DeLoach, 2012).

Enterprises pursue to adopt risk controls; make the deployment of such controls transparent visible to engender better organisational legitimacy such as management accounting, risk management, corporate governance progressively and inseparably interdependent (Bhimani, 2009).

ERM considers activities at all levels of the organisation such as entity-level, division, subsidiary and business unit (Dalton, 2012). The components of the framework are interrelated as the following:

1. Internal Environment
2. Establishes an understanding regarding risk management, and recognises that unexpected as well as expected events may occur.
3. Determines the entity's risk culture.

4. Considers all other aspects and the consequences of the organisation's actions and how they might affect its risk culture.
5. Policies and procedures that will help in ensuring that the risk responses, as well as other organisational objectives, are carried out.
6. Must occur throughout the organisation, at all levels and in all operations.
7. Entails application and general information technology controls.

Management must identify, capture, and communicate important information in a manner and timeframe that encourages team members to carry out their responsibilities. Communication is efficient when it occurs in a broader sense, flowing down, across, and up throughout the organisation (Dalton, 2012).

GARP (2012) refers to Corporate Governance as the processes and structures that guide the affairs of a business organisation and a manner in which one should be directed and managed. To enable them sustain and grow shareholder/stakeholders value and enhance corporate performance and accountability. Good corporate governance is essential, because it helps to avoid corporate scandals, fraud, civil and criminal liability of the organisation. A positive corporate governance image enhances the reputation of the organisation and attracts more customers, investors and suppliers (Olivier, 2012).

### **5.3.2 To what extent are the ERM functions within the organisation?**

This process is conducted using the ERMS database for identifying, analysing and evaluating risk at the departmental level (Young, 2009). Identification involves developing a list of risks based on events that may have a negative or positive impact on the organisation in achieving its objectives. Should cover events that within or may not be within the control of the organisation. Identified risks should be listed in categories to ease reference.

Analysis should be expressed in terms of the effect and probability. The organisation must also develop a risk matrix (Young, 2009). Evaluation includes decisions about what needs to be done about the risk, determine appropriate treatment of the risk and the risk appetite/tolerance of the organisation. Risk tolerance must be interpreted accurately by individual managers when making decisions about the acceptance of higher level risks. Involves the modification of the risk in a way that positive outcomes are maximised, and negative outcomes are minimised.

Risk Management Policy should be understood and observed by all stakeholders. Objectives must be identified and defined, external and internal influences should be established and set the scope and risk criteria for the risk process (Cokins, 2009). The context against which strategic risks are defined must include all business operations.

ERM provides a standard conceptual framework for all employees and departments within the organisation. Consistency and commonality provide improved communication and coordination among employees. ERM enhances, reporting and analysis of risks. Consolidation of risks across the enterprise increases the alertness/awareness of directors and executives, enabling better decisions relative to risk thresholds, risk appetite and risk tolerance (Gunderson, 2001).

ERM helps to open synergies and potential to increase analysis and assessment of risks. Furthermore, ERM methodologies and techniques provide an opportunity to identify; assess key performance indicators regarding risks which allows a method to measure; better quantify risk factors and tolerances (Gunderson, 2001).

Jourdan and Atkinson (2008) states that an organisation's ERM system should be geared toward achieving the following four objectives: (1) Strategy: high-level goals, aligned with and supporting the organisation's mission; (2) Operations: effective and efficient use of the organisation's resources; (3) Reporting: reliability of the organisation's reporting system. (4) Compliance: organisational compliance with applicable laws and regulations.

The organisation must adopt structured measurement methodologies that can support managers in their formal decisions about the effect of identified risks by establishing common risks barriers, enabling aggregations of exposures and setting targeted risk limits. The input from experienced staff with special expertise is valuable when the assumptions that go into the models are developed (Welman, Kruger & Mitchel, 2005).

ERM framework must start from the top and the board of directors must provide direction by delegating risk management outlining the risk appetite of the enterprise, while stipulating general risk management policies (Smith & Merritt, (2002). The senior managers are ultimately responsible for execution of the risk management process and

must give the process corporate priority to ensure support throughout the organisation and setting the standard for a positive risk culture.

Computerised communication systems, internal information network, Web-based technology solutions, etc., may provide useful support for the ERM efforts, as they enable managers across the company to share risk knowledge and enhance risk management capabilities as well as identifying and controlling exposures across the organisation (Chandra, 2011). It must be noted that, technology is only an enabler, whereas the engagement of people within the organisation is more important when responding to corporate risks.

This process of monitoring and reviewing entails regular checks or surveillance of risks and their proposed treatment. Monitor whether controls are operating as they were planned (Young, 2009). Continuously review if new circumstances have arisen that exposes the organisation to new or increased risk. Review and analyse and lessons learnt from past events. The internal audit function must assess the effectiveness of controls over high risk activities.

### **5.3.3 To what extent is the ERM project progress and success quality within the organisation?**

The Loblaw category management team determines which stock keeping units (SKUs) within each product category to sell. Current strategies include adding private label products where appropriate (Smyth and Longbottom, 2005). Two principal management techniques are employed: (1) comparing product sales in stores with similar demographic markets (especially new stores) that over time can suggest changes in category product mix for a store and (2) using industry data collected by AC Neilson, an independent market research firm.

O'Donnell (2005) notes that based on group analysis and management's gut feeling, Loblaw develops private label products when it finds a market niche within a category where the consumer will purchase a product that is not a national brand Loblaw can introduce either a premium private-label product and/or a generic product (O'Donnell, 2005).

The principal differences between the two are product quality and a unique feature that is premium product has higher quality than the leading national brand and may incorporate some features that cannot be replicated easily by competitors.

Loblaw benefits in two ways from having private-labels: products that are only available at its stores and mark-ups that is consistent and less volatile on these products than on national brands (Smyth and Longbottom, 2005). The goal of the price-management team at Loblaw is to ensure that Loblaw meets its commitment to competitive pricing while maintaining a profitable, growing business (O'Donnell, 2005).

In meeting this objective, Loblaw's price-management team carefully prices each product in a category and considers relative price relationships within the category that is Loblaw's private-label products priced below national brands in any category and for substitute goods that is instant coffee vs. ground coffee. To ensure competitive pricing, Loblaw carries out a program of extensive price checks at competing stores in each of its markets (O'Donnell, 2005).

ERM also enhances the cost management and effectiveness relating to audit activities; improves management of market, and consolidate the risk management. ERM data and reporting can enable the firm to effectively coordinate with investment custodians and to better manage capital/investment decisions that will help the organisation to make better timely decisions (Dalton, 2012). ERM is capable to reduce the cost of existing risk management processes and function within the organisation.

Gunderson (2001) notes that the management of risk validate the performance of a firm that becomes a strategic driver for the organisation and this makes it an important aspect within the firm and need a new level of consideration. The role of risk managers is rapidly and they now hold the keys of enterprise value. Operations that create value are essential for firms to grow and have a massive impact on corporate image.

#### **5.4 LIMITATIONS**

The study focused only on one group in the department of Finance, NWU, which is general finance. It is important that surveys be conducted in other groups to get a complete picture of challenges in the NWU finance advisor staff development.

## 5.5 MANAGERIAL GUIDELINES

From the results of this study the following guidelines are given to the NWU, Finance Office that have a sustainability solution or are planning to develop and implement sustainability in the future:

- Employees should be fully capacitated after undergoing financial literacy development training. They should be given extra duties to perform so that they become experts in their field. If a vacancy for a higher post becomes available, the internal personnel should be given a chance to prove that they can do the job before the job is advertised externally.
- The organisation needs an important standard to determine how to align the different functional financial literacy development areas as mentioned in Chapter 2.
- Opportunities exist in all financial literacy development areas to pursue the full benefits, as described in Chapter 2 by improving alignment through training and delegating.
- Ethics should be considered because acquired skills and delegation by management improves the alignment in the financial literacy development area. The benefits associated with improving this alignment are discussed in Chapter 2.
- Reports must meet the needs of recipients and be easily accessible or they will not be used.
- Well-established processes and documentation enable people to deal with facts rather than emotions when problems occur.
- Process improvement meetings must be well structured and leave the organisation with a prioritised list of solutions.
- Solutions must be communicated back to the organisation following a process improvement meeting to insure everyone is working on the same priorities
- Retaining strategies should be implemented to guard against employees who successfully attended and completed the beneficial management programmes from leaving the department to other departments or private companies.
- Accepting and recognising the attempts and performance of employees assists in increasing confidence and drives employees to learn and perform better.



## **5.6 CONCLUSION**

The NWU, Finance Office should be financial literate to overcome the challenges of unable to make informed decisions regarding their financial matters. Financial literacy needs discipline to gain financial independence and statistics proves that government employees are indebted surviving on hand to mouth, have insufficient disposable income to meet the day to day and monthly obligations. The old-fashioned method tiring and the mathematical programming is the only way of solving the financial planning problem. A model for this problem must be built before a mathematical programming method can be used to solve the problem.

The NWU, Finance department has to continually adapt its strategies and programmes to fit these environmental changes. An assessment of the environment then becomes a continuous process. In order for the department to thrive, it will require competent and experienced financial human resources. The NWU, Finance Office should therefore invest in fruitful financial literacy development programmes if it plans to win or manage these challenges.

## REFERENCES

- Akintoye, A. S, and MaLeod, M. J. (1997). Risk analysis and management in construction. *International Journal of Project Management*, 15, 1, pp. 31-38, 1997.
- Akojee, S. (2010). Skills development and disempowerment: *Unraveling workplace skills transfer in trying economic times*, pp. 179 – 183.
- Amrani, R. Rowe, F. and Geffroy-Maronnat, B. (2006). The effect of Enterprise Resource Planning Implementation Strategy on Cross-functionality. *Information Systems Journal*, 79-104.
- Arjoon, S. (2005). Corporate Governance: An Ethical Perspective. *Journal of Business Ethics*, 61, 4, pp. 343-352.
- Andersen, T and Schroder, P. (2010). *Strategic Risk Management Practice, How to Deal Effectively with Major Corporate Exposures*. Cambridge University Press. Southern Africa
- Bhimani, A. (2009). Risk Management, Corporate Governance and Management Accounting, *Management Accounting Research*, 20, 1, pp. 2–5.
- Boyle, T. A. (2007) .Technical-Oriented Enterprise Resource Planning Body of Knowledge for Information Systems Programs: Contents and Implementation .St. Francis Xavier University, Nova Scotia, Canada.
- Calitz, A.P, and Calitz, M.B. 2000. Evaluating the Business Process Reengineering of a SAP R/3 Implementation in a Manufacturing Environment. SART/SACT.
- Chandra, T. (2011). Thought Leadership: Taking Risk Management from The Silo across the Enterprise.
- Cokins, G. (2009), *Performance Management, Integrated Strategy, Execution, Methodologies, Risk and Analytics*.
- Cooper, D.R., Schindler, P.S. (2003). *Business research methods* (8th ed.). Boston: McGraw-Hill Irwin.
- Dalton, G. (2012). *Derivatives and Risk Management*. Mafikeng, SA, NWU, p 23.
- Dalton, G. (2013). *Derivatives and Risk Management (MBFM 822)*. Mafikeng July 2013. South Africa, NWU, p 5. (Study Guide)
- Debreceeny, R, S. Gray, G. L, Ng, J. J, Lee, K. S and Yau, W. (2005). Embedded Audit Modules in Enterprise Resource Planning Systems: Implementation and Functionality. *Journal of Information Systems* , 19,No.2 , p 7-27.

- DeLoach J. (2009). Corporate Compliance COSO, ISO 31000 or another ERM Framework? <http://www.corporatecomplianceinsights.com/coso-iso-31000-or-another-erm-framework/>. Date accessed 30 July 2013.
- Diamantopoulos, A and Schlegelmich, B. (2004). The relationship between country-of-origin image and brand image as drivers of purchase intentions: a test of alternative perspectives. *International Marketing Review*, 28:508-524.
- Gunderson, C. (2001). Five Benefits of Enterprise Risk Management. <http://www.cliftoncpa.com/publications/enewsletters/CoreInsight/issues/December2011/risk.asp>. Date of access 17 July 2013.
- GARP. (2012). Corporate Governance and Risk Management [http://www.garp.org/media/991488/the\\_role\\_of\\_risk\\_governance\\_in\\_effective\\_risk\\_management\\_tunji\\_adesida\\_071312.pdf](http://www.garp.org/media/991488/the_role_of_risk_governance_in_effective_risk_management_tunji_adesida_071312.pdf). Date of access 31 July 2013.
- Gupta M and Kohli A. (2006). 'Enterprise resource planning systems and its implications for operations functions'. *Technovation*, 26: 687-696.
- Fink, A. (1995). How to sample in surveys. London: Sage.
- Hodge, D.R, and Gillespie, D. (2003). An alternative to Likert scale. *Social work Research*, 27, 11.
- Hodge, D.R and Gillespie, D. (2003). An alternative to Likert Scale. *Social Work Research*, Volume 27, Number 1, March 2003.
- Jourdan, C., and Atkinson, T. (2008). A Practical Guide to Risk Assessment. *Price Water Coopers Journal* 1 December 2008. p3.
- Kansal, V. (2006). Enterprise Resource Planning Implementation: A Case Study *.The Journal of American Academy of Business, Cambridge , Vol. 9 , No 1, March 2006.*
- Lawrence, A., Martin, P., and Ching-Yang Tseng. (2009). Embracing risk as core competence: The case of CEMEX. *Journal of International Management*, 15, pp. 296 – 305.
- Leedy, P. D. and Ormrod, J. E (2005). *Research Methodology: Planning and design*. New Jersey: Merrill Prentice Hall.
- Kansal, V. (2007). 'Systemic Analysis for Inter-Relation of Identified Critical Success Factors in Enterprise Systems Projects'. *Contemporary management research*, 3, (4), pp. 331-346.
- Le Roux, F. (2010). The applicability of the third king report on corporate governance to small and medium enterprises. Cape Town: University of Stellenbosch (Research – MBA).

- Liu, C. C . (2000). An analysis of the factors affecting change in an industry's profit: The example of the Taiwan cement industry. *Applied Mathematics and Computation*, (183), pp. 695–703
- McGrath, S. and Akoojee, S. (2007). Education and skills for development in South Africa: Reflections on the accelerated and shared growth initiative for South Africa, p421-434.
- McLellan, B. C and Corder G. D. (2013). Risk reduction through early assessment and integration of sustainability in design in the minerals industry. *Journal of Cleanser Production*, (53), pp. 37-46.
- Morris, M.G. and Venkatesh, V. (2010). Job Characteristics and Job Satisfaction: Understanding the Role of Enterprise Resource Planning System Implementation. *MIS Quartely* , pp. 143-161.
- Murphy, D. (2008). *Understanding Risk: The Theory and Practice of Financial Risk Management*. London. Taylor and Francis group
- Newman, M and Zhao, Y. (2008). The process of Enterprise Resource Planning Implementation and Business Process Reengineering: Tales of two Chinese small and medium sized enterprises. *Information Systems Journal*, No 18, p 405-426.
- Nicholls, D. (2009). Qualitative research: Part two Methodologies. *International Journal of Therapy and Rehabilitation*, November 2009, Vol 16, No 11.
- Ngai, E. W. T., Law, C. C., & Wat, F. K. (2008). Examining the critical success factors in the adoption of enterprise resource planning. *Computers in Industry*, 59, 548-564.
- O'Donnell, L. (2005). Enterprise Risk Management: A systems thinking framework for the event identification phase. *International Journal of Accounting Information Systems*, 6, pp.177-195
- Quon, T., Zeghal, D and Maingot, M. (2012). Enterprise risk management and firm performance. *Social and behavioural sciences*, 62, pp. 263-267.
- Roe, B.E., and Just, D.R., 2009. Internal and External Validity in Economics. *Agricultural and Applied Economic Association*, 91 (number 5, 2009), pp. 1266-1271.
- Saunders, M., Lewis, P. and Thornhill, A. (2007). *Research Methods for business students*. 4<sup>th</sup> edition. London: Prentice Hall.
- Seroka, S. F. (1992). External Factors in the Career Choices of School- Leavers in Lebowa. (Unpublished M.A. Dissertation), Johannesburg: Rand-Afrikaans University.
- Seymour, L .F. and Roode, J.D. (2008). Investigating Affective Response and Job impact with Enterprise Resource Planning adoption. Department of Information Systems, University of Cape Town, South Africa.

- Smith, G., and Merritt, G. 2002, Proactive Risk Management. Malloy Lithographing, USA.
- Smyth and Longbottom, (2005). External Provision of Knowledge Management Information Services. *European Management Journal*, 23, 2, pp. 247–259.
- Stephens, J. C., Wilson, E. J. and Peterson, T. R. (2008). Socio-Political Evaluation of Energy Deployment (SPEED): An integrated research framework analysing energy technology deployment. *Technological Forecasting and Social Change*, 75, 8, pp. 1224–1246.
- Tsai, W and Hung, S. (2008). An Imperial Study of the Performance of Enterprise Resource Planning Systems using the Organisational Learning Model. *International Journal of Management*, 25, 2.
- Urban, B and Mashinini, M. E. (2008). Enterprise Resource Planning System Implementation: Investigating the process of change. *Journal of Contemporary Management*, 5, p 223-237.
- Valsamakis, A., Vivian, R., and Du Toit, G. (2005). Risk Management, Managing Enterprise Risk. Heinemann: Sandton.
- Wang, E. T. G., Shih, S., Jiang, J. J, and Klein, G. (2013). The consistency among facilitating factors and ERM implementation success: A holistic view of fit. *The Journal of Systems and Software*, (81), pp. 1609-1621.
- Welman, S., Kruger, R. and Mitchel. P (2005). Research Methodology – Third Edition. Oxford University Press. Cape Town.
- Young, J. (2009). Operational Risk Management: The practical application of a qualitative approach. Van Schalk. Pretoria

## Appendix A: Matrix

ARTICLES	Definition of Enterprise Risk Management	ERM and Performance	ERM and Jobs	ERM and regulatory firms	Risk and Concern	ERM and Risk Management	ERM Objectives	ERM Framework	ERM and Industry	ERM and Firm Compatibility
Enterprise risk management: An empirical analysis of factors 1	*	*	*	*						
ERM and firm performance: A contingency perspective 2	*				*	*	*	*		
A distributed decision making model for risk management of virtue enterprise 3		*	*		*					
Risk reduction through early assessment and integration 4			*		*	*	*	*	*	
Embracing risk as a core competence 5	*	*	*							
ERM and firm performance 6	*	*	*			*	*			
An analysis of the factors affecting change in a n industry's profit 7		*	*		*			*	*	
External provision of knowledge management information services 8		*	*	*		*			*	*
Risk analysis and management in construction 9			*		*	*			*	*

Trajectory and driving factors for GHG emissions in the Chinese cement industry 10	*		*	*	*	*			*	
ERM: A systems-thinking framework for the event identification phase 11		*	*	*	*	*	*	*	*	
Enterprise risk and security management 12		*	*							
Working in small enterprises 13		*	*							
Integrated risk management and product innovation 14		*	*	*	*	*	*	*	*	
ETM: a systems-thinking framework 15		*	*	*	*	*	*	*	*	*
Selection of construction enterprises management strategy based on the SWOT 16		*	*	*	*	*	*	*	*	*
Utilising enterprise systems for managing enterprise risks 17	*	*	*	*	*	*	*	*	*	*
Building the evaluation model of IT general control for CPAs under ERM 18	*	*	*	*	*	*	*	*	*	*
A role mining framework to business roles and mitigate enterprise risk 19	*	*	*	*	*	*	*	*	*	
A decision model for RM on disaster recovery centre in an enterprise architecture model 20		*	*	*	*	*	*	*	*	
Destination and enterprise management 21		*	*	*	*	*	*	*	*	*
Project risk management methodology for small firms 22		*	*	*	*	*	*	*	*	*
The mean of ERM 23		*	*	*	*	*	*	*	*	*
The organizational dynamics of ERM 24		*	*	*	*	*	*	*	*	*
Project managers and risk management 25		*	*	*	*	*	*	*	*	*

ERM: An empirical analysis of factors associated with the extent of implementation 26		*	*	*	*	*	*	*	*	*
Integrated of carbon risks and opportunities un ERM systems 27		*	*							*
ERM and continuous re-alignment 28		*	*			*				*
Towards enterprise information risk management 29		*	*							*
The role of strategic ERM and organizational flexibility 30	*	*	*	*	*		*	*	*	*
The evaluation of enterprise informatisation risk 31	*	*	*	*	*	*	*	*	*	*
ERM and firm performance 32	*	*	*	*	*	*	*	*	*	*
The role of internal audit in engineering project risk management 33	*	*	*	*	*	*	*	*	*	*
A new comprehensive framework for enterprise information security risk management 34	*			*	*	*	*	*	*	*
Structure of ERM 35				*	*	*				*
Simple tools and techniques for ERM 36				*	*	*				
Introduction to special issue ERM in operations 37					*					
A comprehensive investigation of the applicability of process mining techniques for ERM 38	*	*	*	*	*	*	*	*	*	*
Planning effort as an effective risk management tool 39	*	*	*	*	*	*	*	*	*	*
ERM : A comparative study 40	*			*	*	*	*	*	*	*



## Appendix B: Questionnaire Development Matrix

Research Questions	Survey Questions	Variable(s) and or Relationships measured	Statistical Test
1. To what extent is the ERM system reliable and relevant to the risk management within the organisation?	<p>1. RELIABILITY AND JOB RELEVANCE</p> <p>1.1 Is ERM reliable?</p> <p>1.2 Do you worry about loss as when you apply the ERM?</p> <p>1.3 Do you find system errors when using ERM system?</p> <p>1.4 Is usage of ERM relevant?</p> <p>1.5 Do you experience difficulty in using ERM to all departments?</p>	<p>Ordinal/Nominal Variables</p> <p>1.1 Yes/No</p> <p>1.2 Not within scope, poorly, fairly, mostly, completely</p> <p>1.3 Not within scope, poorly, fairly, mostly, completely</p> <p>1.4 Yes/No</p> <p>1.5 Not within scope, poorly, fairly, mostly, completely</p>	<p>Descriptive stats- frequency tables, bar charts</p> <p>Convert nominal to ration 0,1,2,3,4 &amp; do correlation co-efficient testing with personal information –Pearson &amp; Spearman Rho</p> <p>Numerical description location , spread, distribution, cross tabulation</p> <p>Measures of association, Phi, Crammers</p>

			<p>V</p> <p>Convert nominal to ration 0,1,2,3,4 &amp; do correlation co-efficient testing with personal information –Pearson &amp; Spearman Rho Normal &amp; distribution</p>
<p>2. To what extent are the ERM functions and internal support within the organisation?</p>	<p>2.ERM FUNCTION AND INTERNAL SUPPORT</p> <p>2.1 Does ERM increase the company business value and productivity?</p> <p>2.2 Does the use of ERM improve performance and productivity?</p> <p>2.3 Does the use of ERM improve effectiveness?</p> <p>2.4 Overall, using the ERM is very useful</p>	<p>Ordinal/Nominal Variables</p> <p>2.1 Yes/No</p> <p>2.2 Not within scope, poorly, fairly, mostly, completely</p> <p>2.3 Not within scope, poorly, fairly, mostly, completely</p>	<p>Descriptive stats- frequency tables, bar charts</p> <p>Numerical description location ,spread, distribution, cross tabulation</p> <p>Measures of association, Phi, Crammers V</p>

	<p>in my job?</p> <p>2.5 Is interaction with the ERM clear and understandable?</p> <p>2.6 Are you satisfied with the quality of the ERM system?</p>	<p>2.4 Not within scope, poorly, fairly, mostly, completely</p> <p>2.5 Not within scope, poorly, fairly, mostly, completely</p> <p>2.6 Not within scope, poorly, fairly, mostly, completely</p>	<p>Convert nominal to ration 0,1,2,3,4 &amp; do correlation co-efficient testing with personal information –Pearson &amp; Spearman Rho</p> <p>Normal &amp; distribution</p> <p>Normal &amp; distribution</p> <p>Normal &amp; distribution</p>
<p>3. To what extent are the benefits and perceived usefulness of ERM within the organisation?</p>	<p>3. PROJECT SUCCESS/PROGRESS AND SUCCESS QUALITY</p> <p>3.1 Did the ERM implementation</p>	<p>Ordinal/Nominal Variables</p> <p>3.1 Not within scope, poorly, fairly, mostly, completely</p>	<p>Descriptive stats- frequency tables, bar charts</p> <p>Numerical description</p>

	complete on time?		
	3.2 Did the ERM implementation project complete within the budget as initially planned?	3.2 Not within scope, poorly, fairly, mostly, completely	location, spread, distribution, cross tabulation
	3.3 Is the scope of your ERM well matched with our company needs?	3.3 Yes/No	Measures of association, Phi, Crammers V
	3.4 Do you think the consultant led you in the right direction during ERM implementation?	3.4 Yes/No	Normal & distribution
	3.5 Are the management reports from ERM systems very useful?	3.5 Not within scope, poorly, fairly, mostly, completely	Normal & distribution
	3.6 Is the quality of the output from ERM high?	3.6 Yes/No	Numerical description location, spread, distribution, cross tabulation
			Normal & distribution

# Appendix C: Questionnaire

FOR OFFICE USE ONLY: Respondent Code: \_\_\_\_\_

## VOLUNTARY QUESTIONNAIRE

“AN EVALUATION OF ENTERPRISE RISK MANAGEMENT IN THE FINANCIAL OFFICE, NWU, MAFIKENG CAMPUS.”

Graduate School NWU

North West University

Researcher: Thebe Monakwane

Supervisor: Prof S. Lubbe

### Note to the Respondent

- We need to your help to understand the extent of Enterprise Risk Management function and internal support in the financial office at NWU, Mafikeng Campus.
- Although we would like you to help us, you do not have to take part in this survey.
- If you do not want to take part, just hand in the blank questionnaire at the end of the survey session
- What you say in this questionnaire will remain private and confidential. No one will be able to trace your opinions back to you as a person.

### The Questionnaire as five parts:

Part 1 asks permission to use your responses for academic research.

Part 2 asks general personal particulars like your age, gender and home language.

Part 3 asks about ERM reliability and job relevance in organisations

Part 4: asks about ERM function and internal support

Part 5: asks about Project success and success quality

### How to complete the questionnaire

1. Please answer the questions as truthfully as you can. Also, please be sure to read and follow the directions for each part. If you do not follow the directions, it will make it harder for us to do our project.
2. We are only asking you about things that you and your fellow researchers should feel comfortable telling us about. If you don't feel comfortable answering a question, you can indicate that you do not want to answer it. The responses to the questions that you do answer will be kept confidential.
3. You can mark each response by making a tick or a cross or encircling each appropriate response, with a PEN (not a pencil), or by filling in the required words or numbers.

**Part 1: Permission to use my responses for academic research**

**I hereby give permission that my responses may be used for research purposes provided that my identity is not revealed in the published records of the research.**

Initials and surname \_\_\_\_\_ Postal address: \_\_\_\_\_

\_\_\_\_\_ Postal code: \_\_\_\_\_

Contact numbers: Home: \_\_\_\_\_ Cell: \_\_\_\_\_

No.	<p align="center"><b>PART 2: GENERAL PERSONAL PARTICULARS</b></p> <p align="center"><i>Please tell us a little about yourself</i></p> <p>Please mark only ONE option per question below.</p>	1.3	<p>Do you find errors when using ERM system?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>
1.	<p>I am a:</p> <p><input type="checkbox"/> Male</p> <p><input type="checkbox"/> Female</p>	1.4	<p>Is usage of ERM relevant?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
2.	<p>I am a:</p> <p><input type="checkbox"/> below 20 years</p> <p><input type="checkbox"/> 21- 30 years</p> <p><input type="checkbox"/> 31 - 40 years</p> <p><input type="checkbox"/> 41- 50 years</p> <p><input type="checkbox"/> above 50 years</p>	1.5	<p>Do you experience difficulty in using ERM to all departments?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>
3.	<p>I am a:</p> <p><input type="checkbox"/> African</p> <p><input type="checkbox"/> Coloured</p> <p><input type="checkbox"/> Indian</p> <p><input type="checkbox"/> White</p> <p><input type="checkbox"/> A member of another ethnic group</p>		<p><b>PART 4: ERM function and internal support</b></p> <p>Please mark only ONE option per question below</p>
4.	<p>Indicate your education/ qualification status</p> <p><input type="checkbox"/> Below matric</p> <p><input type="checkbox"/> Matric</p> <p><input type="checkbox"/> Diploma</p> <p><input type="checkbox"/> Degree</p> <p><input type="checkbox"/> Post degree</p>	2.1	<p>Does ERM increase the company business value and productivity?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>

	<p><b>PART 3: Reliability and Job relevance</b></p> <p>Please mark only ONE option per question below.</p>	2.2	<p>Does the use of ERM improve performance and productivity?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>
1.1	<p>Is ERM reliable?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>	2.3	<p>Does the use of ERM improve effectiveness?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>
1.2	<p>Do you worry about loss as when you apply the ERM?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>	2.4	<p>Overall, using the ERM is very useful in my job?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>
2.5	<p>Is interaction with the ERM clear and understandable?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>	3.3	<p>Is the scope of your ERM well matched with our company needs?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
2.6	<p>Are you satisfied with the quality of the ERM system?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>	3.4	<p>Do you think consultant led you in the right direction during ERM implementation?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>

	<p><b>PART 5: Project success / progress and success quality with the use of ERM.</b></p> <p>Please mark only ONE option per question below</p>	3.5	<p>Are the management reports from ERM systems very useful?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>
3.1	<p>Did the ERM implementation complete on time?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>	3.6	<p>Is the quality of the output from ERM high?</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
3.2	<p>Did the ERM implementation project complete within the budget as initially planned?</p> <p><input type="checkbox"/> Not within scope</p> <p><input type="checkbox"/> Poorly</p> <p><input type="checkbox"/> Fairly</p> <p><input type="checkbox"/> Mostly</p> <p><input type="checkbox"/> Completely</p>		



## Appendix D: Correlation

### Notes

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### Correlations

	Gender	Age	Ethnic	Degree	Qu1	Qu2	Qu3	Qu4	Qu5	Qu6	Qu7		
Spearman's rho	Gender	Correlation Coefficient	1.000	.092	-.279	-.009	-.229	.055	.363	.	.148	.	.068
		Sig. (2-tailed)	.	.699	.233	.970	.331	.816	.116	.	.533	.	.777
		N	20	20	20	20	20	20	20	20	20	20	20
Age	Age	Correlation Coefficient	.092	1.000	-.124	-.031	.211	-.291	-.374	.	-.012	.	-.131
		Sig. (2-tailed)	.699	.	.602	.897	.371	.212	.104	.	.959	.	.582
		N	20	20	20	20	20	20	20	20	20	20	20
Ethnic	Ethnic	Correlation Coefficient	-.279	-.124	1.000	-.249	.419	.070	.210	.	-.124	.	-.018
		Sig. (2-tailed)	.233	.602	.	.290	.066	.771	.375	.	.603	.	.940
		N	20	20	20	20	20	20	20	20	20	20	20
Degree	Degree	Correlation Coefficient	-.009	-.031	-.249	1.000	-.394	.623**	.164	.	.516*	.	.510*
		Sig. (2-tailed)	.970	.897	.290	.	.085	.003	.490	.	.020	.	.021
		N	20	20	20	20	20	20	20	20	20	20	20

Qu1	Correlation Coefficient	-.229	.211	.419	-.394	1.000	-.382	.022	.	-.045	.	-.420
	Sig. (2-tailed)	.331	.371	.066	.085	.	.097	.927	.	.849	.	.065
	N	20	20	20	20	20	20	20	20	20	20	20
Qu2	Correlation Coefficient	.055	-.291	.070	.623**	-.382	1.000	.481*	.	.776**	.	.883**
	Sig. (2-tailed)	.816	.212	.771	.003	.097	.	.032	.	.000	.	.000
	N	20	20	20	20	20	20	20	20	20	20	20
Qu3	Correlation Coefficient	.363	-.374	.210	.164	.022	.481*	1.000	.	.493*	.	.377
	Sig. (2-tailed)	.116	.104	.375	.490	.927	.032	.	.	.027	.	.101
	N	20	20	20	20	20	20	20	20	20	20	20
Qu4	Correlation Coefficient	.	.	.	.	.	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.	.	.	.	.	.
	N	20	20	20	20	20	20	20	20	20	20	20
Qu5	Correlation Coefficient	.148	-.012	-.124	.516*	-.045	.776**	.493*	.	1.000	.	.813**
	Sig. (2-tailed)	.533	.959	.603	.020	.849	.000	.027	.	.	.	.000
	N	20	20	20	20	20	20	20	20	20	20	20
Qu6	Correlation Coefficient	.	.	.	.	.	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.	.	.	.	.	.
	N	20	20	20	20	20	20	20	20	20	20	20
Qu7	Correlation Coefficient	.068	-.131	-.018	.510*	-.420	.883**	.377	.	.813**	.	1.000
	Sig. (2-tailed)	.777	.582	.940	.021	.065	.000	.101	.	.000	.	.
	N	20	20	20	20	20	20	20	20	20	20	20
Qu8	Correlation Coefficient	.018	-.151	.334	.241	.041	.594**	.463*	.	.561*	.	.635**
	Sig. (2-tailed)	.940	.525	.150	.306	.863	.006	.040	.	.010	.	.003
	N	20	20	20	20	20	20	20	20	20	20	20
Qu9	Correlation Coefficient	-.010	-.310	.292	.317	-.091	.774**	.421	.	.642**	.	.720**
	Sig. (2-tailed)	.967	.184	.212	.173	.702	.000	.064	.	.002	.	.000
	N	20	20	20	20	20	20	20	20	20	20	20
Qu10	Correlation Coefficient	-.077	-.266	.201	.381	-.066	.733**	.472*	.	.716**	.	.693**
	Sig. (2-tailed)	.746	.257	.395	.097	.781	.000	.035	.	.000	.	.001
	N	20	20	20	20	20	20	20	20	20	20	20

Qu1	Correlation											
1	Coefficient	-.083	-.273	.107	.481*	-.298	.669**	.427		.559*		.634**
	Sig. (2-tailed)	.727	.244	.654	.032	.203	.001	.060		.010		.003
	N	20	20	20	20	20	20	20	20	20	20	20
Qu1	Correlation											
2	Coefficient	-.066	-.210	.205	.342	-.346	.608**	.402		.423		.690**
	Sig. (2-tailed)	.782	.374	.386	.140	.135	.004	.079		.063		.001
	N	20	20	20	20	20	20	20	20	20	20	20
Qu1	Correlation											
3	Coefficient	-.011	-.167	.255	.517*	-.419	.787**	.316		.590**		.820**
	Sig. (2-tailed)	.964	.481	.279	.020	.066	.000	.175		.006		.000
	N	20	20	20	20	20	20	20	20	20	20	20
Qu1	Correlation											
4	Coefficient	.229	.211	-.148	-.291	-.053	-.382	-.394		-.408		-.376
	Sig. (2-tailed)	.331	.371	.534	.214	.826	.097	.086		.074		.102
	N	20	20	20	20	20	20	20	20	20	20	20
Qu1	Correlation											
5	Coefficient	.391	.246	-.400	-.169	-.032	-.221	-.227		-.076		-.074
	Sig. (2-tailed)	.088	.296	.080	.476	.893	.348	.335		.750		.756
	N	20	20	20	20	20	20	20	20	20	20	20
Qu1	Correlation											
6	Coefficient	-.152	-.258	.050	.276	-.087	.435	.392		.453*		.516*
	Sig. (2-tailed)	.522	.272	.834	.239	.715	.055	.087		.045		.020
	N	20	20	20	20	20	20	20	20	20	20	20
Qu1	Correlation											
7	Coefficient	.316	-.218	.000	.000	.000	.175	.000		.000		.000
	Sig. (2-tailed)	.174	.355	1.000	1.000	1.000	.459	1.000		1.000		1.000
	N	20	20	20	20	20	20	20	20	20	20	20

#### Correlations

			Qu8	Qu9	Qu10	Qu11	Qu12	Qu13	Qu14	Qu15	Qu16	Qu17
Spearman's rho	Gender	Correlation Coefficient	.018	-.010	-.077	-.083	-.066	-.011	.229	.391	-.152	.316
		Sig. (2-tailed)	.940	.967	.746	.727	.782	.964	.331	.088	.522	.174
		N	20	20	20	20	20	20	20	20	20	20
Age		Correlation Coefficient	-.151	-.310	-.266	-.273	-.210	-.167	.211	.246	-.258	-.218
		Sig. (2-tailed)	.525	.184	.257	.244	.374	.481	.371	.296	.272	.355
		N	20	20	20	20	20	20	20	20	20	20
Ethnic		Correlation Coefficient	.334	.292	.201	.107	.205	.255	-.148	-.400	.050	.000
		Sig. (2-tailed)										

	Sig. (2-tailed)	.150	.212	.395	.654	.386	.279	.534	.080	.834	1.000
	N	20	20	20	20	20	20	20	20	20	20
Degr ee	Correlation Coefficient	.241	.317	.381	.481*	.342	.517*	-.291	-.169	.276	.000
	Sig. (2-tailed)	.306	.173	.097	.032	.140	.020	.214	.476	.239	1.000
	N	20	20	20	20	20	20	20	20	20	20
Qu1	Correlation Coefficient	.041	-.091	-.066	-.298	-.346	-.419	-.053	-.032	-.087	.000
	Sig. (2-tailed)	.863	.702	.781	.203	.135	.066	.826	.893	.715	1.000
	N	20	20	20	20	20	20	20	20	20	20
Qu2	Correlation Coefficient	.594**	.774**	.733**	.669**	.608**	.787**	-.382	-.221	.435	.175
	Sig. (2-tailed)	.006	.000	.000	.001	.004	.000	.097	.348	.055	.459
	N	20	20	20	20	20	20	20	20	20	20
Qu3	Correlation Coefficient	.463*	.421	.472*	.427	.402	.316	-.394	-.227	.392	.000
	Sig. (2-tailed)	.040	.064	.035	.060	.079	.175	.086	.335	.087	1.000
	N	20	20	20	20	20	20	20	20	20	20
Qu4	Correlation Coefficient	.	.	.	.	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.	.	.	.	.
	N	20	20	20	20	20	20	20	20	20	20
Qu5	Correlation Coefficient	.561*	.642**	.716**	.559*	.423	.590**	-.408	-.076	.453*	.000
	Sig. (2-tailed)	.010	.002	.000	.010	.063	.006	.074	.750	.045	1.000
	N	20	20	20	20	20	20	20	20	20	20
Qu6	Correlation Coefficient	.	.	.	.	.	.	.	.	.	.
	Sig. (2-tailed)	.	.	.	.	.	.	.	.	.	.
	N	20	20	20	20	20	20	20	20	20	20
Qu7	Correlation Coefficient	.635**	.720**	.693**	.634**	.690**	.820**	-.376	-.074	.516*	.000
	Sig. (2-tailed)	.003	.000	.001	.003	.001	.000	.102	.756	.020	1.000
	N	20	20	20	20	20	20	20	20	20	20
Qu8	Correlation Coefficient	1.000	.808**	.791**	.605**	.778**	.577**	-.267	-.266	.705**	-.127
	Sig. (2-tailed)	.	.000	.000	.005	.000	.008	.255	.256	.001	.592
	N	20	20	20	20	20	20	20	20	20	20
Qu9	Correlation Coefficient	.808**	1.000	.882**	.710**	.772**	.744**	-.434	-.254	.534*	.205
	Sig. (2-tailed)	.000	.	.000	.000	.000	.000	.056	.281	.015	.387
	N	20	20	20	20	20	20	20	20	20	20



	N	20	20	20	20	20	20	20	20	20	20
Qu10	Correlation Coefficient	.791**	.882**	1.000	.823**	.719**	.714**	-.421	-.412	.500*	-.198
	Sig. (2-tailed)	.000	.000	.	.000	.000	.000	.065	.071	.025	.402
	N	20	20	20	20	20	20	20	20	20	20
Qu11	Correlation Coefficient	.605**	.710**	.823**	1.000	.763**	.768**	-.404	-.394	.504*	-.190
	Sig. (2-tailed)	.005	.000	.000	.	.000	.000	.077	.086	.023	.421
	N	20	20	20	20	20	20	20	20	20	20
Qu12	Correlation Coefficient	.778**	.772**	.719**	.763**	1.000	.723**	-.411	-.378	.751**	-.164
	Sig. (2-tailed)	.000	.000	.000	.000	.	.000	.072	.100	.000	.490
	N	20	20	20	20	20	20	20	20	20	20
Qu13	Correlation Coefficient	.577**	.744**	.714**	.768**	.723**	1.000	-.469*	-.272	.361	.000
	Sig. (2-tailed)	.008	.000	.000	.000	.000	.	.037	.245	.118	1.000
	N	20	20	20	20	20	20	20	20	20	20
Qu14	Correlation Coefficient	-.267	-.434	-.421	-.404	-.411	-.469*	1.000	.577**	-.414	.000
	Sig. (2-tailed)	.255	.056	.065	.077	.072	.037	.	.008	.069	1.000
	N	20	20	20	20	20	20	20	20	20	20
Qu15	Correlation Coefficient	-.266	-.254	-.412	-.394	-.378	-.272	.577**	1.000	-.393	.419
	Sig. (2-tailed)	.256	.281	.071	.086	.100	.245	.008	.	.086	.066
	N	20	20	20	20	20	20	20	20	20	20
Qu16	Correlation Coefficient	.705**	.534*	.500*	.504*	.751**	.361	-.414	-.393	1.000	-.180
	Sig. (2-tailed)	.001	.015	.025	.023	.000	.118	.069	.086	.	.447
	N	20	20	20	20	20	20	20	20	20	20
Qu17	Correlation Coefficient	-.127	.205	-.198	-.190	-.164	.000	.000	.419	-.180	1.000
	Sig. (2-tailed)	.592	.387	.402	.421	.490	1.000	1.000	.066	.447	.
	N	20	20	20	20	20	20	20	20	20	20

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).