

# FOCUS OF INTERNAL AUDIT DEPARTMENTS ON STRATEGIC RISKS OF LISTED COMPANIES

### **Liezl Foxcroft**

**BCom Internal Auditing** 

**Honours Internal Auditing** 

Master of Internal Auditing

Department of Auditing
Faculty of Economic & Management Sciences
University of Pretoria
November 2013



### **Table of Contents**

Table	e of Contents	i
List c	of Figures	iii
List c	of Tables	iv
Ackn	owledgements	vi
СНА	PTER 1	1
СНА	PTER 1: BACKGROUND AND INTRODUCTION	2
1.1	Strategic risk management within the IA universe	4
1.2	The scope of reviewing strategic risks	5
1.3	Definitions of key terms	6
1.4	The research problem	8
1.4.1	Purpose of the research	8
1.5	The research methodology	9 10
1.6	Delimitations and assumptions	11
1.7	Research Ethics	11
1.8	Outline of Chapters  1.8.1 Chapter 1: Background and introduction  1.8.2. Chapter 2: IA's risk evolvement  1.8.3. Chapter 3: Strategic risk  1.8.4. Chapter 4: Research design and results  1.8.5. Chapter 5: Statistical analysis  1.8.6. Chapter 6: Conclusions and recommendations	12 12 12 12
1.9	Visual representation of the chapters	
1.10	Summary and conclusion	14
СНА	PTER 2	15
СНА	PTER 2: IA'S RISK EVOLVEMENT	16
2.1	Various risk categories currently being addressed by internal auditing	18 19 20 21
2.2	Development of an IA function in the context of strategic risk	24
2.3	Regulatory requirements for listed companies	27
2.4	Risk management frameworks	29
2.5	Summary and conclusion	34



CHAF	PTER 3	.37
CHAF	PTER 3: STRATEGIC RISK	.38
3.1	Background to IAing	38
3.2	IAing in context to risk	41
3.3	Strategic risk	45
3.4	Summary and conclusion	51
CHAF	PTER 4	.53
CHAF	PTER 4: RESEARCH DESIGN AND RESULTS	.54
4.1	Research Design	55
4.2	Participants	57
4.3	Instruments	58
4.4	Data Analysis	59
4.5	Research results	
	4.5.1 Question 1	
	4.5.2 Question 2	
	4.5.4 Question 4	
	4.5.5 Question 5	
	4.5.6 Question 6	
	4.5.7 Question 7	
	4.5.8 Question 8	
	4.5.9 Question 9	
	4.5.11Question 11	
	4.5.12Question 12	
	4.5.13 Question 13	83
	4.5.14 Question 14	86
4.6	Summary and conclusion	88
CHAF	PTER 5	.90
CHAF	PTER 5: STATISTICAL ANALYSIS	.91
5.1	Data analysis	97
5.2	Summary and conclusion	99
CHAF	PTER 61	00
CHAF	PTER 6: SUMMARY AND CONCLUSIONS1	01
BIBLI	OGRAPHY	
	Appendix A	
	Ethical Clearance	
	Appendix BQuestionnaire	
	Appendix C	
	Title Registration	



# **List of Figures**

Figure	1:	Corporate Executive Board survey results	23
Figure	2:	An enterprise risk management model as designed by COSO	54
Figure	4.5.1:	Type of IA departments of the organisations	68
Figure	4.5.2:	Number of Employees in the IA departments	71
Figure	4.5.3:	IA areas that are typically co- scourced	73
Figure	4.5.4:	IA areas that are typically out-scourced	75
Figure	4.5.5:	Bases for operational type audits	78
Figure	4.5.6:	IA's alignment to the organisation's stategy to achieve objectives	79
Figure	4.5.7a	Planned audits listed against the related strategic risk	80
Figure	4.5.7b	Completed audits listed against the related strategic risk	81
Figure	4.5.8:	IA's involvement in the strategy setting process	82
Figure	4.5.9a	IA's involvement in organisational strategic initiatives	83
Figure	4.5.9b	Type of IA department's involvement in achieving strategic	
		initiatives	84
Figure	4.5.10	How IA is involved in achieving the organisation's strategic	
		initiatives	85
Figure	4.5.11:	How assurance is obtained regarding the achievement of expected benefits	
		relating to the strategic business initiatives	87
Figure	4.5.12	IA functions reviewing the information and supporting data used to	
		formulate strategic decisions	89
Figure	4.5.13	a: IA providing assurance over the strategic risk management activities	92
Figure	4.5.13	b: The IA cycle regarding the assurance on the strategic risk management activities	93
Figure	4.5.14	Strategic risk management and the audit committee	94



### **List of Tables**

Table 1:	Results of the GAIN Flash Survey	24
Table 4.5.1:	Analysis of out-sourced / co-sourced audit areas in listed companies	75
Table 5.1.a:	Type of audit departments that are aligned with the organisation's strategy to	
	achieve objectives	.100
Table 5.1.b:	Chi-square tests	.100
Table 5.2.a:	Type of audit departments that lists their planned audit against the related	
	strategic risks	.102
Table 5.2.b:	Chi-square tests	.102
Table 5.3.a:	Type of audit department that lists their completed audits against the related	
	strategic risks	.104
Table 5.3.b:	Chi-square tests	.104
Table 5.4.a:	Type of audit department that is involved in the achievement of the	
	organisation's strategic objectives	106
Table 5.4.b:	Chi-square tests	.106



**FORM A** 

# UNIVERSITY OF PRETORIA FACULTY OF ECONOMIC AND BUSINESS SCIENCES DEPARTMENT AUDITING

The Department of Auditing places specific emphasis on integrity and ethical behaviour with regard to the preparation of all written work to be submitted for academic evaluation.

Although academic personnel will provide you with information regarding reference techniques as well as ways to avoid plagiarism, you also have a responsibility to fulfil in this regard. Should you at any time feel unsure about the requirements, you must consult the lecturer concerned before you submit any written work.

You are guilty of plagiarism when you extract information from a book, article or web page without acknowledging the source and pretend that it is your own work. In truth, you are stealing someone else's property. This doesn't only apply to cases where you quote verbatim, but also when you present someone else's work in a somewhat amended format (paraphrase), or even when you use someone else's deliberation without the necessary acknowledgement. You are not allowed to use another student's previous work. You are furthermore not allowed to let anyone copy or use your work with the intention of presenting it as his/her own.

Students who are guilty of plagiarism will forfeit all credit for the work concerned. In addition, the matter can also be referred to the Committee for Discipline (Students) for a ruling to be made. Plagiarism is considered a serious violation of the University's regulations and may lead to suspension from the University.

For the period that you are a student at the Department of IAing the undermentioned declaration must accompany all written work to be submitted. No written work will be accepted unless the declaration has been completed and attached.

- I. Liezl Foxcroft student number 23050099 declare that:
- 1. I understand what plagiarism entails and am aware of the University's policy in this regard.
- 2. I declare that this thesis (e.g. essay, report, project, assignment, dissertation, thesis etc) is my own, original work. Where someone else's work was used (whether from a printed source, the internet or any other source) due acknowledgement was given and reference was made according to departmental requirements.
- 3. I did not make use of another student's previous work and submitted it as my own.
- 4. I did not allow and will not allow anyone to copy my work with the intention of presenting it as his or her own work.

Signature	
•	



### Acknowledgements

Thank you to my study leader and his wonderful team. Without you this would not have been possible.

To my dear mother – for always encouraging me to be the best I can be and never to give up...thank you!!

Saving the best for last...to the two men in my life. Thank you for the love and support on this journey!



## **Chapter 1**

"There are risks and costs to a program of action. But they are far less than the long-range risks and costs of comfortable inaction."

- John F. Kennedy -



### **Chapter 1: Background and introduction**

Since 2000, various companies like Enron and Tyco, have ended up throwing in the proverbial towel as major accounting fraud has led to their downfall. A diversity of other companies have followed suit due to the global financial crises since 2008, and the escalating U.S. federal debt and deficit (Basioudis, 2010; Grambling & Myers, 2006:53). This has merely intensified global pressure for the adoption of a risk focussed approach to internal audit (IA), especially when reviewing strategic risks. According to Anderson and Schroder (2010:16), strategic decision making and the implementation of those decisions during the still stuttering economic recovery is vital and will determine any firm's success or failure for many years to come. The global pressure for a risk focussed approach to IA has highlighted the fact that the most important risks that a company faces are strategic risks (Andersen & Schroder, 2010:18; Beasley & Frigo, 2007: 26; Bloomberg Business Week, 2010:12).

There are many reasons for a company to fail: the mismanaging of risk (including the construction of and assumptions in its risk model) and the IA functionality not coping with the complexity of the current economic environmental chaos being the most important (Williams, 2008: 473). Studies by Mardjono (2005: 282), and Markham, (2006: 596) as well as others (including Williams, 2008: 472) have indicated that many of the organisations that were the subjects of public humiliation had well-established IA departments. These companies were even nominally practicing high-quality governance principles.

The concern is not only that the above mentioned companies' governance processes were inadequate. There is also a concern that risk governance was linked neither to company strategy, risk management policies, nor its risk bearing capacity. Perhaps the companies' attitudes regarding the IA role were less than honest, begging questions about whether the IA departments existed for compliance work relating only to "checklist" auditing, or whether



their services were fully integrated into the organisation, to really add value and assist in the risk management process (Erasmus & Coetzee, 2009:926; Parkinson, 2010). The mainstream of IA departments as reported by the Bloomberg Business Week (2010:12):

"...spend as much as 80% of their time providing assurance on traditional areas such as financial and compliance risks, even though these risks make up only 18% of the drivers of decline."

An analysis performed by a research team for the Corporate Executive Board in 2010 investigated the cause of steep drops in companies' market capitalisation and published the results in the Bloomberg Business Week. It indicated that 68% of risk occurrences were of a strategic nature, resulting in the destruction of over 50% of firms' market value. A further 13% of these actions were classified as operational risks (Bloomberg Business Week, 2010:12). The above mentioned published results in the Bloomberg Business Week (2010:12) concluded that most IA departments find it difficult to provide assurance regarding risk events in these highly volatile markets, which have a direct impact on the strategic management activities of an organisation.

During the 2010 Southern African IA Conference, online polling was conducted amongst the 1145 IA delegates to obtain audience feedback about which areas had and could still affect the profession (IIA, 2010). The audience was posed the following question:

"Do internal auditors consider strategic risk issues which are not part of the direct environment within which the organisation operates?"

Although 52.7% of the respondents answered positively, the IIA was not completely convinced. 42% of the participants answered *no* and 5.3% indicated that they are *unsure*, highlighting an area for expansion of the scope of IA planning and a prospective development area for IA (IIA, 2010).



IA departments often exclude strategic risks from their audit scope (Basioudis, 2010). More concerning is the lack of new and creative practices that could assist IA to successfully review strategic risks (Fitzmaurice, 2010; IIA, 2010). As Fitzmaurice (2010) points out elsewhere, IA needs to seize every opportunity to enhance its alignment with the firm's strategies and vision as this need for congruence is often disregarded. This can be achieved by IA positioning itself outside the "premeditated" compliance department and by siding with management to integrate "strategic risk" as an audit priority (Fitzmaurice, 2010; Wells, 2010).

#### 1.1 Strategic risk management within the IA universe

Through the evolution of IA's role over the past 70 years, the IA department has become one that provides support to management in the discharge of their responsibilities (Basioudis, 2010; Chambers, 2005:10). As stated by Chambers (2005), the previous definition of IA was:

"Internal auditing is an independent appraisal function established within an organisation to examine and evaluate its activities as a service to the organisation. The objective of lAing is to assist members of the organisation in the effective discharge of their responsibilities. To this end, lAing furnishes them with analyses, appraisals, recommendations, counsel and information concerning the activities reviewed. The audit objective includes promoting effective control at reasonable cost."

Although the general feeling about internal auditors is that they are employed by management to be their watchdog, the intention has been to add greater value and to focus attention on processes and systems rather than transactions (Parkinson, 2010). Furthermore, a conscious effort has been made by the leading IA associations since the early 1990's, to refocus and re-brand its offering to include a more pronounced risk based and consultative approach (Griffiths, 2005:1).



The efforts have paid off and the new definition of IA was approved on the 26<sup>th</sup> of June 1999 by the Institute of IA Incorporated's Board of Directors (Chambers, 2005:9). IA is now defined as follows:

"Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes."

With the new definition in mind, IA departments should now capitalise on its existing good standing and be more involved in identifying and assessing the actual strategic risks facing their organisations. By shifting perceptions from the widely held opinion that they are "corporate cops" to one that sees them as valuable business partners, internal auditors will increasingly be able to assist management with their strategic risk analysis and management, from a position of trusted consultants (Basioudis, 2010; Gregg, 2010:1; Guerra, 2010; Parkinson, 2010).

#### 1.2 The scope of reviewing strategic risks

The King III report on corporate governance emphasises the need for appropriate governance of risk and that boards of directors should collectively be assured concerning the efficiency and effectiveness of the risk management process. IA should have an efficient and effective risk based approach to evaluate the organisation's governance processes including strategic risk governance.

The process should consist of objective assessments of the effectiveness of the strategic risk management policies and processes, and of the internal control framework. The risk management process should also include a risk based strategy that is linked to the organisation's IA plan by being informed



of the risks facing the organisation and assessing the organisation's strategic risks and opportunities (Basioudis, 2010; Gregg, 2010:2; Guerra, 2010; PwC, 2009).

The management of operational and strategic risks should create a well-organised, planned and controlled environment where risks facing the business can be anticipated and contained within pre-set and suitable confines (Andersen & Schroder, 2010:106; Beasley & Frigo, 2007; ISO 31000, 2009:3).

#### 1.3 Definitions of key terms

There are a number of key concepts upon which this study was based. They are briefly considered below:

- **Independence:** Given the fundamental importance of this concept to IA, it is best to refer to the Institute of Internal Auditors (1998:107) definition, which states that:
  - "...it allows internal auditors to carry out their work freely and objectively. This concept requires that internal auditors be independent of the activities they audit. Independence is achieved through organisational status and objectivity".
- Internal Auditor: The study made use of Chambers' (2005:10) definition:
  - "...an internal auditor is an individual within an organisation's IA department who is assigned the responsibility of performing IA.



• IA: Chambers (2005:9) defines IA as:

"...an independent, objective assurance and consulting activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes."

 Risk: Risk can be interpreted in various ways but for the purpose of this study risk was best defined by Steffee (2009:48) as:

"...an event that could adversely influence the achievement of the strategic and business objectives".

• Strategic risk: Wells (2010), defines strategic risk as:

"The risk associated with future business plans and strategies, including plans for entering new business lines, expanding existing services through mergers and acquisitions, enhancing infrastructure, etc."

 Risk management: Various authors have provided pertinent definitions, all of which share a core which is best defined by ISO 31000 (2009:2):

"...it is the process which is used by executive management to identify, evaluate, treat, monitor and report risks to ensure the achievement of its objectives..."



• Sarbanes Oxley legislation: As stated in Wikipedia (2010), the Sarbanes Oxley Act is:

"...a set of rules put together by the US government in an effort to improve a company's audit. These rules came about primarily due to the many corporate scandals that plagued the US not too long ago including some very high-profile cases such as Enron."

#### 1.4 The research problem

As identified in the background and introduction section of this thesis, strategic risk has been identified as an area of fundamental concern to business (Andersen & Schroder, 2010:18; Beasley & Frigo, 2007: 26; Bloomberg Business Week, 2010:12). Although many organisations are content to rely on their IA departments to report on identified risks and gaps in controls, for many organisations the area of reviewing and reporting on strategic risk is inadequate.

IA needs to add value beyond mere compliance auditing, but a significant obstacle facing them is the perception that strategic risk activities are beyond their scope and capabilities. Although internal auditors may lack knowledge of strategic risk practices and techniques, it is not difficult to obtain competence. The key skill required to assess strategic risk effectively and efficiently is knowledge of the business and the industry they operate in (IIA, 2009:11).

#### 1.4.1 Purpose of the research

The purpose of this study was to conduct research to determine if IA departments of various Johannesburg Stock Exchange Limited listed



companies whose Chief Audit Executives are members of the Institute of Internal Auditors do in fact focus on the strategic risk.

In order to conclude on the research aim, a number of sub-questions were also examined:

- The integration of strategic risk management into the individual companies' IA universe (page 104);
- the extent to which the strategic risk management process was being reviewed (page 104), and
- if IA departments of companies listed on the Johannesburg Stock Exchange Limited, whose Chief Audit Executive's are members of the Institute of Internal Auditors; include strategic risk within their audit scope (page 105).

#### 1.5 The research methodology

#### 1.5.1 A description of the study's strategy and inquiry

Strategic risk management as a process within the IA universe has not been adequately researched. Some studies have been conducted, notably Coetzee and Fourie's (2009) investigation into the acuity of the IA role regarding risk, as well as Erasmus & Coetzee's (2009) review of the position of IA departments in South African companies. These research studies used questionnaires and personal interviews with the relevant parties to gather their data. The main aim of this study was to determine whether or not IA departments review their companies' strategic risk management process, and whether they determine whether the identified strategic risk has been included in their audit universe. Consequently a quantitative research design has been pursued. The appropriateness of this research design is supported by the above mentioned studies which have used a similar research design in the exploration of IA (Coetzee & Fourie, 2009; Erasmus & Coetzee, 2009).



Strategy of inquiry is best explained as the type of research methodologies utilised in the selected research design. The most appropriate strategy of inquiry for the proposed quantitative researched design was a survey research. Survey research provides quantitative or numeric description of trends or opinions of a population by studying the responses of that population. This type of data collection involved gathering the views of the respondents of the particular study.

By making use of a survey research strategy, preconceptions of the researcher had a restrictive influence as information was based exclusively on that which was obtained from the respondents of the research.

#### 1.5.2 The basic characteristics of quantitative research

Quantitative research focuses on gathering numerical data and generalising it across groups of people. This left the researcher with "numbers" after performing the research. The data was analysed, and then interpreted in light of the research questions. The researcher needed to know clearly in advance what she was looking for. All aspects of the study including the questionnaire were carefully designed before data was collected.

The research tool that was used in this study was a questionnaire, in order to collect numerical data. It was the best method for the research design as the questionnaires consisted of only closed ended questions.

#### 1.5.3 Data collection

A self-administered questionnaire was utilised to collect the necessary data. The questionnaire was electronically mailed to the whole population so that respondents could complete it in their own time.



#### 1.6 Delimitations and assumptions

Companies which were not listed on the Johannesburg Stock Exchange Limited at the time of administering the questionnaire were excluded from the study.

The literature reviewed was limited primarily to that of the disciplines of strategic risk within the IA environment, of risk based auditing and of IA. Literature from related disciplines such as enterprise wide risk management and strategic planning to avoid risks was consulted when needed.

For the research project to be meaningful, it was important to validate the assumptions. In the study it was assumed that:

- All Johannesburg Stock Exchange Limited companies have risk management and IA departments, and
- a quantitative questionnaire research was an appropriate means to explore the strategic risk focus within the IA universe.

As the questionnaire was sent out to the whole population as mentioned above and not to a sample of the population the validating from a statistical perspective could not be tested.

#### 1.7 Research Ethics

This study fulfilled the ethical requirements prescribed by the Faculty of Economic and Management Sciences' Research and Ethics Committee (Appendix A). A letter of permission to approach the intended respondents was obtained from this committee as indicated by Leedy & Ormrod (2005:103).



#### 1.8 Outline of Chapters

The following is an outline of the chapters' contents, which was developed to address aspects of the research questions.

#### 1.8.1 Chapter 1: Background and introduction

The purpose of this chapter was to define the basis of the research that was conducted. It comprised of the background to the research, the problem statement, the objectives, the research methodology and the structure.

#### 1.8.2. Chapter 2: IA's risk evolvement

This chapter focuses on the evolvement of IA regarding various risk areas including strategic risk. Various risk areas that IA should focus on globally is identified through various literature.

#### 1.8.3. Chapter 3: Strategic risk

Strategic risk is analysed from an IA perspective in chapter three, the evolvement of IA, their focus on risk and the concept of strategic risk.

#### 1.8.4. Chapter 4: Research design and results

In this chapter, the research design was discussed including the results of the questionnaires focussing on the questions, the outcome and the results in graphical format.

#### 1.8.5. Chapter 5: Statistical analysis

A statistical analysis was performed and discussed of the gathered data in this chapter.

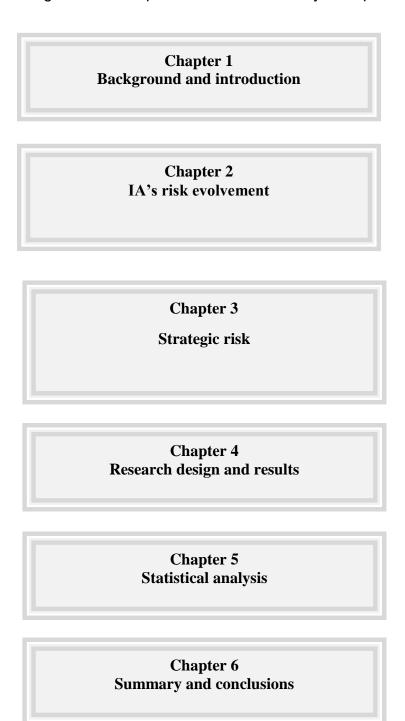
#### 1.8.6. Chapter 6: Summary and Conclusions

This chapter contains the conclusions reached, based on the analysis of the research data obtained from the questionnaire.



### 1.9 Visual representation of the chapters

The following is a visual representation of the study's chapter outlines:





#### 1.10 Summary and conclusion

A brief overview of the importance of strategic risk management, the IA profession and the role of IA regarding strategic risk was provided.

It can be concluded that the IA profession has increased its value by including a risk management approach aspect to its new definition. However, research performed during the 2010 Southern African IA Conference revealed that only 52.7% of the internal auditors present indicated that they do focus on strategic risks. The extent of the strategic risk within these internal auditors' audit universe was not defined. Leaving one with the perception that IA departments are not yet applying the full scope of the latest definition of IA. Internal auditors need to be seen as valuable business partners. This can be achieved by assisting management, understand and manage their strategic risks.

The next chapter presents a study of IA's path to assessing strategic risk.



## **Chapter 2**

"Unless you try to do something beyond what you have already mastered, you will never grow."

- Ronald. E. Osborne-



### **Chapter 2: IA's risk evolvement**

As discussed in the preceding chapter, the profession of IA has evolved dramatically over the last two decades. By comparing the previous 1946 definition of IA with the latest definition adopted in 1999, it is clear that internal auditors were being steered towards an increasingly significant role in the future.

In this chapter the evolvement of IA regarding various risk areas including strategic risks are discussed. Various risk areas that IA should focus on globally, is identified through the literature of a variety of researchers. IA's development as a business function, including the ability to address strategic risk, the regulatory requirements and the various risk frameworks is also explored under the following headings:

- 2.1 Various risk categories currently being addressed by IA;
- 2.2 development of an IA function in the context of strategic risk;
- 2.3 regulatory requirements for listed companies, and
- 2.4 risk management frameworks.

# 2.1 Various risk categories currently being addressed by internal auditing

As the corporate landscape changes from its current focus on recession survival tactics to growth strategies for economic recovery, the roles of IA and the Chief Audit Executive (CAE) continues to grow (Chambers, Eldridge and Park, 2010; Ernst and Young, 2010a; Fitzmaurice, 2010). CAE's and their teams are now being asked to expand their more traditional assurance and consulting roles, and to apply their business insights and audit expertise to key organisation-wide initiatives, particularly those pertaining to risk management (Chambers et al, 2010; Ernst and Young, 2010a; Fitzmaurice, 2010; IIA, 2010). Per the published report by The Institute of Internal Auditors titled, *Internal Auditing in 2010: Shifting Priorities for a Changing* 



*Environment*, risk management is the number one strategic priority for CAEs and the key area of focus for IA activities now and into the future (IIA, 2010).

IA is already stepping into risk identification, providing increasingly beneficial insights to support strategic transformational initiatives (Chambers et al, 2010; Ernst & Young, 2010a). As stated by Kelly Barrett, CAE for The Home Depot, in a report published by the Institute of Internal Auditors and Korn/Ferry International (IIA, 2010):

"Audit committees are starting to see how big role internal auditors can and should play in helping an organisation get it right on the front end—especially when an organisation is undergoing significant change."

Other more traditional risk management roles such as navigating the complex regulatory conditions of the Sarbanes-Oxley era; taming unruly internal controls and data environments; and working with an increasingly audit-savvy team of executive stakeholders – all remain part of IA's mandate (Chamber et al, 2010; IIA, 2010). Successfully addressing these demands requires a combination of insightful leadership, savvy processes and effective tools. Most prominently, IA should be offering a stronger role in boosting the organisation's overall risk management capabilities. As well as promoting the greater use of automation and analytics, such as continuous auditing, to deliver greater efficiency and effectiveness (Chamber et al, 2010; Ernst & Young, 2010b, IIA, 2010).

Through risk based auditing, IA can be involved in a variety of risk areas within an organisation. The various risk categories consistently identified across academic literature that IA should focus on to increase and sustain their ability to add value was strategic, compliance, financial, reputational and operational risk (Basel II, 2009; Compliance Executive Board, 2010; Compliance Institute, 2010; Ernst and Young, 2010b; Fitzmaurice, 2010; IIA, 2010; IIA, 2009; Jacka & Scott, 2011; Jackson, 2008; PwC, 2012; Steelhammer, 2011). These risk areas are discussed in more detail below.



#### 2.1.1 Compliance risk

Originally IA's focus was on compliance risk. This focus was even more evident with the introduction of the Sarbanes Oxley Act of 2002 which is only applicable to companies listed on the New York Stock Exchange. To understand compliance risk in more detail the Compliance Institute of South Africa (2010) defined compliance risk as:

"The current and prospective risk of damage to the organisation's business model or objectives, reputation and financial soundness arising from non-adherence with Regulatory Requirements and expectations of key stakeholders such as customers, employees and society as a whole."

Compliance risk therefore not only exposes the organisation to fines, civil claims, loss of authorisation to operate and an inability to enforce contracts, but also to reputational damage (Compliance Executive Board, 2010; Compliance Institute, 2010). Since the accounting scandals in early 2000, regulatory compliance has been high on the agenda for organisations across the globe. Not only have firms struggled to comply with the new regulations, participation in compliance programs has also impacted on the ability of companies to perform other business functions effectively. In order to progress, organisations must ensure that they are taking reasonable measures to comply with applicable laws, rules and regulations, as well as their own policies (Compliance Executive Board, 2010; Compliance Institute, 2010). IA needs to address compliance risk either as part of a risk-based audit or in conjunction with corporate compliance coordination and the compliance work plan (Compliance Executive Board, 2010; Compliance Institute, 2010).

A key role of the IA function regarding compliance is to monitor and evaluate the firm's ability to adequately implement and comply with applicable laws, rules and regulations. IA may therefore provide consulting and assurance



services in terms of compliance and legislation (Compliance Executive Board, 2010).

According to the Compliance Executive Board (2010) these consulting services may include:

- Providing information and best practices in the design of the compliance function;
- giving advice and information in the design of the monitoring plans;
- training and educational services, and
- facilitation of self-assessments for the compliance function.

The assurance services may include:

- Audits of the compliance program design;
- audits of the compliance monitoring program;
- audits of compliance issues, and
- inspections of the monitoring plan.

Ernst and Young (2010b) provides a perfect summary of IA's role in the compliance risk arena:

"IA can provide assurance that the organisation is meeting its compliance obligations in all of the jurisdictions in which it operates."

#### 2.1.2 Financial Risk

According to Ernst and Young (2010b): "There will be an increasing need for robust controls as organisations focus on reducing costs, generating new revenue streams and reducing risk".



A primary lesson from the financial failures and collapse of numerous organisations is that good governance, risk management, and internal controls are essential to corporate success and longevity (Fitzmaurice, 2010). Because of its unique and objective perspective, in-depth organisational knowledge, and the application of sound audit and consulting principles, a well-functioning, fully resourced and independent IA activity is well positioned to provide valuable support and assurance to an organisation and to its oversight companies (Ernst and Young, 2010b; Fitzmaurice, 2010).

In contrast, external auditors are independent of the organisation, and provide an annual opinion on the financial statements. The work of the internal and external auditors should therefore be coordinated for optimal effectiveness and efficiency. Internal and external auditors have mutual interests regarding the effectiveness of internal financial controls including the mitigation of financial risk (Ernst and Young, 2010b; Fitzmaurice, 2010).

#### 2.1.3 Operational Risk

As defined by PwC (2012) "An operational risk is, as the term suggests, a risk arising from execution of a company's business function." Although it is a vast concept, it focuses on the risk developing from the people, systems and processes through which an organisation operates. Basel II (2009) defines operational risk as the risk of loss which results from failed or inadequate internal processes, people and systems or even from external events.

This type of assurance can be achieved by providing oversight of business areas, ensuring that there is proper risk reduction by periodic review and validation of the related internal controls.

IA also needs to ensure that there is proper ownership of internal control and accountability (Basel II, 2009, PwC, 2012). Assisting in the evaluation of control failures, establishing root causes and proposing appropriate



remediation can also form part of IA's scope. Other significant areas IA should concentrate on are:

- Determining whether suitable controls are in place;
- establishing whether the risks and controls have clearly defined ownership;
- verifying that the controls are adequately maintained, and
- determining acceptability of the failure rate.

It is management's responsibility to design and implement the necessary controls to mitigate operational risks. IA's part is to focus on whether those controls are working.

#### 2.1.4 Reputational Risk

Reputational risk is any risk to an organisation's reputation that is likely to destroy shareholder value (Jackson, 2008). This risk, if realised, leads to negative publicity, loss of revenue, litigation, loss of clients and partners, exit of key employees,

share price decline and difficulty in recruiting talent (Jacka & Scott, 2011). A comprehensive reputational risk assessment is necessary as an important part of a comprehensive risk assessment (Jacka & Scott, 2011; Jackson, 2008).

Company executives are seeing that reputational risks and corporate missteps can have more significant impacts on bottom lines and stakeholder perceptions than ever before. These impacts are being felt immediately due to the evolution of global communication, which allows corporate decisions to be debated in real-time (Jacka & Scott, 2011; Jackson, 2008). Furthermore, the nature of what is considered a misstep is continually changing, making a current awareness of reputation risks increasingly important.

IA have long been involved with assessing reputational risks at companies, monitoring these risks in on-going audit engagements and in ad hoc



consulting activities (Jacka & Scott, 2011; Jackson, 2008). With the growing exposure to reputational risks to organisations, IA should ensure their level of involvement is adequate to assist the organisation in dealing with these risks appropriately. According to Jacka and Scott (2011) there are several ways in which IA can accomplish this level of involvement:

- Identifying risk champions throughout the organisation, whose roles include monitoring and reporting on reputational risks;
- having a place at the table when the committee in charge of risk management in the organisation is discussing reputational risks;
- regularly discussing reputational risk as part of the risk universe at an organisation;
- being aware of reputational risks and identifying areas that represent threats because they are not being managed correctly;
- ensuring organisations examine reputational risks at the inherent level as well as at the perceived residual level;
- increasing monitoring of social networking websites to track public mood;
- maintaining awareness of changes to reputational risks: for example, environmental responsibility is a relatively new reputational risk now increasingly impacting organisations, and
- updating and adjusting risk assessments throughout the year as circumstances change.

While new reputational risks are continually coming to light, other established reputational risks still exist and are often intensified, particularly with the adoption of new technologies. Established reputational risks that may increase due to the economic downturn include fraud, theft, and quality corner-cutting (Jacka & Scott, 2011; Jackson, 2008). Furthermore, the economic downturn has increased the impact of many reputational risks because companies may not be able to recover as quickly from the financial impacts of a misstep (Jackson 2008).

Companies are recognising the importance of reputational risk and placing a greater emphasis on reputational risk management (Jacka & Scott, 2011;



Jackson, 2008). A survey by The Conference Board in 2010 found that 82% of risk managers responding indicated that their companies were making a "substantial" effort in managing reputational risk. 81% stated their focus on reputational risk had intensified during the past three years. IA can play a part in these efforts by helping companies target reputational risks and monitor their responses (IIA, 2010). In doing this, IA can add value to the organisation and increase the prestige of the IA department at very little cost (Jacka & Scott, 2011; Jackson, 2008). However, it is important that IA only assist by carrying out their advisory and monitoring roles, ensuring that it is clear that the business itself owns the reputational risks.

#### 2.1.5 Strategic Risk

With the recent (and on-going) worldwide financial upheaval, the focus has shifted ever further from compliance and operational audits to strategic risk management (Meldrum, 2009; Steelhammer, 2011). Clearly, a world class IA function should do more than just provide information. IA can increase its offering by aligning itself with and being driven by the organisation's strategic objectives (Steelhammer, 2011). As IA's strategic role grows, it will also be called upon to interpret, synthesise and analyse information to help management identify themes, trends and business challenges, and it will actively participate on teams that address strategic initiatives (IIA, 2009; Marais, 2004:96). For example, IA should be involved as strategic initiatives – potential acquisitions, for instance - are considered. In those situations, a high performance, high impact IA function would add value by providing enhanced due diligence and by performing an overall audit of the process (IIA, 2009).

IA should therefore seek opportunities to perform more strategic risk management consulting services in support of whoever is managing the risk management program, and to formally communicate the results of those consulting services to the audit committee and to management (IIA, 2009; Thornton, 2009). These opportunities include:



- Evaluating the strategic risks; i.e., whether management has
  - o comprehensively identified key strategic risks;
  - developed prudent risk management techniques to address those risks, and
  - allocated sufficient resources to monitoring of strategic risk "signposts" so as to identify potential risk occurrences in sufficient time to enable management to take appropriate actions.
- Devoting the time, resources, and leadership to developing IA teams so that they have the right level of skills and experience appropriate to effective strategic risk management.
- Using third-party and other internal resources to supplement the strategic risk management skills of the IA activity if needed.

Although strategic risk management is management's responsibility, business will require IA to retool so it can position itself as a strategic business partner (Thornton, 2009). Even if IA may not have all the "hands" it needs, IA should continue to invest in its existing staff to ensure it has the appropriate technical and functional capabilities and the skills needed so IA can fulfil its new role.

With the inclusion of these five risk categories in IA's scope, the credibility of IA in the business sphere will increase significantly. IA will be seen as a value-adding business partner instead of a corporate cop keeping employees in line with the organisation's policies and procedures as done previously.

#### 2.2 Development of an IA function in the context of strategic risk

Over the last decade, IA has been the business function that was on a fast track to prominence and heightened responsibility. Its major role in assisting with Sarbanes-Oxley compliance is one reason for added recognition – but



not the only reason. IA's increased status gained momentum when management recognised that IA could provide improved value through operational and performance audits, and when audit committees began requiring enhanced audit process transparency and improved risk management practices (Ernst and Young, 2010b; IIA, 2009; Thornton, 2009).

In order for an organisation to bridge the gap between the reality of today and its vision, the organisation needs to create a strategy (Fitzmaurice, 2010). Even an IA function needs to have a strategy especially when the function aspires to achieve operational maturity and excellence. The strategy should also focus on building a sense of partnership with the organisation and to enhance its strategic support across the entire organisation (Chambers et al, 2010; Fitzmaurice, 2010).

For an IA function to contribute to better governance it should function within a strategic framework which needs to be established by the audit committee and the primary stakeholders (IIA, 2010; PwC 2012). The strategic framework needs to include how the IA function will deliver the desired value. Some areas that should address specific outcomes or "value drivers" according to PwC (2012) are:

"Strategic risk management, control assurance and consultative business partnering should address complex issues and have the ability to respond to urgent events that may result in the organisation not achieving it strategy."

The chief audit executive should establish, in conjunction with senior management and the audit committee, an effective mission statement in the form of a charter (Chambers et al, 2010). The objective of a charter is to define the goals of the IA function and the basis on which the IA function's performance can be evaluated. By aligning the charter with the stakeholder expectations, the IA function can achieve the desired strategic performance



which includes the identification of strategic business risks (Chambers et al, 2010; Thornton, 2009).

The IA function's focus and skill set need to be of such a nature and standard that they can evolve as stakeholder expectations changes (Jacka & Scott, 2011). Should the stakeholders be searching for value protection and assurance on internal controls, the IA's capabilities should be able to surpass stakeholder expectation. Furthermore, IA should have an across-the-board set of skills to assist the stakeholders in strategic risks identification and mitigation (IIA, 2009; Jacka & Scott, 2011; Jackson, 2008).

As noted by PwC (2012), to shift course and engage in strategic thinking in order to identify the organisations strategic risks, IA must have a clear, thorough understanding of the organisation's business strategy and objectives which would include the following points of concern:

What is the rationale for corporate objective setting?

- Which stakeholders contribute to the setting of corporate objectives?
- What are the key decision-making criteria used to assess the impact of risks?

The strategic planning process used to formulate the objectives:

- What structure is being used to formulate the objectives?
- How are objectives prioritised?

How strategic risks are managed:

- Is there defined accountability for strategic risks?
- Is there on-going monitoring?
- Is risk managed in silos or across the enterprise?



Furthermore IA must become a key player in effectively providing assurance on strategic risk management. To enable and accomplish this, IA must ensure that (Ernst and Young, 2010b):

- The audit scope aligns with the organisation's strategic objectives;
- the evaluation and reporting of strategic risk correlates with the intent of the strategic risk management process;
- IA continuously reviews and monitors both the accountability for and the management of strategic risk, and
- the success of the strategy is regularly evaluated.

IA's role within an organisation is unique (Fitzmaurice, 2010, PwC, 2012). As the organisation's steward it has an over-view of the entire operation, and a mandate to touch every part of the organisation. IA can assume a pivotal role in adding value, given its broad technical capability and organisational knowledge, by contributing to and assisting management in objectively evaluating the impact of the strategic risk management process (Ernst and Young, 2010b). With its new-found prominence and knowledge about the organisation's functions, IA can more easily take advantage of the prevailing winds of change to chart a new course aimed at achieving comprehensively effective strategic risk management.

#### 2.3 Regulatory requirements for listed companies

According to the latest Johannesburg Stock Exchange Limited listing requirements, Service Issues 14 (2011), listed companies have to comply with King III, failing which they need to explain non-compliance. As set out in section 7. F.5 a) and b) of the requirements, listed organisations should provide:

• "...a narrative statement of how it has applied the principles set out in the King Code, providing explanation that



enables its shareholders and potential investors to evaluate how the principles have been applied; and

 a statement addressing the extent of the company's compliance with the King Code and the reasons for each and every instance of non-compliance."

In order to implement King III, one should unravel its origins to best understand the principles behind the code. In 1994 business in South Africa underwent a transition paralleling the political transition following the election of Nelson Mandela as president. During that same year a committee was established by a corporate lawyer and former High Court Judge, Mervyn King (Barrier, 2003, Van Wyk, 2010).

This committee's deliberations were published as the first King Report on Corporate Governance, now generally known as King I. The purpose of the report was to understand the influence of business on the larger community and to develop an integrated code of company practices (Barrier, 2003, Van Wyk, 2010).

A second report, King II, followed in 2002 as the growing need for a more socially aware and inclusive approach to business was recognised (Barrier, 2003, Van Wyk, 2010). The report indicated that there was greater need for organisations to function as moral corporate citizens.

The South African Government responded positively to King II (Barrier, 2003). As the King II report consists of principles and not rules it allows business the flexibility to adopt individually appropriate corrective action (SAICA, 2010; Thornton, 2004). Furthermore, the Johannesburg Stock Exchange Limited has adopted the King II principles as best practice and requires that listed companies comply with the King II code, or explain their non-compliance (SAICA, 2010).

With the promulgation of the latest South African Companies Act in 2008, the dynamic advances in corporate governance internationally called for a



revised King report (Hendricks & Wyngaard, 2010; Institute of Directors, 2011; Van Wyk 2010).

King III was issued in September 2009. This was an important milestone in the development of corporate governance in South Africa (Hendricks & Wyngaard, 2010; Institute of directors, 2011; Van Wyk 2010). King III provides organisations with coherent guidance on identifying and applying principles of good corporate governance (Hendricks & Wyngaard, 2010; Institute of directors, 2011; Van Wyk 2010). Understandably the achievement of good corporate governance is not a simple task (Hendricks &Wyngaard, 2010; Van Wyk 2010). However, the upside to this complex task is that by practising sound corporate governance organisations are exposed to several practical approaches to business which can be beneficially incorporated into their operational processes (Hendricks & Wyngaard, 2010; Van Wyk 2010).

Regarding IA, the King III report contains the following principles which are required of IA functions (PwC, 2009; Institute of directors, 2011):

- Objective assessments of the effectiveness of risk management;
- assessments of the internal control framework;
- the adoption of a risk based approach by incorporating the strategy and risks of the company within its audit universe, and
- assessment of the firm's risks and opportunities.

Finally, in order to effectively incorporate good corporate governance into successful business practices, the scope of IA functions of organisations listed on the Johannesburg Stock Exchange Ltd should include the review of strategic risk management (PwC, 2009).

#### 2.4 Risk management frameworks

Internal control identification and assessment forms a major part of the various risk management frameworks (Ballou & Heitger, 2006; COSO, 2004). Internal controls are a type of feedback mechanism that look at the quality



and functionality of different aspects of a business (Allen; 2006:146). Several internal control models exist as part of standard business practises (Ballou & Heitger, 2006; Beasley, Branson & Hancock, 2010).

The most popular of the internal control models today, the COSO model, is based upon a model first published by the Committee of Sponsoring Organisations' Tread way Commission (COSO) in 1992 (Beasly et al, 2010). This committee is a charitable organisation in the private sector, established in the United States that provides assistance to executive management and governance companies on critical aspects of organisational governance including internal control and risk management. The COSO report (2004) defines internal controls as:

"a process, affected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the ... effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations".

In 2004, COSO redefined their model, as illustrated in figure 2, to include event identification and risk response, procedures which IA can utilise to provide assurance on the risk management processes including strategic risk and consulting services (COSO, 2004).

In addition, the new framework presents definitions for risk, enterprise wide risk management and strategic risk (Ballou & Heitger, 2006). Considering activities at all levels of the organisation, the enterprise wide risk management framework views entity objectives at the entity, division, and business unit and subsidiary levels in four key categories: strategic, operations, reporting and compliance (Ballou & Heitger, 2009; Fraser, 2009). At the same time, the framework focuses on eight interrelated components: Internal environment, objective setting, event identification, risk assessment, risk response, control activities, information and communication, and monitoring (Beasly et al, 2010; COSO, 2004).



"The internal environment" refers to the environment defined by the interactions of all levels of employees of the company, and particularly influenced by competence, integrity, operating style, etc. The remaining four components are rather more intricately interrelated (Fraser, 2009; IIA, 2004).

According to Fraser (2009), risks as well as strategic risk are identified and monitored by risk assessments. Furthermore, the risk assessment is where the risk is identified and the risk response is documented. This all forms part of the strategic risk management process.

"Information and communications" can be defined as how the information regarding data integrity is actually captured, the timeliness of that capture, and how the information is processed. Closely related, to this, is the monitoring component which refers more to the quality of the internal controls and the methods employed to achieve that quality (Fraser, 2009).

Risk management objectives Compliance Internal Environment Objective Setting Event Identification Risk Risk Assessment components Risk Response Control Activities Information & Communication Entity & unitlevel Monitoring components

Figure 2: An enterprise risk management model as designed by COSO

Source: COSO (2004).

While the COSO model is quite popular, there are many who believe that it is too difficult to implement. In response to this criticism, the Criteria of Control (CoCo) model was published in 1995 by the Canadian Institute of Chartered



Accountants (Grambling, 2006:57). The CoCo model defines internal control as "actions that foster the best result for an organisation and those elements of an organisation (including its resources, systems, processes, culture, structure and tasks) that, taken together, support people in the achievement of the organisation's objectives" (Grambling, 2006:57).

The CoCo model identifies three objectives: effectiveness and efficiency of operations; reliability of internal and external reporting, and compliance with applicable laws and regulations and internal policies (Grambling, 2006:57). Furthermore, the CoCo Model goes on to define four elements of internal control: purpose, capability, commitment and monitoring.

In essence, the CoCo model is a way of focusing on the future of an organisation to ensure it is in control by having a clear sense of shared purpose, collective commitment to achieve that purpose, the resources it needs to do the job, and the ability to learn from experience.

Although there are several models of internal control in use today, some of the most popular ones are the COSO, ISO 31000, SAC and the Cobit model (COSO, 2004; Fraser, 2009; Grambling, 2006:59, ISO 31000:2009).

ISO 31000 is a set of principle based standards for enterprise risk management. The purpose of ISO 31000 is to provide principles and generic guidelines for the design, implementation and maintenance of risk management throughout an organisation (ISO 31000:2009). It seeks to provide a model that can be recognised across the globe and used to employ risk management processes. The ISO 31000 has a basic outline. The plan stage includes the design of the risk management framework. The do stage is the implementation of the risk management. This is followed by the check stage, which consists of the monitoring and reviewing of the process. Lastly, the act stage, is where the organisation does continual improvement of the framework (ISO 31000:2009)



The SAC model, which stands for Systems Audit Ability and Control was created by the Institute of Internal Auditors Research Foundation in 1991(a revision of the SAC model was issued in 1994). The primary intent of the SAC model according to the IIA (2004) is:

"to provide guidance to internal auditors on internal controls related to information systems and information technology (IT)."

Another model of note is the Control Objectives for Information and Related Technology, or COBIT (Marais, 2004). COBIT was created in 1996 by the Information Systems Audit and Control Foundation. According to Marias (2004), COBIT:

"focuses primarily on efficiently and effectively monitoring information systems ... and emphasizes the role and impact of IT control as it relates to business processes".

Regardless of the model chosen, all models of internal control possess similar concepts and intents. Each of the models reviewed here focuses on the actual policies and procedures, the quality of the data collected, the timeliness of response and the role played by the people involved in the company's internal controls.



# 2.5 Summary and conclusion

In this chapter various literatures was explored to identify IA's risk evolvement as well as the different risk models. The risk areas identified that IA should be focusing on in order to assist business in their strategy, were strategic, compliance, financial, reputational and of course operational risk. Within all five risk categories, IA has an important role to play. By aligning the IA function's strategy with the business's strategy, IA can meet stakeholder expectations. IA functions should also increase their skill set in order to provide business with specific outcomes, thereby ensuring that IA continues to add value.

The regulatory requirements for listed companies were identified by reviewing the Johannesburg Stock Exchange Limited's listing requirements, which revealed that compliance with King III is one of the major prerequisites to listing.

King III should be seen as a significant set of guidelines, and not rules, especially since it is not a "one size fits all" document. IA can add major value to business by monitoring and ensuring compliance with King III, especially since compliance or explanations for non-compliance are mandatory under Johannesburg Stock Exchange Limited's listing rules.

Various risk frameworks were explored. While the COSO model, designed by the Committee of Sponsoring Organisations of the Tread way Commission, is the most popular it also has the reputation of being the most difficult to comply with and implement. With that in mind the Canadian Institute of Chartered Accountants designed a model called CoCo which is slightly more user friendly. Recently the ISO 31000 standard was drafted by the International Organisation for Standardisation which was also analysed.

In addition, the Institute of Internal Audit Research Foundation also issued a control framework, known as the SAC. Shortly thereafter the Cobit model was developed and quickly gained popularity. Each of these models can



assist IA in their quest to assist organisations to achieve their strategic direction and to identify the risks that can cause organisations to deviate from their strategic direction.

The reason companies are looking at IA for risk management assurances is that they do not feel that assurance regarding risk, especially strategic risk, is adequately addressed within their organisations. While this is a great obstacle for business, it is also a tremendous opportunity for forward-thinking internal auditors.

In business today, stakeholders' needs and expectations are at an all-time high, and fulfilment of these rests with IA. Many IA functions suffer from a performance gap due to lack of innovative thinking and unclear stakeholder expectations.

Chief audit executives have to provide the leadership in order to balance the demands for compliance and value in audit plans. At the same time, they must continue to develop future leaders. Each chief audit executive has an opportunity to shape the future of the profession. IA functions must therefore make use of the models created to enhance the value of their role where strategic risks are involved. IA has the opportunity to define its place in the business hierarchy and to emerge as the "game-changers" that this business environment demands, by assisting business in their strategic risk management. Those who demonstrate the best capabilities of the profession of IA will succeed spectacularly under this harsh spotlight.

The next chapter will take a closer look at the assurance that IA could provide to their organisations concerning strategic risk.





# Chapter 3

Risk is like fire. If controlled it will help you; if uncontrolled it will rise up and destroy you."

- Theodore Roosevelt-



# Chapter 3: Strategic risk

In the previous chapter the risk evolvement of IA was identified and analysed. It was argued that IA has an opportunity to increase its role within business by providing assurance on areas of key concern, like strategic risks. By expanding the traditional IA scope, IA has the opportunity to become key players in assisting management to make important decisions.

In this chapter, strategic risk is analysed from an IA perspective. The evolvement of IA, their focus on risk and the concept of strategic risk are the focus areas under the following headings:

- 3.1 Background to IA;
- 3.2 IA in context to risk, and
- 3.3 strategic risk.

# 3.1 Background to IA

It all started with accountability and creditability of auditing. The main focus was never on risk and controls. During the developmental years of IA it became especially important with the rapid growth in global trade throughout the nineteenth century. The existing accounting specialists scrambled to keep up, and this in turn resulted in more specialists being attracted into the business environment (Chambers 2005:11; Moeller 2009:8; Steelhammer 2011).

Organisations discovered the need for both internal and external auditors to ensure that assets were properly identified and recorded, and to reduce erroneous record keeping. IA was seen as an extension of external audit due to the fact that they were requested to assist with balance sheet reviews and bank reconciliations (Moeller & Witt, 1999:14). IA's role within the



organisations was perceived to be of low value and so had only "limited responsibility in the total managerial spectrum" (Moeller & Witt, 1999:14).

In 1941 The Institute of Internal Auditors was formally constituted in New York, and in so doing began the professionalisation of the activity. The new Institute's aim was to address specifically American IA issues (Steelhammer, 2011).

The key role of IA in 1946 was to do an assessment of the accounting function established within a company in order to check and assess the accounting activities (Sawyers, Dittenhofer & Scheiner 2003:28; Meldrum 2009). Although the profession of IA was separate from external auditing, the assistance provided to external auditors was soon substantial and increased over time.

By 1958, the development in IA's scope and techniques were such that "operational auditing" was officially recognised. With this new approach, the gap between management and operations became more visible and management had begun to realise the need for a greater level of structured control to ensure that the business and controls were overseen efficiently and effectively (Moeller, 2009).

American industry's dependence on IA was growing at a rapid pace, and given the USA's status as the world's most vigorous economy it leads to IA's globalisation. The Institute of Internal Auditors had reason for concern as they had not yet established a formal framework of policies and procedures that would ensure practical international consistency (Meldrum, 2009; Steelhammer, 2011). In 1978 the situation was addressed when the Standards for the Professional Practice of Internal Auditing were introduced by the Institute of Internal Auditors, and these became the measurement tool for IA quality assurance (IIA, 2009; Marais, 2004:87).

The Standards for the Professional Practice of Internal Auditors was structured into five *general* standards and twenty five *specific* standards all of



which also included numerous Statements on Auditing Standards (IIA, 2009). The Institute of Internal Auditors (2009) indicated that the 1978 standards were considered as mandatory, but there were non-mandatory guidelines included.

Although these Standards contributed to the uniformity of IA across the globe, it was deemed necessary to establish an international group of auditors whose main focus would be to formulate a guidance framework for the future (Meldrum, 2009; Steelhammer, 2011). "The Guidance Task Force", as they were known, created the above mentioned guidance framework, finally published as the Professional Practices Framework (PPF) (Cascarino and Van Esch, 2007:12).

The Professional Practice Framework was drafted in such a way that it provided three levels of guidance, namely mandatory, advisory and practical, in the form of Standards for the Professional Practice of Internal Auditing, Practice Advisories and Development and Practice Aids (Cascarino & Van Esch, 2007:13; Meldrum, 2009).

By 1990, it was well known that IA operated within all areas of their respective organisations, largely facilitated by the fact that the standardisation of professional practices was by then comfortably in place.

Despite organisation-specific variations, IA was conducting audits related to compliance and transaction cycles including fraud investigations (Meldrum, 2009). Part of IA's role was to provide assurances on areas which raised concern for management in the form of consulting services. Many of these audit activities require IA to have a risk-based and control-focussed approach to their enterprise's business (Steelhammer, 2011).

Progressively, IA also started to specialise within particular areas of IA and within specific industries. The IA profession was not restricted to professionals with accounting majors. Instead, the profession embraced diversity thereby creating opportunities to enhance the knowledge base of all



internal auditors. IA started to be proactive and began to participate in and to add value to special projects identified by business. This lead to IA taking on duties as risk officers, ethics officers and compliance officers (Chambers; 2005:24).

#### 3.2 IA in context to risk

Although the full extent of risk and its management is the responsibility of the business' management team, IA functions can play a vital role in detecting, analysing and assessing it. Bearing in mind that IA is there to assist management and to add value to the organisation, it is a major concern that IA functions steer (or are steered) clear of performing any risk related assurance because management or audit committees do not see the potential value IA can add.

Events such as the destruction of the World Trade Centre (9/11), Enron and WorldCom's financial and other collapse, and the recent (and probably ongoing) world financial crises have made it increasingly apparent that the processes, policies and procedures of dealing with organisational risk need to be more cohesive and unified in outlook.

Organisational risk should also be an ongoing analysis of both the internal and external organisational environments (Fourie & Erasmus, 2009: 936; Fraser, 2009; Grambling & Hermanson, 2009:40). Instead, the majority of organisations view the process of risk management predominantly as a matter of compliance with statutory or regulatory requirements (Allen 2007:142; Beasley, Branson & Hancock, 2010; Mclintic & Cengage, 2006; PwC, 2009).

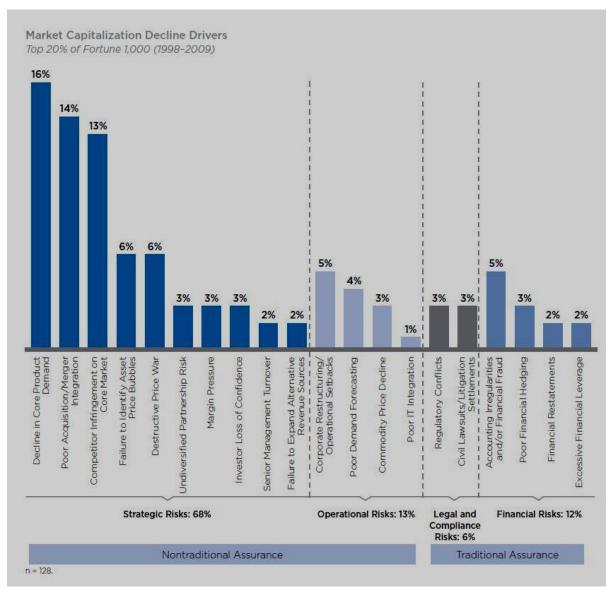
In 2010 a survey was conducted by the Corporate Executive Board (2010) to determine the cause of the 50% decline in capitalisation of Fortune 1000 companies between 1998 and 2009. According to the survey results, non-financial business risks often have more impact on an organisation then the



financial risks. By nature, business and operational risks are distributed widely throughout any organisation and are typically perceived as part of the business process. As a result, they go unassessed and unmanaged. It's important to have a process for encouraging assessment of the cumulative risks instead of only the financial and legal risks as indicated by the survey results. Figure 1 illustrates the results of the survey.

Figure 1: Corporate Executive Board survey results.

Traditional vs. non-traditional IA assurance areas



Source: Corporate Executive Board (2010).



# Conclusions drawn from Figure 1

68% of the directors indicated that they believe strategic risk poses the biggest threat to the organisation while only 12% showed that financial risks were their key concern. The results above identified the need for organisations to explicitly address risks outside of the traditional risk areas. Furthermore, the study concluded that the prime cause of the firms' almost fatal experiences were from ignored or unseen and un-assessed strategic risks such as a drop in demand for their main product or a significant turnover of senior staff. None of these items are covered in the traditional audit scope. The survey also indicated that the areas that IA normally cover, where only 18% of risks identified.

Even though an IA department would like to audit certain areas related to risk and risk management, their options are ultimately determined by what the audit committee and company management instructs them to focus on.

As set out in the Standards for the Professional Practice (PPF) of Internal Auditing, risk is not a new addition to the IA's repertoire (Cascarino & Van Esch, 2007:15; IIA 2009; Meldrum, 2009). To name but a few examples, PPF Standard 2000 addresses the role of the Chief Audit Executive (CAE) and mentions that risk based audit plans that are in line with the organisation's goals should be used. Standard 2100 discuss matters relating to risks that IA should have added to their brief to enhance risk management, control and governance. Furthermore, Standard 2110 indicate that the IA activity should assist in the identification and evaluation of risk (IIA, 2009). To guide IA even more specifically, in 2009 the Institute of Internal Auditors issued two new practice advisories related to risk management (IIA, 2009, Kleffner, 2009). The first is titled: "Using the risk management process in IA planning" (IIA, 2009, Kleffner, 2009). This deals with the coordination of the IA activity with that of risk management. The second practice advisory titled: "Assurance maps", centres on identifying and addressing any gaps in the risk management process (IIA, 2009; Kleffner, 2009).



The ever expanding role of the IA function is taking the discipline into a more advisory approach, offering to aid management with the design of suitable controls and the risk identification process across the different levels of the organisation (Cascarino & Van Esch 2007:5; Mccollum 2009:17; Millage 2009:7). Generating further opportunities for IA functions to develop their spectrum of expertise as Sobel (2011) suggests, include:

- Allocating sufficient time to train the internal auditors, including providing resources and guidance to ensure that they have adequate skills and knowledge regarding risk management, and
- making use of external service providers and other related internal resources to compliment the risk management skills of the internal auditors.

With an adequate level of skills, resources and determination, IA departments can add significant value to their organisations by including assurance on risk issues, and the management thereof to their audit universe (Sobel, 2011).

As mentioned before, risk management, as a fundamental part of strategic management, has become increasingly important in organisations (Allen, 2007:143; Grambling & Hermanson, 2009:41). The rise of Enterprise Risk Management (ERM), sophisticated approaches to financial risk management by both financial and non-financial organisations, and an emphasis by regulators on risk related issues emphasizes this importance (Fraser, 2009; Grambling & Hermanson, 2009:41). As more organisations are focusing on the systemic and controllable risks within their businesses, as well as embracing ERM, a question emerges: how does this fit in with an organisation's management of its strategic objectives? Moreover, how does the IA function provide assurance with regard to 'strategic risks'? It is still unclear from the literature exactly what strategic risks are and how they are managed (Guerra 2010; PwC 2009). There needs to be a common understanding of the concept of "strategic risk" and what it means to organisations to manage this (Allen, 2007:142; PwC, 2008).



From the aforementioned, IA's context to risk is one that is still being matured. Also, the need for IA's focus on strategic risk has been identified including the value add it will bring to the business environment.

### 3.3 Strategic risk

The key question is: "What is strategic risk?" Underlying the lack of academic research into strategic risk is the misunderstanding of what strategic risk really entails (Johnson, Scholes, and Whittington, 2006). It is also why it is relatively rare to have an organisation focusing on its strategic risks as part of their enterprise risk management practices (Johnson et al, 2006:68, PwC 2008). PwC (2008) stresses that organisations may be focusing on the wrong risks, instead of focusing on those strategic risks that have potentially major negative cost implications.

Due to the limited research available regarding strategic risk, various definitions and arguments have been consulted and are detailed below to identify what strategic risk is perceived to be and from what perspective it is viewed. Majority of the management literature that does focus on strategic risks only views it from a financial perspective (Allen, 2007:142; Slywotzky and Drzik 2005; PwC 2008).

According to Allen (2007), financial risk is primarily quantitative, with emphasis on the risk-return relationship. Ongoing academic research confirms this focus on quantitative analysis (Allen, 2007). However, some organisations are at a more advanced stage in that they quantify risks and link them to shareholder and risk-transfer decisions (Allen, 2007:142; Slywotzky and Drzik, 2005). There has also been an overabundance of research on the managerial perspectives on risk and risk taking, particularly within financial management (Allen 2007:142; Chapman; 2006:26; Johnson et al, 2006:69).

Academic research concerning strategic risk has focused on the issue of Bowman's Paradox, which states that there is a negative relationship between risk and return in most industry sectors (Allen 2007:145; Anderson



& Schroder, 2010:40; Chapman; 2006:29; Johnson et al, 2006:69). This is contrary to conventional thinking which has it that in the aggregate higher risks are positively correlated with higher returns.

Bowman argued that an organisation's attitude towards risk may influence its risk taking policies (Anderson & Schroder, 2010:40). Firms that do not perform well in the aggregate often take greater and less justifiable risks. This finding pointed to the need for a comprehensive strategy and an understanding of the individual organisational factors in the development of an approach to risk (Anderson & Schroder, 2010:40).

However, the result of Bowman's and others' work has been to place an emphasis on strategic risk within a financial context. It focused and shaped the management research literature (Anderson & Schroder, 2010:42; Chapman, 2006:31; Johnson et al, 2006:69) on quantitative research and financial risk management issues which may have a strategic impact upon the organisation (Chapman 2006:69). There has been little consideration of the non-financial strategic risks facing an organisation.

There is also a common view in both the internal and external environment that strategic risk is about managing risk 'strategically' rather than examining strategic risk as a distinct area demanding management's attention, similar to operational, financial and other risk areas (Frigo & Schroder, 2011). This common view causes confusion and may be one of the reasons why strategic risk is not widely researched nor specifically managed. It might also be due to the intricacy of the notion of strategic risk, which proposes that no individual measureable quantity/quality will be deemed key to all strategic conditions (Frigo & Schroder, 2011; PwC 2008). Precise quantifiable risks enjoy the greatest attention from researchers, including commercial risk managers, while 'soft risks', however significant, frequently get little notice (PwC 2008). In order to expand the literature, the need for a common understanding of the concept of strategic risk must be developed (Slywotzky & Drzik, 2005:79).



Slywotzky and Drzik (2005:80) attempted to find this common understanding, defining strategic risk as "an array of external events and trends that can devastate a company's growth trajectory and shareholder value". Slywotzky and Drzik (2005:80) further "categorise strategic risk into seven major classes: industry, technology, brand, competitor, customer, project, and stagnation."

It is important to note that Slywotzky and Drzik's (2005:82) definition and categorisation of strategic risk focuses principally on the external environment. Managers, however, in focusing on the external environment, may miss internal risks to the organisation that have as much importance strategically as external risks. Strategic risks cannot solely be viewed or managed from an external focus.

Another definition of strategic risk is explained in terms of the Basel II (2006) regulations, intended to mitigate the rapacity prevalent in the financial services sector. Within this regulatory framework, strategic risk is acknowledged as an important component of business risk (see Pillar II of the Basel II framework), but without defining the term. In Basel II's Pillar II guidelines, The Committee of European Banking Supervisors (Faille, 2007) recommends the following definition:

"Strategic risk is the current or prospective risk to earnings and capital arising from changes in the business environment and from adverse business decisions, improper implementation of decisions or lack of responsiveness to changes in the business environment".

The key terms of the regulatory guidance are that strategic risk needs to be both externally and internally identified, managed and controlled. 'Implementation' and 'lack of responsiveness' confirm the need for internal control and focus as components of managing strategic risk (Chapman, 2006:39; Johnson et al., 2006:73). Yet it is unclear how organisations should



go about this task of identifying external and internal risks, and managing and controlling them.

While the Basel II protocol on strategic risk is focused on regulation, their definition of strategic risk is deficient on how strategic risk might be recognised and analysed. There is a possible overlap between the standard Basel II definition of operational risk, which is:

"The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events"

(Faille, 2007), and Chapman's (2006:72) definition which is as follows:

"Adopting the wrong business strategy, failing to execute a well-thought out strategy or not modifying a successful strategy over time to reflect changes in the business environment are forms of operational risk."

In order to mitigate strategic risks efficiently and effectively, it has to be viewed separately from operational issues, especially in terms of implementation of strategies and policies and assigning resources (Faille, 2007). Furthermore, if strategic risk is viewed from an operational point of view, this can lead to confusion as to how to address possible deficiencies in internal governance processes and management procedures and the inherent external risks the organisation faces (Faille, 2007; Chapman, 2006:73).

Alternatively, the following definition is provided by Johnson et al (2006:76), where

"Strategic risk can be seen as the probability and consequences of a failure of strategy."



An interesting fact regarding this definition is that it concentrates on the 'strategic' component of the definition instead of exclusively on the 'risk' component.

As explained by Chapman (2006:76), strategic risk is not solely about the management of risk - it includes strategy as well. For instance, the probable financial return from a specific strategy may be perceived as a significant part of the acceptability of that strategy. Considering the risk of following a specific strategy should consequently be another process of investigating the likelihood and relative acceptability of possible failure.

From exploring the literature it is clear that there is a lack of understanding of what strategic risk is and how one should approach the managing thereof. It is also evident that there is too much assumed similarity between operational risk and strategic risk. Organisations need to consider operational and strategic risks as essentially separate concepts, requiring different analysis and management processes. If not, they run the risk of failing to manage and control strategic risks.

Essentially, strategic risk is "the new kid on the block", especially since risk has been largely neglected when strategies have been discussed in many organisations (Basioudis, 2010; Fitzmaurice, 2010; Guerra, 2010). The focus of the "strategic" meetings usually quickly shifts to discussions of business and financial opportunities, while ignoring the other risks that can undermine these opportunities (Guerra; 2010).

As strategic risk is still in its infancy, various schools of thought have emerged in the attempt to define strategic risk. According to Frigo and Anderson (2011) strategic risk management can be defined as:

"...the process of identifying, assessing and managing the risk in the organisation's business strategy including taking swift action when risks are realised. Strategic risk



management involves evaluating how a wide range of possible events and scenarios will affect the strategy and its execution and the ultimate impact on the company's value"

There are six key elements in the process introduced by Frigo and Anderson (2011) which can, if used, achieve a smooth combination of strategic risk and the management thereof:

- The identification of the strategic process, as well as the assessment and management of both the internal and external events including social and political measures;
- ensuring that the ultimate goal is one that creates new, and simultaneously protects existing shareholder and stakeholder value;
- understanding that strategy is the fundamental component of the organisation's overall enterprise risk management process;
- realising, that by definition enterprise wide risk management is affected by boards of directors, management and others.
- enterprise wide risk management requires a strategic view of internal and external risks and their effects on the organisation's ability to achieve its objectives, and
- overall risk management is a process in which strategy setting, implementation and management should be embedded as an on-going interactive dance.

Organisations can achieve even more efficient and effective strategic risk value drivers by including strategic risk policies and processes within their enterprise wide risk management framework with assistance from IA (Frigo & Anderson, 2011).

For the purpose of this study, the Basel II definition of strategic risk will be utilised to base the rest of the study on.



# 3.4 Summary and conclusion

The concepts of risk and strategic risk were explored in this chapter. It included IA's involvement (and potential involvement) within this rapidly developing aspect of IA's sphere of competence. Highlighting IA's ability to increase its value adding profile within an organisation has progressed rapidly resulting in a profession that now has global reach and influence.

The need for a standardised approach was recognised in the 1940s and this lead to the establishment of the Institute of Internal Auditors which was responsible for generating a PPF. Central to this Framework's success was the widespread adoption of an internationally credible definition of IA.

Since the 1990's, IA has increasingly focused on risks, the management thereof and on corporate governance, thus creating a growth opportunity for those working within the profession. To aid practicing internal auditors, The Institute of Internal Auditors have drafted two new practice advisories specifically addressing risk management.

The profession of IA has developed a unique approach to audit, establishing a clear difference between internal and external auditing. From the various practice advisories dealing with risk, including the latest definition of IA, it can be concluded that risk is not an unfamiliar concept for IA.

Additionally, IA can play an essential advisory role within the organisation by looking beyond the traditional IA processes and controls. In conclusion, this kind of support will generate multiple benefits for the organisation. This should include enhanced efficiency and effectiveness regarding understanding risk and strategic risk. It can identify enterprise-wide cost efficiencies, provide strategic insights that improve business performance and provide clear understanding of the risks that matter.



For the IA function, this opportunity to add more value will, if taken, assist IA keeping ahead of developments in the business environment, enabling them to provide relevant support to the organisation's approach to governance, risk and compliance.



# **Chapter 4**

"It is a capital mistake to theorize before one has data"

- Sherlock Holmes-



# Chapter 4: Research design and results

In the previous two chapters strategic risks and the evolvement of IA regarding risks were identified and analysed. Based on the results, a questionnaire was developed to address the objectives of the study. These objectives were structured to determine the intensity of focus IA departments place on strategic risk for listed companies on the Johannesburg Stock Exchange Limited. The target universe was the Chief Audit Executives (CAE) whose views were requested using the structured questionnaire. The study aimed to achieve the following detailed research objectives:

- To determine how strategic risk management is being integrated into the individual companies' IA universe;
- to establish the extent to which the strategic risk management process is reviewed; and
- to determine if IA departments of companies listed on the Johannesburg Stock Exchange Limited include strategic risk management within their audit scope.

Self administered questionnaires were electronically distributed to the various listed companies' to determine what role IA portrays regarding strategic risk in companies if any. The information that was used in this study was limited to information that had a direct impact on the status of IA's focus on strategic risk.

A total of 245 questionnaires were distributed electronically to all CAE's that where members of the Institute of IA with a response rate of 12% resulting in 30 completed and usable questionnaires. The data gathered from the research instrument was immediately summarised after being received through electronic mail. After all the questionnaires had been received all the responses were captured onto an excel spreadsheet to enable the comparison.



In this chapter, the research design will be discussed including the results of the questionnaires focussing on:

- The questions and the outcome, and
- the results in graphical format.

### 4.1 Research Design

The research method that was used for this study was the descriptive method. To define the descriptive type of research, Saunders, Lewis and Thornhill (2007) described the descriptive method of research as one where the researcher gathers information to describe the current existing state. The importance is on recitation instead of judging or understanding. The goal of descriptive research is to confirm formulated research questions that relates back to the present situation in order to explain it.

The descriptive research method is mainly concerned with describing the nature or condition and the degree in detail in the present situation. The purpose of the descriptive research method is to attain a truthful reflection of the events, situations or the people (Cassel & Symon, 1994; Saunders *et al.*, 2007). Before the process of collecting data is performed with this research method, the researcher should already have a comprehensible view or picture of the phenomena being examined. In order to formulate rational and sound conclusions including recommendations for the study, the researcher used this particular kind of research to obtain first hand data from the respondents (Cassel & Symon, 1994).

The descriptive research method was employed in this study to identify whether various companies listed on the Johannesburg Stock Exchange Limited have IA functions that focus on strategic risk management processes. This included whether or not these organisations incorporate strategic risk related areas in their audit universe. The researcher decided on this research



method taking into consideration the purpose of obtaining first hand data from the respondents. The descriptive method is beneficial for the researcher due to its flexibility; this method can use either qualitative or quantitative data or both, giving the researcher greater options in selecting the instrument for data-gathering (Polgar & Thomas, 1995).

The researcher opted for the quantitative approach instead of the qualitative approach regarding the data gathering as the quantitative approach concentrates on the quantification of relations between variables. Quantitative data-collecting instruments institute an association between measured variables. By utilising this approach, the researcher is generally separated from the study to ensure that the final output is context free. The core essence of quantitative instruments consists of the statistics, the measurement and the numerical data (Polgar & Thomas, 1995). When using this type of instruments, a very clear description of data collection and analysis of procedures are required. As this approach is mainly deductive in reasoning, it favours the least complex explanation and provides a statement of statistical probability. The quantitative research approach concentrates on the meticulous description of a phenomenon. In short, it provides the researcher with a generalisation of the gathered data with tentative synthesised explanations (Polgar & Thomas, 1995).

By making use of the quantitative approach, it assists the researcher in avoiding being bias in obtaining and presenting the research data. Quantitative data gathering procedures produce epistemological postulations that actuality is objective and unitary. As per Saunders *et al.*, (2007) this occurrence in turn should be explained or discussed by means of data analysis gathered through objective forms of measurement. When a research study is required to measure the cause and effect relationships evident between pre-selected and discrete variables, the quantitative data collection methods are the most useful. The goal of the quantitative approach is to evade subjectivity by means of collecting and exploring data which describes the phenomenon being studied (Saunders *et al.*, 2007).



Quantitative methods institute very detailed research problems and terms. According to Saunders *et al.*, (2007):

"The controlled observations, mass surveys, laboratory experiments and other means of research manipulation in qualitative method make gathered data more reliable."

Therefore, conclusions, discussion and experimentation involved in the process are more objective. Variables, both dependent and independent, that are needed in the study are clearly and precisely specified in a quantitative study. In addition, longitudinal measures of subsequent performance of the respondents are enabled by using the quantitative research method. Saunders *et al.*, (2007) noted that qualitative research focuses on decoding, describing, analysing and interpreting the meaning of a certain phenomena happening in routine social contexts.

# 4.2 Participants

The research population for the proposed study was organisations listed on the Johannesburg Stock Exchange. The main aim of the study was to obtain sufficient information from all types of industries from which comprehensive and inclusive conclusions could be drawn. The most appropriate method to utilise is the descriptive method as this method can allow the identification of the similarities and differences of the respondents' responses (Polgar & Thomas 1995).

Furthermore The Institute of Internal Auditors (SA) distributed the electronic questionnaire to the intended participants which were Johannesburg Stock Exchange Limited listed companies with IIA registered CAE's. Making use of the IIA (SA)'s services was intended to increase the reliability of the proposed study by ensuring that one specific industry type did not influence the findings.

Although there were 489 companies listed on the Johannesburg Stock Exchange Limited at the time of the research, only 245 questionnaires were distributed due to their membership of the IIA (SA). There was a 12%



response rate resulting in 30 completed and usable questionnaires. According to Welman, Kruger and Mitchell (2005:71) it is commonly accepted that a study should not be less than 15 units and should preferably consist of more than 25 units capable of undergoing meaningful analysis. Therefore, the 30 responses to this study were deemed adequate, justifying the descriptive analysis of the results.

The intended diversity of industries contributing to the findings of the study was achieved, making the results applicable to more contexts and also enhancing the general applicability of the results of the study (Czaja *et al.*, 2005:137).

#### 4.3 Instruments

In this study, the main instrument used to gather data was a survey questionnaire. (See Appendix B). The questionnaire was self-administered by the researcher utilising qualitative research and combining it with the research objectives. The first part of the questionnaire determined the size and type of the IA department where the second part related to their involvement in the business from a strategic risk perspective. The questions had pre-determined answers whereby the responded had to select the options applicable to their IA environment.

The researcher tested the questionnaire by making use of two phases of pretesting to ensure that the questions were valid:

- Firstly, members of the auditing faculty focusing on IA were requested to comment on the suitability and clarity of the questions in the questionnaire.
   After their suggestions had been implemented, the revised questionnaire was prepared.
- Secondly, the revised questionnaire was sent to the CAE's of two listed organisations.



The respondents that were part of the pre-testing including their answers were not included in the actual study sample; as they were only used for the pre-testing process. Subsequent to the questions being answered, the researcher followed up with the respondents on any suggestions or required improvements to ensure further enhancement and validity of the outcomes. The researcher adjusted the survey questionnaire according to the input of the respondents. The researcher also removed irrelevant questions and updated vague questions or jargon to ensure comprehension.

# 4.4 Data Analysis

The data analysis is discussed in chapter 5.

#### 4.5 Research results

In order to represent the results as fairly as possible, each question was documented with the outcome and then graphically illustrated. In some instances conclusions could be drawn in conjunction with more than one set of information obtained.

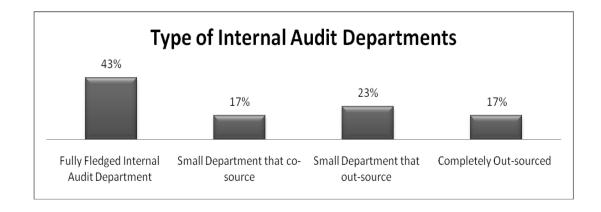


# 4.5.1 Question 1

# What type of IA department does your organisation have?

A fully fledged IA department	13
	43%
A small IA department that co-source	5
	17%
A small IA department that out-source often	7
	23%
No IA department because it is	5
out-sourced	17%

Figure 4.5.1 Type of IA departments of the organisations





IA departments varied significantly in size as well as capacity. Some listed companies have a big IA staff compliment whereby others have a smaller IA staff compliment but out-source or co-source many areas of IA. As illustrated in Figure 4.5.1, the majority of the respondents have fully fledged IA functions resulting in a combined skill set and retaining the knowledge gained from the business specific processes.



# 4.5.2 Question 2

How many people are employed in your department?

1 – 10 Employees

17

57%

11 – 20 Employees

7

23%

21 – 30 Employees

3

10%

31 – 40 Employees

2

7%

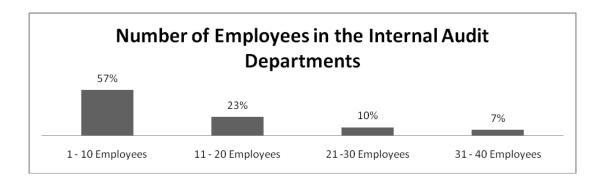
41 – 50 Employees

1

3%



Figure 4.5.2 Number of Employees in the IA Departments



According to the research performed the majority of IA departments do not consist of more than 10 employees as illustrated in figure 4.5.2.



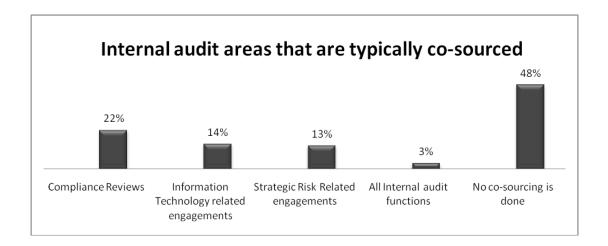
# 4.5.3 Question 3

Which areas are typically co-sourced? (Choose all revenant areas)

Compliance engagements	22%
Information technology related engagements	14%
Strategic risk related engagements	13%
All IA functions	3%
No co-sourcing is done	48%



Figure 4.5.3 IA areas that are typically co-sourced



Based on the outcome of this question, the majority of IA areas are performed in-house and not co-sourced at all. Furthermore, only 14% of strategic risk related engagements are co-sourced.



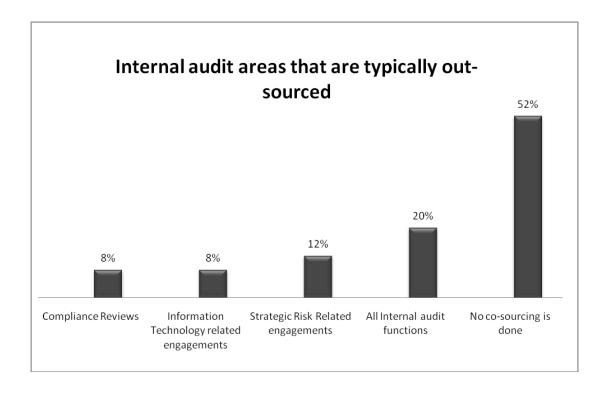
# 4.5.4 Question 4

# Which areas are typically out-sourced? (Choose all revenant areas)

Compliance engagements	8%
Information technology related engagements	8%
Strategic risk related engagements	12%
All IA functions	7 20%
No out-sourcing is done	18 52%



Figure 4.5.4 IA areas that are typically out-sourced



Although the mainstream of participants do not out-source their IA functions, 11% still out-source strategic risk related engagements as indicated in figure 4.5.4.

By combining the information gathered in figure 4.5.3 and figure 4.5.4 the following information is identified:

Table 4.5.1: Analysis of out-sourced /co-sourced audit areas in listed companies

AREA	CO - SOURCED	OUT-SOURCED
COMPLIANCE REVIEWS	22%	8%
INFORMATION	14%	8%
TECHNOLOGY REVIEWS	1170	370
STRATEGIC RISK RELATED	13%	12%
REVIEWS	1070	1270
ALL IA FUNCTIONS	3%	20%



## Conclusion from Table 4.5.1

As indicated in the table, 13% of strategic risk related audit work is co-sourced and 12% out-sourced signifying that most of the audit departments perform their own IA work relating to strategic risk. Being actively involved in the risk associated reviews indicates that the IA functions are focussing on business related areas and not just the traditional audit areas such as compliance reviews.

Furthermore it was noted that 49% of the IA departments do not co-source at all and 57% of the research sample does not outsource their IA functions.



# 4.5.5 Question 5

On what do you base your operational type audits? (Choose all revenant areas)

Risk assessments	25%
Process analysis	27%
Strategic risk workshops	9 11%
Input from strategic risk workshops	10
Requests from audit committee	21 25%



Figure 4.5.5 Bases for operational type audits

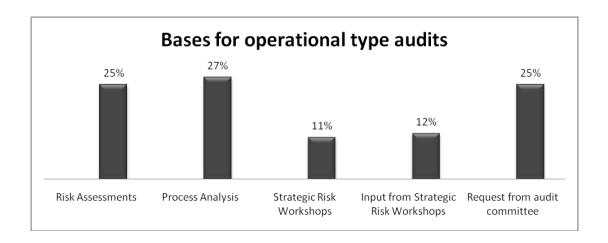


Figure 4.5.5 illustrates that, according to the CAE respondents, the majority of risk type audits are based on process analysis, requests from the audit committee and risk assessments. It can be concluded that the minority is utilising information originating from strategic risk workshops.

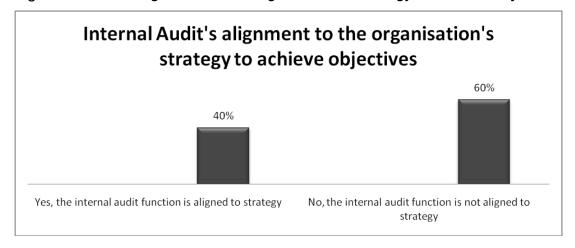


#### 4.5.6 Question 6

Is the IA function aligned with the organisation's strategy to achieve objectives?



Figure 4.5.6 IA's alignment to the organisation's strategy to achieve objectives



40% of the respondents indicated that their IA functions are aligned to the organisation's strategy to achieve objectives while 60% are not aligned. It resulted in the IA function focusing on areas that are subjective to other influences as indicated in figure 4.5.6 instead of strategic risk areas.



#### 4.5.7 Question 7

#### Question 7a)

Are the planned and completed audits listed against the related strategic risks?

#### **Planned Audits**

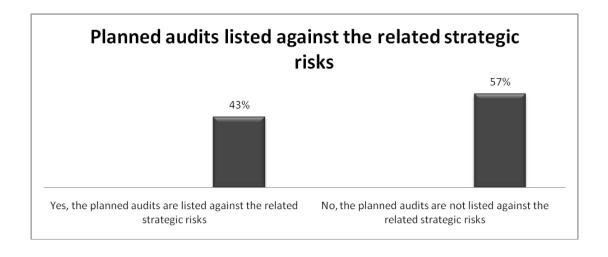
Yes, the planned audits are listed against the related strategic risks.

43%

No, the planned audits are not listed against the related strategic risks.

17 57%

Figure 4.5.7a Planned audits listed against the related strategic risks





## Question 7b)

## **Completed Audits**

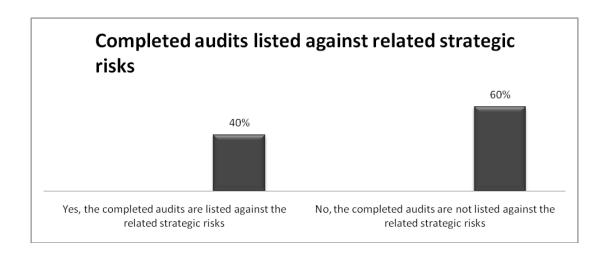
Yes, the completed audits are listed against the related strategic risks.

12 40%

No, the completed audits are not listed against the related strategic risks.



Figure 4.5.7b Completed audits listed against related strategic risks



In conjunction with figure 4.5.7a and 4.5.7b, it was noted that minority of IA departments list their planned and completed audits against the related strategic risk.

6

#### **4.5.8 Question 8**

**During your organisation's strategy-setting process, the IA department:** 



Is part of the strategic team?

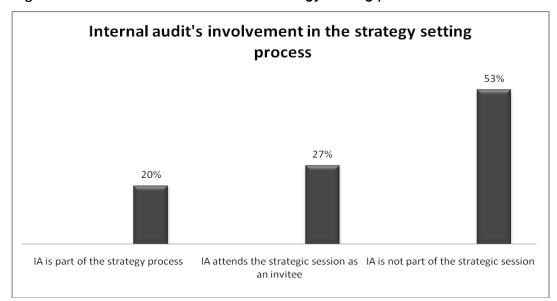
Attends the strategic session as an invitee?

8
27%

Is not part of the strategic session?

16
53%

Figure 4.5.8 IA's involvement in the strategy setting process



As graphically represented in figure 4.5.8, it can be concluded that most of the IA departments are not involved at all in the process of setting the organisation's strategies.



#### 4.5.9 Question 9

What is the involvement of the IA department in the achievement of the organisation's strategic initiatives?

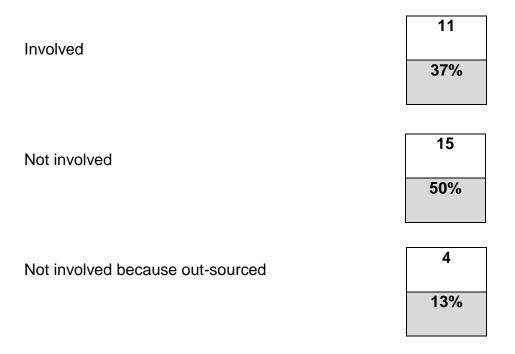
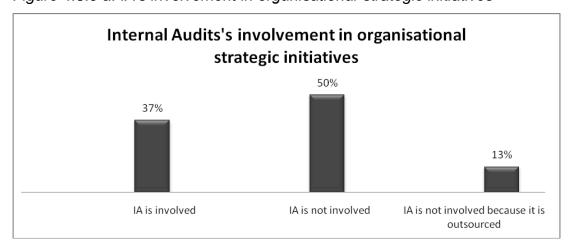


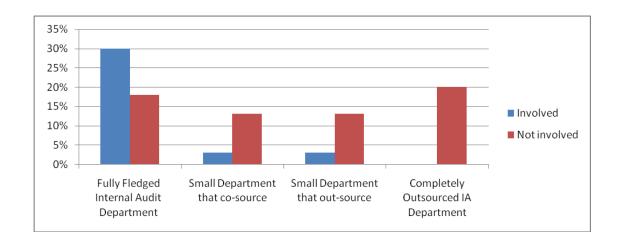
Figure 4.5.9 a: IA's involvement in organisational strategic initiatives



When inquired to what extent their IA department is involved regarding the achievement of the organisation's strategic initiatives, 37% indicated that they are involved, 13% indicated that it was out-sourced and 50% stated that they are not involved at all. By combining the information from question 1 and question 9 the following conclusion can be made as illustrated in figure 5.9 b below:



Figure 4.5.9 b: Type of IA department's involvement in achieving strategic initiatives



As graphically represented in figure 4.5.9 b, it can be concluded that most of the IA departments that are involved in the achievement of organisation's strategic objectives are fully fledged IA departments. This ensures that the experience and knowledge gained by the IA department through this assurance is kept in-house and not lost to external resources.



#### 4.5.10 Question 10

If the IA department is involved, it is involved through (Choose all relevant areas)

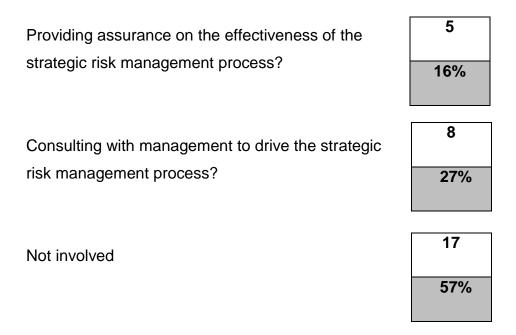


Figure 4.5.10 How IA is involved in achieving the organisational strategic initiatives





For the 43% of IA departments that were involved in achieving the organisations' strategic objectives, 16% thereof provide assurance on the effectiveness of the strategic risk management process. A further 27% consult with management to drive the strategic risk management process and 57% of IA functions are not involved at all.



#### 4.5.11 Question 11

How is assurance obtained regarding the achievement of expected benefits relating to the strategic business initiatives? (Choose all relevant areas)

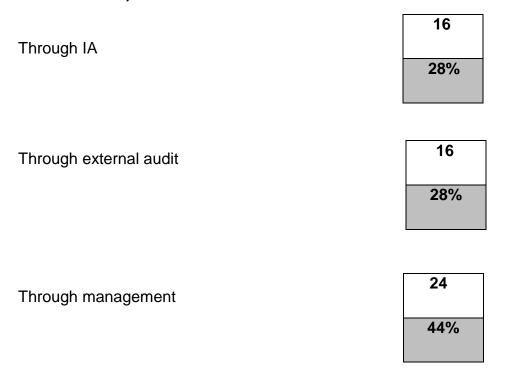
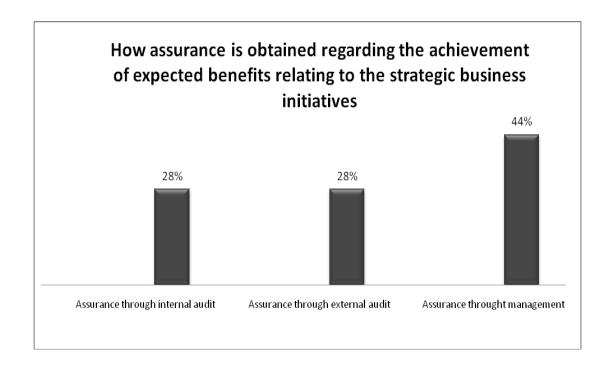


Figure 4.5.11 How assurance is obtained regarding the achievement of expected benefits relating to the strategic business initiatives





From figure 4.5.11 it is evident that IA departments are not required to provide assurance separately, instead organisations prefer to combine it with either management or external audit providing a more combined assurance.



#### 4.5.12 Question 12

Does IA review the information and supporting data used to formulate strategic decisions?

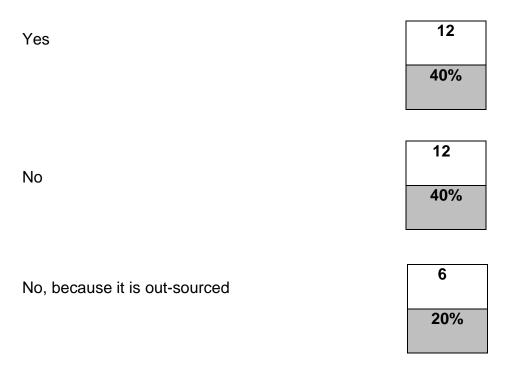
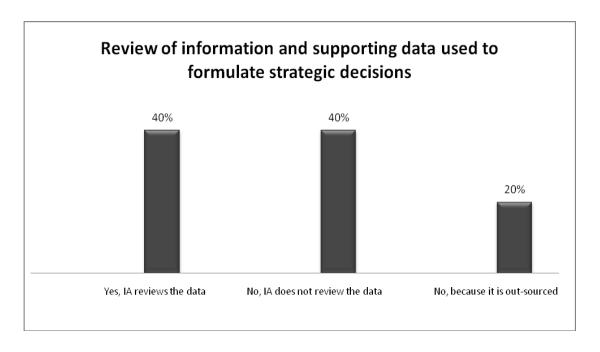


Figure 4.5.12 IA functions reviewing the information and supporting data used to formulate strategic decisions





The responses also reflected that only 40% of IA departments review the risk information and supporting data used to formulate strategic decisions and 40% do not.



## 4.5.13 Question 13

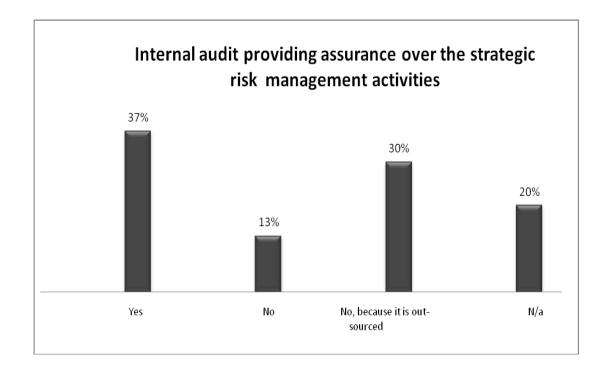
# Question 13 a)

If your organisation has an advanced (fully operational) risk management capability, do you provide assurance regarding the strategic risk management activities?

Yes	11
	37%
No	4
	13%
No, because it is out-sourced	9
	30%
	6
N/A	
	20%



Figure 4.5.13a: IA providing assurance regarding the strategic risk management activities



37% of the participants indicated that they do provide assurance on the strategic risk management activities where the majority is not involved in providing assurance at all. A further 20% does not include it in their audit universe.



# Question 13b)

# If yes, how often is assurance provided?



Figure 4.5.13b: The IA cycle regarding the assurance on the strategic risk management activities



For the 37% of IA functions that do provide assurance on the strategic risk management activities, 91% provides it on an annual basis and 9% on a biannual basis.



#### 4.5.14 Question 14

Is your organisation's strategic risk management process an agenda topic at the audit committee?



Figure 4.5.14: Strategic risk management and the audit committee



Although IA might be seen as being 'out of their league' when it comes to providing assurance on strategic risks, 47% of the CAE's responded that their audit committee still want to hear from their IA, about these risks. The CAE



needs to ensure that he or she tools up the department's skill set and experience so that they can express an opinion on these issues.



## 4.6 Summary and conclusion

Based on the literature discussion in chapters two and three a quantitative research approach in the form of a structured survey was identified as the most appropriate method to achieve the desired results. Especially since this approach provides a quantitative (numeric) description of trends or opinions of a population by studying a representative sample of the population. By making use of the survey research method, information was gathered in numeric form, which made it easier for the researcher to interpret the collected data using statistical analyses.

Furthermore, it was concluded that the questionnaire was understandable and user friendly after it had been pre-tested. The final questionnaire was distributed to the research target audience by the South African chapter of the Institute of Internal Auditors, who also collected the response data and forwarded it to the researcher for analysis and interpretation.

By adhering to the guidelines identified and described in the discussion of the research method and approach, the nature and manner in which the data was collected enabled the researcher to conclude that a valid resolution to the research questions have been identified.

Through the research, it was noted that the majority of the research respondents indicated that they are aligned to their organisations' strategic objectives. However, it can be concluded that the strategic risk areas being audited stem from other sources such as requests from audit committees and process analysis instead of the strategic risk workshops.

IA can play an essential role in the shift to auditing strategic risk management processes by integrating the identification and assessment of risk into the audit plan. The insight IA gains from these activities and communicating it to senior management and the board of directors can make strategic risk management efforts more relevant, reliable, and resilient. It can also move IA into a strategic advisory role through dialogue that helps management better.



In the next chapter, a statistical analysis will be performed of the gathered data.



# **Chapter 5**

"An approximate answer to the right problem is worth a good deal more than an exact answer to an approximate problem."

- John Tukey-



# **Chapter 5: Statistical Analysis**

The results of the survey were further analysed using descriptive statistics. There are many basic techniques for analysing quantitative data. In this study, the researcher chose the Statistical Package for the Social Sciences (SPSS) software for Windows to analyse the explanatory factors. SPSS for Windows is probably the most widely used computer software for analysis of quantitative data for social scientists. SPSS has been in existence since the mid -1960's and over the years has undergone many revisions, particularly since the arrival of personal computers (Bryman& Bell, 2007).

For this study the cross tabulation analysis with the Chi-Square analysis approach was utilised. The cross tabulation analysis shows the combined distribution of two variables, where the data for each variable is in categories. Cross tabulations are only appropriate for data that is in categories. SPSS provides a case processing summary with the cross tabulation output which provides the researchers with sufficient data to perform the Chi-Square analysis. This type of analysis tests the statistical independence between the variables represented in the cross tabulation. The Chi-Square analysis also examines differences between the expected and actual counts across the cells in the cross tabulation. If 20% or more of the data cells have an expected count less than five or if the minimum expected count is less than one, the researcher cannot use the direct chi-square results but opt for the extended analysis called Fisher's Exact analysis. This analysis is used for statistical testing for independence in a 2x2 design. If the significance value, represented by p, is less than 0.05, then the result is statistically significant; if the significance value is greater than 0.05 then the result is not statistically significant.

Four cross tabulations for statistical testing could be generated from the 30 surveys collected for this study and these are outlined below:



Table 5.1a: Type of audit departments that are aligned with the organisation's strategy to achieve its objectives

		Part of org strategy tobje		
		Yes	No	Total
Organisations with fully fledged IA departments	Count %	11 84.62	2 15.38	13 100%
Organisations with a small IA department that co-sources	Count %	2 40	3 60	5 100%
Organisations with a small IA department that out-sources often	Count	2	5	7
Organisations with no IA departments because they have been out-sourced	%	28.57	71.43	100%
	Count %	2 40	3 60	5 100%
Total	Count %	17 56.67	13 43.33	30 100%

Table 5.1b: Chi-Square tests

Statistic	Value	Df	Significance	Table	Pr<=p
			value	Probability	
Chi-Square	7.5168	3	0.0571		
Likelihood Ratio	8.0555	3	0.0449		
MH Chi-Square	5.2670	1	0.0217		
Fisher's Exact Test				0.0014	0.0529

Because the expected count was less than 5 for 75% of the cells, the chisquare results for interpreting the statistical differences are best explained by using the Fisher's Exact test results.

Results: 0.0529> 0.05 = not significant



As the results in tables 5.1a and 5.1b show, there is no significant correlation between the type of audit department an organisation has and the alignment of the IA function with the organisation's strategy to achieve its objectives.

Table 5.2a: Type of audit department that lists their planned audits against the related strategic risks

		their plan against tl	ments listing ned audits he related gic risks	Total
		Yes	No	
Organisations with fully fledged IA departments	Count %	11 84.62	2 15.38	13 100%
Organisations with a small IA department that co-sources	Count %	2 40	3 60	5 100%
Organisations with a small IA department that out-source often	Count %	3 42.86	4 57.14	7 100%
Organisations with no IA departments because they have been out-sourced	70	42.00	37.14	10070
	Count %	2 40	3 60	5 100%
Total	Count %	18 60	12 40	30 100%

Table 5.2b:Chi-Square tests

Statistic	Value	Df	Significance	Table	Pr<=p
			value	Probability	
Chi-Square	5.8059	3	0.1214	•	
Likelihood Ratio	6.1974	3	0.1024		
MH Chi-Square	4.1802	1	0.0409		
Fisher's Exact Test				0.0032	0.1104



As the expected count was less than 5 for 75% of the cells, the chi-square results for interpreting the statistical difference are best explained by using the Fisher's Exact test results.

## Results: 0.1104> 0.05 = not significant

As the results in tables 5.2a and 5.2b show, there is no statistically significant correlation between the type of audit department an organisation has and whether the IA department lists their planned audits against the related strategic risks of the organisation.

Table 5.3a: Type of audit department that lists their completed audits against the related strategic risks

		their comp against the	ments listing leted audits ne related jic risks	Total
		Yes	No	
Organisations with fully fledged IA departments	Count %	11 84.62	2 15.3 8	13 100%
Organisations with a small IA department that co-sources Organisations with a small IA	Count %	2 40	3 60	5 100%
department that out-sources often  Organisations with no IA departments because they have been out-sourced	Count %	4 57.14	3 42.8 6	7 100%
	Count %	2 40	3 60	5 100%
Total	Count %	19 63.33	11 36.6 7	30 100%



Table 5.3b: Chi-Square tests

Statistic	Value	Df	Significance	Table	Pr<=p
			value	Probability	
Chi-Square	4.9955	3	0.1721		
Likelihood Ratio	5.2461	3	0.1546		
MH Chi-Square	3.2294	1	0.0723		
Fisher's Exact Test				0.0050	0.1573

Due to the expected counts being less than 5 for 75% of the cells, the chisquare results for interpreting the statistical differences are best explained by using the Fisher's Exact test results.

Results: 0.1573> 0.05 = not significant

As the results in tables 5.3a and 5.3b show, there is no statistically significant correlation between the type of audit department an organisation has and whether the IA department lists their completed audits against the related strategic risks of the organisation.



Table 5.4a: Type of audit department that is involved in the achievement of the organisation's strategic objectives

		Audit departments involved in the achievement of the strategic objectives			
		Involved	Not Involve d	Out- sourced	Total
Organisations with fully fledged IA departments  Organisations with a small	Count %	8 66.67	4 33.3 3	0	12 100
IA department that co- sources	Count %	1 20	4 80	0	5 100
Organisations with a small IA department that outsources often  Organisations with no IA department because they	Count %	2 28.57	4 57.1 4	1 14.29	7 100
have been out-sourced	Count %	0	1 25	3 75	4 100
Total	Count %	11 39.29	13 46.4 3	4 14.29	28 100

Frequency Missing 2

Table 5.4b:Chi-Square tests

Statistic	Value	df	Significance	Table	Pr<=p
			value	Probability	
Chi-Square	19.5150	6	0.0034		
Likelihood Ratio	17.9119	6	0.0065		
MH Chi-Square	11.1094	1	0.0009		
Fisher's Exact Test				2.034	0.0101

The expected count was less than 5 for 92% of the cells, therefore the chisquare results for interpreting the statistical difference are best explained by using the Fisher's Exact test results. UNIVERSITEIT VAN PRETORI.
UNIVERSITY OF PRETORI.
YUNIBESITHI YA PRETORI.

**Results: 0.0101< 0.05 = significant** 

As the results in tables 5.4a and 5.4b show, the type of IA department was positively correlated with the involvement of audit departments in the

achievement of the organisation's strategic objectives.

5.1 Data analysis

All empirical data gave the legible and specific results predicted by the

analytical model. In this part, the analytical model is confronted with both

empirical data and the theoretical framework in order to analyse all the

research questions and by so doing, achieve the purpose of the research.

Since the analytical testing was based on a 2 x 2 design, the other leg of the

testing was the type of audit department the organisation had in place.

5.1.1 To determine how strategic risk management is being integrated into

the individual companies' IA universe.

The correlation matrices in Tables 5.2a, 5.2b, 5.3a and 5.3b show all variables

to be negatively correlated. This indicates that the type of IA function has no

impact on whether planned and/or completed audits are listed against the

organisation's major risks. Nevertheless, the survey results in Figures 4.7a

and 4.7b indicate that less than 43% of the respondents integrate strategic risk

management with their IA universe by listing their planned and/or completed

audits against the major strategic risks of the organisation regardless of the

type of audit department it is.

5.1.2 To establish the extent to which the strategic risk management process

is reviewed.

This study's results, presented in Tables 5.4a and 5.4b, make it clear that the

type of IA department was positively correlated with the involvement of audit

departments in the achievement of the organisation's strategic initiatives. The

role of the IA department would not be one of decision-making, but more of a



consulting role, assisting management to identify their strategic risks. This in turn would be achieved, at one extreme, by facilitating strategic risk workshops, and at the other by reviewing the risk management process holistically. IA can also be part of the process of achieving strategic objectives by performing interim audits to ensure that the organisation continues to adhere to the action plans intended to achieve success. Most importantly is the integration of the IA department into the organisation, and the credibility management sees in the opinion of the IA function. Should the IA department not be part of the organisation or if this particular function has been outsourced, the IA function cannot be seen as a valuable business partner.

5.1.3 To determine if IA departments of companies listed on the Johannesburg Stock Exchange Limited include strategic risk management within their audit scope

According to the empirical research data analysed in Tables 5.1a and 5.1b there is no significant correlation between the type of audit department an organisation has and the alignment of the IA function with the organisation's strategy to achieve its objectives. The type of IA function does not necessarily dictate the scope of the IA function. That is determined by the chief audit executive in consultation with management and the audit committee. completely out-sourced IA function can still include strategic risk management in their audit scope, as long as they are aligned with the organisation's strategy to achieve specific objectives. Similarly, if the organisation's IA function is partially or completely out-sourced, the organisation cannot claim that strategic risk management is being integrated into their audit universe as their IA function is unlikely to be invited to participate in the achievement of the organisation's strategic objectives is non-existent. In the end, for the IA department to have strategic risk management incorporated in their audit scope, they need to be aligned with the organisation's strategy to achieve objectives.



## 5.2 Summary and conclusion

In order to further explore the research questions, analytical tests were performed on the data obtained from the survey. The researcher used the Statistical Package for the Social Sciences (SPSS) to generate the statistical correlations.

Overall, the researcher could only derive four valid chi-square tests, as the survey had various answer options which, when coupled with a relatively small response number, resulted in some answers not being selected at all. For statistical analysis tests to produce meaningful results, all response options should have some positive support.

Although hypothesis testing starts from a chi-square test, this tool was not sufficiently responsive, due to the small amounts of data available. The researcher therefore had to use the Fisher's Exact testing. This was due to the count in the chi- square testing being less than five for more than 20% of the sample tested in every case. By using the Fisher's Exact test, the researcher was analysing the independence of the data in a 2 x 2 scenario. The test resulted in the data having either a significant value or a non-significant value which the researcher could then utilise to establish credible conclusions pertaining to the hypothesis tested in this study.

It can be concluded that for the researcher to be able to test the research questions posed for this particular study, the statistical analysis method utilised was the best approach. Even though only one of the research questions had a positive correlation between the two variables, the information gathered through this exercise assisted the researcher to draw final conclusions pertaining to the research objectives.

In the following chapter, a final conclusion will be drawn from an examination of all aspects of the study, and areas of possible future research which were identified through this particular study will be briefly examined.



# Chapter 6

"Reasoning draws conclusion, but does not make the conclusion certain, unless the mind discovers it by the path of experience."

- Roger Bacon-

**Chapter 6: Summary and Conclusions** 

In the previous chapter, the results of the study were presented and analysed.

The focus of this chapter is to summarise these results, interpret the

information and come to a logical conclusion. The study's chapters will be

briefly discussed, and the main objectives of each chapter highlighted.

6.1 Summary chapters

Chapter 1: Background and introduction

Chapter one presents the background and introduction to strategic risk, and

IA's role within and contribution to this vital business function. Finally, the

research objectives and the research approach are introduced.

Chapter 2: IA's risk evolvement

The objective of chapter two is to research the evolvement of IA and its

function addressing various risk areas, including strategic risks. Various risk

areas that IA should focus on globally, are identified through the published

literature of various researchers. IA's development as a business function,

including its ability to address strategic risk, and the regulatory requirements

and the various risk frameworks are also explored.

Chapter 3: Strategic risk

Chapter three focuses on analysing strategic risk from an IA perspective. The

evolvement of IA, the function's focus on risk, and the concept of strategic risk

are placed in the context of IA's historical development. Finally, IA's

relationship to risk and strategic risk is also discussed in this chapter.

Chapter 6: Summary and Conclusions

101



Chapter 4: Research design and results

The research design and the results of the questionnaire survey are detailed in chapter four. The result of each question is documented and graphically represented.

Chapter 5: Statistical analysis

The results of the survey were further analysed using descriptive statistics powered by the Statistical Package for the Social Sciences (SPSS) software for Windows. The outcome of this analysis is documented in this chapter.

Chapter 6: Summary and conclusions

In chapter six, the summary of the study, the study's research questions and overall objective are discussed in relation to the research results. Thereafter the research results are discussed within the limitations of the study. The overall conclusion and recommendations conclude the chapter.

6.2 Summary of the results of the study

The results of the study are best summarised under the appropriate research sub-questions that were presented at the beginning of this study.

6.2.1 To determine how strategic risk management is integrated into the individual companies' IA universes

The research instrument (questionnaire) was designed specifically to determine how strategic risk had been integrated into the individual companies' IA universes. The responses to these specific questions were noted in the tables in Chapter 4 (page 76). These responses indicated that only 43% of the respondents listed their planned audits against the related strategic risks faced by their organisations, and that only 40% listed their completed audits. Furthermore, 53% of the respondents were not involved



during their organisation's strategy-setting process, and a mere 40% of respondents reviewed the supporting information these strategic decisions were based on (Chapter 4; page 78). A reading of these results leads to the conclusion that a minority of IA functions within Johannesburg Stock Exchange Limited listed companies, where the CAE is a member of the Institute of Internal Auditors, have strategic risk management formally and effectively integrated into their IA universes.

6.2.2 To establish the extent to which the strategic risk management process was reviewed.

Only 37% of the respondents are involved in the pursuit of the organisation's strategic objectives, and 13% are not involved at all, as this area has been out-sourced (Chapter 4,page 79). These results demonstrate that IA departments play a less-than-optimal part in the review of the strategic risk management process, and bring into question whether the strategic risk processes are even subjected to a review. It was noted that organisations with their own fully fledged IA departments were more involved in the business, as there was a positive correlation between the type of IA department and the extent to which the strategic risk management process was reviewed (Chapter 5, page 102).

6.2.3 To determine if IA departments of companies listed on the Johannesburg Stock Exchange Limited, whose CAEs are members of the Institute of Internal Auditors, include strategic risk management within their audit scope.

In order for strategic risk management to be part of the IA department's audit scope it needs to be aligned with the organisation's policies and processes intended to achieve the organisation's overall strategic objectives. The survey results indicated that 60% of the respondents' audit scope was not aligned with the organisation's strategy to achieve the overall strategic objectives, implying that only the minority included strategic risk management in their



audit scope. In addition, only 47% of the audit departments have the strategic risk management process as an agenda item at their audit committee meetings (Chapter 4, page 90).

By dividing the research objective into the three sub-questions, the researcher could analyse the data and reach the conclusion that the majority of audit departments listed on the Johannesburg Stock Exchange Limited have excluded strategic risk management from their audit focus. Even though the respondents did not all have fully fledged IA functions, there is nothing in legislation or the Johannesburg Stock Exchange Limited's listing regulations to suggest that strategic risk management could not still be included in the scope of the out-sourced or co-sourced IA contracts.

### 6.3 Interpretation of the results within the limitations of the study

In this particular research study, the researcher focused on whether or not the IA departments reviewed the strategic risk management process; to what extent it was reviewed, and whether the strategic risks that had been identified were subsequently incorporated into the audit universe. The literature reviewed was limited primarily to the disciplines of strategic risk management within the IA environment, risk based auditing, and IA. Literature from related disciplines such as enterprise wide risk management and strategic planning to avoid risks was also consulted when needed.

With regards to the questionnaire (see Annexure A), it was designed to determine the extent of the IA department's focus on strategic risks which was directed to the chief audit executives. The researcher obtained assistance from The Institute of Internal Auditors (SA) who distributed the questionnaire electronically to the intended participants, the Chief Audit Executives (CAE), from as many organisations and industries as possible, provided that the CAE was a registered member of the IIA. Making use of the IIA (SA)'s services was intended to increase the reliability of the proposed study by ensuring that one specific industry type did not disproportionately influence the findings of the study. Thus, although there are 489 companies listed on the Johannesburg



Stock Exchange Limited listed the time of the research, only 245 questionnaires were distributed, this being the number of companies whose CAEs were members of the IIA (SA). From this there was a 12% response rate resulting in 30 completed and usable questionnaires.

The distinction made between the types of IA departments was shown to be necessary as organisations with fully fledged IA departments were shown to have IAFs that were more actively involved in the strategic risk management process than those with co-sourced or entirely out-sourced departments. The reason for this difference in involvement is probably because fully fledged IA departments are in more ways involved in the business' daily activities. Therefore, should a concern be brought to management's attention, IA is conveniently on hand to assist and to enhance their knowledge of the business. Although it is management's responsibility to design and implement the necessary controls needed to mitigate operational and other risks, IA's part is to focus on whether those controls are working. By being onsite and readily available fosters a good business relationship between the IA department and management. When IA is out-sourced or co-sourced, the IA department's ability to assist management with strategic initiatives is diminished, both by physical distance and a lack of business knowledge.

### 6.4 Conclusions and recommendations

Since the global financial crisis in 2008, many companies have been brought to their knees due to the escalating U.S. Federal debt and the balance of payment deficit. This has merely intensified global pressure on businesses to adopt a risk focussed approach to IA, especially when reviewing strategic risks. Strategic decision-making and the implementation of those decisions during the still stuttering economic recovery is vital and will continue to determine firms' successes or failures for many years to come. The global pressure for a risk focussed approach to IA has highlighted the fact that some of the most important risks that a company faces are strategic risks.

Literature review conclusion and recommendations: Chapter 2 and Chapter 3



Strategic risk is not a common risk. Not all members of management are aware of the negative such risks carries if ignored, until it is almost too late. Although it is common knowledge that organisations need a strategy to bridge the gap between the reality of today and their vision, the risks associated with such a strategy are usually forgotten, if they were ever fully identified. This is where the IA department plays a vital role. The profession of IA has evolved in such a way that strategic risk can be incorporated within their universe. IA as a function is able to provide information to management regarding the progress of the implementation of strategic action plans, and to be made aware of any strategic risks that are identified prior to and during the strategy implementation process. IA is also able to provide the necessary assurance that the correct strategic risk identification and management processes have been followed. Audit committees and stakeholders need to obtain assurance that management is implementing the strategy agreed upon, and that adequate reviews are being performed. Should IA functions not be aligned with the organisations' strategies, this type of assurance will not be possible.

It is therefore recommended that strategic risk should be a part of the audit universe to ensure that IA does include the strategic risk and the management thereof in their wider review process. Internal auditors should research strategic risk and the business environment to be able to assist management.

Research conclusion and recommendations: Chapter 4 to 6

By analysing the research data collected through this study it can be concluded that strategic risk and the review thereof is not part of the respondents' audit scope. Although strategic risks are a real threat to organisations, especially if the original strategy was not a well-designed one, management needs appropriately qualified assistance. IA needs to assist management in these matters. Not only will management and stakeholders then gain from such reviews, IA will also increase its status within the business.



It is therefore recommended that IA guidelines should be developed to assist internal auditors in their efforts to provide assurance on strategic risk and the management thereof. These guidelines should be developed by the Institute of Internal Auditors Inc., with the assistance of IA professionals who are actively involved in the issue of strategic risk management.



### **Bibliography**

Allen, B. (2007). The best laid plans for managing risk. Internal Auditor. 29(7): 142-147.

Anderson, T.J. & Schroder, P.W. 2010. Strategic Risk Management Practice: How to deal effectively with Major Corporate Exposures. Cambridge University Press. New York.

Ballou, B. & Heitger, H.L. 2006. A building block approach for implementing COSO's enterprise risk management. [Online] Available from: http/pdfguide.org/pdf-for-COSO-guidance-on-monitoring-control [Accessed: 01 September 2011].

Basel II: Revised international capital framework. 2006. [Online] Available from: http/www.bis.org/publ/bcbsca.128.htm [Accessed: 08 February 2012].

Barrier, M. 2003. Principles, not rules: thanks to codes drafted under Mervyn King, South Africa has taken the lead in defining corporate governance in broadly inclusive terms. [Online] Available from: http/findarticles.com/p/articles/mi\_m4153/is\_4\_60/ai\_106863373 /?tag=mantle [Accessed 27 June 2011].

Basioudis, I.G. 2010. Aligning the internal audit function with strategic objectives. Qfinance. [Online] Available from: http://www.qfinance.com/auditing-best-practice/aligning-the-internal-audit-function-with-strategic-objectives?full [Accessed 20 February 2011].

Beasley, M.S; Branson, B.C. & Hancock, V.H. 2010. Current state of enterprise risk oversight and market perceptions of COSO's ERM framework. North Carolina State University research foundation. [Online] Available from:http://poole.ncsu.edu/vol2/erm/ee/i/weblogs/research-documents/COSO-erm-report-dec2010.pdf [Accessed: 02 June 2011].

Beasley, M.S. & Frigo, M.L. 2007. Strategic risk management: creating and protecting value. Strategic Finance [Online] Available from:

http://poole.ncsu.edu/erm/documents/StrategicRiskManagementCre



atingandProtectingValue-StrategicFinance-May2007.pdf [Accessed: 03 January 2011].

Bloomberg Business Week. 2010. Why firms should audit strategic risk. Business Week, 2 July. [Online]] Available from: http://www.businessweek.com/managing/ content/jul2010/ca2010072.htm [Accessed: 03 January 2011].

Bryman A., and Bell., E. 2007. *Business research methods*. Oxford University Press.

Cascarino, R. and van Esch, S. 2007. *IAing: an integrating approach.* Florida. Institute of IAors.

Casse, C. and Symon, G. 2004. Essential guide to quantitative methods in organisational research. SAGE.

Chambers, A. 2005. *Tolley's IAor's handbook*. UK. LexisNexis Butterworhts.

Chambers, R.F., Eldridge, C,B. & Park, P. 2010. License to lead: seven personal attributes that maximize the impact of the most successful chief audit executives. [Online] Available from: http://www.korn\_ferry\_IIA.pdf [Accessed 22 March 2012].

Chapman, R. J. 2006. Tools and Techniques for Enterprise Risk Management. London: Wiley.

Coetzee, P & Fourie, H. 2009. Perceptions on the role of the IA function in respect of risk. *Journal of Business Management*, 3(13):959 – 968. [Online] Available from: http://www.academicjournals.org/AJBM [Accessed: 24 February 2010].

Committee of Sponsoring Organisations of the Tread way Commission, 2004. Enterprise risk management framework – integrated framework. [Online] Available from: http://www.COSO.org/documents/COSO\_ERM\_ExecutiveSummary.pdf. [Accessed: 20 June 2011].

Compliance Executive Board. 2007. Compliance: the impact of IA. [Online] Available from: http://www.acl.com/pdfs/070125\_ComplianceExecutive.pdf [Accessed 20 March 2012].

Compliance Institute. 2010. Defining compliance [Online] Available from: http://www.compliancesa.com [Accessed: 17 March 2012].



Corporate Executive Board. 2010. Why firms should audit strategic risk. [Online] Available from : http://www.executiveboard.com/businessweek/bw-week57html [Accessed: 17 December 2010].

Czaja, R & Blair, J. 2005. *Designing surveys: a guide to decisions and procedures.* Pine Forge Press.

Erasmus, L & Coetzee, P. 2009. The standing of the IA function within South African companies. *Journal of Business Management,* 3(13): 926-935. [Online] Available from: http://www.academicjournals.org/AJBM [Accessed: 24 February 2010].

Ernst & Young. 2010a. Escalating the role of IA. [Online] Available from: http://www.ey.com/Publication/vwLUAssets/escalating\_the\_role\_of\_internal\_audit\_1108/\$file/Escalating\_the\_role\_of\_internal\_audit\_1108.pdf [Accessed on 13 June 2011].

Ernst and Young. 2010b. Top five IA risk. [ONLINE] Available from: http://www.ey.com/US/en/Services/Specialty-Services/Climate-Change-and-Sustainability-Services/Top-5-risks-for-internal-audit\_Highlights [Accessed: 24 March 2012].

Faille, C. 2007. Strategic risk. [Online:] Available from: http://www.ehow.com/info \_7931389\_strategic-risks.html [Accessed: 08 February 2012].

Fitzmaurice, J. 2010. Why you should audit your corporate strategy. CEB Views – Finance and Strategy. [Online] Available from: http/cebviews.com/2010/06/01/why-you-should-audit-your-corporate strategy/ [Accessed: 20 February 2011].

Fourie, H & Erasmus, L. 2009. IA activities performed in South Africa. *Journal of Business Management*, 3(13): 936-945. [Online] Available from: http://www.academicjournals.org/AJBM [Accessed: 06 June 2011].

Fraser, I 2009. IAors and enterprise risk management. Qfinance. [Online] Available from: http://www.qfinance.com/ auditing-best-practice/IAors and risk enterprise risk management?full [Accessed: 22 February 2011].

Frigo, L. & Anderson, R.J. 2011. What is strategic risk management. Strategic finance. [Online] Available from: http://people.stern.nyu.edu/adamodar/pdfiles/ papers/strategicrisk. Pdf [Accessed: 06 June 2011].

Grambling, A.A. & Hermanson, D.R. 2009. Avoiding "Where was IA?". IAor 24(5): 39-41.



Grambling, A.A. & Myers, P.M. 2006. IAing's role in ERM. IAor 63(2): 52-58.

Gregg, S. 2010. The new chief audit executive. *White Paper*. [ONLINE] Available from: http://www.whitepapers.com/chiefauditexecutives/apr2010/ca. [Accessed: 24 February 2010].

Griffiths, P. 2005. Risk-based auditing. England. Gower House.

Guerra, K. 2010. From Corporate Cop to Corporate Strategy – The future of IA. Corporate Executive Board. [ONLINE] Available from: http://cebviews.com/2010/04/23/from-corporate-cop-to-corporate-strategy-the-future-of-internal-audit. [Accessed: 07 January 2011].

Hendricks, P.S.A. & Wyngaard, R.G. 2010. International Journal of Non-For-Profit Law, 12(2):6-7.

Hofstee, E. 2006. Constructing a good dissertation: a practical guide to finishing a Masters, MBA or PhD on schedule. Sandton: EPE.

Institute of Directores (IOD). 2011. Frequently asked questions pertaining to King III. [Online] Available from: http://www.iodsa.co.za/enza/bookspublications/ezine/issue26/kingiiifaqs.aspx [Accessed: 09 July 2011].

Institute of Internal Auditors (IIA). 1998. Standards for the professional practice of internal auditing. Altamonte Springs. Florida.

Institute of Internal Auditors (IIA). 2004. The role of IAing in ERM. [Online] Available from: http://www.iia.org. [Accessed: 17 March 2011].

Institute of Internal Auditors (IIA). 2009. *International professional practices framework*. IIA. Altamonte Springs. Florida.

Institute of Internal Auditors (IIA). 2009. 10 Risk management imperatives for internal auditing. [Online] Available from: http://www.iia.org. [Accessed: 11-05-2010].

Institute of Internal auditors (IIA) 2009. Introduction to the international professional practices framework. [Online] Available from: http://www.iia.org/guidance. [Accessed: 02 June 2011].



Institute of Internal Auditors (IIA) 2010. Feedback from the 2010 national conference. IA Advisor. September/October 2010:32:43.

Institute of Internal Auditors (IIA). 2010. Internal auditing in 2010: shifting priorities for a changing environment. [Online] Available from: http://www.iia.org/download.cfm?file=70693. PDF [Accessed: 17 March 2012].

ISO 31000, 2009. A structured approach to enterprise risk management and the requirements of ISO 31000. [Online] Available from: http://www.theirm.org/documents/SARM\_FINAL\_pdf [Accessed: 20/01/2014].

Jacka, M. & Scott, P.R. 2011. The whole world's talking. [ONLINE] Available form: http://www.theiia.org/intAuditor/feature-articles/2011/june/the-whole-worlds-talking/ [Accessed 20 March 2012].

Jackson, R.A. 2008. Reputation at risk. [Online] Available from: http://www.theiia.org/intAuditor/feature-articles/2008/june/reputations-at-risk/ [Accessed 22 March 2012].

Johnson, G., Scholes, K. and Whittington, R. 2006. Exploring Corporate Strategy. London: FT-Prentice Hall.

Leedy, P.D. & Ormrod, J.E. 2005. *Practical research: planning and design.* 8<sup>th</sup> ed. Upper River, NJ: Pearson Education.

Johannesburg Stock Exchange Limited— Listed Requirements. 2011. Service Issue 14. [Online] Available from:http://www.Johannesburg Stock Exchange Limited.co.za/How-To-List-A.../Main.../Listing-requirements.aspx. [Accessed: 15 May 2011].

King II Report. 2002. [Online] Available from: http://www.saica.co.za/Technicalinformation/...King/tabid/.../Default.as px. [Accessed: 01 June 2011].

Kleffner, A.E. 2009. IA and risk oversight. North Carolina State University research foundation. [Online] Available from:http://mgt.ncsu.edu/erm/index.php/articles/entry/internal-audit assurance. [Accessed: 04 June 2011].

Marais, M. 2004. Meditari accountancy research. *Accounting Journal* 12(2): 85-107.

Mardjono, A. 2005. A tale of corporate governance: lessons why organisations fail. *Managerial Auditing Journal*. 20(3):272:283.



Markham, J.W. 2006. A financial history of modern US corporate scandals: from Enron to reform. ME Sharp: New York.

McClintic, M. & Cengage, M, G. 2006. Internal control systems. Encyclopedia of Business and Finance.Ed. [Online] Available from: http://www.enotes.com/business-finance-encyclopedia/internal-control-systems. [Accessed: 20 June 2011].

Mccollum, T. 2009. Auditing's \*changing risk focus. IAor. 68(6). 17.

Meldrum, K. 2009. History of IAing. [Online] Available from: http://www.articlebase.com/accounting-articles/IAing-448380.html. [Accessed: 02 June 2011].

Millage, A. 2009. Risk responsibility. IAor. 68(6): 7.

Moeller, R.R. 2009. *Brink's modern lAing: A common body of knowledge*. Hamilton: London.

Moeller, R.R, and H.N. Witt. 1999. *Brink's Modern IAing*, 5th Ed. New York: John Wiley & Sons, Inc.

Parkinson, M. 2010. IA planning: how can we do it better? Qfinance. [Online] Available from: http://www.qfinance.com/ auditing-best-practice/internal-audit-planning-how-can-we-do-it-better?full [Accessed: 20 February 2011].

Polgar, S. and Thomas, A. 1995. *Introduction to research in the Health Sciences*. Elsevier science health division. London.

PricewaterhouseCooper (PwC). 2008. *Risk Perspective*. [Online] Available from:http://www. pwc. com /riskgx/eng/about-/svcs/grms/PwC Risk Perspecitives.pdf [Accessed: 16 December 2011].

PricewaterhouseCooper (PwC). 2009. *King's Counsel: understanding and unlocking the benefits of sound corporate governance.* [Online] Available from:http://www.pwc.com/images/gx/eng/about-/svcs/grms/PwC\_IAS\_KINGIII.pdf [Accessed: 30 April 2010].

PricewaterhouseCooper (PwC). 2012. Operational risk management. [ONLINE] Available from: http://www.pwc.be/en/systems-process-assurance/operational-risk-management.jhtml [Accessed 22 March 2012].

Ray, E. 2009. Adding Value: How modern IAing assists organisations in achieving strategic objectives. The Institute of IAors Research Foundation. Altamonte Springs. Florida.



Sarens, G. 2009. IAing research: Where are we going? Editorial. *International Journal of Auditing, 13: 1-7.* 

Sarens, G., De Beelde, I & Everaert, P. 2009. IA: a comfort provider to the audit committee. *British Accounting Review*, 41:90-106.

Saunders, M., Lewis P., and Thomhil., A. (2007). *Research Methods for Business Students*. 2<sup>nd</sup> ed. London: Pearson Education Limited.

Sawyer, B.L., Dittenhofer, M.A. & Scheiner, J.H. 2003. *Sawyer's IAing: the practice of modern IAing*. 5<sup>th</sup> ed. Florida. Institute of IAors.

Slywotzky, A.,J; and Drzik, J. 2005. Countering the Biggest Risk of All. Harvard Business Review, April: 78-88.

Sobel, P.J. 2011. *IAing's role in risk*. Institute of IAor's research foundation. [Online] Available from: http://www.oracle.com/us/solutions/corporate-governance/ia-role-in-rm-345774.pdf [Accessed: 15 June 2011].

South African Institute of Chartered Accountants (SAICA). 2010. The king report on corporate governance. [Online] Available from: https://www.saica.co.za/TechnicalInformation/LegalandGovernance/King/tabid/626/language/en-ZA/Default.aspx [Accessed: 15 June 2011].

Steelhammer, L. 2011. *IA - How far we have come!* [Online] Available from http://www.iiokc.com/news/?p=719. [Accessed: 02 June 2011].

Steffee, S. 2009. In control. IAor 89(6): 47-49.

The Corporate Executive Board. 2010. Why firms should audit strategic risks. [Online] Available from: http://www.executiveboard.com/businessweek/bw-week57.html. [Accessed: 17 December 2010].

The Data Governance Institute. 2009. The COSO financial controls framework: 2004 Version. [Online] Available from: http/www.sox-Online.com.COSO\_2004\_COSO\_framework.html. [Accessed: 02 June 2011].

Thornton, G. 2004. A brief overview of King II. [Online] Available from: http/www.gt.co.za/publications/effective-directors-guide/KingII.asp [Accessed: 02 June 2011].

Thornton, G. 2009. IA, risk management and internal control. [Online] Available from: http/www.gt.co.za/publications/effective-directors-guide/int\_audit.asp [Accessed: 08 June 2011].



Van Wyk, A. 2010. Corporate Governance – King III report – Introduction and overview. [Online] Available from: www.PwC.com/za/en/king3. [Accessed: 08 June 2011].

Welman, C., Kruger, F. & Mitchell, B. 2005. *Research Methodology*. 3<sup>rd</sup> ed. Oxford university press. South Africa.

Wells, J. 2010. Shifting course – IA's move to value creation. [Online] Available from:http://www.jeffersonwells.com/internalaudit.pdf [Accessed: 30 November 2010].

Wikipedia. 2008. Sarbanes—Oxley Act. [Online] Available from: http://en.wikipedia.org/wiki/Sarbanes%E2%80%93Oxley\_Act [Accessed: 02 February 2011].

Wikipedia. 2010. Definition of Strategic risk management. [Online] Available from: http://en.wikipedia.org/wiki/Riskmanagement%E6%20%Strategicrisk [Accessed: 01 September 2011].

Williams, J.W. 2008. The lessons of Enron: media accounts, corporate crimes and financial markets. *Theor. Criminol.* 471(12): 471-4



# **Appendix A Ethical Clearance**





FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES

RESEARCH ETHICS COMMITTEE

Tel: +27 12 420-2306

E-mail: anske.grobler@up.ac.za

**Strictly confidential** 

1 June 2012

Prof H de Jager

**Department of Auditing** 

Dear Professor de Jager

Project:

Focus of internal audit departments on strategic risk of listed

companies

Researcher:

L Jacobs

**Student No:** 

23050099 Prof H de Jager

Supervisor: Department:

Auditing

Thank you for the application you submitted to the Committee for Research Ethics, Faculty of Economic and Management Sciences.

I have pleasure in informing you that the Committee formally approved the above study on 30 May 2012. The approval is subject to the candidate abiding by the principles and parameters set out in her application and research proposal in the actual execution of the research.

The approval does not imply that the researcher, student or lecturer is relieved of any accountability in terms of the Codes of Research Ethics of the University of Pretoria if action is taken beyond the approved proposal.

The Committee requests you to convey the approval to Ms Jacobs.

We wish you success with the project.

Sincerely

PROF AF GROBLER

CHAIR: COMMITTEE FOR RESEARCH ETHICS



# Appendix B Questionnaire



#### Questionnaire

#### For the investigation into the focus of internal audit departments on strategic risk of listed entities

	Ans	wer Column		For office use
1	Company Name:		V1	
2	Does your organisation have		V2	
	a fully fledged internal audit department	1	٧Z	
	a small internal audit department that co-sources			
	a small internal audit department that co-sources			
	no internal audit department that out source often			
	no internal addit department because it is outsourced			
3	How many people are employed in your department?		V3	
4	Which areas are typically co-sourced? (Tick all relevant areas)			
	Compliance engagements		V4	
	Information Technology related engagements		V5	
	Strategic risk related engagements		V6	
	All internal audit functions		V7	
	No co-sourcing is done		V8	
5	Which areas are typically out-sourced? (Tick all relevant areas)			
	Compliance engagements		V9	
	Information Technology related engagements		V10	
	Strategic risk related engagements		V11	
	All internal audit functions		V12	
	No out-sourcing is done		V13	
6	On what do you base your operational type audits? (Tick all relevant areas)  Risk assessments		V14	
	Process analysis		V14 V15	
	Strategic risk workshops		V16	
	Input from strategic risk workshops		V17	
	Requests from audit committee		V17	
	Other (Please specify)			
7	Is the internal audit function aligned with the organisation's strategy to achieve objectives?			
	Yes		V19	
	No			
8	Are the planned and completed audits listed against the related strategic risks?			
	Planned			
	Yes		V20	
	No			<del></del>
	<u> </u>			
	Completed			
	Yes		V21	
	No			
9	During your organisation's strategy-setting process, the internal audit department:			
	Is part of the strategic team		V22	
	Attends the strategic session as an invitee		V23	
	Is not part of the strategic session		V24	
	,y		•	



	Involved		
	Not involved	V25	
	Not involved because out-sourced		
	Other (Please specify)		
	If the internal audit department is involved, it is involved through: (Tick all relevant areas)		
	(Tick all relevant areas)		
	Providing assurance on the effectiveness of the strategic risk management process	V26	
	Consulting with management to drive the strategic risk management process	V27	
	Other (Please specify) Not involved		
	How is assurance obtained regarding the achievement of expected benefits		
	relating to the strategic business initiatives? (Choose all relevant areas)		
	Through internal audit	V28	
	Through external audit	V29	
	Through management	V30	
	Does internal audit review the information and supporting data used to formulate strategic decisions?		
	Yes		
	No	V31	
	No, because out-sourced		
	If your organisation has an advanced (fully fledged) risk management capability, do you provide assurance over the strategic risk management activities?		
	Yes		
	No	V32	
	No, because out-sourced		
	N/a		
1	If yes, how often is assurance provided?	V33	
	Is your organisation's strategic risk management process an agenda topic at the audit committee?		
	Yes	V34	
	No No	v 34	

Thank you for your participation in the survey



### Appendix C Title Registration

Our ref: 23050099

11 August 2011

Ms L Jacobs Sparticuss 177 RAVENSWOOD 1459

Dear Ms Jacobs

**SUBJECT: DISSERTATION** 

I have pleasure in informing you that the following subject has been approved:

SUBJECT: Focus of internal audit departments on strategic risks of listed companies

EBW08/06 EBW11/07 Attached please find a checklist (EBW 08/06) and Notice to Submit (EBW 11/07).

Your enrolment as a student must be renewed annually until you have complied with all the requirements for the degree, preferably during the official period of enrolment but before <u>28</u> <u>February</u>. You will only be entitled to the guidance of your supervisor if annual proof of registration can be submitted.

Kind regards

Carebes

for: **DEAN** 

**FACULTY OF ECONOMIC AND MANAGEMENT SCIENCES** 

EMS Building Room 2-24 University of Pretoria PRETORIA 0002 Republic of South Africa Tel Number: 012 4203327

Fax Number: 0866 318630

Email address: elma,carelsen@up.ac.za www.up.ac.za