

The risk maturity of South African private and public sector organisations

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ABSTRACT

Risk management is a fairly new concept for organisations world-wide, both in the private and the public sectors. With the evolution of corporate governance in general and specifically risk management, formalised risk management frameworks have been recognised by many as an effective tool in assisting management with their responsibilities. In South Africa, this is supported by the fact that risk management is included in the leading corporate governance codes and in legislation, such as the Public Finance Management Act, No 1 of 1999 and the King Report on Governance, 2009. However, the question remains as to how comprehensive an organisation's risk management strategy should be. This article explores the concept of assessing risk maturity by using a risk maturity scorecard. After an existing risk maturity model was adjusted for the South African corporate governance environment, a scorecard was developed that was used to determine the risk maturity level of certain organisations within the South African private and public sectors. Results indicate that organisations within the private sector are mostly risk mature, while public sector organisations are lacking many elements within their risk management frameworks and no risk mature respondent could be found in this sector. Secondly, the article indicates that management's commitment to risk management could be the one main concern that should be addressed to ensure an effective risk management strategy.

Key words

Risk management; risk maturity; risk maturity models; private sector; public sector

1 INTRODUCTION AND BACKGROUND

In today's competitive world it is becoming increasingly difficult for organisations, both privately owned or in the public sector, to achieve their goals and manage risk effectively. Some reasons for this are the growing globalisation of the markets in which operations occur, scarcer resources, constant changes in the business environment and the increasing challenges to identify and manage risks effectively (Merna & Al-Thani 2005:2; Miller & Smith 2011:1-5). More complex markets bring greater opportunities for organisations, which causes a greater risk for potential losses. Although management should limit the potentially hazardous effects of risks on the organisation, it has to accept some risk because without risks, gains are unlikely. To assist management with balancing these two extremes, namely the need to limit risks that could harm the organisation *versus* taking on risks in order for the organisation to grow and meet its objectives, a structured risk management strategy could be used.

Although not formally defined or discussed for the purpose of this article, two terms are used to describe the overall risk management strategy. These are also the terms preferred by risk experts such as Dr Sean

de la Rosa (2008), Alexandra Psica (2008:53) and Deloitte (2009), as well as legislation containing risk management guidance from the United Kingdom government (UK – Cabinet Office 2002:9-10), the Australian and New Zealand Standards Board (AS/NZS 2004:5), and the Institute of Internal Auditors (IIA) (France) (2005), namely:

- A risk management framework – the totality of the structures, processes, systems, methodology, individuals involved, etc., that an organisation uses to implement its risk management strategy.
- The risk management process – the process that is used by management to identify, assess, treat, monitor and report risks. This is usually a structured and systematic set of tasks.

Risk management is, however, not a simple concept; the reason being that each organisation devises its own, usually unique framework, consisting of different practices and activities, amongst other details. Organisations thus have to determine the quality and the quantity of activities to be implemented in order to determine whether risks are appropriately managed according to the wishes of its governing bodies and senior management, and whether the risk management process is in line with what is communicated to its

stakeholders. This refers to the risk maturity of the organisation. The more effectively management has implemented the relevant activities and elements of the risk management framework, the more risk mature the organisation is (RIMS 2006:4).

An assessment of risk maturity provides role players with a way to combine all the various elements of a risk management framework to best suit the needs of their organisation, whereas a risk maturity model provides a stepping-stone approach to assist organisations in progressively reaching the desired maturity levels. The benefits of using a maturity model when determining the risk maturity level are increasingly being recognised by individuals, organisations and governments worldwide (Lenckus 2006; McDonald 2007:28; Chapman 2009). A model is primarily used by risk managers to assess how advanced their risk management framework is and to communicate this information to senior management and to the governing body, which, in turn, can incorporate this information into their decision making with regard to risk management strategies. Secondly, the assessment will identify areas that need improvement within the organisation's risk management strategy, providing the various role players with an action plan for the development of the risk management framework.

This article investigates the risk maturity levels of the Top 40 listed companies on the JSE Limited, the South African stock exchange, as well as the 37 national state departments in the South African public sector (refer to section 3 for the methodology, scope and limitations of the article).

In the next section, the concept of a risk maturity model is discussed, a comparison of existing risk maturity models is constructed, and the identification of common criteria used in these models is provided. An existing risk maturity model is adjusted for the South African environment and a risk maturity scorecard is developed that is then used to assess the risk maturity levels of the above-mentioned South African organisations. Thereafter, the empirical research methodology is explained, the empirical results provided and discussed, and appropriate conclusions and recommendations are made.

2 RISK MATURITY MODELS USED TO DEVELOP A SCORECARD

Various descriptions of the term 'risk maturity' and of the different stages of adoption of the risk management framework within an organisation exist (COSO 2004:28; Liebowitz 2007:44; De la Rosa 2008; Chapman 2009), and can be summarised as:

- a series of steps;
- that evaluate and score key characteristics of the risk management framework;
- against best practices (benchmarking);
- to determine whether the risk management framework as adopted and planned by the governing body and senior management, has been adhered to.

In the above descriptions, there is also often reference to a risk maturity model as a tool to assess

the risk maturity levels, and this concept can be summarised as:

- a structured and systematic approach;
- with a list of current generally accepted criteria;
- used as a benchmark against which to evaluate the organisation's risk management framework;
- to determine the maturity or level of implementation of the risk management framework.

In the rest of this section, the concept of a risk maturity model is introduced, various models are compared in order to identify common criteria, and a risk maturity scorecard is developed, all based on the literature, which will be used during the empirical investigation.

2.1 Introduction to risk maturity models

As mentioned before, maturity models are much needed barometers for risk management role players. With risk management being a relatively new addition to the corporate governance environment (compare the second and third King reports on governance in South Africa for an indication of the extent of the changes), much guidance is needed to ensure that organisations mitigate their risks optimally – without over- or under-managing – so as to reach objectives effectively and efficiently. It is therefore important to use a well-developed risk maturity model to ensure that the result of the comparison makes sense within the global risk management environment (macro level) and can be trusted by the organisation's risk managers as well as the governing body and senior management (micro level).

Although it would seem to be a fair assumption that all organisations would want to strive for the highest risk maturity level, this may not always be the case, as the highest level may have some disadvantages including that it may be very expensive and time consuming to achieve. It may not be necessary for a specific organisation to implement all the elements of a risk management framework in order to manage its risk effectively and efficiently, and thereby ensuring that its objectives are achieved. The risk maturity of the organisation has to be decided by the governing body, as overall custodians of the risk management framework (IOD 2009:73). The governing body is, in turn, guided by risk managers and senior management. A risk maturity model is an available tool that can be used to determine the level of risk maturity that management wishes to accept.

Currently, models are being used by organisations to assess risk maturity, and after an extensive literature search the seven models most frequently and most effectively used were identified. In the next section these seven models are compared and the common criteria are identified.

2.2 Comparing various risk maturity models

A number of the leading risk maturity models are based on the Capability Maturity Model that was developed by the Software Engineering Institute (SEI) in the United States of America in the 1980s for the measurement of information technology maturity

(Liebowitz 2007:44; McDonald 2007:29; Chapman 2009). According to this model, maturity models should be in the form of a matrix comprising the following elements:

- a few levels of maturity describing the stage of development;
- the assessment criteria or attributes describing the quality of the risk management practices within each level (hereafter referred to as criteria); and
- the competencies describing the incremental improvements or desired capabilities, linking the levels to the criteria (also referred to as deliverables or key performance indicators and hereafter referred to as deliverables).

Although the concepts of risk maturity and a risk maturity model are relatively new to the business environment, seven risk maturity models were identified after undertaking a comprehensive search to identify the most prominent and frequently used models. Other risk maturity models do exist, but for the purpose of this article it was apparent that these models were sufficiently comprehensive and diverse to identify common criteria used in risk maturity models. Table 1 compares these models by measuring them against the Capability Maturity Model's three elements, namely maturity level (all adhere), the criteria used (only three models adhere), and the deliverables achieved (all adhere).

Table 1: Risk maturity models

Model	Maturity level	Criteria with brief identification of deliverables						
		Culture	Process	Experience	Application			
Hillson 1997	Naïve	No awareness	No process	No understanding	No structured application			
	Novice	Selected use	Some methods	Individuals	Inconsistent			
	Normalised	Policy & benefits	Formal process	In-house training	Routine			
	Natural	Top-down commitment	Comprehensive	All staff aware	All activities			
IACCM 2002	Novice	No awareness	Inefficient	None	Not used			
	Competent	Some awareness	Inconsistent	Basic	Inconsistent			
	Proficient	Understand benefits	Consistent & tailored	Proficient	Adequate resources			
	Expert	Proactive & full commitment	Adaptive & fit for purpose	Extensive experience	Proactive resources			
IIA (UK & Ireland) 2003	Naïve	No formal approach						
	Aware	Scattered silo-based approaches						
	Defined	Strategy and policies in place and risk appetite defined						
	Managed	Organisation-wide approach						
Hopkinson 2004	Naïve	Measured in terms of stakeholders, risk identification, risk analysis, risk mitigation, project management and culture:						
	Novice	Little attention paid to actions						
	Normalised	Progress against planned implementation not satisfactory						
	Natural	Process against planned implementation usually satisfactory Actions carried out in consistent professional manner						
Spencer Pickett 2005	Awareness	Some form of system is needed to ensure a methodical approach to manage risk						
	Design Integration Review	System(s) is designed for risk management process incorporation Systematically apply risk management throughout organisation Reporting structures to ensure processes are functioning optimally						
RIMS 2006	Ad Hoc	Approach	Process	Appetite	Cause	Uncover risks	Perform	Sustainability
		Little accountability	Reactive	Silo view	No cost saving	Owned by specialist	Limit measure	Aware
		Compliance enforced	Need recognised	Only senior level	No top-down	Lists of risks	Separate process	Broader view
		Understood	All needs	Communicated	Understood	Growing lists	Contributes	Far-sighted
		Self-governed	Define & enforce	In each step	Implement	Owners manage	Integration	Comprehensive
Leadership	Strong	Embedded	Delegate to all	Mitigate	Best practices	Performance measure	Continuity	
MIT Not dated	1	Able to respond to most disruptions						
	2	Minimise disruptions and recover fast						
	3	Planning and execution are integrated						
	4	Strategic initiative integrated into operational management and external reporting						

With regard to the models used in table 1, the Massachusetts Institute of Technology, Centre for Transportation and Logistics' model (MIT n.d.) was developed for the mitigation and elimination of risks in supply networks. The Hillson model (1997), the International Association for Contract and Commercial Management (IACCM) Business Risk Management Maturity model (2002), the Hopkinson model (2004), and the Risk and Insurance Management Society's

(RIMS) model (2006) were developed as generic tools for organisations to determine their risk maturity and then, guided by the outcome, to determine the further implementations needed to become more risk mature. The Institute of Internal Auditors' model (IIA (UK & Ireland) 2003) and the Spencer Pickett model (2005) were developed to assist internal auditors in determining the level of the organisation's risk maturity in order for the internal audit function to

decide what their role should be in the risk management framework – ranging from providing advice (for a risk immature organisation) to providing assurance (for a risk mature organisation).

When the risk maturity models are compared with the Capability Maturity Model developed by the SEI, only three have all three of the required elements in their structure – the models developed by Hillson (1997), the IACCM Business Risk Management working group (2002) and RIMS (2006). Furthermore, from the above table it is evident that the RIMS (2006) model, for the purpose of this study, is by far the most comprehensive model when it comes to assessing risk maturity as it has five risk maturity levels compared to the four levels of the other two models, and has seven assessment criteria compared to the four criteria of each of the other two models.

For the purpose of deciding which common criteria should be included in the risk maturity scorecard to be used in the empirical study to determine the risk maturity levels of South African organisations, only these three models (Hillson 1997; IACCM 2002; RIMS 2006) were included in the discussion.

2.3 Criteria commonly used

The Hillson model (1997) and IACCM model (2002) each have four assessment criteria whereas the RIMS model (2006) has seven criteria (refer to table 1). These models' criteria are briefly discussed, after being compared with one another, to determine which criteria should be used when measuring an organisation's risk maturity levels. Additionally, when scrutinising the documents, it seemed as though some of the apparently different criteria address the same concepts, and as such, even though different terminology is used, these criteria can be meaningfully combined. Lastly, it should be noted that the RIMS (2006) model consist of various documents explaining the different areas addressed in the model in greater depth: there is a matrix summarising the risk maturity levels, a matrix explaining the criteria, a matrix explaining the deliverables, and a comprehensive document providing a list of the criteria and linking these to the deliverables. For the purpose of this article, the comprehensive document was used in the comparison documented in table 1.

- **Criteria: culture, approach and appetite**

This describes the attitude, commitment and degree of support from the governing body and senior management with regard to risk management, referring in particular to the extent to which the risk management framework is adopted and implemented. It includes aspects such as setting a risk management policy (including the determination of the risk appetite), the level of integration of various risk management initiatives across the organisation, starting with the integration of risk management within the strategy setting process, internal and external communication (including the overall awareness of the importance of risk management), and the coordination between various parties.

- **Criteria: process, cause and uncover**

This refers to the steps and initiatives undertaken to identify (uncovering and cause), assess, evaluate, mitigate and monitor risks. It includes the integration with other business processes as well as the risk appetite accepted by management, and how the accountability of various parties is used to guide decision-making and to eliminate gaps.

- **Criteria: perform and application**

This criteria refers to the application as well as to the performance measurement of the adequacy of the risk management framework, with reference to aspects such as resource allocation, policies, the risk management process, implementation of the risk response within the boundaries of the risk appetite, quality of communication, and the achievement of objectives, to name but a few of the areas that should be covered in a comprehensive risk management framework.

- **Criteria: sustainability**

This could be difficult to assess, as sustainability, including resilience, is difficult to gauge. Linking these concepts to risk management further complicates the assessment. However, this criteria could be assessed by integrating risk management into the operational activities of the organisation and understanding the consequences of a risk. For example, a supply chain disruption or a major change in the market pricing would affect sustainability, and the corrective actions in response would have to be evaluated against the organisation's risk appetite.

- **Criteria: experience**

Personnel should be equipped and supported to manage risk promptly and appropriately as risks could materialise on all levels of the organisation. This criteria includes the need for risk tasks to be performed by qualified staff with the appropriate range and depth of knowledge, skills, and competencies and a positive attitude. Furthermore, management should ensure that sufficient resources are allocated to the staff in the form of training or personal development.

2.4 Developing a risk maturity scorecard

Arising from the above comparisons, the model developed by RIMS (2006) was chosen as the most comprehensive and therefore the most appropriate for the purpose of developing a risk maturity scorecard to be used in the empirical study. The following is a summary of the common criteria identified above, grouped into meaningful sections. As the comprehensive RIMS model (2006) is too lengthy and cumbersome, the criteria matrix is limited to four sections ('approach' has further sub-sections), and is used as basis:

- Risk management approach including:
 - the risk culture of the organisation;
 - risk management included in the organisation's strategy setting;
 - risk management policy setting (including the risk appetite).
- Risk management process including the identification of risks and the causes of the risks.
- Staff experience.
- Risk management application and performance measurement to ensure sustainability.

After establishing which document to use as the basis for developing the scorecard (refer to Annexure 1 for the risk maturity scorecard used in the empirical study), the model needed to be adapted to address particular aspects as discussed hereafter. Firstly, the model was adapted to address the limitations identified after completing the comparison of all the models' criteria. Secondly, as the model was developed for all RIMS members on a global scale, the model had to be adapted to address South African corporate governance recommendations contained in the second King Report (IOD 2002). Two further criteria were added: reporting and communication, and internal auditing as the provider of assurance. Deliverables for the five maturity levels of these two areas were developed by consulting various South African risk management guidelines (SA – National Treasury 2009; SA – Act No 1 of 1999), but as subordinate to the guidance contained in the second King Report (IOD 2002). The reason for using the guidance in the second King Report and not the third King Report is that the changes in the guidance on risk management between the two reports (second and third King reports) are substantial and organisations were judged to still be in the process of implementing the additional guidance criteria. Although no research has been done to support this fact, a study performed by Faure and De Villiers (2004) on the implementation of the requirements of the second King Report (IOD 2002:69), revealed that it had only been partially implemented two years after the report had been issued.

3 METHODOLOGY, SCOPE AND LIMITATIONS OF THE EMPIRICAL STUDY

The research methodology used to determine the respondents' risk maturity level is qualitative, namely *evaluation research: implementation evaluation* (Mouton 2001:144,158-159) that has as its main objective to determine whether a programme, policy or strategy has been properly implemented as planned or developed. Mouton (2001:159) concludes that when using this type of research, the evaluation could be theory-based (tick the 'black box'), amongst others. The analysing of existing documentary sources is also commonly used in such a research methodology. The data analysis is qualitative in nature and the researcher's control over the research content is low. This empirical study was conducted in three parts, as explained below:

- Develop a risk maturity scorecard (refer to Annexure 1). For the purpose of this empirical study, each of the forty areas (eight criteria x five

maturity levels) were allocated five points, totalling a maximum of two hundred.

- The researchers gathered organisations' financial statements, information published on the Internet and in other media, such as investment reports and media releases, that addressed the organisations' risk management efforts.
- Each organisation's information was compared to the final list of deliverables per criteria and the outcome was documented on the scorecard.

The minimum risk maturity level is suggested to be level three ('repeatable') as the deliverables listed in this level (refer to Annexure 1) suggest that a level of risk management activities exists that would be useful to the organisation. Deliverables at level one ('*ad hoc*') and level two ('initial') are too limited. Risk maturity is then calculated at a hundred and twenty (eight criteria x level three x weight of five).

For the private sector the top forty companies listed on the JSE Limited as at 8 April 2009 were used as the sample. The reason for this choice is that all companies listed on the JSE Limited have had to comply with the King Report on Corporate Governance recommendations since 1 September 2003 (Baue 2003), enhancing the probability of a higher risk maturity rating. Additionally, the sample choice reflected the researchers' professional judgements, as not all listed companies could be included. The literature indicates that not all organisations listed on the JSE Limited adhere to the King Report's recommendations (Business Times n.d.; Faure & De Villiers 2004:67-69). It could, however, be argued that the top forty listed companies would probably have to adhere to these recommendations to be able to stay at the forefront of their respective markets. Furthermore, the TOP 40 Index represented 87.64% of the total market value of the JSE's All Share Index on 27 February 2008 (Marx 2008:346), and R3 milliard (thousand million) market capital on 8 April 2009 (Mathephe 2009), thus not only representing the largest companies, but also a wide spectrum of stakeholders. The McGregor BFA Index (Mathephe 2009) is used to determine the top forty companies.

For the public sector, the thirty seven national government departments as on 4 June 2009 (SA Government n.d.), were included in the sample. The reason is that according to the Auditor-General (AGSA 2009(a):1,12-17; AGSA 2009(b):5), this is the group with the highest percentage of unqualified audit reports (21%) compared to provincial government organisations (6%) and local authorities (2.8%). These statistics suggest that, of all departments across all three tiers of government, these departments would be most likely to adhere to rules and regulations, including the establishment of a risk management framework. Secondly, according to a status report on risk management for provincial government (SA – Public Service Commission 2002), three of the nine provinces do not comply with risk management strategies contained in the Public Finance Management Act (SA – Act No 1 of 1999). This could also be interpreted that provincial departments have a lower risk maturity level, and for

this reason these departments are not included in the sample.

The empirical study has a few limitations. Firstly, due to the fact that both the private sector and the public sector were included in the study (wide population), only the top forty companies listed on the JSE Limited for the private sector and national government departments for the public sector were investigated. However, the decision to choose these specific organisations was a carefully considered one and, on average, the group of organisations probably includes those within South Africa with the highest risk maturity levels. Secondly, the scorecard that has been used to determine the risk maturity levels may not be entirely comprehensive as there could be some of the readily accessible models that were not considered when developing the scorecard used during the study, and it is probable that there are other models in private use that might be more effective. Thirdly, the final scorecard used in the empirical study was not empirically tested nor refined by submitting it to outside experts for their assessment. Fourthly, no specific in-depth investigation into the risk maturity level of each organisation was conducted. Two secondary sources were used to obtain the research data, namely the Internet websites of the various organisations, and the McGregor BFA database. This limited investigation could have biased the assessment of risk maturity levels because it can safely be assumed that no organisation has the time, space or inclination to put every detail of their operations into the public domain. This limitation is substantiated by the study performed by Marx (2008:452-455) where information obtained via empirical research is compared with organisations' annual financial report disclosures. The comparison revealed that not all functions, activities or duties that form part of the business are reported on or fully

disclosed. The users of readily available research information may thus arrive at conclusions that would not be entirely justified if more in-depth investigation had been possible. Lastly, the study was conducted in 2009, and although the third King Report on Governance (IOD 2009) included much new guidance on risk management, organisations are still in the process of grasping these guidelines and it will be some time yet before they successfully begin implementing it.

4 EMPIRICAL RESULTS

The results of the risk maturity scorecard for each organisation are listed as Annexure 2 (Private sector) and Annexure 3 (Public sector). Only ten of the forty private sector organisations were not risk mature (score < 120), whereas not one of the national government organisations was scored as risk mature (score ≥ 120). One of the government departments that had no information available on the Internet was the South African Secret Services and because of this, it was excluded from the study (i.e., only thirty six organisations were therefore part of the public sector sample). The low scores of the government departments could be as a result of disclosure guidelines as described by the National Treasury (SA – National Treasury 2010), or due to the fact that guidance on risk management, although addressed in public sector legislation, is not very prescriptive.

Further analysis (refer to table 2 below) reveals that on average (*M*) the private sector is risk mature (130.625/200) whereas the public sector is risk immature (66.25/200). The non-parametric Mann-Whitney *U*-test indicated a statistical ($p < 0.05$) significant level of difference between the private and the public sectors' level of maturity.

Table 2: Analysis of data on risk maturity

Nr	Criteria	Private sector Mean (<i>M</i>)	Public sector Mean (<i>M</i>)	<i>p</i> -value
1	Organisational culture	2.25	1.64	.039
2	Involvement in strategy setting	3.55	1.86	.000
3	Risk management policy setting	3.53	1.78	.000
4	Risk management process/framework	3.63	1.67	.000
5	People/staff	2.35	1.14	.000
6	Risk management performance measure	3.4	1.56	.000
7	Internal auditing	3.58	1.83	.000
8	Reporting/communication	3.88	1.78	.000
Total (weighed score)		130.625	66.25	.000

The area that has the lowest maturity levels in both the sectors is the 'people or staff' (referring to individuals that are equipped and supported to manage risk well), followed by 'organisational culture' (referring to the degree of executive support for formalised risk management) for the private sector, and 'risk management performance measure' (measuring the success of risk management) for the public sector.

5 CONCLUSIONS AND RECOMMENDATIONS

To manage risks more effectively, organisations could benchmark their risk management strategies against

best practices. This would ensure that their strategies are addressing all their needs, including checking the effective implementation of the identified and necessary risk management elements. One way of doing this is to assess the organisation's risk maturity. The empirical study's results indicate various trends in the South African private and public sector with regard to risk management. These, and appropriate recommendations are discussed below.

The overall risk maturity of the participating organisations, assessed against a pre-developed risk maturity scorecard (refer to Annexure 1) that was adapted for South African organisations, indicated

that private sector organisations are on average risk mature (refer to Annexure 2) with thirty of the forty organisations in the sample being risk mature. However, not one of the thirty six private sector organisations in the sample was risk mature (refer to Annexure 3). This is a concerning fact for this sector as legislation makes risk management mandatory for these organisations. Exacerbating this worrisome result is the significant difference between the private sector's and the public sector's risk maturity across all the criteria ($p < 0.05$). Bodies and individuals in the public sector that is responsible for implementing risk management should take note of this situation.

The three criteria that received the lowest scores for both the private and the public sectors' organisations (although the sequences differ) are that the organisational culture does not support the management of risk, that staff is not being equipped and supported to manage risk well, and that the implementation of a performance measurement system is not in evidence. If management perceives risk management in a different light ('culture'), it could be assumed that the latter two areas would be appropriately addressed, for example, by establishing a risk department or by appointing a chief risk officer to assist personnel to be more risk conscious, and finally, by assessing the success of the risk

management framework. These aspects all reflect directly on the state of the organisational culture.

With regard to the organisational culture, leadership from senior management and the governing body to incorporate a risk mindset into the organisation's culture is a critical element in the drive to achieving an effective risk management framework. Many argue (Borgelt & Falk 2007:125; Campbell 2008:54; Lam 2009:24) that without the buy-in of the governing body, as the overseers of the framework, and senior management as the initiators of the implementation, risk management cannot be successful. Unfortunately research (Borgelt & Falk 2007:132; Beasley, Branson & Hancock 2009:30) has indicated that although in many instances management perceives risk management as an excellent tool to assist in managing crucial risks threatening the organisation, it is also sometimes perceived as something that must be done simply to demonstrate compliance with applicable guidance and legislation. The empirical study's result supports these findings. Bodies responsible for establishing risk management guidelines and legislation should take note of this tendency and find ways and means to convince organisations of the importance of wholeheartedly embracing a culture of risk management.

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ANNEXURE 1

Risk Maturity Model Scorecard
(Adapted with the recommendations in the second King Report) *

Organisation name: _____

Sector: _____

Information obtained: _____

Criteria	Level 1 Ad-hoc	Level 2 Initial	Level 3 Repeatable	Level 4 Managed	Level 5 Optimised	Level	Score
Culture (tone at the top)	Vision and mission statement.	Values statement.	Values statement includes 'positive risk taking'.	Annual self-assessment of organisation's culture.	Ongoing self-assessments of organisation's culture.		
Involvement in strategy setting	Annual risk identification for strategic objectives.	Risk identification part of strategic objective setting. Report significant risks to executive committee(s).	Risk process triggered when strategic objectives revised. Significant risks monitored at monthly executive meetings.	Board decides risk tolerance and indicators for major strategic objectives' risks. Monthly management feedback on progress in mitigating risks.	Risk on strategic objective part of monthly management information pack.		
Risk management policy setting	Reactive policy to manage hazards only.	Need for proactive (hazards and opportunity) policy identified. Risk management in charter of over-sight committee (audit or risk).	Proactive policy. Risk management in policy "owned" by CEO.	Regular self-assessment of compliance with policy.	When assessing organisation culture (strategic decision making), measure achievement of principles and values in policy.		
Risk management process or framework	No formalised process. Risk losses reported on a periodic basis.	Simplified process for information purposes. Roles and responsibilities framework. Qualitative and standardised risk assessment. Executives issue notices on risks which staff should be made aware of.	Organisation-wide framework. Risk management committee. Risk management function revises the framework. Annual audit of the process. Common risk language initiated.	Periodic input from business unit heads on framework. Quantification of certain risk types. Consistent use of risk common language.	Framework components integrated into strategy and key policies. Framework's common risk language used across organisation. Benchmark against international best practice. Risk management committee: - ensures best practice across organisation; - review need to update framework annually.		
People (staff)	Risk management perceived as finance management function. External training courses on 'as needed' basis.	Need for internal risk champions identified. Training outsourced to third party. Guidance within organisation to develop capabilities.	Central risk manager (CRO) role identified and person appointed. Risk management committee coordinates internal risk champions and CRO.	Training programme in-house.	Risk management committee ensures staff periodically trained on internal and external best practices. Culture encourages employee participation in risk communication (forms part of performance assessment).		
Risk management performance measures	Meet legislative requirements. No measure of benefits.	Reduce internal and external audit findings. Limited evidence of improved outcome.	Reduce number of material surprises. Measure improved outcome including stakeholders' perceptions.	Ensure strategic objectives will be achieved within boundaries of risk appetite. Clear evidence of improvement.	Indicators linked to risk appetite objectives and main competitors (best practice). Excellent evidence of improvement of strategic objectives.		
Internal audit (assurance provider) **	No formalised audit of risk management process.	Internal audit function performs overview of framework.	Internal audit function performs audit on certain areas of the framework.	<i>Ad hoc</i> audit of framework. Internal audit function provides input into framework.	Annual audit of framework. Internal audit function provides input into improving framework (ensure best practices).		
Reporting / communication **	No communication regarding risk management.	Only internal communication to relevant parties.	Risk management included in financial statements as a sub-section.	Risk management included in financial statements as separate section.	Risk management included in financial statements as a separate section. Comprehensive reporting on all the elements of the framework. Separate risk management communication to external parties, e.g. risk report to shareholders.		
TOTAL							

* The empirical study was conducted in 2009 and the third King Report was not yet available.

**Additional to the criteria as a result of the guidance in the second King Report (IOD 2002).

The risk maturity of South African private and public sector organisations

Private sector – top 40 companies listed on the JSE Limited as per market capital on 08/04/2009

JSE Rank	Company	IIA member	Sector	Risk Maturity Scores (*)								Total	Risk Maturity ≥120
				1	2	3	4	5	6	7	8		
1	BRITISH AMERICAN TOBACCO PLC	No	Tobacco retail	2	4	3	4	2	3	4	3	125	11
2	BHP BILLITON PLC	Yes	Mining	2	3	4	5	2	3	4	4	135	9
3	ANGLO AMERICAN PLC	Yes	Mining	2	4	3	4	2	3	3	3	120	12
4	SABMILLER PLC	Yes	Brewers	1	4	4	3	1	5	4	3	120	12
5	MTN GROUP LIMITED	Yes	Communication	1	5	4	5	3	4	3	5	150	6
6	SASOL LIMITED	Yes	Oil & Gas	1	3	2	3	2	3	4	3	105	Not mature
7	STANDARD BANK GROUP LIMITED	Yes	Banking	2	4	4	5	3	4	4	5	155	5
8	ANGLO PLATINUM LIMITED	Yes	Mining	1	4	3	2	2	4	4	5	125	11
9	ANGLOGOLD ASHANTI LIMITED	Yes	Mining	3	3	4	2	2	3	3	3	115	Not mature
10	IMPALA PLATINUM HOLDINGS LIMITED	Yes	Mining	3	4	5	5	2	5	5	5	170	2
11	COMPAGNIE FIN RICHEMONT	No	Consumer luxury goods	3	4	2	3	2	3	3	3	115	Not mature
12	FIRSTRAND LIMITED	Yes	Banking	2	3	4	4	4	4	5	3	145	7
13	GOLD FIELDS LIMITED	Yes	Mining	3	4	4	4	3	4	3	5	150	6
14	NASPERS LIMITED	No	Media	4	3	4	3	2	2	3	4	125	11
15	ABSA GROUP LIMITED	Yes	Banking	5	5	5	5	4	5	5	5	195	1
16	TELKOM SA LIMITED	Yes	Communication	3	4	5	5	4	4	5	4	170	2
17	KUMBA IRON ORE LIMITED	No	Mining	4	4	5	5	3	4	3	4	160	4
18	OLD MUTUAL PLC	Yes	Insurance	5	4	4	4	3	5	4	5	170	2
19	NEDBANK GROUP LIMITED	Yes	Banking	1	4	4	5	5	4	3	5	155	5
20	SANLAM LIMITED	Yes	Insurance	1	3	4	5	2	3	5	5	140	8
21	HARMONY GOLD MINING COMPANY LIMITED	Yes	Mining	1	5	4	4	3	4	4	4	145	7
22	ARCELORMITTAL SA LIMITED	Yes	Iron & Steel	3	2	2	3	2	2	2	3	95	Not mature
23	REMGRO LIMITED	No	Investment	3	4	5	5	2	4	5	4	160	4
24	THE BIDVEST GROUP LIMITED	Yes	Business support	2	3	2	3	2	3	4	3	110	Not mature
25	LONMIN PLC	Yes	Mining	2	3	3	3	2	3	3	5	120	12
26	SHOPRITE HOLDINGS LIMITED	Yes	Retail	5	3	4	3	2	3	3	3	130	10
27	AFRICAN RAINBOW MINERALS LIMITED	Yes	Mining	1	2	2	2	1	2	2	3	75	Not mature
28	RMB HOLDINGS LIMITED	Yes	Banking	1	3	3	3	2	3	2	4	105	Not mature
29	EXXARO RESOURCES LIMITED	No	General mining	3	4	3	3	2	3	2	4	120	12
30	TIGER BRANDS LIMITED	Yes	Food products	1	3	3	3	2	4	3	3	110	Not mature
31	AFRICAN BANK INVESTMENTS LIMITED	Yes	Investment	3	4	3	4	2	3	4	4	135	9
32	LIBERTY INTERNATIONAL PLC	Yes	Investment	1	3	2	2	1	2	2	2	75	Not mature
33	PRETORIA PORTLAND CEMENT COMPANY LIMITED	Yes	Building materials	2	4	4	3	2	2	3	4	120	12
34	GROWTHPOINT PROPERTIES LIMITED	No	Real Estate	3	3	3	3	2	3	3	4	120	12
35	ASPEN PHARMACARE HOLDINGS LIMITED	Yes	Pharmaceuticals	1	4	4	3	2	3	4	3	120	12
36	REINET INVESTMENTS S.C.A (**)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
37	INVESTEC PLC	Yes	Banking	4	4	4	5	3	4	4	5	165	3
38	LIBERTY HOLDINGS LIMITED	Yes	Investment	1	3	3	3	2	2	3	3	100	Not mature
39	MASSMART HOLDINGS LIMITED	Yes	Retail	2	3	4	3	2	3	4	4	125	11
40	TRUWORTHS INTERNATIONAL LIMITED	Yes	Retail	1	3	3	3	2	4	5	3	120	12
41	DISCOVERY HOLDINGS LIMITED	Yes	Life insurance	1	3	3	3	3	4	4	5	130	10

(*) Scores according to calculations as explained in section 3.

(**) No information available as the company resides under Richmond (nr 11).

Public sector – national government organisations as on 18/06/2009

NR	Department	IIA member	Risk Maturity Scores (*)								Total	Risk Maturity ≥ 120
			1	2	3	4	5	6	7	8		
1	Department of Agriculture	Yes	3	2	2	2	1	1	1	3	75	Not mature
2	Department of Arts and Culture	Yes	2	3	3	2	1	2	4	3	100	Not mature
3	Department of Communication	Yes	1	1	2	1	1	1	2	1	50	Not mature
4	Department of Correctional Services	Yes	1	3	2	1	1	1	2	1	60	Not mature
5	Department of Defense	Yes	2	2	2	2	1	1	1	2	65	Not mature
6	Department of Education	Yes	2	2	1	1	1	1	1	1	50	Not mature
7	Department of Environmental Affairs and Tourism	Yes	2	1	1	1	1	1	1	1	45	Not mature
8	Department of Foreign Affairs	Yes	2	2	2	1	1	1	1	1	55	Not mature
9	Department of Governmental Communication	Yes	1	1	1	1	1	1	1	1	40	Not mature
10	Department of Health	Yes	1	2	2	2	1	1	2	1	60	Not mature
11	Department of Home Affairs	Yes	1	2	2	2	1	1	1	1	55	Not mature
12	Department of Housing	Yes	1	2	2	2	1	1	2	1	60	Not mature
13	Department of Independent Complaints Directorate	Yes	1	1	1	1	1	1	1	1	40	Not mature
14	Department of Justice and Constitutional Development	Yes	1	1	1	1	1	1	1	1	40	Not mature
15	Department of Labour	Yes	2	1	1	1	1	1	1	1	45	Not mature
16	Department of Land Affairs	Yes	1	1	1	1	1	1	1	1	40	Not mature
17	Department of Minerals and Energy	Yes	3	2	2	1	1	1	2	1	65	Not mature
18	National Intelligence Agency	Yes	1	1	1	1	1	1	1	1	40	Not mature
19	Department of National Treasury	Yes	1	1	1	1	1	1	1	1	40	Not mature
20	Department of Provincial and Local Government	Yes	2	2	2	1	1	1	2	2	65	Not mature
21	Department of Public Enterprises	Yes	1	2	2	3	2	2	3	3	90	Not mature
22	Department of Public Service and Administration	No	2	2	2	2	1	1	2	2	70	Not mature
23	Department of Public Service Commission	Yes	1	3	2	2	2	3	3	3	95	Not mature
24	Department of Public Works	Yes	3	2	2	2	1	2	2	2	80	Not mature
25	Department of Science and Technology	Yes	2	2	2	2	2	3	4	3	100	Not mature
26	Department of Safety and Security	No	1	1	1	1	1	1	1	1	40	Not mature
27	Public Administration Leadership and Management Academy	No	3	2	2	3	2	3	3	3	105	Not mature
28	South African Police Service	Yes	1	2	2	2	1	2	2	2	70	Not mature
29	South African Revenue Service	Yes	2	3	4	3	2	3	3	3	115	Not mature
30	South African Secret Service (**)	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
31	Department of Social Development	Yes	3	2	2	2	1	3	3	3	95	Not mature
32	Department of Sport and Recreation	Yes	2	3	2	2	1	2	2	2	80	Not mature
33	Department of Statistics South Africa	Yes	1	1	1	1	1	1	1	2	45	Not mature
34	The Presidency	Yes	2	2	2	2	1	2	3	2	80	Not mature
35	Department of Trade and Industry	Yes	1	2	2	3	1	3	2	2	80	Not mature
36	Department of Transport	No	1	3	2	2	1	1	1	2	65	Not mature
37	Department of Water Affairs and Forestry	Yes	2	2	2	2	1	3	2	3	85	Not mature

(*) Scores according to calculations as explained in section 3.

(**) No information available.

