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The influence of key risk indicators on managers' behaviour within the financial industry in South Africa

Tracie Lee McCabe

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Johannesburg, 2012

ABSTRACT

There is currently no significant research that explores the influence that key risk indicators (KRIs) have on managers' goal setting behaviours in the financial industry in South Africa. A tremendous amount of research has been conducted on both KRIs as a formal operational risk monitoring tool and on managers' goal setting behaviours; however, there is limited literature that explores this relationship. As a result, senior management and Operational Risk Managers are unaware of the constructs that affect this dynamic which limits their ability to cultivate or maintain an acceptable risk profile, one which would propel an organisation forward in its pursuit to remain sustainable and profitable while also adhering to regulatory obligations.

This research report aims to provide clarity to senior management and Operational Risk Managers on the influence that KRIs have on managers' goal setting behaviours.

A manifest and content analysis was conducted on the responses obtained from an in-depth semi-structured interview process. It involved 15 respondents who were all managers responsible for the management of KRIs within their respective business units at Investec Bank Limited. The constructs identified during the literature review were explored to provide an understanding of their influence the KRIs and on managers' subsequent goal setting behaviours.

The research findings indicated that some constructs considered had an influence on managers' KRI process and goal setting behaviours. All constructs are discussed in depth in Chapter four of this research report.

The key message of this report is that financial institutions should continuously consider all the constructs that were investigated and align their internal KRI process. This is to ensure they reap the full benefits of the ORM process in their quest to manage their risk profiles more effectively. The findings of this research report will assist managers in leveraging their risk management tool to better

manage organisational risk profiles. By realising the full benefits of a sophisticated risk management framework, all depositors, debtors, shareholders and clients are protected and the stability and effectiveness of the financial system considerably enhanced.

DECLARATION

I, Tracie Lee McCabe, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Tracie Lee McCabe

Signed at ……

On the …….. day of …… 2012

DEDICATION

This research report is dedicated to all managers who are involved in the implementation of KRIs and who are attempting to extract the greatest value from the process, particularly by encouraging employees to mitigate risk exposures through the use of goal setting.

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I would like to acknowledge and thank my supervisor Rasoava Rijamampianina for his time, dedication and guidance as I completed this final milestone of my MBA. His positive attitude and energy was a huge motivational factor during this lengthy process. He is a man of wisdom who takes pleasure in developing others and his dedication to this profession is remarkable.

Thank you to everyone that works at Wits Business School for maintaining a world class institution and curriculum. A special acknowledgement to all the highly qualified lecturers who spend their time sharing their impeccable academic and business knowledge.

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CHAPTER 1: INTRODUCTION

1.1 Purpose of the study

The purpose of this research report is to explore the influence that key risk indicators (KRIs), a formal technique used in operational risk monitoring, have on managers' behaviour in relation to goal setting within the financial industry in South Africa.

1.2 Context of the study

The last decade has been marked by a significant degree of change, and in some instances turmoil, on the political, economic, sociological, technological and environmental front (BBC 2008; IMF 2009; Roubini 2009; Weinberg 2010; CBC 2011; Gibbs 2011; Kollewe 2011; Manhire 2011; Norris 2011; Ross 2011; Taylor 2011; Weaver 2011). Recent events such as the global recession that emanated in the United States, the increasing number of natural disasters, for example the earthquake and tsunami in Japan, terrorist attacks (as witnessed in countries like Moscow) and political unrest - in Egypt and Libya, for instance, have put the sustainability of economies and subsequently organisations into jeopardy (IMF 2009; Roubini 2009; Warner 2009; Weinberg 2010; CBC 2011; Gibbs 2011; Kollewe 2011; Manhire 2011; Norris 2011; Ross 2011; Taylor 2011; Weaver 2011). Such major events have placed organisations under a tremendous amount of strain, particularly financially, with a fair number having been culled from the marketplace (BBC 2008; Gordy and Hughes 2008; Warner 2009; Weinberg 2010).

In difficult conditions and an ever increasing regulatory environment, organisational strategies are more essential than ever in ensuring economic success and sustainability (FSB 2009; Inman 2009; BIS 2011). This is the reason why all the risks within a bank (operational, credit, market, legal and liquidity risk) require close management and monitoring (FSB 2009). This paper

specifically considered the operational component of risk inherent in every organisation. Operational Risk Management (ORM) is a relatively new concept for most banks and has historically been viewed as a secondary risk, so receiving very little attention (Davies 2005; Kraujalis, Karpavičienė and Cvilikas 2006). This, however, is changing dramatically as it becomes one of the most important and prevalent risks affecting banking activities and consequently requires proactive management (Kraujalis et al. 2006; Kallenberg 2007; BIS 2011).

In 2010, the Basel Committee on Banking Supervision published a paper, Principles for Enhancing Corporate Governance, containing recommendations for banks on sound corporate governance practices. The paper outlined the basic principles that should be adopted by financial institutions when evaluating and improving their respective governance frameworks. Specifically, principle five alluded to senior managements' involvement and promotion thereof in the management of risk within the organisation; principle six referred to the need for institutions to have an effective internal control system and risk management function; and principle seven highlighted the need for risks to be identified and monitored (BIS 2011). Regular monitoring of organisational risk profiles includes the escalation of material exposures, losses and pertinent information to the Board of Directors and senior management (BIS 2011). The Basel Committee for Banking Supervision further proposed that risk monitoring was quantitative and qualitative in nature and both forward looking and an indication of current exposures (BIS 2011). This is all in support of proactive risk management strategies to effectively manage the risk profile of the organisation and pre-empt any direct and indirect threats by planning accordingly (Breden 2008; Anon 2010a; BIS 2011). The increasing degree of attention ORM has received has resulted in the formalisation and improvement in measurement of ORM (Kraujalis et al. 2006; Kallenberg 2007; Breden 2008; Rochette 2009; Tice 2011).

Research indicates that one of the challenges is that there is no portfolio of defined operational risks (Breden 2008; BIS 2011). Organisations are affected

by an array of changing business processes and threats in both the internal and external environment (Talavera 2004; Kraujalis et al. 2006; Breden 2008). Another challenge faced by managers is the difficulty experienced in determining the operational exposure faced by an organisation. Events such as fraud and system failures make it very difficult to determine exposure as an exact science, based on the fact that the future is unknown (Kraujalis et al. 2006; Breden 2008). Challenges such as these make it increasingly important for organisations to influence employee and managers' behaviours towards ORM in a positive manner to ensure self-adequacy (Kraujalis et al. 2006; Breden 2008).

Manager and employee understanding of ORM is fundamental in instituting multiple levels of control and a higher level of security (Gordy and Hughes 2008; Hain 2009). An increasing trend of operational losses has been witnessed over the years, particularly in the banking sector (Kraujalis et al. 2006; Kallenberg 2007; Association 2009; Hain 2009). The human factor is responsible for the majority of these operational failures that resulted in subsequent losses (Association 2009; Hain 2009). Provision is made for operational losses in any business, but employee behaviour should be driven by the acceptable level of losses, as indicated in an organisation's risk appetite or tolerance policies set by its Board and senior management. Core competencies remain distinctive when skills and risk conscious behaviours are leveraged through efficient capabilities (Maria 2009).

Organisations and their respective operational structures are becoming increasingly complex (Maria 2009; Petria and Petria 2009). It is therefore of the utmost importance that operational risk is quantified to understand and manage short term profits and long term sustainability. This is all underpinned by perpetuating the correct behaviours from employees with risk conscious mind sets and appropriate goal setting. The move away from stringent rules and regulations to market discipline increases the requirement for appropriate behaviour (BIS 2001a, 2003b, 2003c, 2005; Jobst 2007; Kallenberg 2007; BIS 2009). Awareness of environmental and social risk factors, including

sustainability issues, and a shift from a consensual risk approach to a more deliberative mode of risk management, continue to take place (Jobst 2007; Kallenberg 2007). Increasing regulations and responsibilities are being imposed on financial institutions although these are guidelines rather than prescriptive rules (Jobst 2007; Kallenberg 2007; BBC 2008; FSB 2009; Inman 2009; Unhold 2010).

The need for employee understanding of risk and importance of communication thereof is stressed in the business context (BIS 2001b; Kraujalis et al. 2006; Association 2009). This research was therefore designed to provide the reader with an understanding of the influence that operational risk monitoring tools, specifically KRIs, have on managers' goal setting behaviours to more effectively manage operational risk.

1.3 Problem statement

Explore the influence that KRIs, a formal operational risk monitoring technique, have on managers' behaviour in relation to goal setting within the financial industry in South Africa.

1.4 Significance of the study

This study fills a gap in that there is currently no significant research that explores the influence that KRIs have on employees and, more specifically, managers' goal setting behaviours in the financial industry in South Africa (Close 1986; Rundmo 2001; Davies 2005; Scandizzo 2005; Tice 2011). A tremendous amount of research has been conducted on operational risk as a discipline and KRIs as a monitoring tool; however, there is limited research focusing on the influence that ORM or KRIs have on managers' goal setting behaviours (Breden 2008; Maria 2009; Rodriguez and Edwards 2009; Huebner

2011). A critical success factor in the perpetual transformational alignment to environmental changes entails continuous learning to ensure a risk conscious mind set for higher consolidation, coordination and decision making (Gordy and Hughes 2008; Rodriguez and Edwards 2009).

It can be deduced that organisations, through non-voluntary regulation, implement risk governance structures although a question remains around proactive adoption of these structures when examining managers' goal setting behaviours.

This research report will add value by providing insight into this far reaching business problem. The study aims to provide clarity for senior management and Operational Risk Managers in their pursuit to cultivate a risk conscious corporate culture that integrates into - and aligns with - other business strategies. In particular, it will assist managers by highlighting the importance of goal setting behaviours in relation to risk exposures. Relevant stakeholders will be better able to plan and align the objectives of the organisation to ensure the best possible outcomes. Critical considerations of the outcomes will provide for better goal setting, planning and strategy implementation, leading to a reduction in operational failures and losses.

1.5 Delimitations of the study

The study only addressed an organisation's KRIs as a formal monitoring technique of the operational risk environment. The study excluded the other techniques such as risk and control self-assessments, loss database monitoring or analysis and scenario planning (Breden 2008; Petria and Petria 2009).

Although all risk disciplines are intertwined, this study did not consider the implications of credit, market, legal or liquidity risk within the organisation (Petria and Petria 2009; Rochette 2009; Hull 2010).

The research was conducted in the financial industry at Investec Bank Ltd, across all relevant business pillars. The sample excluded all managers not permanently employed in the Johannesburg office of South Africa. Only managers with previous exposure to KRIs were considered for interviewing purposes.

Cross-sectional research was conducted during the study therefore a longitudinal approach was not adopted.

Managers' behaviour is influenced by a number of factors including personal judgements and perceptions, the need for fulfilment, rewards and sanctions, organisational culture, leadership styles and goal setting. For the purposes of this research report, only goal setting was considered in detail.

1.6 Definition of terms

Operational Risk Management (ORM): Investec adopts the Basel definition of operational risk as defined by the Bank for International Settlements (BIS). Operational risk is therefore defined as "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events" (BIS 2001b; 2009a).

Manager: for the purpose of this research report, a manager at Investec was deemed to be an individual responsible and accountable for the management of risk within his/her respective business unit, regardless of whether he/she managed people and/ or processes.

1.7 Assumptions

The following assumptions were made:

- The sample consisted of managers who had an understanding of risk management and who were in a position to control the degree of risk exposure in their business units. Any lack of knowledge or insight in this regard would have jeopardised the credibility of the study.

- Every respondent, to the best of their present knowledge, conveyed information in an honest and accurate manner. Any falsified information would have been detrimental to the outcomes and legitimacy of the study.

- An adequate number of respondents were interviewed. If there had been an insufficient number of respondents, the study would have been limited in its credibility and therefore not applicable to other jurisdictions or organisations.

- Respondents that formed part of the sample reflected general experiences of the environment within which they operate. Non-representative responses would have reduced the validity of the results and ability to generalise the outcomes. The outcomes would have represented a distorted picture.

- All valid results will continue to be relevant for as long as the phenomena investigated remains regular by following the same laws in all places at all times (Mcburney 2001b).

- All organisations, through non-voluntary regulation, implement risk governance structures. If an organisation has not implemented mandatory governance structures, then the findings of this paper cannot be generalised to apply to that organisation.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

This section contains a literature review on the key themes of relevance to this respective study. Firstly, context to the study is given through a brief overview of the regulatory environment and ORM within the financial industry. Each one of the operational risk monitoring techniques is described with focus given to the explanation of KRIs, the tool selected for the purposes of this research report. Secondly, consideration is given to managers' behaviour and the drivers thereof. The section concludes with the influence that KRIs have on managers' goal setting behaviour and a conclusion on the research proposition.

2.2. Operational risk monitoring techniques

2.2.1. Regulatory background

The Basel Committee for Banking Supervision focused on the analysis of possible regulations of banking activities and the associated optimal solutions, leading to the formulation of the standards of Basel II in 1999 (BIS 2003a; Kraujalis et al. 2006; Jobst 2007; BIS 2011). The Basel Committee released the first consultative document on operational risk in the first revision of Basel Capital Accord in January 2001 (see appendix c) (BIS 2003b; Jobst 2007). This document was subsequently followed by the Working Paper on the Regulatory Treatment of Operational Risk (BIS 2001b; Jobst 2007). In July 2002 the first draft implementation guidelines for Sound Practices for the Management and Supervision of Operational Risk were released (BIS 2003c; Jobst 2007). The standards of Basel II are gaining an increasing degree of relevance and significance within the financial industry (Jobst 2007; Breden 2008). Under the revisions for the New Basel Capital Accord (Basel II), together with the

International Convergence of Capital Measurement and Capital Standards, the regulatory guidance in Sound Practices for the Management and Supervision of Operational Risk and the Working Paper on the Regulatory Treatment of Operational Risk, the Committee established a regulatory operational risk capital framework called the New Advanced Capital Adequacy Framework (BIS 2001b, 2003c, 2005; Jobst 2007; BIS 2009, 2011). These publications formed the foundation for the regulatory framework for ORM and provide a robust mandate for financial institutions to identify, measure, evaluate, control and manage their operational risks (BIS 2001a, 2003a; Kraujalis et al. 2006; Jobst 2007; BIS 2011). These guidelines provide a structural base in which organisations can effectively develop ORM frameworks (Kraujalis et al. 2006; BIS 2011).

Research conducted over a four-year period between 1994 and 1998 indicated that the operational losses suffered by financial institutions totalled over $100 billion, the largest from a Japanese institution equating to $2.6 billion (Kraujalis et al. 2006). Additional data obtained from the Operational Risk eXchange (ORX) indicated the total number of risks incidents in their database equated to 142,041 with a gross loss value equating to approximately €47 billion from 52 members from 18 different countries (see Appendix D) (ORX 2009). These figures painted a grim picture of the magnitude of losses suffered in the financial industry and highlighted the need for effective ORM. The losses and consequences should therefore perpetuate the drive to reduce operational risk exposures.

ORM is not always seen as a function that adds value to an organisation; however, losses indicate that unmonitored operations are extremely expensive and unpredictable and could potentially result in significant losses affecting the sustainability of the organisation (Chitakornkijsil ; Kraujalis et al. 2006; Nilniyom and Ussahawanitchakit 2009). Supervision by the regulators attempt to safeguard the financial industry therefore providing far reaching benefits by protecting all depositors, debtors, shareholders, clients and the stability and effectiveness of the financial system (Kraujalis et al. 2006; Kallenberg 2007).

2.2.2. Operational risk management

While operational risk has been clearly defined for all employees and managers at Investec, a literature review reveals that there is no consensus on an agreed upon definition in the financial industry (BIS 2001a; Kraujalis et al. 2006; Breden 2008; Eugenia-Ana 2009; Petria and Petria 2009). The majority of organisations have adopted the Basel Committee's definition of operational risk as "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events" (BIS 2003c; Kraujalis et al. 2006; Jobst 2007; Gordy and Hughes 2008). It is important to note that this definition includes legal risk but excludes strategic and reputational risk (BIS 2003c). Operational risk is the risk inherent in any business process or set of functions (Kraujalis et al. 2006; Jobst 2007; Kallenberg 2007; Breden 2008).

ORM is an integrated cyclical process framework in which risks are identified and assessed, and control measures selected, implemented and continuously monitored (Maria 2009; Anon 2010b). ORM is therefore core to the success and sustainability of an organisation's operations. Organisations are required to develop their own tailored framework, not purely for compliance, but also to leverage the effectiveness of their operations to better guide employee decisions, thereby improving the overall risk culture (Kraujalis et al. 2006; Rochette 2009). The aim of ORM is to determine the optimal level of loss that a business is willing to accept (the organisation's risk appetite) versus the cost of implementing controls (see Appendix E) (Breden 2008; Hain 2009; Maria 2009).

ORM is largely driven by the application of consistent and effective risk management frameworks that will assist organisations achieve their set objectives, reduce their costs due to failures and translate this input into superior performance by improving client experience and bottom line profitability (Kraujalis et al. 2006; Kallenberg 2007; Rochette 2009; Anon 2010b). In addition, aligned to the implementation of the Basel II Accord, enhanced risk management processes can reduce capital requirements thereby increasing the cash flow in the organisation and ability to reinvest and/ or reward shareholders

(King, Marks Jr and McCoy 2002; Kraujalis et al. 2006; Anon 2010b). All stakeholders, including clients, employees and shareholders, are protected when the operations of an organisation are well controlled and there is stability in the financial sector (Kraujalis et al. 2006; Rochette 2009).

The core components of an operational risk framework include good corporate governance whereby the Board of Directors defines key objectives for the organisation and oversees progress towards achieving these objectives in the context of an overall ORM strategy (Hain 2009; Rochette 2009; Anon 2010b). Effective risk begins with management and needs to be driven through the organisation in order to enhance compliance, competitiveness and performance (King et al. 2002; BIS 2003c; Anon 2010b). The best protection any organisation has against failure is the embedding of a risk culture in its people and processes (BIS 2003c; Jobst 2007; Rochette 2009; Anon 2010b; Mongiardino and Plath 2010). At the core of this culture would be individual rewards calculated on the outcome of the balance between risk and return (Maria 2009; Rochette 2009; Anon 2010b; Mongiardino and Plath 2010).

The benefits of ORM are almost unquantifiable. Roles and responsibilities and the associated accountabilities are more clearly defined; key risk exposures are continuously monitored and appropriate action taken where necessary; capital allocation is more efficient; reporting capabilities improve; a risk culture is embedded; continuous learning takes place; and the organisation becomes a better controlled environment (Jobst 2007; Hain 2009; Rochette 2009; Anon 2010b; Mongiardino and Plath 2010). The benefits of ORM increase organisational effectiveness and decrease the probability of the occurrence of major loss incidents (Kraujalis et al. 2006; Rochette 2009).

2.2.3. Definition of operational risk monitoring techniques

Organisations are required to monitor their risk profiles, usually completed through the use of operational risk monitoring techniques. These techniques include KRIs, risk and control self-assessments, loss data and scenario planning (Davies 2005; Breden 2008; Gordy and Hughes 2008; Rippel 2010; Whipple 2010; Huebner 2011). The purpose of operational risk monitoring is to eliminate or reduce the levels of risk exposure within an organisation and to avoid high impact incidents (Kraujalis et al. 2006; Breden 2008; Hain 2009; Maria 2009; Whipple 2010). This research report explored the influence that KRIs have on managers' goal setting behaviours specifically as these metrics are a fundamental requirement for banking institutions worldwide in order to progress onto the advanced measurement approach (AMA) (Davies 2005; Scandizzo 2005; CEBS 2006; Hain 2009). Regulators of financial sectors apply a tremendous amount of pressure for banking institutions to progress onto this approach as it is evidence of sophisticated methods of monitoring of risk profiles (Davies 2005; Scandizzo 2005; CEBS 2006; Hain 2009). The AMA is associated with numerous benefits, including the reduction of capital holding requirements (Davies 2005; Scandizzo 2005; CEBS 2006; Hain 2009).

2.2.4. Key risk indicators

A risk indicator is a metric that is used to track risk exposures and losses on a regular basis (Davies 2005; Scandizzo 2005; Tice 2011). KRIs are measurable elements of an organisation's activity and have a direct correlation to the levels of risk within the organisation (Davies 2005; Scandizzo 2005). KRIs are indicators of whether an organisation's level of risk exposure is increasing or decreasing (Davies 2005; Breden 2008; Anon 2010b). These indicators can be compared to a fuel gauge in a motor vehicle. The fuel gauge continuously monitors the level of fuel in the vehicle (risk exposure) and when the levels

become too low, a warning light comes on prompting an action. In this instance the driver would make his way to a fuel station to fill up his tank to return it to an acceptable level, much in the same way a manager would act to bring the risk exposure back under control. If the warning light is ignored the vehicle will eventually start to use the fuel in the reserve tank and ultimately break down. If managers do not react to the warning signs of their KRIs they may suffer losses, either financial and/or non-financial. In the worst case scenario, all capital reserves are used because the risk is not addressed or mitigated and ultimately the organisation fails.

An indicator is considered to be “key” if it tracks key or material operational risk exposures (Davies 2005; Scandizzo 2005; Anon 2009b). A KRI can measure a generic or common organisation risk exposure, for example, the number of client complaints received within a given period, or it can track department specific key risk exposures, for example the number of foreign exchange trades booked incorrectly (Davies 2005; Breden 2008). Changes in a KRI act as an alert for immediate remedial action by the manager or employee (Scandizzo 2005; Breden 2008; Anon 2010b).

There is often an overlap between KRIs and key performance indicators (KPIs). In certain circumstances, a KRI for a risk manager or senior management is often a KPI for the business unit manager (Davies 2005). Davies et al (2005) state that the definition of a KRI and a KPI is based on the user’s perspective, therefore undoubtedly leading to an overlap in definitions.

In the development of KRIs managers assign exposure ranges or thresholds, each with a different level of associated action and escalation. Typically a KRI will have a low range in which no action is required as risk exposure is at an acceptable level; a medium range which will prompt some form of action and start to raise concerns in terms of the risk exposure; and lastly, a high range which is an immediate trigger for action resulting in immediate mitigation and escalation to management (Davies 2005; Scandizzo 2005; Anon 2009b). The ranges or thresholds are set by management and are a reflection of

management's risk appetite (Davies 2005; Scandizzo 2005; Anon 2009b; Tice 2011). Research indicates that the financial services industry regulators are starting to express more interest in KRIs as an important management tool (Davies 2005). Research also indicates, however, that many organisations have failed in their attempts to successfully implement KRIs and not reaped the full benefits thereof due to the challenges faced (Davies 2005; Tice 2011).

KRIs serve the purpose of early pre-warnings of a risk exposure and potential risk events including financial losses and non-financial exposures (Anon 2009b, 2010b). KRIs can be used as a powerful management information, reporting, escalation and benchmarking tool (Davies 2005; Anon 2010b). KRIs provide a common risk language and monitoring structure (Davies 2005; Scandizzo 2005). In this respect, KRIs are lagging (detective control), leading (preventative control) or current (snapshot of the current landscape) and they are a good indicator of a trend (Davies 2005; Scandizzo 2005). If KRIs are implemented correctly, they provide quasi-real time information that no other risk measurement tool is able to (Davies 2005; Scandizzo 2005).

The benefit of the effective embedding and regular monitoring of KRIs is the early detection of an intolerable risk exposure and incident management (Davies 2005; Anon 2009b, 2010b). Should a KRI be reported after the event has taken place, it does not allow action to be taken to mitigate or better control the risk (Davies 2005; Breden 2008). This limitation makes the reviewing of trends a very important element of KRI monitoring. Investment in KRIs has many benefits including the concrete communication of the organisation's risk appetite, the optimisation of risk and return and the likely increase in attaining business objectives (Davies 2005; Breden 2008; Hain 2009). Key operational risk exposures are quickly identified, quantified, monitored and controlled. The organisation is able to more effectively evaluate control environment effectiveness and inherent risk exposures, thus driving positive behaviour and further embedding the risk culture (Hain 2009; Rochette 2009; Anon 2010b). Operational risk capital can be more effectively allocated as management has access to enhanced risk intelligence or information (Anon 2010b). KRIs quantify

risks in an objective manner and so offer both managers and shareholders the opportunity to rely on management information to determine a best-practice course of action (Breden 2008; Maria 2009). The organisation as a whole moves beyond mere compliance and reaps the full benefits of the ORM framework and gains senior management support (Anon 2010b).

KRIs are objective measures of the control environment and are present in an auditable format (Davies 2005; Scandizzo 2005; Breden 2008; Maria 2009). They allow for the assessment of the risk on many levels, for example location, business unit, product line etc (Davies 2005; Scandizzo 2005; Breden 2008; Maria 2009).

KRIs form the basis for the escalation of risk intelligence to management on a tactical (day-to-day activities) and corporate level (Davies 2005; Breden 2008). KRIs can be used by a variety of internal and external stakeholders in addition to risk managers and senior management. Regulators and supervisors can glean comfort in the capital allocation process through the use of such metrics, rating agents who utilise the information for comparative metric in their own model and methodologies and auditors (internal and external) as they immediately gain an understanding of the risk exposures and levels of corporate governance (Davies 2005; Hain 2009). Through sophisticated analytical tools, future risk exposures and trends can be identified (Davies 2005; Hain 2009; Maria 2009).

The implementation of KRIs is not without its challenges. Literature indicates that the acceptance of KRIs as a risk management tool has been slow in certain circumstances as these metrics do not have a reliable proven record of predicting losses (Davies 2005; Breden 2008). There are a lot of inconsistencies in the manner in which business units track their KRIs (Davies 2005; Scandizzo 2005). A business unit may, for example, track the same metric but its naming convention is different or it may not track it as a specific risk because it is not deemed to be key or it is immeasurable (Davies 2005; Scandizzo 2005). It is a challenge to develop KRIs that are consistent, relevant,

transparent and complete (Davies 2005; Scandizzo 2005). Lastly, the literature indicated that it is difficult to aggregate, benchmark, compare and systematically analyse because the specifications are incomplete or inaccurate (Davies 2005). Research alludes to there being a lack of systemic measurement of operational risk. While organisations may have operational risk data and reports, very few have completed the Basel II quantification requirements (Davies 2005; Anon 2010b).

2.2.5. Overview of the other existing techniques

2.2.5.1. Loss data analysis

One of the earliest forms of risk exposure monitoring in ORM took place in the form of loss data analysis (Garrity 2007; Breden 2008; Huebner 2011). Organisations develop processes to collect information on actual losses and near losses which enables the analysis of the impact of a particular risk and to identify where relevant controls or corrective action need to be put into place (Garrity 2007; Breden 2008; Whipple 2010; Huebner 2011). Loss data allows an organisation to monitor its losses versus its set risk tolerance levels (Garrity 2007; Breden 2008). Key parameters that drive losses can be identified and stress tested to identify if a loss event can exceed the set tolerance levels and the necessary remedial actions identified and implemented (Garrity 2007; Breden 2008; Huebner 2011).

The limitation of loss data analysis is that it represents past incidents. More often than not, the risk exposure or incident has been mitigated by the time a report has been published (Davies 2005; Breden 2008; Huebner 2011). A loss database provides limited insight into the low-probability, high-impact losses that an organisation may be exposed to (Breden 2008). These are risk incidents that the organisation would be reluctant to accept and wish to avoid given the

degree of their impact. Loss data has to be accurate and complete in order to add value to any form of analysis (Davies 2005; Breden 2008; Huebner 2011).

2.2.5.2. Risk and control assessments

The purpose of a risk and control assessment is to identify inherent risks that exist within the operations of an organisation (Kraujalis et al. 2006; Breden 2008; Hain 2009). This assessment is often conducted through the harnessing of the workforce's knowledge of the risks at a people, process and system level and identifies external exposures and threats (Kraujalis et al. 2006; Breden 2008; Hain 2009). Risk and control assessments are conducted on a continuous basis as the environment is constantly subject to change thereby affecting the risk exposures (Kraujalis et al. 2006; Breden 2008). These assessments identify new risks, increased risk exposures and reflect where control enhancements have been introduced to reduce the risk exposure. The assessments also allow individuals to develop a shared and common understanding of the environment and governance requirements (Anon 2008; Breden 2008). The organisation is able to monitor any variations within the risk environment thereby identifying instances where risk tolerance levels have been exceeded; it can then determine what action plans need to be put into place (Breden 2008). Self-assessments also serve as a reminder to all employees of the control requirements and compliance standards and form an input into strategic decision making and enhanced business performance (King et al. 2002; Anon 2008; Breden 2008).

The challenge with risk and control assessments is that they are a snapshot of the environment at a point in time, often only amended after a trigger event or audit (Davies 2005; Breden 2008). Assessments are not updated on an ongoing basis meaning environmental changes and trends cannot be monitored though the use of this tool (Davies 2005). Furthermore, completing a risk assessment is a time-consuming process, although there are a number of techniques that can

be used to reduce the amount of time taken to complete this exercise (Davies 2005; Anon 2008; Breden 2008). Research indicates that when completing a risk self-assessment, the employees completing the assessment often overestimate their personal abilities and underestimate their risk exposures. Peers and/ or qualitative information would provide a more accurate picture of current risk exposures (McKenna and Myers 1997). This risk can be reduced through holding individuals accountable for the information they give during their risk assessments (McKenna and Myers 1997).

2.2.5.3. Scenario analysis

Scenario analysis is a tool utilised to predict and quantify future risk exposures through the use of, amongst other inputs, the above mentioned techniques (Alderweireld, Garcia and Léonard 2006; CEBS 2006; Kraujalis et al. 2006; Jobst 2007; Mays 2009; Rippel 2010). Stress testing and scenario analysis of loss events is a proactive approach in pre-empting possible future loss events so the appropriate controls can be established and monitored (Davies 2005; CEBS 2006).

While scenario analysis can be an effective tool in predicting changes in the control environment or potentially identifying risk exposures of great magnitude (through the use of risk information), it is a complex and farfetched tool (Davies 2005; Alderweireld et al. 2006; CEBS 2006). Exposures are not always quantifiable proving to often be unreliable (Davies 2005).

Based on the characteristics, advantages and challenges of all the monitoring techniques, KRIs are seen to be the most effective tool to manage an organisation's risk profile: for this reason they were selected as the best method to investigate for the purposes of this research report.

2.3. Managers' behaviour

2.3.1. Managers' behaviours in relation to their psychographics

Managers' behaviour and the broader concept of organisational behaviour is a scientific discipline rooted in the goal of describing, understanding, predicting and controlling the phenomenon under consideration (Dipboye 1994; Newstrom 2002). Analysis can take place at many levels, from an individual, interpersonal, small group or intergroup level, to the holistic system level (Dipboye 1994; Newstrom 2002). The dynamics and interplay at the various levels differ. This research report focused solely on the individual aspect of managers' behaviour and specifically goal setting behaviours, although it is noted that the other levels may have an impact on behaviour. The law of individuals states that all individuals are different from one another (Newstrom 2002; Markos and Sridevi 2010). Individuals perceive the world in a very different manner even when presented with the same objects or situation (Newstrom 2002; Markos and Sridevi 2010). Individuals observe, organise and interpret the world according to a mental framework they have built over the course of their lifespan due to exposure to different experiences and values (Newstrom 2002; Markos and Sridevi 2010). Managers act on the basis of their own perceptions of reality, which may also be context specific, leading to these individuals only paying attention to environmental elements consistent with their own expectations (Rundmo 2001; Newstrom 2002). Managers' perceptions consist of rational and emotional components (Dipboye 1994; Rundmo 2001; Newstrom 2002; Markos and Sridevi 2010). Managers' behaviour is thus influenced by many factors which are explored below, with particular focus given to the managers' goal setting behaviours.

2.3.2. Managers' goal setting behaviours

A goal is defined as "the objective or aim of one's actions" (Greenhaus, Callanan and Godshalh 2000). The setting of goals by a manager for an individual acts as a motivational tool when they are accepted by that individual and are specific and measurable with continuous constructive feedback given (Dipboye 1994; Covey 1999; Greenhaus et al. 2000). Goal setting is a cognitive theory that views individuals as rational and active processors of information with the purpose of developing conscious intentions directed toward the attainment of goals (Dipboye 1994). The belief in, and acceptance of, goals and their measurement capabilities encourages the correct behaviours: these include spurring higher levels of effort, focus and direction to the effort exerted; higher levels of persistence; helping the development of useful strategies to accomplish set tasks; and cementing opportunities for feedback on task performance (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; Newstrom 2002). Such behaviours are essential in any organisation when attempting to mitigate intolerable levels of risk or any other goals (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; Newstrom 2002; Davies 2005).

One of the principles in harnessing the science of persuasion was published in the Harvard Business Review (2001) highlighted the importance of consistency and the alignment and public portrayal of goals set (Cialdini 2001). The research specifically noted that when an individual or manager had publically committed to a goal, that increased the likelihood of attaining the goal. Those individuals who do not publically commit to attaining goals may more easily change their direction or determine new goals (Cialdini 2001). This research thus indicates that goals are important in mobilising individuals, business units and organisations to achieve common and aligned outcomes and ultimately, success.

Goal setting and management by objectives (MBO) are tools frequently used by professionals and managers to establish clear and precise statements of

objectives, develop action plans to achieve the objectives, measure the achievement, take corrective action and establish new goals for the future (Dipboye 1994; Covey 1999; Byars and Rue 2000; Greenhaus et al. 2000; Newstrom 2002). The goal setting theory, although simplistic, suggests that specific and difficult goals directly correlate to higher degrees of performance than general and easy goals (Dipboye 1994). In order to ensure goals or a descriptive target towards which one aims, are effectively implemented, they should be quantifiable and measurable, challenging yet achievable, and expressed in a clear, concise and unambiguous manner (Dipboye 1994; Covey 1999; Byars and Rue 2000; Greenhaus et al. 2000). Active participation by all employees and managers is essential to the success of effective implementation of goals. The objectives or goals should provide an opportunity for the manager to discuss an employee's progress and allow for the modification of behaviour or the goal, where necessary (Byars and Rue 2000; Greenhaus et al. 2000). The achievement of goals should be monitored on a regular basis in order to increase the likelihood of achievement (Greenhaus et al. 2000). Goals may be defined by their time horizon by either being short term or long term in orientation. Long term goals require more flexibility given that the future is unknown (Greenhaus et al. 2000). The setting of goals facilitates self-awareness and encourages experimentation and creativity (Greenhaus et al. 2000).

The obstacles of goal setting can be overcome by ensuring a goal is closely aligned to the employee's own goals and values, that the negative impact on lifestyle is minimised, and that goals are not too vague (Dipboye 1994; Greenhaus et al. 2000). Alignment to values triggers a cognitive process in which the manager or employee evaluates the events against their own values (Dipboye 1994; Greenhaus et al. 2000). Goals should be flexible and neither too difficult nor too easy to attain (Greenhaus et al. 2000).

Managers' goal setting behaviours was therefore selected as the primary behaviour in relation to how they are influenced by KRIs. Goals have a direct

impact on the organisation, they are easily quantifiable and can assist managers and employees in achieving broader objectives and reducing risk exposures (Greenhaus et al. 2000; Davies 2005). Goals can facilitate improved self-awareness and encourage adoption of the achievement of broader business strategies (Greenhaus et al. 2000). Consistency can be more easily achieved by documenting what the manager and employee or team have agreed to strive towards (Cialdini 2001). Given the significance and benefits goal setting has on an organisation and the business problem identified, it was believed to be the most appropriate management behaviour to investigate in this research report.

2.3.3. Other drivers of managers' behaviour

Managers' behaviour is not solely driven by goal setting but includes a number of other factors including a manager's work ethic, his/her perception and judgements of risk, rewards and negative reinforcement, organisational culture, leadership styles and need for fulfilment. Although the influence of KRIs on these behaviours was not considered in this report, they are still important to consider as a driver of manager's behaviour.

2.3.3.1. Managers' work ethic

Managers are driven by their work ethic which is described as the importance of work relevant to all aspects of an individual's life and as being a desirable goal (Dipboye 1994; Newstrom 2002; Markos and Sridevi 2010). Typically individuals with a strong work ethic have higher levels of commitment to the organisation and its goals and at the same time derive personal satisfaction from the relationship and outputs (Dipboye 1994; Newstrom 2002; Markos and Sridevi 2010). Such individuals may identify with the bigger goal of an organisation's commitment to social responsibility (Markos and Sridevi 2010).

2.3.3.2. Risk perception and judgements

Risk perception and judgements may influence behaviour and decision making processes (Rundmo 2001; Small and Sage 2006). A manager's mental framework and value system will drive the manner in which risk is perceived and responded to. The more closely aligned the mental frameworks and value systems of a manager are, the more aligned perceptions and judgements become (Rundmo 2001; Newstrom 2002; Small and Sage 2006). If all employees perceive risk in a similar manner they will treat the results of the KRI outputs in the same manner, thereby instilling correct behaviours.

2.3.3.3. Rewards and negative reinforcement

Rewards and negative reinforcement as an element of performance management also drive behaviour through either providing favourable outcomes that encourage repetitive patterns of positive behaviour, or by discouraging certain behavioural patterns due to unfavourable consequences (Newstrom 2002; Hain 2009; Markos and Sridevi 2010). An individual's behaviour can be shaped or moulded through systemic and progressive positive reinforcements (Dipboye 1994; Newstrom 2002; Markos and Sridevi 2010). Rewards can also have a negative impact on the behaviour of an individual, team and manager as they can create destructive competitive behaviours (Dipboye 1994; Newstrom 2002; Markos and Sridevi 2010). Negative reinforcement can also lead to demotivated employees (Dipboye 1994; Newstrom 2002; Markos and Sridevi 2010). Managers need to ensure that reinforcement is implemented in the correct manner to aiviod the pitfalls for rewards or negative reinforcements.

2.3.3.4. Organisational culture

The effects of organisational culture on employee behaviour are difficult to establish due to conflicting research, although some evidence suggests that each organisation's unique culture may be a driver of employee behaviour (Dipboye 1994; Newstrom 2002). Research findings, however, do agree that an organisational culture results in a high degree of cooperation, communication, commitment and acceptance of decision making (Newstrom 2002). Cultures are relatively stable in nature as they develop over time into a pattern of communication, systems, procedures, mission statements, visions, stories and myths (Dipboye 1994; Newstrom 2002). Employees would naturally gravitate toward a culture that is similar to their values, belief systems and goals (Newstrom 2002). A clearly defined mission statement, vision and objectives drive managers' and ultimately employees' behaviour and are facilitated through the organisational culture. Motivational drivers are generally seen to be a by-product of an organisation's culture and assist in the achievement of goals and increased power (Newstrom 2002; Markos and Sridevi 2010).

Organisational culture has an influence on behaviour and it is therefore an important driver of risk conscious behaviours; however, an organisation's culture may also hamper the information flow of operational risks to the decision makers in a timely manner (Rundmo 2001; Rochette 2009; Tice 2011). If the appropriate risk conscious culture has been created, KRIs should be constantly monitored and acted upon (Davies 2005).

2.3.3.5. Managers' leadership style

A manager's leadership style is exhibited through a number of consistently applied philosophies, skills, traits and attitudes (Dipboye 1994; Newstrom 2002). A leadership style is observed by an employee and it drives motivation, power and orientation towards tasks and other individuals (Dipboye 1994;

Newstrom 2002; Markos and Sridevi 2010). Managers differ from other employees in that they are responsible for the management of all aspects of a particular business unit and the processes contained within. Inherently managers have a number of characteristics synonymous with identified leadership traits (Dipboye 1994; Newstrom 2002). They exude a particular amount of influence dependant on these factors (Dipboye 1994; Newstrom 2002). Leaders in conjunction with employees should set goals and objectives which also drive behaviour.

2.3.3.6. Need for fulfilment

There are numerous drivers of employees' and managers' behaviour including an individual's needs or the consequences that may result after a particular behaviour is displayed (Dipboye 1994; Newstrom 2002). In this respect, behaviour is driven by the need for fulfilment or the threat of reduced fulfilment behaviour is driven by the need for fulfilment or the threat of recduced fulfilment (Newstrom 2002). According to Maslow's Hierarchy of Needs Model and Herzberg's Two-Factor Model, an individual strives to achieve self-actualisation and fulfilment of needs and in the latter advancement recognition (motivational factors), which are secondary needs to the primary survival and basic needs (Dipboye 1994; Newstrom 2002; Markos and Sridevi 2010). These models relate to an individual's inner self and how needs drive behaviour (Dipboye 1994; Newstrom 2002; Markos and Sridevi 2010). Research indicates that there is a direct positive correlation between employee engagement and organisational performance which includes retention, productivity, profitability and loyalty (King et al. 2002; Markos and Sridevi 2010). There are numerous definitions of employee engagement but it ultimately relates to an individual's willingness and his/her ability to drive the organisation towards success (Markos and Sridevi 2010). This engagement can take place at an emotional and/ or rational level (Markos and Sridevi 2010). Research suggests there is a direct

correlation between the need for achievement by a manager or employee and the commitment to goals (Dipboye 1994; Greenhaus et al. 2000).

2.3.4. Influence of KRIs on managers' goal setting behaviours

KRIs have an influence on managers' goal setting behaviours thereby facilitating an increase in self-awareness and encouraging experimentation, creativity and goal attainment (Greenhaus et al. 2000; Davies 2005). KRIs may be used as an effective management tool to achieve the goal of consistency by documenting what the manager and employee or team have agreed to strive towards in a clear and quantifiable manner; this increases the motivation to achieve the set standard, the likelihood of achievement and the monitoring of progress (Cialdini 2001). In addition, this provides managers with an opportunity to effectively integrate their KRIs into their business units, make appropriate risk decisions based on the information received on a frequent basis and amend KRIs and subsequent goals where necessary (Dipboye 1994; Davies 2005). Goals and thresholds can be appropriately aligned to motivate and challenge employees, increase levels of persistence and commitment and assist managers where they require their own behaviours to be modified (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; Newstrom 2002).

In setting goals and standards, an employee may be managed through the KRI process. Goal setting drives managers' behaviour and therefore, through setting targets or thresholds, employees have a common understanding of what is required of them (Newstrom 2002; Anon 2010b). KRIs are used as an effective management tool to monitor the risk exposures the employee will mitigate through the maintenance of effective controls. KRI thresholds may act as a motivational tool when they are accepted by that individual, specifically if they are narrow and measurable, monitored on a regular basis and the manager provides continuous constructive feedback (Dipboye 1994; Covey

1999; Greenhaus et al. 2000; King et al. 2002; Newstrom 2002; Markos and Sridevi 2010; Tice 2011). The belief in KRIs as an effective monitoring tool will encourage a heightened level of acceptance, leading to effort, focus, direction and persistence towards the accomplishment of set tasks (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; Newstrom 2002). KRIs establish clear and precise statements of objectives within a defined risk appetite and propel the manager to develop action plans to ensure the exposure is maintained at an acceptable level or assist with the development of action plans (Dipboye 1994; Covey 1999; Byars and Rue 2000; Greenhaus et al. 2000). KRIs can be effectively implemented when they are quantifiable and measurable, challenging yet achievable, and are expressed in a clear, concise and unambiguous manner (Dipboye 1994; Covey 1999; Byars and Rue 2000; Greenhaus et al. 2000). The very nature of a KRI should drive the need for achievement and commitment to targets by a manager or employee (Dipboye 1994; Greenhaus et al. 2000). KRIs remain flexible in the sense that thresholds can be changed according to cyclical periods and changing economic conditions (Byars and Rue 2000; Greenhaus et al. 2000).

Other factors that have an impact are managers' perceptions or judgements of risk (including risk appetite), their levels of engagement, work ethic, leadership style, the organisational or business unit culture and rewards and negative sanctions (Dipboye 1994; Greenhaus et al. 2000; Rundmo 2001; Newstrom 2002; Small and Sage 2006; Rochette 2009; Markos and Sridevi 2010).

The significance and relevance of KRIs influence on goal setting behaviours is that the mere belief in the goals set encourages correct behaviours, leading to higher levels of effort, focus, direction, persistence and the development of strategies to accomplish set tasks (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; Newstrom 2002). This is essential in any organisation when attempting to mitigate intolerable levels of risk or any other goals. Managers may be able to establish clear and precise statements of objectives, develop action plans to achieve the objectives, measure the achievement, take corrective action, make appropriate risk decisions and establish new objectives

for the future if KRIs are effectively implemented. KRIs may provide managers with an opportunity to discuss the employees' and business units' progress in risk mitigation and allow for the modification of behaviour or the goal where necessary (Byars and Rue 2000; Greenhaus et al. 2000).

This research aimed to provide managers with insights into understanding the influence that KRIs have on managers' behaviour. Such insights allow management to reassess its own behaviours and realign where necessary to ensure that the goals set are achieved within the required period. This also allows the achievement of the goals set out within the broader organisation thereby ensuring profitability and sustainability. Further, this research report demonstrates how managers can identify if KRIs have an effect on managers' goals setting behaviours and fine tune their own behaviours to reap the full benefits of the KRI process. By providing insight into the outcomes of regular monitoring of KRIs, managers will in addition have a better understanding of how KRIs can influence the monitoring of goals set and how the communication of the KRIs to team members has an impact on employee behaviour.

The implications of managers not being aware of the findings of this research report could result in KRIs becoming - or remaining - ineffective in their use as a management tool; without monitoring the achievement of business objectives, it could ultimately lead to the underperformance or failure of a particular business unit where risk exposures were not monitored.

For the purposes of this research report, given the significance and benefits goal setting behaviours have in an organisation, the influence of KRIs on managers' goal setting behaviours was explored.

2.4. Proposition

Based on the above literature review and the casual links deduced, the influence of KRIs on managers' goal setting behaviours was explored. The research was based on the premise that KRIs can be an effective monitoring tool if properly integrated and if they are clear, concise and frequently reviewed (Dipboye 1994; Covey 1999; Greenhaus et al. 2000). A heighten level of acceptance of the KRIs may lead to increased commitment, persistence to achieve set goals and aid risk decision making (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; Rundmo 2001; Newstrom 2002; Small and Sage 2006). KRI thresholds should further act as a motivational tool and change behaviour where required (Dipboye 1994; Covey 1999; Greenhaus et al. 2000). KRIs should then remain flexible enough that they can be amended when there are changes in the internal and external business environments (Greenhaus et al. 2000; Davies 2005).

Managers' perceptions and judgements of risk, their levels of engagement, work ethic, leadership style, culture and performance management tools play a role in the KRI process and subsequent goal setting activities (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; King et al. 2002; Newstrom 2002; Davies 2005; Small and Sage 2006; Rochette 2009; Markos and Sridevi 2010; Tice 2011).

KRIs influence goals that a manager sets and communicates within his/her respective business unit in order to mobilise employees towards the achievement of broader business and organisational goals (Newstrom 2002; Anon 2010b). The regular monitoring and management of KRIs will result in the achievement of these predetermined targets (Newstrom 2002; Anon 2010b).

The proposition that was tested was therefore that KRIs influence managers' goal setting behaviours.

CHAPTER 3: RESEARCH METHODOLOGY

This section describes the methodology that was utilised to explore the influence KRIs have on managers' goal setting behaviours within the financial industry in South Africa. Firstly, the research methodology and the design thereof is discussed to give the reader further context to the propositions under investigation. Secondly, the research population and sample is outlined, followed by the research instrument used, the methods for data collection and the analysis thereof. Lastly, the limitations of the study and the validity and reliability consideration are set out.

3.1 Research methodology

The research was conducted through the use of qualitative methodology in order to gather the required data to provide insight into the research question under exploration. Qualitative methodology was selected as it provided a mechanism to interpret the constructs in relation to the research question posed (du Plooy 2002). The conceptual nature of the subject matter lent itself to the use of such methodology since it is entrenched in logic (Mcburney 2001b). The method of inquiry allowed for access to the managers' perspective on the subject matter in order to gain an in-depth understanding of behaviours (Mcburney 2001b). The methodology was best suited to this study as it allowed for further enquiry and questioning to capture the essence of complex matters while remaining less structured and flexible to explore unanticipated responses (Mcburney 2001b). The respondents were given the opportunity to provide context and describe their experiences in detail, enabling the interviewer to gain heightened insight into the subject matter (Mcburney 2001b).

In order to gather the required experiences, feelings and attitudes of the respondents, in-depth semi-structured interviews were conducted. Each

interview took approximately one hour to complete and addressed all of the above mentioned propositions. This meant that the interviews went beyond mere respondent description to detailed explanations increasing the insight gained during the process (Mcburney 2001b). Insight was gained about the casual relationship between KRIs and managers' goal setting behaviours. The assumption of this methodology was that respondents were truthful and accurate in the reflection of their experiences, feelings and attitudes. In addition, it was assumed that these individuals had exposure to the subject matter under consideration.

3.2 Research design

The research design was in the form of an interpretive study executed through face to face semi-structured interviews as a primary method of data collection (Mcburney 2001b; du Plooy 2002; Creswell 2007). This method was the most effective manner to collect rational and emotional data for interpretation (Mcburney 2001b; du Plooy 2002). Secondary information was obtained through the literature and document reviews (Mcburney 2001b; du Plooy 2002). The purpose of the interview was to meet the research objectives through building a relationship with the respondent in order to collect data and probe for further understanding where necessary (Mcburney 2001b; du Plooy 2002).

The research took the form of inductive reasoning based on assumptions which started with observations and ended with descriptions of what was observed, if applicable (du Plooy 2002). The research design allowed for the exploration of relationships where there was limited research to describe these behaviours and relations (du Plooy 2002). Systematic analysis of responses was used to gain insight into the qualitative content of what the respondents discussed and answered to (du Plooy 2002).

The advantages of this methodology included the ability to probe further for an enhanced understanding of the responses received and gain heightened insight

into complex issues and questions (Mcburney 2001b; du Plooy 2002; Creswell 2007). Direct answers were gained through the use of closed- ended questions; more in-depth explanations were gained through open-ended questions (Mcburney 2001b; du Plooy 2002). The research method facilitated the building of a relationship between the researcher and respondent (Mcburney 2001b; du Plooy 2002). This enabled the researcher to gain heightened insight into the managers' behaviour within the organisation under consideration. Because time was allocated in respondents' diaries, the response rates to the questionnaire were higher in comparison to the survey conducted, where no face-to-face interaction was required. Respondents were able to ask further questions or clarify anything they may not have fully understood (Mcburney 2001b; du Plooy 2002). The literacy of the managers' being interviewed did not play a role in this research report as all respondents were literate.

The disadvantages of this approach included a limitation of the size of the sample that could be interviewed (Mcburney 2001b; du Plooy 2002). Given the time-consuming nature of the methodology, the researcher was limited to a small representative sample (Mcburney 2001b). This methodology is also expensive as all interview feedback had to be transcribed and analysed (Mcburney 2001b; du Plooy 2002). Lastly, the researcher could have influenced the respondents if the correct interviewing methods were not used or if leading questions and personal perceptions were used or divulged (Mcburney 2001b; du Plooy 2002). The researcher attempted to minimise all associated limitations.

3.3 Population and sample

3.3.1 Population

The population in this research report was the entire staff compliment of Investec employees who manage an area which uses KRIs as a management tool to monitor risk within their business unit. The target population contained all

possible units of analysis in which the sample group was selected in order to represent a smaller portion of the group. This meant that the findings could be generalised back to the population as a whole (Mcburney 2001a; du Plooy 2002).

3.3.2 Sample and sampling method

A purposive sample was selected which was non-random in nature since the characteristics contained within the population could be used to purposefully select a sample (Mcburney 2001b). The error in judgement risk, synonymous with this method of selection, was reduced through the guidance of the Investec Group Operational Risk team in selecting managers who had been exposed to KRIs (the characteristic) (Mcburney 2001b; du Plooy 2002). A total of 15 individuals were purposefully selected from the population to partake in the interview (du Plooy 2002). The number of individuals selected was appropriate based on the population parameters, as common characteristics were narrowed down through the sample selection method (du Plooy 2002). Selected respondents (as indicated in Table 1) were interviewed face-to-face. Respondents were encouraged to participate through scheduling a formal meeting time in their diary, through building trust in a comfortable meeting room and through the benefit of receiving the outcomes of the research and the action plans to address any gaps identified (du Plooy 2002). The highest number of participants was selected from the Private Bank, this being the biggest business unit in the organisation and one of the pillars with the most embedded KRI process.

Table 1: Profile of respondents

Respondent	Number to be sampled
Group Operational Risk Managers	3
Private Bank Managers	8
Investec Capital Markets	2
Other pillars	2

3.4 The research instrument

The instrument selected was a questionnaire that was partially or semi-structured (Rubin and Rubin 1995; du Plooy 2002). The reason this instrument was selected was to increase the probability of a response and to allow for in-depth probing to understand any underlying ideas, views, attitudes, behaviours and motivators (Rubin and Rubin 1995; du Plooy 2002). The format of questionnaire selected allowed the researcher an increased degree of latitude to explore unanticipated answers and discussion directions (du Plooy 2002). The structure of the engagement allowed for the respondent to build trust or a rapport with the researcher and feel more comfortable to give open and detailed responses (Rubin and Rubin 1995; du Plooy 2002). Respondents were given a letter describing the purpose of the research and were guaranteed confidentiality during the research process.

This instrument had many advantages although it was not without its drawbacks. The instrument was extremely time consuming and costly, impacting the size and representativeness of the sample selected and therefore possibly the research outcome, and the researcher might have influenced a respondent's answers (du Plooy 2002). Respondents did not remain anonymous but given the nature of the topic, respondents were less likely to feel intimidated (Rubin and Rubin 1995; du Plooy 2002). The interpretation and quantification of the respondents' responses could have become difficult (du

Plooy 2002). However, given the quality of the outputs, it is believed that the advantages outweighed the associated costs and drawbacks.

3.5 Procedure for data collection

Interviews were pre-arranged with selected managers in the Investec offices to preserve the natural and non-threatening environment. This assisted in building the required level of trust and allowed for salient observations in relation to the environment. All respondents were interviewed in the Johannesburg office. Managers based in the other regional offices across the country were not interviewed, both for convenience purposes and because of the limited ability to interact and observe respondents via a video conference. Interviews were recorded by means of transcribing the engagement through hand written notes during. Records of the body language and gestures of the respondents were also kept. The hand written notes were then transcribed to an electronic format.

3.6 Data analysis and interpretation

This was a crucial step in the research process as the conclusions and recommendations are based on the analysis and interpretation of the data. Content analysis procedures as described by du Plooy (2002) and McBurney (2001) were used to analyse and interpret the data recorded. Content analysis comprises two distinct approaches, namely coding the manifest content and coding latent content (Mcburney 2001b; du Plooy 2002). Manifest content coding was completed through the coding of certain words. The number of times identified words are mentioned is counted and the data analysed (Mcburney 2001b; du Plooy 2002). This method is a lot more objective than the latter method, noting, however, that because the words could be used in different contexts, this could affect the overall outcome of the method (Mcburney 2001b; du Plooy 2002). Latent content coding allowed the

researcher to interpret the presence of a particular theme in the responses received. A descriptive content analysis method was used to extract themes and contradictions (Mcburney 2001b; du Plooy 2002). This method is a lot more subjective than manifest content coding and so could jeopardise the reliability of the outcome (Mcburney 2001b; du Plooy 2002). These methods were used in conjunction with each other to increase the validity of the overall outcome.

The coded data was displayed using text-based matrices to assist in the interpretation of the themes (du Plooy 2002). This data are available to the reader upon special request. Data were compared and contrasted in order to note trends and patterns and to identify inconsistencies.

3.7 Limitations of the study

- The methodology used was time consuming and costly, both for the respondents and the researcher (Rubin and Rubin 1995; Mcburney 2001b; du Plooy 2002). This could have resulted in delays and predetermined respondents withdrawing from the research process (Mcburney 2001b; du Plooy 2002).

- The interviews were dependent on the respondent's availability and timeous attendance for the interview. If a respondent postponed the interview, it would have led to delays in the completion of the research. Respondents might also have deviated from the topic under discussion too often, thus prohibiting the researcher from gaining traction or delaying the interview (Mcburney 2001b; du Plooy 2002).

- It was difficult to draw a convenient sample that was representative given the nature of the interview process (Mcburney 2001b; du Plooy 2002). This may have reduced the reliability of the result (Mcburney 2001b; du Plooy 2002).

- It became increasingly more difficult to standardise the responses when subjective information was being given through the completion of the questionnaire (Mcburney 2001b; du Plooy 2002). This could have jeopardised the validity of the results.

- The researcher's perceptions may have come into play and a respondent's answers may have been deceptive (Rubin and Rubin 1995; Mcburney 2001b; du Plooy 2002). As with the above noted point, this could reduce the reliability of the research results (Mcburney 2001b; du Plooy 2002).

- The respondents did not remain anonymous during the interview which could have affected the reliability of the research. The responses were, however, kept anonymous and confidential (Mcburney 2001b; du Plooy 2002).

- Respondents interviewed were only from the Johannesburg office for convenience purposes.

3.8 Validity and reliability

Research indicates that there are different definitions of the term validity but all point to the accuracy of the research conclusion in relation to its correspondence to the actual state of reality (Mcburney 2001b; du Plooy 2002). What is supposed to be tested should actually be tested (Mcburney 2001b). It was of the utmost importance that the validity of this research was maintained so the influence of KRIs on managers' goal setting behaviours is reflective of the current state of the world.

3.8.1 External validity

External validity is the degree to which research conclusions can be generalised to the remainder of the population or situation (Mcburney 2001b; du Plooy 2002). The ability to generalise the results of the study was maintained by ensuring the advantages of this methodology were maintained throughout and the disadvantages and other exogenous factors were controlled as much as possible (Mcburney 2001b; du Plooy 2002). The sample of mangers drawn was as representative of the population as possible, interviews were conducted in a natural environment and interference factors avoided where possible (including fatigue, increased pressure caused by workloads over month-end etc) (Mcburney 2001b; du Plooy 2002)

3.8.2 Internal validity

Internal validity is described as the degree to which the research study design can be accounted for that affects the outcome of the research questions (Mcburney 2001b; du Plooy 2002). This was controlled in this research study through the use of reliable measuring instruments on a convenient random sample of managers and by maintaining unobtrusive behaviour and questions (Mcburney 2001b; du Plooy 2002). The problem of confounding was avoided through the attempt to maintain the interviews at a consistent time and place during the quieter periods of the month, thus avoiding month end deadlines (Mcburney 2001b).

3.8.3 Reliability

Central to the concept of reliability is consistency. The results determined in the research report had to be applicable on different occasions and yield the same result (Mcburney 2001b; du Plooy 2002). Random errors were controlled as much as possible throughout the research process and a trial interview was conducted beforehand so any refinements needed were timeously made.

CHAPTER 4: PRESENTATION AND ANALYSIS OF RESULTS

4.1 Introduction

To avoid repetition this Chapter which details the presentation of results is combined with the chapter where the data analysis, findings and interpretations would ordinarily be contained separately. This Chapter identifies and presents evidence and interpretations of the results obtained through in-depth semi-structured interviews. A research question was derived from the literature review against which the research was conducted. The researcher sought to provide the reader with insight into the influence that KRIs have on mangers' goal setting behaviours. The results and discussions stemming from the research have been presented below.

4.2 Demographic profile of respondents

15 interviews were conducted over a period of five weeks as per the initial research plan outlined. It was originally proposed that three individuals from the Group Operational Risk function would be interviewed; however, after a discussion with the Head of Risk, it was determined that more valuable outputs would be gained from the process by interviewing an additional respondent from the Private Bank. This decision was made based on the premise that the KRI process is more embedded and mature in the Private Bank and therefore better insight into the interview questions posed could be given. Individuals were interviewed in accordance with the interview schedule below (Table 2). All 15 respondents identified for interviews indicated their willingness to participate in the research upon receipt of the interview meeting invitation.

Table 2: Schedule of interviews conducted

Respondent	Date	Time		Respondent	Date	Time
R 1	11/11/2011	10h00		R 9	25/11/2011	13h00
R 2	14/11/2011	10h00		R 10	28/11/2011	09h00
R 3	15/11/2011	12h00		R 11	29/11/2011	09h00
R 4	15/11/2011	14h00		R 12	29/11/2011	10h00
R 5	16/11/2011	10h30		R 13	01/12/2011	11h00
R 6	22/11/2011	09h00		R 14	05/12/2011	12h30
R 7	23/11/2011	11h00		R 15	05/12/2011	16h00
R 8	23/11/2011	14h00				

All interviews took place face-to-face in various meeting rooms conveniently located within the Investec building in Sandton, Johannesburg. The research instrument or questionnaire was used as the basis for conducting the interviews. A sample of the actual questionnaire used during the interviews is included in Appendix B. Prior to the commencement of all the interviews, the respondents were reassured that all details discussed during the engagement were strictly confidential and for academic purposes only. Respondents reconfirmed their willingness to participate. All interviews were manually recorded through hand-written notes by the researcher. The details recorded were then transcribed for each individual interviewed. All interview notes have been stored for safe keeping and will be destroyed after a reasonable period of time.

Respondents' direct comments and statements are quoted throughout this chapter, where appropriate. Interview notes, both hand-written and those transcribed are not made available to the reader. Transcribed interview notes

may, however, be made available upon special request. Table 3 provides a demographic profile of the interview respondents.

4.2.1 Gender of respondents

Of the 15 respondents interviewed, 60% were females and 40% were males. The split between gender is detailed in Table 4. No males were interviewed in the Group Operational Risk business unit due to the limited number of males responsible for the collation and oversight of the KRI process. One individual in the business unit is responsible for a set of KRIs but these had not been successfully rolled out across all business units at the time that this research was conducted. There were no males interviewed from the Group Human Resource division as there are no males in that team. No females were interviewed from Investec Capital Markets as the Group Operational Risk resource provided the names of the individuals believed to offer the most value for insight into the research proposition. The maturity of the KRI process in the business unit was also a factor considered in selecting respondents from Investec Capital Markets. One male is the manager responsible for the KRI process in the Central Information Technology division so therefore no females could be interviewed in this business unit.

Table 3: Demographic profile of respondents interviewed				
Respondent	**Business unit**	**Job Title**	**Gender**	**Length of service**
R 1	Group Operational Risk	Analyst	Female	5 years, 2 months
R 2	Central Information Technology	IT Risk Manager	Male	4 years,7 months
R 3	Private Bank	Credit Manager	Female	13 years, 2 months
R 4	Investec Capital Markets	Manager	Male	12 years, 4 months
R 5	Private Bank	Team Leader	Female	4 years, 1 month
R 6	Private Bank	Manager	Female	4 years, 8 months
R 7	Group Operational Risk	Risk Manager	Female	6 years, 1 month
R 8	Private Bank	Team Leader	Female	2 years, 11 months
R 9	Private Bank	IT Divisional Head	Male	1 year, 11 months
R 10	Private Bank	Head of Operational Risk	Female	10 years, 5 months
R 11	Private Bank	Team Leader	Female	7 years, 8 months
R 12	Investec Capital Markets	Head of Operations	Male	2 years, 11 months
R 13	Group Human Resources	Remuneration Consultant	Female	4 years, 7 months
R 14	Private Bank	Manager	Male	10 years, 2 months
R 15	Private Bank	Team Leader	Male	4 years, 6 months

Table 4: Demographic split per business unit

Gender	Business unit	Number	Percentage
Female	Group Human Resources	1	7%
	Group Operational Risk	1	7%
	Private Bank	6	43%
Female Total		**9**	**57%**
Male	Central Information Technology	1	7%
	Investec Capital Markets	2	14%
	Private Bank	3	21%
Male Total		**6**	**43%**
Grand Total		**14**	**100%**

4.2.2 Business units of respondents

Respondents were interviewed from three of the six pillars at Investec which included Private Bank, Investec Capital Markets and the Group functions (Group Human Resources, Group Operational Risk and Central Information Technology). No respondents were interviewed from Wealth and Investments and Investment Banking as these business units do not have established KRI processes. No individuals were interviewed from Investec Asset Management as the head office is located in Cape Town and the majority of the KRIs are managed in this jurisdiction. This did not make the interview via video conference plausible.

60% of the individuals interviewed were from the Private Bank for mainly two reasons. Firstly, the number of potential respondents from the business unit was higher than other divisions as it is the largest business unit in the group with an approximate total of 1,400 employees across the country. The Private Bank's matrix structure is spread across numerous geographies, so increasing the effective management of risk through the use of KRIs is required. The

division also has the largest sets of the KRIs. There are more females in management positions that are responsible for KRIs on a regular basis than males within the Private Bank. This information was made available by the Human Resource division of Investec.

4.2.3 Length of service of respondents

The respondents had between one year, 11 months and 13 years, two months of service. The average length of service across all respondents was six years and four months. On average, females had a slightly longer length of service of six years and six months, whereas males had six years and one month. Investec Capital Markets had the most experienced respondents with an average length of service of seven years and seven months, followed by Private Bank with an average of six years and eight months. Group Operational Risk, Central Information Technology and Group Human Resources respondents had an average of five years and seven months length of service.

20% of respondents have over over 10 years' experience, 13% of which are from the Private Bank and 7% from Investec Capital Markets. There was an equal split between males and females in this group.

4.2.4 Respondents understanding of a key risk indicator

Respondents were asked to provide clarification of their perception of a KRI. This question was used as a double check to ensure the respondent had some logical understanding of the function and purpose of a KRI. The respondents were purposefully selected based on their prior experience with the KRI process in their business unit, regardless whether this was current or past experience. The respondents' perceptions of the meaning of a KRI were measured against the academic definition provided in the literature review. The criteria against

which the respondents were measured also included other characteristics outlined in the overview of the KRI in the literature review. The results from the manifest and latent content analysis are depicted in Table 5.

It can be concluded that all respondents adequately understood the basic definition of a KRI. During their explanation most respondents used the word “measurable” or referred to the term indicating that the metric was a form of measurement. According to Table 5 on page 46, respondent 13 had the least degree of correspondence to the academic definition of a KRI; however, the respondent did summarise their perception of a KRI as being “a form of data analysis that is used to give an indication of the state of your business units’ risks. It is a health check”. This definition did provide an adequate understanding of a KRI by this respondent.

In addition to the characteristics noted in the academic definition, the respondents also highlighted that KRIs were “influenced by the business environment” in terms of what is monitored, that they were purposefully “tied to the achievement of strategy” and that they provided “qualitative information” in addition to their quantitative outputs.

Only 7% of respondents referred directly to the thresholds of a KRI. However, it could be deduced that most of the respondents acknowledged or were aware that thresholds form part of the KRI process. This was based on their discussions around the appropriate escalation to management when a risk exposure exceeded a set tolerance level and their references to quantification and measurement of a risk exposure, including the overall risk profile.

Table 5: Respondents' understanding of a key risk indicator

Respondent	Track risk exposure / changes/ Losses	Monitor/ regular basis	Measur-able	Key/ material risks	Remedial action	Risk appetite	Involve manage-ment	Pre-warnings / lead indicators	lagging / trend	MI*, reporting, escalation and bench-marking tool
R 1		✓	✓		✓	✓			✓	
R 2		✓			✓			✓		
R 3		✓			✓					
R 4			✓	✓						✓
R 5			✓							
R 6	✓		✓	✓				✓	✓	
R 7			✓					✓	✓	
R 8			✓				✓			
R 9	✓		✓							
R 10	✓				✓		✓			✓
R 11		✓	✓	✓	✓					
R 12					✓		✓			✓
R 13			✓							
R 14		✓	✓	✓						
R 15	✓		✓	✓			✓	✓	✓	✓

Note: MI – management information

4.2.5 Exclusion of inconclusive results obtained

Respondent 1 portrayed a good understanding of a KRI, although during the interview she indicated that she was not able to provide her perception of the influence that KRIs have on managers' goal setting behaviours. The respondent had responsibilities for managing the KRI process for her respective business unit, she was not responsible for the setting or monitoring of that business unit's goals. Her role was purely one of requesting feedback and escalation reporting where significant movements had taken place. She worked in conjunction with another manager who would be able to provide better insight into the research problem.

For this reason, the responses from this respondent were excluded from the presentation and analysis of results on this research report. Her inability to provide her own perception would have jeopardised the results pertaining to this research if included in the analysis. The following presentation and analysis therefore only considers the 14 valid responses received.

4.3 Results pertaining to the proposition

The proposition tested was the KRIs influence on managers' goal setting behaviours in the financial industry in South Africa. In an attempt to test this proposition, respondents were asked a number of related questions. Respondents' answers provided insight into their perceptions and experiences of the influence their respective KRIs had on their goal setting behaviours. The results stemming from the interviews provide the reader with insight into the research proposition.

Respondents were requested to provide both insight into whether or not they believed KRIs influenced their own goal setting behaviours and a rationale supporting their perception. The outcome of this question was important as it

provided direct insight into the proposition that this research paper has attempted to explore. Interestingly, the results were unilaterally split across respondents' perceptions. 50% (later referred to as group 1) of the respondents indicated that they believed that KRIs do influence their goal settings behaviours whereas the remaining 50% (later referred to as group 2) indicated that KRIs did not have any influence on their goal setting behaviours.

The analysis of results chapter seeks to explore the rationale behind respondents' perceptions to the proposition and to better understand how or why respondents indicated that KRIs either did or did not influence managers' goal setting behaviours. Initially the research report explores the reasons why KRIs influenced managers' goal setting behaviours and the associated constructs that might have played a role in this outcome. This is followed by a detailed review of the reasoning why KRIs do not influence managers' goal setting and the associated constructs. A further detailed analysis is provided to highlight any scenarios where factors such as the gender of a particular respondent, the business unit in which he/she works on a daily basis or the length of service have had an impact on the proposition.

4.3.1 How KRIs influence managers' goal setting behaviours

Respondents who indicated that KRIs influenced their goal setting behaviours did so because they believed KRIs to be a key measurement of the operating environment, providing an early warning sign of an increasing risk exposures. In addition, KRIs provided management with information on trends that could be built into their risk planning to assist in identifying any unfavourable risk exposures. Changes in the business environment were picked up easily due to the sensitive nature of the indicator and the associated threshold. Changes in the environment then prompted either the modification of the KRI, followed by the realignment of current goals, or the implementation of new goals to ensure increasing risk exposures were dealt with promptly. When KRIs are leading in

nature, they informed goals before the risk exposure become intolerable, thus allowing a manager to deal with the root cause early on.

Respondents also noted that when they changed their KRIs, due to a change either in the internal or external environment, people, processes or systems, they would naturally change the goals they had set. The analysis revealed that one of the predominate reasons for a respondent's perception was that KRIs influence the achievement of milestones because they lead to goals being set to achieve these milestones.

KRIs are used to measure and monitor key material risks which could have a substantial impact on a business, regardless of whether or not the exposure was financial or non-financial. Literature reveals that material risks should be managed and escalated, in order to ensure the sustainability and profitability of a particular business unit or the organisation as a whole (Davies 2005; Scandizzo 2005; Anon 2009b; BIS 2011). Based on this premise, respondents indicated that the management of material or key risks depicted which KRIs were monitored and therefore influenced the goals that were set.

During the interview, respondents noted that the majority, if not all their KRIs, were measured at a process or business unit level and that very few were measured at an individual level. In 28% of the business units where KRIs have been broken down into an individual level, they appeared to have more of an influence on managers' goal setting behaviours. Managers were more effectively able to directly influence the goals set by themselves, or those in conjunction with an employee, when KRIs could be linked to an individual. The monitoring of KRIs and the goals set could have both a negative and positive impact on the employee's behaviour. Evidence suggests that in some instances employees found the KRIs to be quite "exposing" and given their function within the governance structure, they knew that a broader audience - mostly senior management - would have sight of the results on a frequent basis. This then perpetuated positive reinforcing behaviours from employees and increased the overall performance of the employee and challenge of the goals set.

On the negative front, measuring KRIs at an individual level could lead to an increase in unhealthy competition and “corner cutting”. The degree of internal conflict increased to unhealthy levels as the KRIs and the subsequent goals set became the employees’ only concern. Unhealthy competitive behaviours included employees questioning and challenging the difference in goals set by managers for different employees. Also it became evident that employees did not always take the context behind a KRI into consideration. Numerous examples were provided but one example in particular that was used proved to be descriptive in proving evidence of this statement. It was indicated that if employees were being monitored by a KRI that tracked the “number of deals approved per consultant” for example, employees would often associate very high approval rates as superior performance. Employees would then aim to approve as many deals as possible because they would view themselves as a top performer and wish to exceed their set monthly goals. At face value this may appear to be correct: however, if one considered the context of a credit risk department, for example, this behaviour would override the main goal of Credit Consultants which was to take a conservative approach to credit risk management. This could eventually increase both credit and operational risk exposures in the team. Respondents indicated that they would ensure that employees were aware of the context of any given KRI to ensure that employees’ behaviours were not negatively affected.

Interestingly, even though 72% of the respondents’ answers indicated that KRIs were not broken down to individual employee level in their business units, they did indicate that employees would on their own accord create their own individual goals in order to achieve the broader business unit goals. Respondents believed that KRIs influenced managers’ goal setting behaviours at either a conscious or subconscious level. This was only true, however, if employees had been part of the development of the business units KRIs. Respondents therefore reviewed these reports on a regular basis with their respective teams to influence employees to determine their own goals and to inspire commitment. It was evident that in business units where KRI outcomes

were shared amongst team members, competition intensified and individuals became more conscious about setting their own individual goals relating to a specific set of KRIs. This was further supported by evidence that suggested the sharing of management reports “opens up the KRIs for discussion often leading to mini projects to meet and address business goals”. This evidence supported the literature that KRIs influence goals that managers set and communicate within their respective business unit in order to mobilise employees towards the achievement of broader business and organisational goals (Newstrom 2002; Anon 2010b). Regardless of whether the KRI was set at a business unit or individual level, they provided a benchmark for employees’ own measurements of their performance goals or that of their teams.

A theme identified with 43% of the respondents was that KRIs appeared to have an influence, particularly in the project management space when goals were closely aligned to these risk metrics. It was evident that KRIs identify and highlight intolerable risk exposures that then lead to the proposal of system and process enhancement projects. Once agreement was reached for a particular project, KRIs were developed and goals set to achieve the required implementation strategy. Managers used the KRIs as an ongoing measure of traction gained in the project and to track successful implementations or impending failures. Depending on the outcome of these KRIs, goals might either be amended or reinforced. KRIs influenced smaller goals (such as completing a milestone) or bigger ones which tracked the implementation of the entire project in time, and within specification and budget.

Managers frequently used trends identified in the KRI process to inform goals that had been set. It was noted that “trend lines push people to take action, responsibility and learn more about the business to instil growth and learning” all of which are capsulated into a goal. It was further highlighted that “the process itself [KRIs] indicates behaviours and trends in order to set appropriate expectations when determining goals”. This highlighted the importance for managers to use KRI information to inform goals that they had set (Davies 2005). An advantage of this process noted by respondents was that KRIs and

their influence on managers' goal setting behaviours was inter-linked with business unit and organisational strategy and could therefore be used to achieve success within an organisation.

Managers noted that KRI thresholds could be seen as a goal when respondents strived to keep their risk exposures within the acceptable range and more proactively manage them when they start moving into an uncomfortable range or breach the threshold. "The thresholds force people to be more responsible and to take accountability for their actions". It was highlighted how thresholds acted as a goal for individuals within their business units and that "KRIs are used as a motivation to get things right and to fix something" where required. This then lead to the subsequent development of other goals or an active pursuit to achieve the goal of remaining within an acceptable risk threshold range. KRI thresholds were directly linked to a business unit's defined risk appetite, therefore respondents alluded to the fact that the risk appetite set for the business unit or by a manager did have an influence on the goals set. "Where there are metrics in place, they naturally drive the goal setting behaviours of managers" within a defined risk appetite. Another perception provided by respondents was that a KRI could also be a measure of the achievement of a goal that had already been established through the monitoring of thresholds.

KRIs encouraged acceptable behaviours, spurring enhanced levels of focus and direction to the effort exerted and producing higher levels of persistence in achieving goals (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; Newstrom 2002; Davies 2005; Breden 2008). The literature was reinforced by respondents indicating that KRIs encouraged acceptable behaviours thereby influencing goal setting, especially when they were aligned to the broader business strategy and all team members were on the "same page". It was noted that it was important for all members of the team to be aware of the KRIs in order to align behaviours. The respondents once again highlighted that KRIs encouraged goal setting if individuals themselves were either measured against

the goals or if they consciously set their own goals in accordance with the business unit standards.

Respondents believed that it was the responsibility of managers to drive the influence of KRIs and goal setting. If managers saw the intrinsic value of the KRIs they would set specific, measurable, achievable, realistic and timely goals. Goals such as these increased the likelihood of a suitable outcome (Dipboye 1994; Greenhaus et al. 2000). Inherent individual competitiveness could encourage managers to develop KRIs from the business unit strategy to manage their risks. This would then lead to the development of goals against which individuals measured and monitored themselves. Overall, the organisation benefited from improved operational efficiencies, cost reduction, positive client experience and profitability when managers drove these behaviours (Kraujalis et al. 2006; Kallenberg 2007; Rochette 2009; Anon 2010b). Respondents indicated that KRIs influenced goal setting when managers drove participation and included all relevant stakeholders and team members. This was a strong theme identified during the interviews conducted, that is, it was imperative that the relevant employees were included in the development of the KRIs. This was essential in order to obtain their approval and buy-in and mobilise them to achieve the subsequent goals set (Newstrom 2002; Anon 2010b). It was stated that even outside of the KRI process, business “risks should always be an element that is part of goal setting”. If KRIs were more “drilled down” and “related at a personal level”, they would be more effective in influencing managers to drive goal setting.

Respondents believed that KRIs were influential in the goal setting process when they themselves and senior management were intrinsically involved in both the development of these metrics and the subsequent actioning of the goals set. This was in support of the literature which indicates that while management (and particularly senior management) are responsible for risk within the organisation, top management support is a driving force to acceptance and success (Davies 2005; Anon 2010a; BIS 2011).

Another construct of the KRIs process that subsequently influenced managers' goal setting was the level of acceptance over and above merely stakeholders just being part of the development of KRIs (Newstrom 2002; Davies 2005; Breden 2008). 86% of respondents in group 1 agreed that there were differing levels of acceptance across the organisation and this influenced managers' goal setting behaviours. Respondents were requested to provide evidence why they felt that there were differing levels of acceptance of the KRI process across the organisation. These respondents felt that acceptance could be affected by a number of factors, including the relevant infancy of the KRI process, lack of understanding and awareness of a KRI or the benefits of goal setting, lack of management oversight and involvement, the inclusion of relevant stakeholders, differences in business unit sub-cultures and the "exposing" nature of these metrics. If the KRIs were not well embedded or there was a lack of understanding and awareness, respondents felt that managers would fail to accept them as a management tool nor fully realise their potential. Managers who failed to see the value in the process would exclude the KRI process from the operations of their business units. As already discussed, the failure to include relevant stakeholders in the development of KRIs limited buy-in and acceptance.

Respondents touched on different business unit sub-cultures playing a role in the KRIs influence on goal setting behaviours. The relationship was dependent on the acceptance of risk mitigation and monitoring activities in order to drive the KRIs. Lastly, both managers and employees found the KRIs to be quite "exposing" and given their function within the governance structure, they knew that a broader audience would have sight of the results on a frequent basis. The escalation of KRIs to senior management, specifically to Group Operational Risk and the executives, appeared to directly influence the KRI process. These factors drove the effective management of the KRI process and expedited the speed at which goals were set and achieved.

The remaining 14% of these respondents felt that there were no differences in levels of acceptance across various business units. The management of KRIs was viewed as a regulatory obligation and therefore managers should all accept KRIs in the same manner. KRIs were a fairly new risk management tool that was in the process of being implemented across many banks in preparation for their migration to the Advanced Measurement Approach (AMA) (Davies 2005; Scandizzo 2005; CEBS 2006; Hain 2009). Research highlighted the importance of effective implementation of these metrics as they were a fundamental requirement for banking institutions to progress to this advanced approach (Davies 2005; Scandizzo 2005; CEBS 2006; Hain 2009). Regulators worldwide in the financial sectors are applying an ever increasing degree of pressure for banking institutions to move to this approach, being a more sophisticated method to monitor their respective risks environments (Davies 2005; Scandizzo 2005; CEBS 2006; Hain 2009). The push factors to move to the advanced measurement approach further magnified the need for managers and organisations to buy in to and accept the KRI process, and to see it as not only just a regulatory requirement, but also as an effective management tool.

The acceptance of the KRI process therefore translated into management acknowledging that the metrics were an effective management tool which could be used to influence how goals were set and monitored. Key to this statement is the word “effective”. It becomes important to understand the influence KRIs have on managers’ goal setting behaviours if they are viewed as an effective management tool. Supporting evidence further suggests that KRIs, if used effectively, may increase the motivation and likelihood of achieving a particular goal (Cialdini 2001; Davies 2005; Breden 2008; Anon 2010b). Results from the interviews indicated that there was a 100% correlation between all respondents who indicated that KRIs influence goal setting behaviours and those who indicated that they effectively used KRIs as a management tool. This provided evidence of a level of maturity in the KRIs process and the value it added as a management tool to influence goal setting behaviours (Davies 2005; Breden 2008).

58% of respondents in group 1 indicated that KRIs were an effective management tool: however, the metrics were used in conjunction with other management tools to influence goal setting behaviours. The reason for the use of other management tools was that KRIs were limited to assessing only the operational risks within a business unit. Depending on the key material risks being monitored in a business unit, KRIs might not take other risks such as financial, credit and market risks, into account. The use of other management information merely provided a more holistic view of the operation or supported the information already contained within the KRIs. The content analysis suggested that respondents used KRIs as an effective management tool specifically when risk exposures were near threshold breaches or were in breach of a particular threshold therefore propelling an investigation into the matter. An investigation allowed for a thorough root cause analysis to be conducted so goals can be developed to proactively reduce the risk exposure. The trends identified were also used as predictors of future intolerable risk exposures so management could set goals far in advance to manage the risk exposures. It was evident that managers were motivated to address intolerable risk exposures and trends, increasing the likelihood of achievement of goals set.

The belief in, and acceptance of, goals and their measurement tools encouraged the correct behaviours which spurred higher levels of effort, focus and direction and produced higher levels of persistence (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; Newstrom 2002). This was essential in any organisation when attempting to mitigate intolerable levels of risk through defined goals. Goals and thresholds can be appropriately aligned to motivate and challenge employees, increase levels of persistence and enhance commitment (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; Newstrom 2002). During the interviews, 86% of respondents in group 1 believed that KRIs led to an increase in persistence and effort towards setting and achieving goals. They specifically noted that the metrics “feed directly into action plans and projects” to ensure the “risk maintenance and optimisation stay on track”. It was noted that “now when viewing the KRIs the conversation goes along the lines of ‘how is this going to be fixed?’ The team all want to stop what

is going wrong. The team looks at how goals can be put into place". Goals thus provided a common platform from which all individuals could actively pursue the mitigation of risk exposure.

Interestingly, 14% of respondents indicated that KRIs led to an increase in persistence and effort towards setting and achieving goals although it was also pointed out that managers had an important part to play in influencing this process. Respondents viewed themselves as one of the driving factors behind the success of the KRIs and in playing the role of an influencer, would focus and direct the effort exerted to improve levels of persistence.

Research suggested that KRIs might be used as an effective management tool to achieve the goal of consistency by documenting in a clear and quantifiable manner what the manager, employee or team had agreed to strive towards. This increased the motivation to achieve the set standard, the likelihood of achievement and the monitoring of progress (Cialdini 2001). Respondents indicated that once a goal was set, the ERM would record the particular goal into the risk management system. The ERM would then prompt management and their respective teams to achieve the goals by requesting regular progress updates. Individual goals were not tracked within the risk management system and would typically be either documented in respondents' thresholds, on the performance development reviews of individuals or noted through a discussion to which an agreement was reached (tacit contract).

In order to ensure that the right goals were being monitored and documented, they needed to measure the right exposures and be appropriately prioritised. The prioritisation of goals set was important when determining which risk exposures and goals should be addressed first (Davies 2005; Scandizzo 2005; Anon 2009b). An indicator was considered to be "key" if it tracked key or material operational risk exposures thus ensuring dedicated focus by managers was placed in the right areas (Davies 2005; Scandizzo 2005; Anon 2009b). In support of this academic evidence, respondents highlighted that they mainly tracked material risk exposures. When managers tracked material operational

risk exposures, they tracked risks that had - or could have - a high impact to a business unit or organisation (Davies 2005). All respondents identified high impact risks in order to address these first or to closely monitor the high exposures where further mitigating actions cannot be implemented to reduce the exposure (i.e. a high accepted risks). Respondents indicated that they were monitoring key or material risks which allowed them to better prioritise their goals. Attention was further converged by limiting the number of KRIs monitored by respondents which increased the likelihood of the achievement of individual, business unit and organisational goals.

Once material risks were identified, their associated goals set needed to be clear and concise to minimise confusion (Davies 2005). Responses received indicated that in order to ensure KRIs were clear and concise to better influence goal setting, managers predominantly used a method of trial and error. This method was by no means the most scientific method that could be found but it did, however, assist in the streamlining of KRIs in a world that was more often than not very subjective (Davies 2005; Anon 2010b, 2010a). Respondents used historic data obtained to determine the best possible alternative and included numerous stakeholders in various discussions to provide broader input. Any new risks identified were then set as a KRI and an appropriate goal associated and communicated. This was not a foolproof process, especially where historical data were lacking.

Respondents indicated that KRIs were reviewed on a regular basis and removed when there were no longer concerns, when the risk was no longer material or when the goals had been achieved. This ensured that the KRIs and the subsequent goals were relevant and focused on the right exposures. The operational risk functions embedded in the various business units and risk review forums also played a role in assisting managers to refine their KRIs and ensure the right goals were set, communicated and monitored.

Maintaining the relevance of KRIs in an ever changing world proved to be a challenge for respondents. 86% of group 1 respondents believed that their KRIs were agile enough, while 14% believed that their KRIs could be more agile and

if not managed correctly, could potentially have a hampering effect on goal setting. Ensuring that KRIs were clear and concise was important, as was ensuring that KRIs could be easily amended – the processes went hand in hand. A theme identified across 86% of respondents in group 1 was that there needed to be a good balance between the ability for KRIs to remain flexible so they could be promptly amended, and goals realigned to ensure business units were focusing on the right areas. Respondents indicated that KRIs should also not be too fluid as this could lead to set goals becoming irrelevant or the failure to achieve any of the identified goals. Respondents referred to the thresholds of the KRIs being more fluid than the actual KRIs. Responses further indicated that this had less of an impact on the goals set and could just be the result of a change in risk appetite or more data available to assist with recalibration of the thresholds. The business unit operational risk teams appeared to play an active role in assisting managers with changes to KRIs which respondents believed brought about a level of consistency. The agility of KRIs appeared to influence the goals that were set by ensuring the goals remained relevant.

The remaining 15% of respondents in group 1 believed that the agility of their KRIs was not at an adequate level. These respondents felt that although their KRIs had not changed rapidly, their amendment proposals were subject to rigorous challenge and review conducted by the various stakeholders, resulting in a delay to amend the metrics. These managers indicated that in a scenario where the agility of the KRIs might begin to hamper the achievement of goals, the mangers would escalate the risk to expedite the amendment process, not allowing themselves to be the victim of a process.

While the agility and clarity of goals remained important, this appeared to be irrelevant if KRIs were not effectively integrated into the organisation. The integration of KRIs was an important construct in the influence that KRIs had on managers' goal setting behaviours (Greenhaus et al. 2000; Davies 2005). Effectively integrating KRIs into the organisation brings about a high level of acceptance and therefore goal attainment (Greenhaus et al. 2000; Davies 2005). 58% of respondents in group 1 who indicated that KRIs influenced their

goal setting behaviours, mentioned that their current set of KRIs were integrated into their operations. Evidence provided by these respondents suggested KRIs were integrated by incorporating the metrics into other management information packs, for example financial reporting packs, to provide management and their respective committees with a broader snapshot of their operating environment. KRIs were included in team meetings, allowing the sharing of learning, increasing buy-in, collaboration and coordination. Team members shared in the investigation of the root causes of the increasing risk exposures and therefore began to feel part of this end-to-end process. This was essential in ensuring the effectiveness of these reports and the subsequent goal setting behaviours (Gordy and Hughes 2008; Rodriguez and Edwards 2009). Evidence further suggested that constant communication and reinforcement of the KRIs had an important influence in goals set and monitored in the business units under consideration.

Respondents indicated that when the right risk exposures were being measured it highlighted, through a root cause investigation process, where operational efficiencies could be improved by prompting process changes or system enhancements. As indicated in an earlier section of the results analysis, respondents indicated that KRIs in the project management areas had a favourable influence on goal setting behaviours. This increased the likelihood of managers setting effective goals and the monitoring of the progression towards achievement. Finally, these respondents indicated that they tried to embed KRIs into the culture of their teams. The literature review showed evidence of there being conflicting research on the influence that culture had on behaviour, although it did provide clarity on culture leading to a high degree of cooperation, communication, commitment and acceptance of decision making (Dipboye 1994; Newstrom 2002). Based on the evidence provided by these respondents, the culture would have had an impact on the integration of the KRI process which in turn influenced the managers' goal setting behaviours. Respondents believed that they had created a culture which facilitated the integration of their KRIs.

28% of respondents who indicated that KRIs influenced their goal setting behaviours stated that their current set of KRIs were fairly integrated into their operations. The reason these respondents answers were different to 58% of the other respondents in group 1 was because these respondents did not share this information with their respective teams, unless it was necessary to do so. Respondents managed the KRI process in isolation but when they noticed an increasing trend or a breach, they would bring it to the attention of their respective teams. Feedback and goal setting was more targeted than the other respondents. Managers also included their KRIs into other management information packs for escalation to management but due to the lack of communication with team members, learning was not always shared and the sense of collaboration was reduced. Since root cause analysis took place at an individual level, the effectiveness of these reports and the subsequent goal setting behaviours might have been reduced (Gordy and Hughes 2008; Rodriguez and Edwards 2009). It appeared that the different treatment of KRIs by these two groups of respondents might not facilitate the same culture of KRI monitoring, therefore influencing managers' goal setting behaviours. Both sets of managers indicated, however, that they felt that their degree of integration and influence was sufficient.

The remaining 14% of respondents in this group indicated that there was a degree of integration of their KRIs but that this was not actioned to a sufficient level. KRIs were, however, integrated into team meetings with the learning and root cause analysis being shared between team members, reports were escalated and included in management information packs: the difference between these respondents and others was that the inherent culture created did not facilitate further integration. Employees who assisted the respondents with the collation of these reports merely completed the KRIs as a governance and regulatory obligation and did not necessarily extract the full value out of the process. Certain managers to whom the information was distributed did not take the time to look at the bigger picture to set goals, but merely distributed the reports to their respective stakeholders. This outcome further highlighted the

importance of the integration of KRIs in order to set effective goals (Greenhaus et al. 2000; Davies 2005).

Managers frequently alluded to including KRIs into team meetings and management information packs. This was an indication of a business unit moving beyond mere compliance to reap the full benefit of the KRIs process (Davies 2005; Breden 2008; Anon 2010b). Firstly, the frequency of review and distribution and the impact thereof was considered as a construct that affected KRIs and influenced goal setting behaviours (Byars and Rue 2000; Davies 2005; Breden 2008; Hain 2009). Secondly, the individual responsible for collating the KRIs and the target audience to which KRIs were distributed provided further insight into the influence on managers' behaviour (Byars and Rue 2000; Davies 2005; Breden 2008; Hain 2009).

Respondents were asked to indicate how often they monitored the KRIs set in their business units. The literature review highlighted that the influence of KRIs on managers goal setting behaviours was strengthened if managers set, communicated and monitored their employees in order to mobilise them towards the achievement of broader business and organisational goals (Newstrom 2002; Anon 2010b). The regular monitoring and management of KRIs results in the setting and achievement of these goals (Newstrom 2002; Anon 2010b). All respondents indicated that they monitored their KRIs on a monthly basis. It became evident that risk consciousness in the respondents business units who drove the frequent monitoring and risk reporting saw this as "part of their genetic makeup", thereby facilitating the end-to-end process.

58% of group 1 respondents suggested that they frequently used other forms of risk data input to supplement their KRIs. This portion of respondents used a combination of other risk reports, such as complaint reports and risk incident reports, on a weekly basis. 14% of respondents indicated that they conducted a full bi-annual assessment on their KRIs. 14% of group 1 used risk objectives and weekly monitoring of business units risk objectives. A further 14% indicated that they used external information in addition to the monitoring of KRIs by

conducting a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis on a bi-annual basis to influence their KRIs and the risks monitored. They indicated that their goals were appropriately amended and monitored, based on the information obtained. The remaining 42% noted that the monthly monitoring of KRIs influenced their goal setting behaviours without the use of additional management reports.

The second construct explored was whether the individual collating the KRI reports, and to which target audience they were distributed, had an influence on managers' goal setting behaviours. Respondents were therefore requested to indicate who was responsible for the collation of the KRI reports in their respective business units and to which audience their reports were distributed. 58% of respondents in group 1 were responsible for collating the KRI reports and believed that KRIs influenced managers' goal setting behaviours. 14% of respondents indicated that their contract Trainee was responsible for collating their reports; 14% of respondents indicated that their Embedded Risk Managers collated their reports; and the remaining 14% indicated that an employee within their team was responsible for collation. Based on the respondents' answers, it was concluded that where the respondents were not responsible for collating their KRIs, they had more time to review their KRIs, determine their implications and set goals.

Respondents were then requested to comment on the target audience to which these KRI reports were distributed. This analysis provided insight into whether or not there was a correlation with the target audience to which the reports were distributed and the influence of these reports on managers' goal setting behaviours. The data analysis indicated the KRI reports were distributed to the Executive Risk Review Forum (ERRF), the Board Risk and Capital Committee (BRCC), business unit specific management committees (MANCO's) including the Chief Operating Officers (COOs), Group Operational Risk, the Embedded Risk Managers' (ERMs), business unit specific risk review forums and the South African Reserve Bank (SARB). 71% of respondents who believed KRIs influenced goal setting behaviours provided evidence of them escalating their

KRIs to a Group Operational Risk level at a bare minimum (The Group Operational Risk level is two levels below the executives and one level below the above mentioned executive forums). 14% of respondents indicated that they escalated their KRIs directly to a board level. The remaining 29% escalated their KRIs to a business unit management level. The findings suggested that escalation of KRIs to senior management influenced goal setting behaviours. Managers that escalated their reports to senior management set and monitored goals for their respective business units continuously.

In addition to the frequency and target audience to which the KRIs were distributed, the managers' ability to make risk decisions associated with KRIs was explored to identify if this had any influence on goal setting behaviours. Organisations are required to use their own tailored framework, in this instance KRIs, to better guide managers' in risk decision making (Kraujalis et al. 2006; Rochette 2009). These decisions were further influenced by managers' perceptions and judgements of risk (Rundmo 2001; Small and Sage 2006). During the interviews it became evident that all respondents were responsible for the risk decisions made subsequent to the review of their KRIs in order to set goals. 43% of these respondents worked in consultation with their immediate COOs and 29% consulted their respective operational risk functions (Head of Risk or their ERM) to make risk decisions around which goals needed to be set in order to minimise the impact of the exposure. The insight gained in the interviews suggested that the involvement of these senior stakeholders was a double-edged sword. On the one hand, the involvement of senior management promoted acceptance by the business units and highlighted the importance of mitigating risk and increased the benefits of effective ORM (Davies 2005; Anon 2010b; BIS 2011). Acceptance of the goals appeared to be better when senior management was involved. On the other hand, management might not always be available to immediately assist with goal setting, therefore impeding the process. Delays resulted in KRIs breaching thresholds because goals could not be realigned. The remaining 28% of respondents did not consult any senior management when making risk decisions and determined the

associated goals in isolation. Respondents believed this increased their ability to make risk decisions and implement the necessary goals.

In another question, respondents were requested to provide evidence of whether or not KRI thresholds motivated individuals to achieve goals set. 71% of group 1 respondents felt that KRI thresholds acted as a motivational tool to set and achieve goals. Goals were set to minimise risk exposures, motivate employees to get “things right the first time”. Respondents indicated that thresholds influenced employees’ behaviour toward goals set as the “more controlled the environment”, the more employees “ensure self-control”. Respondents were of the opinion that “the breach of thresholds and thresholds themselves drive or motivate behaviour and changes therein. “If we breach thresholds, for example we go into red, we start to become very creative in our goal setting on how we can address this breach and bring the level down to an acceptable level. We would do everything in our absolute power”. The literature review indicated that KRIs influenced managers’ goal setting behaviours thereby facilitating an increase in self-awareness and encouraging experimentation, creativity and goal attainment (Greenhaus et al. 2000; Davies 2005).

The remaining 21% of respondents in group 1 indicated that thresholds themselves did not act as a motivation to employees. This was due to the fact KRIs were not always reflected at an individual level. This made the direct motivational effect of the threshold difficult to quantify for each individual. Respondents did, however, believe that KRI thresholds motivated the achievement of goals at a team level as evidenced in the feedback gained from the other 71% of respondents.

Breaches caused managers to actively follow up on the goals set, better understand the root causes to identify whether or not the current goals needed to be amended or driven harder in order to address the intolerable risk exposure. A manager and his/her “team are relaxed and comfortable when the KRIs are in the green threshold. As soon as the metrics start going into the

amber thresholds, the team starts to engage and becomes very focused". "The teams become a lot more "panicked" and focused on their goals at hand".

The analysis of the data obtained from respondents who believed their goal setting behaviours were influenced by KRIs provided compelling evidence of how the relationship existed and also highlighted instances where there was not common agreement. However, as highlighted in the beginning of this Chapter, not all respondents believed that KRIs influence managers' goal setting behaviours. The subsequent analysis provided an overview of the reasoning and constructs on why 50% of the total respondents (group 2) indicated that KRIs did not influence their goal setting behaviours.

4.3.2 Why KRIs do not influence managers' goal setting behaviours

Respondents in group 2 indicated that there was no influence on goal setting behaviours. These respondents indicated that KRIs had no influence on goal setting behaviours because they had other management information which they used as input in their goal setting process. Secondly, it became evident throughout the interviews that these respondents had never in the past considered using KRIs to influence their business unit or employees' goals.

43% of respondents in group 2 who indicated that KRIs did not influence their goal setting behaviours suggested that they would probably play a part in the future. The reasoning given by respondents was that they had never really thought about KRIs influencing their behaviour in such a manner - or they believed their KRIs were not mature enough to facilitate this process. These respondents also indicated that goals might be set through the influence of KRIs but this was a sporadic and often an unconscious action. Another reason was that managers did not necessarily own the risk on which they reported. An example of this would be when a support function reported on poor data quality

as a KRI. The front office consultants owned the risk as they captured data into the organisation's client relationship management system, whereas the support functions only reported on it. It appeared that managers in the support functions did not necessarily drive the goals to reduce the risk exposure set for the front office consultants. Instead these areas only reported the KRI when in breach and escalated the information to other relevant managers.

KRIs are used to measure and monitor key material risks which could have a substantial impact on a business, regardless of whether or not the exposure is financial or non-financial. Literature revealed that material risks should be managed - and escalated - in order to ensure the sustainability and profitability of a particular business unit or the organisation as a whole (Davies 2005; Scandizzo 2005; Anon 2009b; BIS 2011). Respondents indicated that the management of material risks depicted which KRIs were monitored but this did not influence the goals that were set. Respondents would monitor their KRIs where appropriate and run projects on an informal basis to address the increasing risk exposure, but at no stage was it alluded to that this led to formal goal setting.

The results analysed did not suggest that in all instances KRIs were an ineffective management tool but rather that they were used in a different manner. Respondents felt that KRIs were more effectively managed outside the goal setting process when they were aligned to the organisation's or business unit's strategy as managers "start to measure what is being [achieved] versus [what is] supposed to be achieved". 86% of respondents felt confident that because KRIs in their business units were not broken down into an individual basis, they could not influence goal setting behaviours. Only 14% of respondents in group 2 broke down their KRIs to an individual level. These respondents did not believe that individual KRIs influenced their goal setting behaviours. 14% of group 2's respondents added a slightly different angle to the outcome by stating that "if there is a belief in the value of KRIs, they would drive behaviour by monitoring the risk of not achieving the goals".

Respondents provided evidence of their business unit goals driving persistence towards their achievement; however, these respondents could provide no evidence on how these goals were related to their KRI process. There was no substantial evidence suggesting there was a difference in outcome between respondents who believed KRIs should influence goal setting in the future, and those who believed that KRIs did not influence goal setting behaviours.

Respondents suggested that the only reason KRIs led in the effort to reduce risk exposures was because management had sight of the reports on a monthly basis. In this respect, the interview results did not support the literature review, that is, KRIs encouraged the correct behaviours spurring higher levels of effort, focus and direction to the effort exerted, producing higher levels of persistence in achieving goals (Dipboye 1994; Byars and Rue 2000; Greenhaus et al. 2000; Newstrom 2002; Davies 2005; Breden 2008). Results indicated that goals independently encourage higher levels of persistence in achieving favourable outcomes.

Results showed that 92% respondents interviewed believed that there were differences in the level of acceptance of KRIs across different business units. This indicated that regardless of the influence KRIs had on managers' goal setting behaviours, there would be undulating levels of acceptance. Respondents were a lot more streamlined in their reasoning for different levels of acceptance when compared to the results obtained with group 1. In this analysis, 58% of respondents were aligned to respondents in group 1 stating that management involvement was a critical feature and if management was not intrinsically involved, KRIs would be ineffective. The other 43% indicated that differences in business unit sub-cultures played a role, whereas in the first group analysed only 14% stated this was an influential factor. Lack of awareness, differing business unit objectives and non-ownership of risks were also the reasons identified - this outcome was the same as noted in group 1.

28% of respondents alluded to that fact the KRIs were not accepted across business units because management did not view them as an effective

management tool, nor did they see their inherent value. In order to understand the underlying influence of this outcome, an analysis was conducted on whether or not respondents viewed KRIs as an effective monitoring tool. 43% of these respondents indicated that KRIs were an effective management tool to measure risk but that they did not have any influence on their goal setting behaviours. 24% stated that KRIs were effective only to a certain degree. The reasons for this outcome were that while KRIs identified trends, the respondents felt that they were not effective in predicting future trends or changing risk exposures to which goals could be aligned. Action plans could be implemented when an exposure was already at an intolerable level but they did not allow the manager to prevent risk exposure from increasing in the first place. Instead the manager was required to guess what might happen, which was not always accurate. They were also just used as a high level “dip stick” test of the control environment and were not always an accurate indicator of the risk profile. The remaining 33% indicated that KRIs were fairly frequently used but due to the manual nature of the process, they were too outdated to provide any real value. Again, this indicates that if KRIs were not viewed as an effective monitoring tool, they would not influence managers’ goal setting behaviours.

58% of respondents indicated that KRIs were not mature enough in their respective business units to provide valuable management information and too often breaches were escalated to management: however, the threshold themselves were incorrect, diluting the urgency and effectiveness of addressing breaches. It was stated that KRIs, because of their limitations, did not influence the way in which respondents managed their team to set goals. These respondents appeared to not always believe in the value of a KRI and in addition, commented that there was a lack of buy-in from their senior managers. This devalued the entire process and resulted in KRIs not influencing managers’ goal setting behaviours. Evidence suggests that these managers did not believe in the value associated with the KRI’s and supports the notion that managers did not reap the full benefit of these metrics as the process had not progressed beyond mere compliance with regulatory requirements (Davies 2005; Breden 2008; Anon 2010b). A deduction from the interviews was that some of the KRIs

were forced onto these managers from a regulatory perspective and they did not inherently wish to monitor their risk exposures in this manner.

KRIs may be used as an effective management tool to achieve the goal of consistency by documenting what the manager, employee and team had agreed to strive towards in a clear and quantifiable manner, therefore increasing the motivation to achieve the set standard and increase the likelihood of achievement (Cialdini 2001). However, this would not be the case where KRIs became outdated, as discussed previously. It therefore becomes important to maintain relevancy in these metrics. 86% of respondents in group 1 who indicated that their goal setting behaviours were influenced by KRIs, believed that their KRIs were agile enough, while 15% believed that they were not and could therefore have a hampering effect on goal setting. Interestingly, 71% of the second group of respondents indicated that their KRIs were agile enough and 29% indicated that their agility was acceptable but could be enhanced. The main reason for 29% of these respondents stating this was because the changes took a prolonged period of time to implement. This hampering effect was due to the high number of stakeholders involved in the process. While group 2 respondents felt that their KRIs were not that useful, they appeared to have more freedom in amending their metrics. A predominant trend identified in group 2, compared to group 1, was that the second group was concerned about their KRIs being too agile. The respondents' answers did not provide any evidence of why there may be a difference, especially as the second group of individuals did not use their KRIs as effectively as the first group analysed. It could be deduced that there may be tighter controls and management oversight in business units were KRIs were used as an effective monitoring tool thereby making it a lot more difficult to amend KRIs.

Data integrity was highlighted as another key issue in ensuring that managers were able to monitor the right risks. Respondents indicated that poor data quality meant that a proportion of the data were not correct, outdated or missing. A second related issue was the inability to pull automated reports from the Bank's systems, making the process a very manual one. The manual

process to sort through data in an attempt to make logical sense of it was noted as a frustration for 43% of these managers. In certain instances management cannot even obtain the information for the risks they wish to monitor due to system or reporting constraints. This reduced management ability to monitor the right material KRIs which has had an impact on managers not setting associated goals.

14% of the total respondents from the second group of managers felt that given all the constraints, it was easier to monitor the team outside of the KRI process. It appeared that with managers being intrinsically involved in the day-to-day processes within their business unit, they felt they did not need metrics to run their business. If they were concerned about a particular risk, they would go directly into the respective system and view the details themselves or alternatively, they would request clarification from their team members. Respondents felt that KRI's did not always make sense and that sometimes they were obliged from a regulatory perspective to produce them. Data, reporting and system constraints, as well as the use of untraditional methods (i.e. viewing systems directly or questioning employees), had had an impact on the level of acceptance of the KRI process which had inadvertently impacted the influence that KRIs had on managers' goal setting behaviours.

The above analysis then suggests that KRIs may not be effectively integrated into the managers' respective business units. The literature review indicated that the integration of KRIs was an important construct in the influence that KRIs have on managers' goal setting behaviours (Greenhaus et al. 2000; Davies 2005). Results showed that 58% of these managers indicated that their KRIs were integrated into their business units.

Further analysis revealed that although respondents integrated their KRIs into their business units, they were not integrated to the same level that respondents in group 1 indicated. Only 14% of these respondents' integrated the KRIs into their team meetings, 14% merely distributed the reports to their teams without necessarily discussing the outputs with employees, and 43% brought this

information to senior management's attention when absolutely necessary (i.e. in the case of major risk events or substantial financial losses). This high level integration did not appear to have any impact on influencing managers to set goals related to these outputs.

The remaining 62% of respondents did state that KRIs were not effectively integrated into their business units. From a regulatory perspective a manager had to have KRIs and follow the processes advised by Group Operational Risk and the board. This did not add a lot of value because the metrics told the respondents what they already knew.

28% of respondents who indicated that their KRIs were not currently integrated indicated that they intended to better integrate them over the short term to influence goal setting once their processes had matured. These respondents' KRIs were only escalated to senior management when necessary and completed without involving team members. 14% of respondents did not integrate their KRIs as they were completed for "academic purposes". In summary, the lack of proper integration of KRIs reduced the effectiveness of the KRI process. This has resulted in the failure of respondents to use the KRI process to influence goal setting behaviours.

Managers frequently alluded to including KRIs into team meetings and into management information packs when the first group of respondents' feedback was analysed. This provided an indication that these respective respondents' business units have moved beyond mere compliance and were enjoying the full benefits of the KRI process (Davies 2005; Breden 2008; Anon 2010b). All respondents in this second group stated that they completed their KRI reports on a monthly basis. 58% of respondents collated their KRIs in isolation and did not share the information with an audience broader than those stipulated by Group Operational Risk guidance. 14% of the respondents' reports were collated by contract Trainees, 14% outsourced to ERMs and 14% completed by respondents' team members. The 58% of respondents who completed the KRIs on their own affected the outcome of the influence that KRIs had on managers'

goal setting behaviours because goals could not be set if other individuals were not privy to the information.

Organisations are required to use their own tailored framework, in this instance KRIs, to better guide managers decision making (Kraujalis et al. 2006; Rochette 2009). 28% of respondents made risk decisions in isolation, ie not involving other stakeholders. This was 14% higher than the outcome observed in the first group of respondents. In general, risk decisions were made at a lower level within the organisation, especially in comparison to the first group of individuals analysed. Only 14% of respondents indicated that, if necessary, they would make decisions in consultation with the board of directors; however, this was dependant on whether or not the business unit was situated at a group level. Business units situated at a group level appeared to be more likely to include the board of directors in their risk decision making processes if necessary. It was evident that the lower levels of escalation and the higher levels of decisions made in isolation by managers might reduce the amount of questioning that would normally be received by the inclusion of more senior stakeholders. This resulted in the KRIs not being viewed as an important risk management tool and therefore impacted the influence the process had on goal setting behaviours.

Respondents were then requested to indicate if breaches in thresholds changed their behaviour and influenced the manner in which they set goals. All respondents indicated that breaches in the thresholds made them change their behaviour but it would not impact the manner in which they set their goals. Again, respondents reinforced that either they did not see the full value in KRIs and therefore did the bare minimum to complete them as part of their regulatory obligations, or the process was not mature enough to influence goal setting behaviours. During the interviews a theme emerged indicating that respondents completed much of their work on KRIs in isolation and did not integrate their KRIs well enough for them to influence goal setting behaviours.

Respondents indicated that their behaviour would be affected when a KRI went into breach because “the executives would then ask questions”. This made sense if consideration is given to the early findings, where 43% of respondents indicated that they escalated their KRIs directly up to board level. Changes in the managers’ behaviour might bring the exposure back into a comfortable range but the learning was not shared and it appeared to be actioned in a more informal manner outside of the setting of formal goals. This was not purely limited to the escalation of KRIs to the executives but it also included other stakeholders. Respondents indicated that stakeholders would be more concerned, especially if there were continued threshold breaches, and would ask more questions. This should then drive managers’ goal setting behaviours and risk mitigation but evidence suggested it didn’t because goals were not set.

Results analysed across the two groups provided insight into the influence that KRIs had on managers’ goal setting behaviours. Overall, the proposition was rejected because not all respondents indicated that KRIs influence their goal setting behaviours. There was an equal split amongst participants’ view on the proposition being explored.

The influence that differences in gender, business unit and length of service had on the proposition has not yet been explored. The next section provides an overview of whether or not these exogenous factors have played a role in respondents’ perceptions.

4.3.3 Gender influence on respondents’ answers

The outcome of the proposition that was tested showed that 50% of respondents believed that KRIs affected their goal setting behaviours, whereas 50% indicated that KRIs did not influence their goal setting behaviours. 35% of females and 65% of males indicated that KRIs influenced their goal setting behaviours, whereas 65% of females and 35% of males indicated that KRIs did not influence their goal setting behaviours. The high percentage of male

respondents indicating that KRIs did influence goal setting behaviours and that of the females indicating that KRIs did not influence their goal setting behaviours, suggested that gender had a bearing on the respondents' perception on the proposition being explored. These results are investigated further to identify the rationale behind these differences.

It was evident that gender played a role in the holistic monitoring of risks as inputs into goal setting. 21% of males indicated that they monitored additional risk reports by reviewing risk exposures, risk events, risk objectives and complaints on a weekly basis. These respondents alluded to how multiple data inputs improved the robustness and relevance of the KRIs produced and therefore enhanced the goal setting process. Only 7% of females used additional monitoring tools. It was therefore accepted that gender influenced managers' use of multiple sources of data to improve their KRI data in order to set goals to effectively control risk exposures.

62% of females and 38% of males who indicated that they completed the KRIs on their own accord also indicated that they did not believe that KRIs influenced managers' goal setting behaviours. The content analysis conducted suggested that the main reasons for this response was that the female respondents used other management reports which they believed were more effective; they therefore only completed the KRIs from a governance perspective. Another reason was that it was believed that KRIs are still in their infancy. In this respect, females did not believe that KRIs influenced managers' goal setting behaviours. The male respondents who collated the KRI reports themselves predominately felt that these reports did influence managers' goal setting behaviours. Males believed that metrics naturally drive a manager's behaviour and therefore they would set goals to actively maintain their risk exposures. Male respondents worked closely with the metrics and therefore used them to monitor their business. It was accepted that gender then influences managers' goal setting behaviours when the managers themselves complete the KRI reports.

4.3.4 Business units influence on respondents' answers

It can be deduced that the business unit to which an employee belongs could influence a respondent's perception of whether or not KRIs influenced goal setting behaviours. It was noted throughout the analysis that there were some minor salient trends between business units that influlenced the respondents' perceptions.

Respondents, predominately from the Private Bank, indicated that KRIs influenced managers' goal setting behaviours. The reasoning for this was that KRIs in the Private Bank business unit were a lot more granular than the other business units across the group, making it easier to directly link and monitor the achievement of business unit goals. It also appeared that it was a lot easier to change KRIs in the Private Bank due to their granularity and fewer stakeholders required to make the changes. It was therefore accepted that business units played a role in the acceptance of the KRI process in influencing goal setting behaviours.

4.3.5 Length of service influence on respondents' answers

Respondents' length of service varied from one year and 11 months to 13 years and two months. The length of service of each respondent appeared to have an impact on whether or not managers believed that KRIs influenced their goal setting behaviours.

It should be noted that 75% of respondents with more than 10 years' experience felt that KRIs influenced their goal setting behaviours. It was therefore accepted that the length of service had an impact on the proposition being explored.

The length of service appeared to have an impact on who was responsible for the collation of the KRIs. 42% of managers who collated the report themselves had between one and five years' experience. The managers with the most

experience used their contract Trainees to collate their KRI reports. It was accepted that the length of service might influence who was responsible for the collation of KRI reports.

Length of service appeared to have an influence on the integration of KRIs and their subsequent influence on managers' goal setting behaviours. Respondents with 10 to over 13 years' experience indicated that their KRIs were well or fairly well integrated and stated that they influenced goal setting behaviours. Respondents with four to five years' experience all indicated that their KRIs were integrated into their business units and that the KRIs influenced managers' goal setting behaviours. It was accepted that the length of respondents' service might have an influence on the integration of the KRI process and its subsequent influence on goal setting behaviours.

In summary, all three exogenous factors had a certain degree of influence on respondents' perceptions and the content analysis suggested where the relationships under each factor existed.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This Chapter of the research report provides an overview of the conclusions drawn from the interviews conducted, followed by recommendations based on the findings and suggestions for further research. The Chapter ends with concluding remarks on the research conducted.

5.2 Conclusions of the study

KRIs influence a manager's goal setting behaviour in an organisation when they are used as a key measurement of the operating environment, especially if they are leading in nature. The KRIs themselves provide evidence of when the business environment begins to transform, and if they remain agile enough, they provide a key input into the realignment of goals in order to ensure effective management of the organisation's risk profile. Lagging KRIs have the opposite effect as management is being given information it already knows or should have already acted on. Goals are one of the essential ingredients highlighted in the respondents' motivation to mobilise their employees to achieve key business milestones. This was specifically effective in the project management areas.

The influence that KRIs have on managers' goal setting behaviours is enhanced in instances where the KRIs adequately measure material risks, and where they are measured at an individual level and escalated to a broader audience, including senior management. Respondents cautioned that if the KRI process was not correctly managed, it could lead to unhealthy competition and inappropriate behaviours in the quest to quickly achieve goals set, often to the

detriment of the organisation's risk profile. This highlights the importance of the context of any KRI report when managers and employees implicitly and explicitly consider setting goals.

The alignment of KRIs to the business unit strategy influences the goals that are set by respondents and acceptance by their respective teams and management. Respondents function as encouragers in the KRI and goal setting process and the clear and concise manner in which goals are then set and communicated are some of the key components in the KRI being an effective management tool. Effective integration of KRIs and the risk culture created by managers drives a high level of acceptance of this process leading to appropriate goals being set. The opposite effect is witnessed when KRIs are not effectively integrated.

KRIs do not in all circumstances influence managers' goal setting behaviours. Lack of knowledge of the benefits of this relationship have meant than management has never in the past linked the two constructs. This relationship is highly dependent on business units' maturity to integrate their KRI process and the consistency in which goals are set. KRIs may be perceived as being ineffective in comparison to other management reports that monitor the operational environment including material risks. Data integrity, system and reporting constraints are an inhibiting factor on KRIs not influencing mangers' goal setting behaviours as the process is time-consuming and the outcome cannot be trusted.

Acceptance levels of the process, ownership of risk exposures and KRIs being measured at a team level and not an individual employee level, directly influence goals not being set to mitigate intolerable exposures. The incorrect thresholds being set or KRIs not monitoring the right exposures dilutes the influence that KRIs have on goal setting.

Sharing of KRI information allows individuals to consciously or sub-consciously set goals for themselves. Decisions in circumstances where KRI information is

not shared among relevant stakeholders leads to an isolated approach to goal setting that is not effective in mobilising broader communities. Lower or isolated levels of escalation and consideration by managers, depletes the value of the KRI and subsequently does not influence managers' goal setting behaviours.

It was determined that gender influences a respondent's perception on whether or not KRIs influence managers' goal setting behaviours. The majority of males indicated that KRIs influenced their goal setting behaviours, whereas the majority of females indicated that KRIs did not influence their goal setting behaviours. It was evident that gender may have an influence in the holistic monitoring of risks as inputs into goal setting. Males tended to use multiple sources of data to improve their KRI data in order to set goals to effectively and controlled risk exposures more consistently than females. More females than males completed the KRIs on their own accord, indicating that they did not believe that KRIs influence managers' goal setting behaviours.

The business unit to which an employee belonged could also influence a respondent's perception of whether or not KRIs influence goal setting behaviours. Respondents, predominately from the Private Bank, indicated that KRIs influence managers' goal setting behaviours. KRIs can also influence managers' goal setting because the metrics appear to be more agile in the Private Bank due to their granularity and fewer stakeholders required to make the required changes.

Respondents' length of service could influence goal setting behaviours where respondents had over 10 years' service. The length of service may have an influence on who is responsible for the collation of the KRIs. Respondents who collated their reports themselves had between one and five years' experience. The managers with the most amount of experience used their contract Trainees to collate their KRI reports. It was accepted that the length of service influenced who was responsible for the collation of KRI reports. Finally, length of service

influenced the integration of KRIs with respondents who had more than four years' experience.

The results provide the reader with a detailed analysis which allows financial institutions to continuously consider the influence that KRIs have on managers' goal setting behaviours to leverage the full benefits of the ORM process in a quest to effectively manage organisational risk profiles.

5.3 Recommendations

The data analysis explored the influence that KRIs had on managers' goal setting behaviours. The analysis provided clarity on underlying influnces which managers could consider when attempting to effectively manage their KRI and goal setting processes. The recommendations can be split into short term and long term options. The short term options provide management with "quick wins" that will allow managers to effectively monitor goals through the KRI process.

1. It is recommended that in the short term risk training is tailored more effectively to leverage and communicate the advantages of utilising KRIs to influence their goal setting behaviours on individuals, teams and the organisation. This recommendation addresses the issue identified where managers indicated they had never previously associated KRIs with goal setting. The main purpose of this is formalise the goal setting process in relation to the KRIs through the use of demonstration and knowledge sharing as tools to enhance this process.The training session should include a story telling module that outlines where successful implementations of KRI and goal setting processes have been witnesses to increase the rate of effective adoption.

2. A method to facilitate information sharing between managers should be established. Respondents indicated that they were not necessarily always responsible for the underlying risks reported on in their business units. It would therefore be recommended that managers share this with the relevant stakeholders so the risk exposures can be addressed at the source and the overall risk profile of the organisation improved.

3. The target audience to which KRI reports are distributed should be standardised. Through the standardisation of the escalation and reporting process, managers may be able to create an increased level of consistency which, as indicated in Chapter 4, would mature the process and expedite managers' goal setting behaviours.

4. Group Operational Risk should be more involved in the KRI process across all business units to create consistency and share learning and success stories. This will mature the process and facilitate effective goal setting.

5. The involvement of senior management appeared to drive goal setting behaviours due to exposure the reports received. It is suggested that KRIs and their associated goals are added as a standard agenda item to all management committee meetings.

6. Lastly, a standard comments column should be added to all KRI reports requesting respondents to provide feedback on goals set in order to mitigate the risk exposures. This will encourage the use and monitoring of goals to reduce risk exposures.

Due to the associated costs involved, it is suggested that the following recommendations are implemented over the long term. These recommendations will drive the long term sustainability of the KRI process more effectively and so influence managers' goal setting behaviours.

1. Management should identify ways in which KRI reports can be automated in order to reduce the time lag between production and analysis. Some managers indicated that the KRI reports were not effective in influencing goal setting behaviours because the time lag between the collation of reports and receipt was prolonged. This recommendation would speed up the process and possibly provide real time data to effectively set goals to manage risk exposures.

2. A long term strategic project for the managers would be to improve the overall data integrity in the systems and address the current report constraints. Because it takes a prolonged period of time to rectify data, once the reports are collated they are meaningless since the information is already known. Secondly, the results of the KRI reports might not be trusted because their integrity is doubted and so managers do not set goals.

3. Managers should investigate whether or not goal setting behaviours would be more influenced by the KRI process if rewards for risk mitigation are linked. This would possibly drive goal setting behaviours towards reducing risk exposures and minimising operational losses, client dissatisfaction and reputational damage.

4. Evidence suggested that the use of KRIs - together with other management reports - improved the influence that KRIs had on managers' goal setting behaviours. It is therefore recommended that managers identify other management reports to use in conjunction with KRIs to improve the overall manner in which a business unit is effectively managed.

5.4 Suggestions for further research

It is suggested that the following be considered as further research topics:

Researchers explore the influence KRI indicators have on the other managers' or employees' behaviours that were mentioned in the literature review. This includes, but is not limited to, risk perceptions and judgements, levels of engagement, work ethic, leadership style, culture, performance monitoring and the need for individual fulfilment. Research of this nature will allow managers to consider the constructs that affect the KRI process to realise the benefits of this operational risk monitoring tool.

The influence of the other operational risk monitoring techniques should be explored in relation to the above mentioned management behaviours. These monitoring tools include risk and control assessment, loss data collection and scenario analysis. Insight into these findings will aid managers in leveraging the tools effectively to mobilise their respective teams and organisations.

Lastly, research suggests that many organisations have failed in their attempt to successfully implement KRIs (Davies 2005; Tice 2011). It is therefore recommended that the critical success factors for implementation are explored to assist organisations with effective implementation.

5.5 Concluding remarks

The world in which we operate is the culmination of a significant degree of change, taking place at a faster rate than it ever has before. Those organisations which have not remained agile and in touch have been rapidly culled from the market place. New processes, technology, regulatory obligations and increasing competitor pressure magnify the need for effective risk management strategies and goal setting in order to mitigate impending threats –

and even unrealised opportunities. Organisations can protect themselves and hold substantial amounts of capital, but if they are not proactive in preventing and mitigating risk, this capital may not be enough which could be detrimental to their sustainability.

The literature review identified the constructs that influence the KRI process and the subsequent goal setting behaviours of managers. The findings of this research report will assist managers in leveraging their risk management tools to effectively set goals to manage organisational risk profiles and realise the full benefits of a sophisticated risk management framework which would protect all depositors, debtors, shareholders, clients and enhance the stability and effectiveness of the financial system.

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APPENDIX A – LETTER TO RESPONDENTS

Dear _____,

I am currently in my final year at Wits Business School in Parktown, Johannesburg, completing the Master in Business Administration (MBA) degree. An important and final criterion for the accreditation of this degree is to complete a report on a research topic of interest and benefit to a selected population.

My thesis topic aims to explore the influence that key risk indicators (KRIs), a formal operational risk monitoring technique, have on managers' goal setting behaviours within the financial industry in South Africa. The respondents selected are all currently employed by Investec Bank Limited and have had some degree of exposure to KRIs within their functions in the organisation.

In order for me to fulfil this objective, I would appreciate if I could arrange a one-hour interview within the Investec offices at a time convenient to you, to gain an understanding of the influence KRIs have had on your behaviour.

The contents of the discussion will be observed for academic research purposes only and your confidentiality will be protected through the interview process and the publishing of the findings.

I thank you for your time and willingness to assist me.

Yours sincerely,

Tracie McCabe

Mobile number: 082 300 8557

APPENDIX B - RESEARCH INSTRUMENT: SEMI-STRUCTURED INTERVIEW QUESTIONNAIRE

Interview questionnaire

The proposition to be tested: Key risk indicators influence managers' goal setting behaviours

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Interview details:

Date:

Time:

Job title:

Business unit:

Gender:

Introduction:

The respondent should be thanked for the time they have taken to meet and contribute towards the investigation in preparation for this research report.

Explain that the purpose of this research report is to gain an understanding of the influence that key risk indicators have on managers' behaviour, specifically their goal setting behaviours. Reference should be made to the email correspondence also sent to the respondent in setting up the appointment and in preparation for the interview. Provide an explanation as to the format of the

semi-structured interview. This includes that the researcher will ask questions and that the respondent is requested to answer them based on their own perceptions.

Explain that the research topic aims to explore the influence that key risk indicators, a formal operational risk monitoring technique, have on managers' goal setting behaviour within the financial industry in South Africa. Highlight to the respondent that the sample of individuals selected are all currently employed by Investec Bank Limited and have had some degree of exposure to KRIs within their functions within the organisation.

Permission to record the interview for academic purposes should be requested from the respondent and that their confidentiality will be guaranteed. It should further be stated that all hand written notes will be transcribed and the respondent will only be identified through a number sequence (i.e. R 1, R 2, etc). It should also be noted that upon special request that records of the interview may be requested and made available. The respondent should be informed that documents will be stored in a safe location for a reasonable period of time before being destroyed. It should be mentioned to the respondent that direct quotes may be used in the research report but that these comments will only be linked to the respondents' numerical identification.

Interview questions

1. What is your perception of a KRI?
2. Do you believe KRIs are an effective management tool? Please provide an explanation.
3. What is the frequency in which KRIs are monitored your business unit?

4. Who is responsible for the collation of the KRI reports?

5. Who forms part of the target audience that these KRIs are distributed too?

6. Are KRIs effectively integrated into your business unit to affect goal setting? Please explain.

7. Who is responsible for risk decisions in relation to goal setting in your business unit? How does this influence goals set?

8. To what extent do you perceive employees behaviour to be affected by the monitoring of KRIs?

9. Do you believe KRIs influence your goal setting behaviours? Please provide a rationale, an explanation and/ or examples?

10. Explain the process followed in order to ensure that KRIs are clear and concise?

11. Do KRI thresholds act as a motivational tool to set and achieve goals set? Please explain.

12. Do you think there are differences in levels of acceptance of KRIs across the various business units? Please explain.

13. Do you believe KRIs led to a heighten level of effort to reduce risk exposures? Please explain.

14. Do you believe the monitoring of KRIs lead to an increased persistence towards goal attainment? Please explain.

15. Do breaches in thresholds change your behaviour? Does this affect your goal setting behaviours? Please explain.

16. How do KRIs encourage goal setting behaviours?

17. Do you believe the KRIs in your business unit are agile enough to allow for effective goal setting? Please explain

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Close out

Lastly, the respondent should be asked if they have any questions and then thanked for the contribution. The respondent should be offered a copy of the research report once complete.

APPENDIX C – BACKGROUND TO OPERATIONAL RISK MANAGEMENT

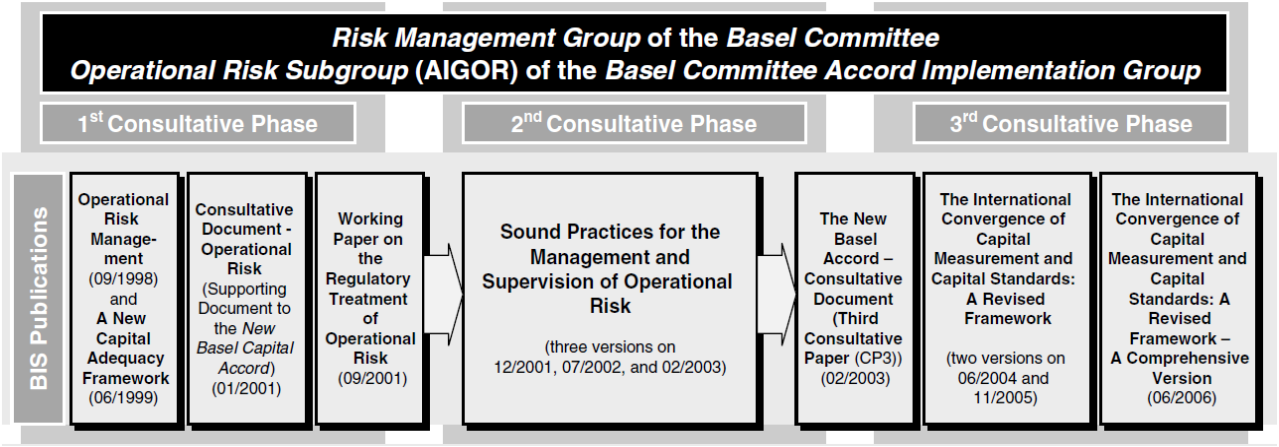


Figure 1: Background to ORM (Jobst 2007)

APPENDIX D – OPERATIONAL RISK EXCHANGE LOSS DATA

	Total	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009 H1*
Total number of loss events	142,041	8,519	11,338	14,920	18,106	21,620	23,620	31,511	12,910
Total gross loss (€Mn)	46,761	5,726	7,448	5,314	5,152	4,711	6,404	7,584	4,383
Average loss per event (€)	329,208	672,145	656,906	356,16	284,547	217,900	277,026	240,678	339,504
Number of ORX members		12	12	17	22	34	41	52	52

Figure 2: Overall summary of ORX annual data (Association 2009)

APPENDIX E – LOSS/ CONTROL OPTIMISATION

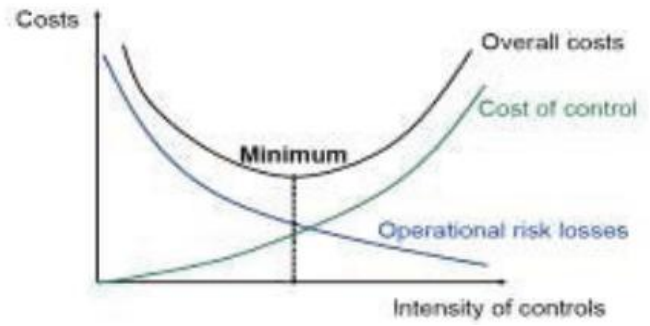


Figure 3: The optimisation of loss versus control trade off by using ORM (Maria 2009)