CHANGE IN INTERNAL AUDITING PRACTICE: EVOLUTION, CONSTRAINTS AND INGENIOUS SOLUTIONS

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Doctor of Philosophy

ASTON UNIVERSITY

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THESIS SUMMARY

The main purpose of this research is to investigate if and how the internal auditing (IA) profession and practitioners exercise ingenuity to deal with the constraints faced by them during the development of IA and implementation of IA activities at the societal and organizational level. The key aim is to explore whether, through exercising ingenuity, the Institute of Internal Auditors (IIA) and IA functions can strengthen and improve IA quality and effectiveness in order to meet the expectations of management, key stakeholders and the changing role of IA, in order to remain relevant and to survive in the challenging environmental conditions. The data for the study was collected and analysed at both societal and organizational levels, including how they interact each other. The theoretical approach employed in this research offers a valuable lens on the relationship between ingenuity, ingenious strategies and constraints. This theoretical framework offers a way to understand how constraints at societal and organizational levels can be resolved over time as IA evolves. The results of this study found three main constraints: the continuously changing IA role; insufficient resources and capabilities; and low IA status and quality. These led to five main ingenuity strategies that emerged at the societal and organizational levels, such as the use of Risk-Based Internal Auditing (RBIA), co-sourcing, talent management, the continuous improvement of IPPF, and forging collaborative partnerships between internal auditing and risk management. These strategies enable the IIA to improve the quality and effectiveness of IA and assist IA functions to tackle the constraints they face, exercise activities that improve organization operations, and add more value to organizations. This study takes the initiative to categorize ingenious solutions according to types of ingenuity and constraint. The findings of this study (see Chapter 7, 8 and 9) also show that constraints can motivate the IA profession and its practitioners to identify and exercise ingenious practices and become a source for creativity and innovative problem-solving.

Keywords: Internal audit, ingenuity, case study, changes in the role of internal auditors.

DEDICATION

~ To Allah the Almighty and my beloved parents, wife and children ~

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LIST OF ABBREVIATION

AIRMIC	Association of Insurance and Risk Managers
BARC	Board Audit and Risk Committee
BC	Britain Communication
BMAC	Britain's Most Admired Companies
CAE	Chief Audit Executive
CBOK	Common Body of Knowledge
CCO	Chief Compliance Officer
CEO	Chief Executive Officer
CIIA	Charted Institute of Internal Auditors
COO	Chief Operating Officer
COSO	Committee of Sponsoring Organizations
CRO	Chief Risk Officer
ERM	Enterprise Risk Management
EY	previously known as Ernst and Young
IA	Internal Audit
IAF	Internal Audit Function
IASB	Internal Auditing Standards Board
IIA	Institute of Internal Auditors
IIARF	Institute of Internal Auditors Research Foundation
IPPF	International Professional Practices Framework
IRM	Institute of Risk Management
LSE	London Stock Exchange
OLS	Ordinary Least Squares
PPF	Professional Practice Framework
RBIA	Risk-Based Internal Audit
RM	Risk Management
RMF	Risk Management Function
ROI	Return on Investment
ROIA	Research Opportunities in Internal Auditing
SEC	Securities and Exchange Commission
SOR	Statement of Responsibilities
SPPIA	Standards for the Professional Practice of IA
UKC	UK Communication

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Chapter 1

INTRODUCTION

1.1 INTRODUCTION

This thesis examines if and how the internal auditing (IA) professional body (the Institute of Internal Auditors) and IA practitioners (IA functions) exercise ingenious strategies to help strengthen and improve the effectiveness and quality of IA. Through these ingenuity practices, it is expected that IA is able to overcome the constraints it faces and increase its capability to remain relevant in the changing environmental conditions.

The chapter begins by presenting the background to the research and the problem statement. This is followed by the research aims, questions and objectives, then the motivation (significance) and contribution of the study. The chapter concludes with a summary of the research approach and methodology, as well as the structure of the thesis.

1.2 RESEARCH BACKGROUND

The role of IA continuously evolves as the organization's structure, risks and environmental conditions change over time. By changing or improving their role, IA functions can provide different types of services (or activities) to their key stakeholders (such as the board, audit committee, senior management, operating line managers, regulators, external auditors and other auditees) according to their needs. Within the last three decades, IA services and activities have improved and expanded from the traditional IA role that focused on financial, compliance, internal controls, operational, computer, value-for-money, quality and management auditing (Cooper et al., 2006; Zakaria et al., 2006; Pickett, 2003) to a contemporary IA approach. This contemporary role is designed to also provide assurance and consulting services (Selim et al., 2009; Hass et al., 2006; Arena et al., 2006; Allegrini et al., 2006; Anderson, 2003; Chapman, 2001); value-added activities (Roth, 2003); business insights and strategic advice services (Deloitte, 2012; Christopher et al., 2009; Bou-Raad, 2000); and risk

management (RM), governance and control processes (Soh & Martinov-Bennie, 2011; Burnaby et al., 2007; Sarens & De Beelde, 2006; Fraser & Henry, 2007; De Zwaan et al., 2009; Fadzil et al., 2005; Gramling et al., 2004). Today's expanded role means that the IA profession and its practitioners sometimes face constraints that inhibit their ability to perform their duties in a cost-effective manner. Strategies of ingenuity and creativity are, therefore, required to overcome these constraints. These issues have triggered the researcher's interest to find out whether ingenuity has an impact on the effectiveness and quality of AI. According to D'Silva and Ridley (2007), it is essential to have effective and quality IA to help the board and management to develop a good governance practice in its organization.

A series of corporate failures, fraud, the recent global financial crisis (2007 – 2012), and the collapses of corporations, such as Enron, WorldCom, AIG and Lehman Brothers with losses of more than hundred billion, have made good governance a central concern for stakeholders (Muchhala, 2007). Table 1.1 shows a series of corporate failures and accounting scandals that have received broad coverage in the past years. Collectively these suggest that RM and governance remain very challenging issues for a wide range of organizations.

Table 1.1: Major Corporate Failures and Accounting Scandals

Corporate Failures	**Year**	**Country**
Maxwell Publishing Group	Late 1980s	UK
Savings and loans collapse	1986–1995	USA
Barings Bank, Poly Peck, BCCI, Marconi	1990s	UK
Crédit Lyonnais	1990s	France
Holtzman, Berliner Bank, Babcok	1990s	Germany
Banking Industry (in the Asian crisis)	1997	Asia
HIH, Ansett Airlines, One.tel	2001	Australia
Parmalat	2003	Italy
AIG	2007	USA
Enron, WorldCom, Tyco, Adelphia,	2000s	USA
Vivendi	2000s	France
Swissair	2000s	Switzerland
Accounting Scandals		
BANINTER	2003	Dominican Republic
Northern Rock	2007	UK
Satyam Computer	2009	India
Lehman Brothers	2010	USA
Olympus Corporation	2011	Japan
HSBC, Lloyds, Royal Bank of Scotland, Barclays	2012	UK
J.P Morgan	2012	UK
Tesco Plc	2014	UK
Toshiba	2015	Japan

Source: Adapted from the Office of the Registrar of Indigenous Corporations (ORIC), 2010

These corporate failures and accounting scandals have raised questions as to the ability of boards and managements to manage legitimately the risks confronting their organizations. According to Stanton (2012) and Parsons et al. (2011), poor RM and control processes in dealing with uncertainty and changing risks contribute to less effective corporate governance. In addition, the ineffective management of risks may indicate that the board of directors, executive management and the IA function have failed to discharge properly their professional and statutory responsibilities. As a consequence, today, more than ever, organizations are required to establish sound governance and effective RM processes in order to protect shareholders' rights and maintain stakeholders' trust and confidence (Gramling et al., 2004). Therefore, the focus needs to be placed on how organizations address the challenges of delivering good corporate governance, creating value, and improving profitability and growth within the boundaries of acceptable risk appetites and values.

Governance issues have stimulated organizations to place more emphasis on control, and RM and IA functions (Zabihollah Rezaee, 1995). This had led to growing demand for improved IA, not just from business entities but also from government and regulatory bodies. As one of the four main corporate governance pillars[1] (Reding et al., 2009; Gramling et al., 2004), IA plays a crucial role through helping audit committees, executive managements and external auditors to evaluate and improve organizations' operations and performance. In order to fulfil this crucial role, IA functions must possess the appropriate capability and have deep business knowledge and insight to enable them to support managements in improving and strengthening organizations' governance practice. Consequently, in response to the demand for effective corporate governance, a new definition for IA has been created to incorporate a broader role that focuses on adding value through providing assurance and consulting activities. A strong IA function has the capability to discharge its role effectively, leading to sound RM, control and governance processes, which are crucial in preventing corporate failures and regaining stakeholders' confidence. For example, in the United States of America and Malaysia, corporate failures have led government to require more companies to have IA functions and to specify additional roles from internal auditors (Plant & Steyn, 2009).

[1] Four interdepended pillars of an organization's governance process are represented by the board of directors, management, internal audit and external auditors.

The ‘Three Lines of Defence’ model has positioned IA functions as the third line of defence within organizations to provide assurance and an advisory role to audit committees, senior managements and risk owners on the effectiveness of internal governance and risk processes (see Chapter 2). The ‘Three Lines of Defence’ model was developed in the 1990’s by a KPMG consultant called Smith. It defined and segregated the responsibilities of each group of risk and control professionals, so that the boundaries of their responsibilities are well understood (IIA, 2013).

IA needs to change and adapt to new requirements by recognizing more clear lines of responsibility, authority and accountability (IIA, 2004; Albrecht & Sack, 2000). For example, the latest (2014) corporate governance code in the United Kingdom highlighted a series of challenges that may have a significant impact on the IA profession. This raises the question of the extent to which IA, as the third line of defence in the organization, is sufficiently well placed, tasked and resourced to perform an assurance and advisory role to help the board and management to effectively manage organizational risks (IIA, 2013).

On the other hand, the uncertain economic conditions, growing business risks and borderless world with fast innovation and advanced technology (i.e., the internet, social media, and the advancement of computer, information and communication technology) have created a very competitive and dynamic environment that puts almost all organizations in a challenging and risky position to achieve their objectives (Mikes & Kaplan, 2013; Muchhala et al., 2007; Volberda, 1996). This has driven changes in business conduct, systems, processes, operations, plans, market models and regulatory requirements. As a result, these conditions have led to a better focus on corporate governance frameworks and the responsibilities of different constituents of the governance mechanism. In reviewing governance processes, the issue of IA function quality and effectiveness has received huge attention from stakeholders, including regulators, rating agencies, shareholders and corporate managements (Ernst & Young, 2011; CIMA, 2010; Cohen & Sayag, 2010; Arena & Azzone, 2009; Power, 2009; Saren, 2009; Bou-Raad, 2000).

Effective IA is vital because of its potential link with business performance and continuity by helping organizations to manage risk effectively, add value, and meet stakeholder expectations (Davey, 2001: 1–4). In this context, the IA function can be considered as playing a potentially key role in protecting shareholders’ and other

stakeholders' values. In addition, creating and maintaining a good reputation, restoring confidence, and meeting the stakeholders' values are essential for organizations to succeed and survive.

Undoubtedly, organizations are increasingly under pressure to create surprise-free environments by practising good governance. A possible avenue through which organizations (or even regulators) could develop proactive and effective monitoring and control mechanisms in the corporate governance system is by relying on the work undertaken by IA functions (a key component of governance oversight) (Reding et al., 2009; Felix, Gramling & Maletta, 2001; Gramling, 1999). The role of IA has been evolving and shifting to a more value-added approach in line with changes in business strategies and the growth of regulations (IIA, 2008). To realize this, IA functions may need ingenuity to be able to act as a catalyst in problem-solving and adding value to their organizations. The IIA and IA functions have to improve the quality, effectiveness and efficiency of IA, which is potentially achieved by exercising ingenuity throughout all IA activities, strategies and methodologies. IA ingenuity has a huge prospective to improve organizations' performance and stability by reducing the uncertainty of the business environment. Organizations that can effectively manage their risks are likely to create more a stable environment and winning strategies, and these are essential for surviving in a dynamic and competitive market, both in the short and long term.

The need to provide a broader range of services has raised questions about how the IIA and IA functions should improve their quality and effectiveness to meet these challenges. Whether the evolution that has been driven by these challenges leads to strategies of ingenuity raises interesting questions to be explored. These ideas form the basis for the research in this thesis.

1.3 THE PROBLEM STATEMENT

This section presents the problem statement in two parts; the role of IA and the myth of ingenuity as follows.

1.3.1 The Role of IA

With an increasing series of major corporate failures, accounting scandals and economic uncertainties, it is reasonable to query the role of IA functions in corporate governance mechanisms and the quality and effectiveness of IA in improving

governance processes. More specifically, there are questions to be asked relating to how IA functions build necessary capabilities and exercise ingenuity strategies to deliver services as expected by the boards of directors and managements of organizations. In addition, the following questions could also be asked: Where were the internal auditors during the financial crisis (2007 -2012)? Why have corporate scandals and failures occurred repeatedly in recent times? What should IA functions do to prevent similar events from happening in the future? How can IA help the board to restore investors' confidence and trust? Is there any difference between having and not having sound and innovative IA functions in organizations? How successful is IA in helping to protect an organization's fragile, intangible asset, "reputation"? Do directors and managers get the best from their IA functions and internal auditors? Can IA functions act as business partners and contribute to organizations' strategic plans? What are the real values that IA is able to provide during scandals and periods of crisis?

All of these questions need to be addressed prospectively and retrospectively to better understand IA practices and its current issues. Interestingly, one big question that emerges from addressing this wide range of questions is how the IIA (at the societal level) and IA functions (at the organizational level) exercise ingenuity or create ingenious solutions in their efforts to meet various key stakeholders' expectations.

As a key component of governance oversight, the IA function is supposed to continuously evolve to become more a value-added and relevant service. According to the IIA (2000), value is delivered by improving opportunities to achieve organizational objectives, make improvements to operational processes and effectively reduce and manage risk through both assurance and consulting services. In other words, value is created if those the IA function serve are significantly improved because of its work. It seems that the quality of IA and the effectiveness of the IA function could potentially bring a lot of benefits to the organization (OpenPages, 2009; Beasley et al., 2006; Turnbull, 2006; Stoh, 2005; Power, 2004; ERM COSO, 2004; Walker et al., 2002; KPMG, 2001). However, the question remains: How can IA achieve these goals?

In searching for the answer to this question, research is needed to examine and address whether IA evolves and improves its quality and effectiveness over time through ingenuity strategies developed by the IIA (at the societal level) and IA

functions (at the organizational level). Understanding how the IIA and IA functions deal with change successfully through instances of ingenuity provides great opportunities for expanding the study and literature on this subject. In addition, the relationship between IA ingenuity and IA performance, as well as how constraints may boost or deter ingenuity, is so far quite an under-researched area in the IA discipline. This study focuses on: exploring the various types of ingenious solutions used by the IA profession and IA functions; examining whether these solutions help the profession and functions to solve the constraints they face; and evaluating how IA is evolving and remaining relevant in organizations.

1.3.2 The Myth of Ingenuity

In this study, "ingenuity" refers to the organizational ingenuity concept introduced by Lampel et al. (2014, p. 467). This research states organizational ingenuity "as the ability to create innovative solutions within structural constraints using limited resources and imaginative problem-solving". According to Isaacson (2011), organizational ingenuity is a domain of the organizational actor to solve challenging problems creatively in a particular organizational context, credible in negotiating organizational boundaries, and fully aware of the constraints and limitations imposed by the bureaucratic institution they inhabit. In general, "ingenuity" can be associated with creative problem-solving; "the quality of being clever, original, inventive; having a skill or cleverness that allows someone to solve problems, and invent things" (*The Oxford Dictionary* and *The Merriam-Webster Dictionary*). In the context of this research, IA ingenuity refers to creative solutions, such as new or improved IA frameworks, methodologies, strategies, tools and techniques that the IIA and IA functions use to conduct IA activities in order to help the organization towards success, to improve performance and to achieve desired objectives. However, in this research, the researcher sees **ingenuity as not merely a term used to describe a big or highly creative solution to a problem**, but also as to how the IIA (at the societal level) and IA functions (at the organizational level) **make small improvements, that are nevertheless crucial, or achieve breakthroughs** that can change the IA function's practice in the organization or change the entire IA profession.

1.4 RESEARCH AIMS, OBJECTIVES AND RESEARCH QUESTIONS

1.4.1 Research Aim

This study explores whether ingenious strategies used by the IIA and IA functions help them to improve the quality, effectiveness and efficiency of IA and its activities, including: adding value, safeguarding the survival of IA, and striving to remain relevant as a cornerstone of corporate governance in organizations. The study concentrates on exploring ingenuity practiced by the IIA and IA functions from 1999 to the present day, the time period from the issuance of the IIA's new definition of IA. It seeks to develop a better understanding of the role of ingenuity and its impact on the continuous development of the IA profession and practice to meet the needs and expectations of IA key stakeholders. **In particular, this study aims to explore IA ingenuity through the use of risk methodology and IA involvement (or role) in RM.** This is important in ensuring that sound governance, RM and control processes are in place to help organizations manage risks effectively and achieve their business and strategic objectives. The research aims lead to the following research questions and objectives.

1.4.2 Research Questions

This study attempts to answer four research questions, which are:

RQ1. How does the Institute of Internal Auditors (the IIA) exercise ingenuity in the development of the IA profession at the societal level in order to survive and remain relevant in the challenging environmental conditions?

RQ2. How do IA functions (IA departments in organizations) exercise ingenuity in executing and conducting their activities at the organizational level in meeting management and other key stakeholders' expectations?

RQ3. What ingenious solutions (types of ingenuity) are used by the IIA (at the societal level) and IA functions (at the organizational level) in dealing with the variety of constraints faced by them?

RQ4. How do IA and RM (professional bodies and functions) collaborate at the societal and organizational level to strengthen their relative position in RM (as stated in the 'Three Lines of Defence' model)?

1.5 MOTIVATION AND CONTRIBUTION OF THE STUDY

The Institute of Internal Auditors (IIA) defines internal auditing as:

> *"An independent, objective assurance and consulting activity designed to add value and improve an organization's operation. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes"* (IIA, 2000).

This definition has shifted the focus of IA from control to risk and from one of an assurance role to a value-added and consultancy role. This study on IA is motivated by the increasing focus by regulators and stakeholders, specifically on the need to improve corporate governance, RM and control processes, and compliance to the relevant rules and regulations. As discussed in Section 1.2 and 1.3, the continuous scandals and failures of big corporations have triggered regulatory reforms and calls to improve existing corporate governance mechanisms and practices. This can be seen in a range of new acts, regulations and guidelines, security commission rules, corporate governance codes and standards that have been revised and issued globally. These new rules and frameworks aim to instil public confidence, protect organizational reputation, and help to ensure business prosperity and accountability in dealing with uncertainties, whilst also combating unethical behaviour.

Major governance reforms have taken place in the United States (the US) and the United Kingdom (the UK) in the last two decades. In the US, the reforms include the Sarbanes-Oxley Act (2002), Committee of Sponsoring Organizations (COSO) of the Treadway Commission on Enterprise Risk Management (ERM) (2004), Emergency Economic Stabilization Act (2008), American Recovery and Reinvestment Act (2009), New York Stock Exchange (NYSE) Corporate Governance Rules (2009), The Dodd-Frank Act (2010), and the new COSO framework (2013). In the UK, there are the UK Corporate Governance Code (2010), the Companies Act (2006), the Operational Risk Management Practices (Financial Services Authority, 2005), the Walker Review of corporate governance in UK banks and other financial industry entities (HM Treasury, 2009), the UK Stewardship Code (2010), and the London Stock Exchange (LSE) listing rules. These reforms have put pressure on organizations to strengthen their IA practices, systems of governance, RM and control to prevent and minimize the risk of

future major corporate failures and unethical misconducts (Collier & Woods, 2011; The Financial Regulation Forum, 2011).

The reforms have also highlighted the importance of the IA function in helping organizations to achieve their objectives, protecting and creating good reputations, and fulfilling stakeholders' expectations by creating more stable and surprise-free environments (Chambers, 2013; Boesso & Kumar, 2007). Accordingly, as a central point to good corporate governance, the IA profession must help organizations to win back stakeholders' confidence (Peters, 2013). The endless lists of financial and debt crises in Western countries have caused the role of IA to be cited as among the top agenda topics (Ernst & Young, 2011; and PwC, 2009). Therefore, IA functions need to strive and improve the quality and effectiveness of their role in the current business environment as prominent assurance and consulting service providers. In addition it needs to become the 'third line of defence' in corporate governance structures to help organizations mitigate risks and ensure proper control across their operations (COSO, 2004; ISO 31000, 2009).

The IIA and IA practitioners inherently claim that contemporary IA operates to add value and improve organizational operations. However, there is still a lack of research evidence explaining if and how both the IIA (at the societal level) and IA functions (at the organizational level) add value, improve organizational operations and tackle issues of limited resources and the constraints they face.

In addition, this study is inspired to respond to Sarens et al.'s (2011) call to investigate to what extent IA quality and effectiveness are associated with, or have a positive impact on, the quality and effectiveness of RM and corporate governance. According to Sarens et al. (2011), the involvement and role of IA in RM and governance will continue to increase, and this necessitates the appropriate status (i.e., authority, responsibility and independence) and the allocation of more resources to IA activities (i.e., an increase in staff size, competency, audit tools, and techniques). In this context, the use of IA ingenuity by the IIA and IA practitioners in developing IA across a variety of IA activities is necessary, in order to improve and strengthen the quality and effectiveness of both the IA profession and its practitioners. This study is, therefore, motivated by the drive to get a deeper understanding of whether ingenious strategies (whether new or modified for the circumstances) help the IIA and IA functions to resolve the constraints and challenges they face in the modern world.

1.5.1 Contribution to Theory and the Academic Literature

The importance of practising good corporate governance in preventing accounting scandals and corporate failures highlights the necessity of quality and effective IA. This research contributes insights on IA practices, particularly regarding the use of ingenuity strategies in both theoretical and empirical aspects that are yet to receive sufficient research attention (Sarens, 2009).

To date, the literature in the IA discipline shows that there are many studies that have been conducted to investigate the development and evolution of IA, including examining how IA functions cope with the expectations and needs of management and regulation. Nonetheless, the research has found no studies to date in IA that have attempted to use the "organizational ingenuity" theory to examine how the IA profession and practitioners overcome the constraints and limited resources they face. Therefore, this study extends the use of a theoretical framework in IA research by introducing the ingenuity and constraints concept to explain how IA is able to continuously improve its effectiveness and quality. This, in turn, helps to safeguard and raise IA's prominent position in the governance structure. In addition, the use of the ingenuity theory in IA research has extended the application of the theory in a new area of study.

This study contributes to the literature by extending the evidence on areas of improvements made by the IIA and IA functions. It shows how the IIA and IA functions problem-solve through using ingenuity to overcome constraints in order to fulfil stakeholder expectations. For example, IA functions are required to do more with less and to operate ingeniously within their existing resource constraints to improve the quality and effectiveness of IA. In addition, this study aims to demonstrate how IA ingenuity stimulates different types of ingenious solutions to deal with different type of constraints. Ingenuity strategies enable IA functions to deal with some significant challenges, including adding value and moving towards becoming a trusted adviser to top management.

Prior studies, such as by Kasim et al. (2010), acknowledge that research in this area has been largely practitioner-based and undertaken by big public accounting and consulting firms such as Deloitte, Ernst & Young, PwC, KPMG and Protiviti. Their studies are normally restricted to descriptive material and lack empirical evidence.

Sarens (2011) highlights the fact that most IA research fails to critically evaluate the added value of IA at both the macro level (the profession) as well as at the micro level (the organization). Thus, this study attempts to fill the gap in IA literature, as well as extending existing literature, in terms of the theoretical framework (ingenuity theory) employed. Uncovering the use of ingenious strategy in the IA role and its development can provide a new lens and insight for scholars in looking at IA practice at both societal and organizational levels. The findings generated could also be tested in different organizations in different economic and cultural contexts, thus extending the literature further.

While previous research has looked into the current state of IA's involvement in RM, almost none seeks to understand the collaboration between IA and RM through the ingenuity perspective. Therefore, this study attempts to extend the literature by exploring how ingenuity emerges through IA's partnership with RM in order to safeguard both functions' roles as described in The 'Three Lines of Defence' model. Moreover, empirical evidence of the positive impacts, resulting from a collaboration between IA and RM at the societal level (professional bodies) and the organizational level (IA and RM functions), could provide ideas to organizations regarding improving the effectiveness of their RM and governance processes.

At present, there is no formal framework or standards available for ingenuity in IA. This study contributes to enrich the literature of IA by offering a common definition of ingenuity and organizational ingenuity that have been defined and discussed in the organizational studies literature. In addition, the more specific definition of IA ingenuity has been addressed in this study. This definition establishes a fundamental framework that recognizes ingenuity in the societal and organizational context. The definition also makes clear that ingenuity is not merely a term used to describe a big change or a highly ingenious solution to a problem. It also indicates that, if the IIA (at the societal level) and IA functions (at the organizational level) make small improvements, these can be crucial for raising the quality, effectiveness and efficiency of IA. The study, therefore, contributes to the IA literature by providing insights and understanding on the strategies and concept of ingenuity that potentially could help in influencing and improving the quality, performance and effectiveness of IA activities. Ultimately, looking at the potential for ingenuity strategies in IA functions may contribute to the success and effectiveness of organizational processes.

Prior studies on the quality, effectiveness and performance of IA have mostly focused on the assessment, quantifying and construction of measuring instruments (Kassim et al., 2012; Arena and Azzone, 2011; Ridley & D'Silva, 2008; Mihret & Yismaw, 2007; Van Gansberghe, 2005; Dittenhofer, 2001). In addition, they have been primarily conducted quantitatively. There is a necessity to explain such findings in more detail, especially in terms of the approaches and strategies used to improve IA quality and effectiveness and to explain how IA functions resolve problems while dealing with limited resources and constraints. Through two case studies and qualitative inquiries, this research provides greater insight on these issues. Since little is known about the relationship between IA ingenuity and the role of IA in RM, this study extends the scope of the research by investigating collaborative efforts between IA and RM functions and how IA impacts the overall corporate governance of organizations.

1.5.2 Contribution to Practitioners and Policy Makers

In order to meet management expectations in a fast-changing and dynamic environment, IA functions and professional bodies need to create new ways, or adopt existing approaches, to perform IA activities, starting from planning, to communicating reports and implementing recommendations. On the other hand, IA practitioners cannot afford to spend a lot of time designing frameworks, building expertise and capabilities, and developing strategies to manage risks that may have short lives. It is also unlikely for the IIA and IA functions to obtain additional resources and power to develop all the new capabilities needed by them to execute their new ideas. Faced with structural constraints and limited resources, the best solutions for improving quality and effective IA may well be found through exercising ingenious strategies. In this manner, big or small IA functions are able to increase their potential to meet management and other key stakeholder expectations.

At the societal level, the findings of this study could help professional bodies such as the IIA and Institute of Risk Management (IRM) to continuously be aware of constraints faced by their members. It is crucial for them to provide appropriate assistance, such as by issuing or updating frameworks, guidance and the training required by their members. The findings from the study could influence professional bodies and regulators to embrace the ingenuity concept in developing and improving their frameworks, standards, guidelines, making sure these are up to date and relevant at all times. Finally, the research findings could inspire the IIA and regulators in

developing a framework that embeds ingenuity practice into the IA profession, and its role and activities.

1.6 SUMMARY OF THE RESEARCH APPROACH AND METHODOLOGY

To achieve the objectives of the thesis, the researcher adopted the interpretivist research philosophy (Myers, 1997; Saunders et al., 2009; Crotty, 2009) and employed a qualitative approach in gathering the evidence to address the research questions posed in Section 1.4.2. The research adopted a case-study approach, complemented with interviews with practitioners and experts in related fields.

In collecting the data, the researcher used both semi-structured interviews and documentation. Documents reviewed by the researcher include professional standards and guidance resources, the IIA members' documents, public and regulatory documents, research reports, news clippings and articles in mass media, professional bodies' and consulting firms' research and practice reports, virtual documents, administrative and strategic documents, IA customers' satisfaction surveys, IA quality review reports, IA reports and recommendations, board and management reports, IA plans, IA profiles and charters.

Referring back to the research questions, a key component used to address these are the analysis at the societal and organizational levels of IA. Data was collected for both levels and to show how the levels interact. The data was analysed using thematic content analysis. Themes used were based on the ingenuity practice and implementation at societal and organizational levels. The themes were identified based on the occurrences, repetitions or synonyms of the texts, words, phrases and events within the interview transcript data. These themes included (i) the evolution and extended role of IA; (ii) the resources and capabilities of IA; (iii) the status and quality of IA; and (iv) the collaboration between IA and RM.

In explaining the empirical data, the researcher also aimed to match the phenomena with the theoretical framework and previous literatures. Finally, yet importantly, the researcher also ensured that the whole process met research ethics; and that confidentiality and safety of the data were safeguarded. Details on the research process and methodology are discussed in Chapter 5.

1.7 STRUCTURE OF THE THESIS

This section describes the structure and organization of the research thesis, providing an overview of its contents. The thesis consists of ten chapters as follows.

Chapter 1: Introduction

This introductory chapter discusses the background, gap and justification for the study together with the motivation for the current research by emphasizing its importance and key contributions to knowledge and practice. The chapter then states the research aims, objectives and core research questions that are a focal point of the investigation. A summary of the research approach, methodology and the methods employed to undertake the study are also presented in this chapter.

Chapter 2: Internal Auditing: The Research Context

The second chapter discusses the research context. It discovers the history and evolution of IA, and the rise of IA as a professional profession, and as a prominent function in an organization that adds value and enables effective RM, control and governance processes (Coram et al., 2008; Carcello et al., 2005; Spira & Page, 2003; Beasley et al., 2000; IIA, 1999). The chapter also covers: the Risk-Based Internal Audit (RBIA) approach, the role of IA in RM, the 'Three Lines of Defence' model, the IA competency framework and the maturity of the IA model.

Chapter 3: Literature Review

This chapter provides insights to previous studies of the IA role, a role that is continuously evolving over the years to adapt to changes in business operations, regulatory demands, customer needs, and stakeholder expectations. The discussion on previous literature covers issues of the effectiveness and quality of IA, the role of IA in corporate governance mechanisms, IA's new definition, IA's role in RM and the collaboration between IA and RM.

Chapter 4: Theoretical Framework: Theoretical Lens of the Study

In this chapter, the researcher applies the ingenuity theory as a theoretical lens to explain the changes and innovation involved in IA (Homer-Dixon, 2000; Lampel et al., 2011). This theory is based on the concept of human ideas (or sets of instructions) that are applied to solve practical, social and technical problems, to aid the achievement of goals (Lampel et al., 2011). The research uses an organizational ingenuity framework to show the ability to create innovative solutions within structural constraints using limited resources and imaginative problem-solving to overcome practical problems and help in the achievement of goals. This ingenuity concept is explored in the IA development and practices that the researcher reports in Chapters 7, 8 and 9.

Chapter 5: Research Method

This chapter outlines and presents the adopted research method, providing the overall approaches and perspectives used in conducting this research. It focuses on the research methods and procedures involved in collecting and analysing data, which are applied based on the philosophical assumptions used for achieving the research objectives outlined in Chapter 1. This chapter also explains and discusses the selection of preferred research strategies and the justification for choosing those strategies.

Chapter 6: Preliminary Study

This chapter gives details of the quantitative preliminary study that was carried out before the data collection process for the case study took place. Using questionnaire surveys, a background of IA practices and characteristics in organizations is presented. The data is analysed descriptively, such as by using statistics figures and frequency. The findings from this chapter help the researcher to identify areas that need to be explored in depth in the case study. Subsequently, the survey participants' organizations become the targeted organizations for the case study.

Chapter 7: Ingenuity of Internal Auditing at the Societal Level

This chapter discusses the way professional bodies such as the IIA perform ingenuity initiatives at the societal level. How the IIA exercises ingenuity is shown based on constraints faced by IA profession. These are categorized into three themes, which are (i) redefining the role of IA, (ii) IA capabilities and resources, and (iii) IA status and quality. The findings reveal how ingenuity initiatives taken by the professional body are crucial in advancing IA practice and solving the IA profession's constraints in order to fulfil the needs and expectations of organizations and key stakeholders.

Chapter 8: Ingenuity of Internal Auditing at the Organizational Level

This chapter explores the constraints faced by IA functions in the two case studies of the organizations listed on the London Stock Exchange (LSE). In addition, it also addresses the ingenious strategies that the IA functions in the two companies have exercised in dealing with constraints to assist the functions to effectively meet their organizations' demands. The discussion topics in this chapter cover the same themes used in Chapter 7.

Chapter 9: Ingenuity through Forging a Collaborative Cooperation between IA and RM

This chapter explores the collaborative effort between the IA and RM professions from an ingenious perspective at the societal and organizational level. The collaboration effort is viewed as an ingenuity process that aims to solve process constraints, such as unclear role divisions and rivalry issues between the IA and RM disciplines (professional bodies) at the societal level, and between both IA and RM functions at the organizational level. In discussing this issue, the researcher incorporates interviews with top senior executives from the Charted Institute of Internal Auditors (CIIA) UK and Ireland, and the IRM UK.

Chapter 10: Discussion and Conclusion

This final chapter provides a brief overview of the study conducted as a whole. This chapter includes a summary, a review of the purpose of the study, the research methodology used, and a reflection about the theoretical and practical contribution of

the study. This chapter also includes a discussion of the results as compared to existing literatures, as well as the potential implications of the research. Limitations of the study and recommendations for future research conclude this chapter.

Chapter 2

INTERNAL AUDITING: THE RESEARCH CONTEXT

2.1 INTRODUCTION

This chapter aims to provide the context, background, principles, history, development and evolution of the IA discipline and practices. It also discusses the rise and development of the IA profession and accompanying frameworks, standards and guidelines. The chapter explores how these attributes have changed the role, purpose, nature, scope and effectiveness of IA. Further, the application and practice of several major approaches, models and methodologies, such as the IA role in RM, RBIA, and the role of IA within the 'Three Lines of Defence' model, are reviewed. The use of these approaches has a huge potential to strengthen and improve the profile and performance of IA. A number of other issues that are of fundamental importance to IA's organizational success and survival are explored later on in the chapter.

2.2 THE DEVELOPMENT AND EVOLUTION OF IA

This section discuss the development and evolution of IA; covering the time period of before 1999 and post 1999 to present. The summary of the development and the evolution of IA and its role are summarised in the following Figure 2.1.

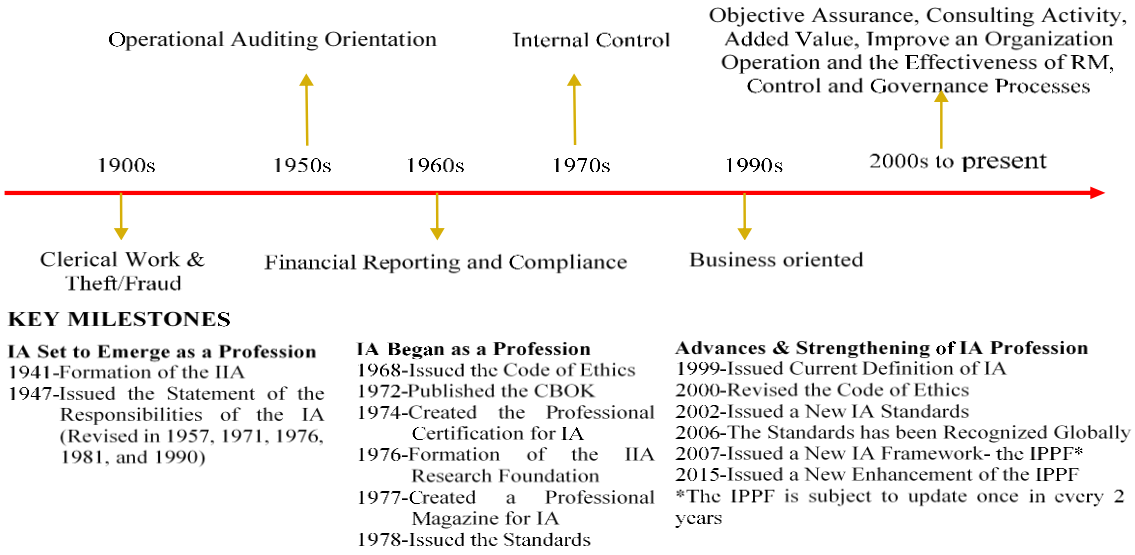

Figure 2.1: The Evolving Role, Focus and Professionalism of IA

2.2.1 Prior to 1999

According to Ramamoorti (2003) and Sawyer (1996), the existence of auditing has been construed from records of a Mesopotamian civilization that dates back to around 4000–3500 B.C. The systems found encompass accounting and financial transactions that demanded independent verifications (or detailed checks and counterchecks) to prevent book-keeping errors and irregularities, misappropriation of assets, as well as bribery and fraud within business and non-business organizations (Ramamoorti, 2003). Over time, as business activities grew in size, capacity, and complexity, book-keeping practices evolved from the hearing of accounts to include a need for an auditing service from independent internal assurance functions. Accounting records were verified and the information then used for decision-making by managements (Ramamoorti, 2003). In addition to the independent verification of accounting records, business managements also needed an IA function to evaluate the efficiency of work performed by their employees and employees' honesty in financial transactions. Further, the Industrial Revolution in Europe created demand for both external and internal auditing with characteristics similar to current auditing (Ramamoorti, 2003). Subsequently, the Europeans brought these practices to North-American settlements.

Auditing practice was further developed during the economic and stock market crash in the early 20th century. At that time, there was a new demand for financial auditing,

to reinstate shareholder and public confidence in financial and investment activities. The Great Depression (1929–1933) and the economic recession (1937) that occurred in the United States brought about a need for the IA in US public- listed companies (Sawyer, 1996) and the role of IA grew in importance.

Generally, in most organizations, the IA function performed accounting-related audits as a sub-function of the accounting department (Brink, 1991). IA, during the 1930s, initially emerged as an aid to external audit activities. It could even be seen as performing an extension of the external auditor's work in completing the detailed verification of financial audit tasks and reducing external audit costs for the benefit of management (Reeve, 1986).

The development of modern IA began with the foundation of the Institute of Internal Auditors (the IIA) in 1941 (refer to Figure 2.1). Since the establishment of the IIA, it can be seen that the role of IA to serve organizations' board members, management and other stakeholders has continuously altered and advanced for more than seven decades. The sequence of IA development started with the early focus on clerical work and prevention of theft/fraud (1900s), before moving into work on operation effectiveness (1950s) and then financial reporting and compliance (1960s). More recently, the emphasis has been on: internal control (1970s), control evaluation and ethics (1980s), the achievement of business objectives (1990s) and, most recently, value adding and the evaluation and improvement of the effectiveness of risk management, control and governance (2000s to present) (Pickett, 2004:11-12).

The year 1941 was a defining moment in the progress and development of the profession and practice of modern IA. The birth of the IIA and the publication of the first book on IA by Victor Z. Brink in 1941 marked the start of the IA professional, creating its own identity and becoming recognized as an independent profession.

The establishment of the IIA has enabled the creation of a clearly defined scope of IA activities, the continued expansion of the scope and the move towards becoming a body engaged in standardized and consistent practices (Burns et al., 1994). The professionalization of the practice of IA depended heavily on the development of professional underpinnings, which emerged over a long period of time. Since the establishment of the IIA in 1941, it was only in 1947 that the IIA issued its first Statement of Responsibilities (SOR). Meanwhile, the Code of Ethics (the Code) was

issued in 1968; the first Common Body of Knowledge (CBOK) was published in 1972; the first Certified Internal Auditor (CIA) exams were written in 1974 (indicating that there was a recognized body of knowledge governing IA professionals); the IIA Research Foundation was established in 1976; and the first standards for the Professional Practice of IA (SPPIA) (currently known as the International Standards for the Professional Practice of Internal Auditing (ISPPIA)) were issued in 1978 (see Table 2.1). Each stage in this history marks a move towards professionalization of the IA function.

The role, scope and focus of IA have all changed over the years in response to regulatory changes, new market order and stakeholders' expectations within the business environment. Selim and McNamee (1999) and Nagy and Cenker (2002) state that, over the years, these changes are evident throughout the periodical revision and transformations of SOR, standards, and the IA definition. For example, the SOR has been revised accordingly in 1957, 1971, 1976, 1978, 1981, 1990, and 1993. The first definition of IA was issued in 1978 and was replaced in 1999 by the current definition. According to Chambers et al. (1987), the broadening role and significant changes in the scope of the IA was made clear in all the revisions of SOR. For example, in 1957, at the time of the first revision, operational audits were promoted to be co-equal partnerships to financial audits. In the second revision in 1971, operational auditing was the main focus of IA, and IA was known as operational auditing. The term "operational auditing" was adopted in this revision to describe the expanded audit scope and activity.

A significant turnaround in the IA profession happened in 1978 when the IIA issued the Standards for the Professional Practice of Internal Auditing (SPPIA) to provide guidelines on how the IA function should be managed, and how audit engagement should be performed. The issuance of the SPPIA is important to accommodate the evolving IA profession. The first definition of IA was issued in 1978 as part of the Professional Practice Framework (PPF) (Sawyer, 1996), with the aim of stating the fundamental purpose, nature, and scope of IA, as well as to continuously assist internal auditors in ensuring the highest quality of IA services. In this respect, the IIA officially issued the first definition of IA as the following:

> *"Internal auditing is an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization. The objective of internal auditing is to assist members of the*

organization in the effective discharge of their responsibilities. To this end, internal auditing furnishes them with analyses, appraisals, recommendations, counsel, and information concerning the activities reviewed."

At this time, IA was defined as an "independent appraisal function" which is established fully in-house within an organization. This means no other sourcing format such as outsourcing and co-sourcing are permitted. The scope of IA services during the 1960s focused on the verification of financial statement information and data. Later on, by 1970s, IA practice had been expanded in scope by broadening financial auditing into the examination of business operations and value-for-money auditing (reviewing all areas where money was being spent). By the mid-70s, an increasingly important role was attributed to the creation of systems of internal control and understanding IA as an essential element of that function. This resulted in the evolution of the IA definition by the IIA, incorporating the role of the auditor as appraiser in the business operation and internal control process. According to Williamson (1975), IA is an appraisal function, integral and complementary part of the control systems to assess financial and operational controls.

According to Reding et al. (2009), the practice and landscape of the IA profession started changing in the 1980s. One of the key changes in IA was the release of a 1987 report by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) which required that: (i) an IA should exist in every public corporation, and (ii) there should be a corporate audit committee composed of non-executive directors of the corporation. This change was aimed at IA assuming an active role in preventing and detecting fraudulent financial reporting. Another significant change in the IA profession and practice came about in 1990s when the use of risk assessment as a method to determine the allocation of audit resources dramatically gained in popularity (Reding et al., 2009). Similarly, the use of outsourcing arrangements became a popular means for organizations to manage their IA activities. In the 1990s, there was also a shift in the amount of time allocated to different activities in IA, with more time being allocated to operational audit activities (evaluating the effectiveness and efficiency of operations). As a result, less time is allocated for traditional audit activities (financial control and focus) (Reding et al., 2009). By this point, the traditional IA definition appeared to be no longer adequate to address the change in the role, nature of work and focus of IA. Consequently, a new definition was required to deal with the current and future changes in IA.

2.2.3 Contemporary Internal Auditing (1999 and Onward)

As the role of IA evolved over the years in response to the changes and uncertainties in the business environment, the IIA (the IA professional body) and practitioners struggled to create and implement strategies in order to survive and strengthen its role and position. In 1999, a special committee known as the Guidance Task Force has reviewed the Professional Practice Framework (PPF) and concluded that a more robust definition of IA was warranted. This resulted in the IIA developing a new definition of IA to shape a new image and contemporary focus, as well as highlighting ingenuity features of IA roles and practices in their current form. This definition states:

> *"Internal Auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes" (the IIA, 1999).*

This new definition states the fundamental purpose, nature, focus and scope of IA (the IIA, 2015). It views IA as assurance[2] and consulting[3] services that give IA the general responsibility for adding value[4] by improving an organization's operations and activities. It aims to help an organization to accomplish its objectives by bringing a

[2] Assurance services involve the IA's objective assessment of evidence to provide an independent opinion or conclusions regarding an entity, an operation, a function, a process, system or other subject matter. The nature and scope of the assurance engagement are determined by the IA. There are generally three parties involved in assurance services: (1) the person or group directly involved with the entity, operation, function, process, system or other subject matter – the process owner, (2) the person or group making the assessment – the IA, and (3) the person or group using the assessment – the user.

[3] Consulting services are advisory in nature, and are generally performed at the specific request of an engagement client. The nature and scope of the consulting engagement are subject to agreement with the engagement client. Consulting services generally involve two parties: (1) the person or group offering the advice – the IA, and (2) the person or group seeking and receiving the advice – the engagement client. When performing consulting services, the IA should maintain objectivity and not assume management responsibility.

[4] The term "value-added IA" can represent different meanings from one IA function to another. For many practitioners, "value added" describes audit activities that help management improve the business and organization operations, beyond verifying compliance with policies and procedures. For others, the opposite meaning may apply. In general "value added" is about how the IAF identify the practices that will add the most value given its own specific situation. According to Roth (2003), "There are four factors that can help auditors determine what will add the most value to their organization: (1) A deep knowledge of the organization, including its culture, key players, and competitive environment; (2) The courage to innovate in ways stakeholders don't expect and may not think they want; (3) A broad knowledge of those practices the profession, in general, considers value added; and (4) The creativity to adapt innovations to the organization in ways that yield surprising results and exceed stakeholders' expectations" (J. Roth, 2003).

systematic and disciplined approach to evaluate and improve the effectiveness of RM, control, and governance processes (Professional Guidance, 2000). This new definition marks a significant shift away from the old definition that regarded IA as primarily an appraisal function that examined and evaluated activities.

This suggests that IA will change in response to the demands of emerging needs. In this respect, IA is expected to become a catalyst and an agent of change, especially in evaluating and recommending improvement of operations. In addition, IA is also expected to provide independent, objective assurance and consulting activities to add value to the organization (especially in the field of governance, RM and control processes) (Allegrini et al., 2006; Hass et al., 2006; Cooper et al., 2006).

IA new image

Chapman and Anderson (2002) explain that the new definition of IA presents a new image of the profession in six significant ways:

- *"As an objective activity, not necessarily established within the organization, the revised definition permits IA services to be provided by 'outsiders', in effect acknowledging that quality IA services can now be obtained through outsourcing (or co-sourcing);*
- *By emphasizing that the scope of IA encompasses assurance and consulting activities, the new definition projects IA as proactive and customer-focused, and being concerned with key issues in control, RM, and governance;*
- *By explicitly stating that IA is designed to add value and improve an organization's operations, the new definition underscores the significant contribution that IA makes for any organization;*
- *By considering the whole organization, the new definition perceives IA's mandate much more broadly, charging it with helping the organization accomplish overall objectives;*
- *The new definition assumes that controls only exist to help the organization manage its risk and promote effective governance. Such a perspective considerably broadens the horizons of internal auditing and expands its working domain to include RM, control, and governance processes; and*
- *The new definition accepts that the IA profession's legacy, consisting of its unique franchise in being a standards-based profession, may well be its most."*

These six significant ways are not easy for IA to achieve and definitely requires appropriate innovative strategies. However, the definition and current business issues, such as ongoing corporate governance failures, uncertain business environments, financial and debts crises, regulatory changes, fraud and ethical issues, and stakeholders' confidence crisis, have unlocked huge opportunities and a platform for IA to provide relevant and indispensable services to their clients (Allegrini et al., 2006; Hass et al., 2006; Cooper et al., 2006).

This new definition of IA signifies a broad role and field of works that require multi-skills and a discipline of knowledge from IA practitioners. According to the definition, IA must add value and improve operations by providing assurance and consulting services to the board of directors, executive management, middle management, and front-line management across all levels and the entire organization. Now IA functions must operate at the process, management and strategic level. This is because of the scope of IA to "evaluate and improve the effectiveness of governance, RM, and control processes". This scope has provided opportunities to IA that go beyond the traditional role of IA that does not work at all levels of the organization (Sawyer, 1996).

The new definition brings IA to the boardroom and elevates the profile of IA to become a strategic adviser and business partner to the organization. Yet, the concern now is how can IA effectively deliver these promised services? Do they have the capability, resources and management support to execute their roles? Are they able to succeed in meeting the demands placed on them? Consequently, the capability and resources required in delivering services have to evolve in accordance with the role requirements and stakeholders' demands (refer to Figure 2.2 and Table 2.2).

Source: EY, 2013

Figure 2.2: IA Role and Competency Requirements

Table 2.1: IA Core Competency and Services Needed

Year	Business Issues	IA Service/ Role Needed	Core Competency and Expertise Required
Prior 1900s	To verify the honesty of persons charged with fiscal responsibilities	Re-performance or complete review of transactions	Book-keeping (Accounting)
1900 To 1939	• The rate of financial failure was high • Fraud and errors of financial statements • The stock market crash and Great Depression • Company solvency and small investor protection	Theft/Fraud/Error	The detection or prevention of fraud and errors (Accounting, Financial Statements and Finance)
1940 To 1969	• A true and fair view of the company's financial statements • The credibility of the financial statement, position and performance • Internal control weaknesses	• Operational/effectiveness Auditing orientation • Internal control • Control evaluation and ethics	Preparation and handling full-set of financial statements, operational and compliance expert, fundamental principles of auditing, and eminently skilled in the knowledge and understanding of business environment, operation, and control systems (Accounting, Internal Control, Auditing, Statistic, Finance, Business Analysis, Quality Control, Business Management and Ethics)
1970 To 1990s	• The credibility of financial information • The effectiveness of business operation and capital market	• Business oriented • Advance and automated auditing	Financial and business literacy, auditing and internal auditing principle, business management, automated and computerized system, operational management and the knowledge and understanding of business analysis, operation, internal control systems, and marketing (Accounting, Internal Control, Auditing, IA, Information and Communication Technology, Business Statistic, Finance, Business Analysis, Quality Control, Operational and Business Management, Ethics and Governance)
2000s-Present	• Accounting scandal and collapse of giant companies • Financial and debt crisis • Business uncertainty • Social media	• Focus to add value • Evaluate and improve the Effectiveness of RM, control and governance processes • Consulting and advisory role	• Governance, RM and control systems • Social media and information technology • Professionalism, business consultation and advice, forensic accounting, environmental issues, corporate social responsibility, accountability, transparency and business ethics • Business acumen: maintains expertise of the business environment, industry practices, performance & specific organizational factors • Communication and human skills • Persuasion and collaboration • Critical thinking: applies process analysis, business strategy &intelligence, data analytics, value catalyst, problem solving techniques, creativity and innovation (Multiple Discipline)

IA practitioners have to comply with the standards and adhere to a Code of Ethics, which set the bar for professionalism in carrying out IA activities. Mutchler (2003) suggests three components of professionalism, namely integrity, competence, and the use of due care to be relevant to the IA profession. The entire IA process, starting from getting the authority from the audit committee, defining the role and responsibilities in the audit charter, planning and conducting audit assignments, preparing working papers, communicating results, following up the recommendations, setting criteria for evaluating performance, getting feedback on services provided via surveys of customer satisfaction, all is done in a very systematic and disciplined approach. Having an internal and external quality assessment and also a quality assurance and improvement programme in place is a critical aspect of professionalism.

Internal auditor involvement in the professional association, continued professional development programmes, certification and qualification programmes, and improving capabilities and talents through lifelong learning and networking is essential. In this way, IA practitioners remain sensitive to innovative ideas and implement best practices in the ever-changing and growing field of IA and maintain their commitment to professionalism (the IIA, 2013).

It is hoped that all of these changes and efforts will make a significant improvement to the IA profession and give a better result to help the IA profession in meeting the expectations of the IPPF and the new IA definition. For this reason, the IIA for over 70 years is continuing to innovate through the development and publication of the IA framework (the IPPF), CBOK, research findings, IA magazine, education and certification programmes. All these efforts and programmes are for the use of the IIA's members and IA practitioners in thousands of organizations in more than 190 countries, across all business and public sectors (the IIA, 2015).

Co-sourcing of IA Function

In addition to in-house and fully outsourced IA functions, the standards and new definition of IA permits organizations to use co-sourcing arrangements with outside professional service providers. Co-sourcing providers are expected to deliver complex IA assignments and transfer their knowledge and expertise to the in-house IA team. Co-sourcing is an alternative way for an organization to supplement its existing in-house IA function and remain responsible for the IA process without losing day-to-day

control over its function and activities while cutting costs and maximizing IA capabilities. In the situation where the IA function faces constraints in terms of resources, capabilities and expertise, it can rely on the outside professional service provider for specialized technical skills and talents to carry out IA assignments as specified in the IA plan. Co-sourcing helps the IA function to enhance its ability to stay focused on the organization's core business, core competency, significant risks, and strategic plan in a timely manner by utilizing the highly skilled personnel and specialists of the external IA professional provider. This is done without recruiting new staff and investing in expensive audit tools in circumstances where an organization immediately needs to deal with new, technical or specific areas or projects. Co-sourcing is useful when an IA function instantly needs to become involved in areas such as: a strategic expansion into global markets, geographically dispersed resources, broadening horizons of new, rapid changes, innovations and dynamic business lines, or a new niche market that requires specialized expertise. A combination of in-house and co-sourced IA can perhaps help organizations to improve the effectiveness of the IA function and its business operations in less time and money than it would take for an organization to instantly build capacity, hire staff, develop or fill resource gaps internally. The key findings from the global Internal Audit Survey on matching IA talent to organizational needs by EY (2013) suggest that, apart from hiring internally, the IA function has a number of other options available to supplement staffing shortages or resource gaps. This includes: interns; a guest auditor or auditor rotation programmes; and co-sourcing or outsourcing arrangements with third-party providers (EY, 2013).

2.3 THE RISE OF THE INTERNAL AUDITING PROFESSION AND EMERGENCE OF INTERNAL AUDIT APPROACHES

In the 1970s, 1980s and early 1990s, the IA profession was not popular as a preferred choice of career. During this period, IA positions were normally only being offered by multi-national companies or big organizations. The objective of IA was more control oriented and focused on providing assurance pertaining to financial and reporting matters. Later on, in the late 1990s, the business environment changed and became loaded with emerging issues such as globalization and the explosion of information technology (IT). At this time, business models and operations of organizations gradually transformed accordingly with the increasing changes in business complexity and the development of automated systems. These transformations affected the IA

functions' scope of work and practices, and the existing set up was no longer capable of helping business entities in fulfilling its controls and RM requirements in order to maintain the sustainability of business operations. In dealing with these new expectations, the IA scope and function expanded from a basic and uncomplicated nature to become a complex support system that existed to assist business entities. IA functions provided independent assurance as to whether business operations had been carried out successfully and in accordance to the organizations' objectives, regulatory requirements, policies and procedures, market standards and various established criteria. As business entities increasingly acknowledged the rising pressures in economy and business performance drive, appreciation and demand for IA was also on the rise (Dominic & Nonna, 2011).

In the 21st century, the knowledge economy, uncertainty of business environment, globalization, race for profit and return on investment (ROI) began to emerge exponentially. Human and business aggressiveness towards profit has driven and shaped the business world rapidly. During this period the world was shocked with the collapse of Enron, financial catastrophes and non-stop business scandals and crises. As a result, there has been an increasing awareness of the effectiveness and role of corporate governance within organizations, a circumstance which indisputably impacts on the IA profession (Cunningham et al., 2013). Corporate scandals and crises, and the issuance of regulatory requirements, such as the recommendation of the UK Combined Code on Corporate Governance (2003, 2014) and the Sarbanes-Oxley Act (2002) to strengthen the governance, RM and internal control systems including the IA function, have caused significant changes in the IA profession. Today's business entities rely heavily on IT in order to run their business operations, as well as to deal with the influence of social media and the internet, both of which have drastically transformed society and business environment.

Social media, IT, the complexity of business, the risky business environment, speedy innovation and creativity, business ethics issues, volatile economic conditions, changing legal and regulatory requirements, all these have tremendously changed current IA practices, from a supporting independent function to a strategic business partner, trusted adviser and value-added function.

To realize this change, it is crucial for the IA function to run IA like a business operation and think as a strategic business unit. Therefore, the IA function must hold itself accountable for functional excellence, continuous improvement and tracking impact. For example, this can be achieved through developing talent, extending roles, continuous education and training, and assessing to what extent it has achieved its goals. Over time, the IA function has evolved and risen from just playing a reactive role to a proactive role in organizations to remain relevant to the business.

Approaches and models, including (i) The IA role in ERM/RM, (ii) The 'Three Lines of Defence' model and (iii) RBIA, are examples of how IA has extended its role, as defined in the IA new definition and proactively plays its part in the organization. These three sub-topics are discussed as follow.

2.3.1 The Role of Internal Auditing in Risk Management/Enterprise Risk Management

According to the IIA (2004), RM is a fundamental element of corporate governance. In organizations, normally, management is responsible for developing and operating the RM framework on behalf of the board. Continuous corporate scandals and business catastrophes have triggered the importance of having strong and effective governance, RM and control processes (the IIA, 2009). Thus, organizations are increasingly acknowledging and giving RM more consideration (The IIARF, 2011). In this context, having effective RM processes in today's organizations are crucial to enable organizations to manage risks effectively. The role that IA functions can play in RM depends on the maturity level of RM practice in organizations and whether or not organizations are formally implementing RM. As an independent function, IA plays a critical role in helping organizations manage risk by providing advisory or consulting services to evaluate and improve RM processes, as well as providing assurances that all significant risks are identified, evaluated, monitored, mitigated and managed effectively. By doing so, IA functions help and support management to protect organizations on an ongoing basis. This is important for the success and survival of organizations in navigating in an uncertain, complex and turbulent business world.

However, not all IA functions are ready to proactively pursue IA roles in RM to a level that satisfies the management, board, regulators and other key stakeholders. This is because implementing an effective RM programme takes time, resources, discipline

and leadership, in order to develop IA teams that have the right level of skills and experience related to RM.

The IA role in RM is made clear in the revised version of the IA definition by the IIA in 1999. The definition states that IA scope is to provide both assurance and consulting activities across the three related areas of RM, governance and control (IIA, 1999). The Turnbull Report released in the UK in 1999, which contains requirements on internal control and RM influenced IA involvement in RM (ICEAW, 1999). Later on, the release of COSO's integrated framework for Enterprise Risk Management (ERM) (COSO, 2004) in 2004 provided an opportunity for IA to play its role in monitoring and auditing the ERM process. According to Sarens and De Beelde (2006), from then onwards, there has been a global move towards an enterprise-wide approach to RM, with IA playing a key role in providing both assurance and consulting services with respect to the management of risk within organizations.

As IA functions have sought to involve and extend their role in RM/ERM with the above initiatives many internal auditors and others have asked: "What is, and what should be, the role of IA in RM?" In response to this, in 2004, the IIA UK and Ireland issued the IIA Position Paper: "The Role of Internal Auditing in Enterprise-Wide Risk Management". The purpose of the paper was to assist chief audit executives (CAEs) in responding to ERM issues in their organizations. Even though IA engagement in RM/ERM can add value to organizations, there is also a risk that it could lead to an impairment of IA independence and objectivity. Acknowledging this possibility, the IIA issued the position paper that suggested ways for IA functions to maintain the objectivity and independence required by the IIA's standards. It delineates the "do's and don'ts" of the IA role in RM/ERM by providing guidance on the core roles of IA in regard to RM/ERM (IIA, 2004).

According to the IIA UK and Ireland (2004), the position paper goes into significant detail about the IA role with regard to RM/ERM, particularly about the role IA should take regarding a number of specific corporate functions. In this context, the position statement indicates:

> *"Internal auditing's core role with regard to ERM is to provide objective assurance to the board on the effectiveness of an organization's ERM activities*

to help ensure key business risks are being managed appropriately and that the system of internal control is operating effectively" (the CIIA, 2004).

Figure 2.3 below shows the different roles the IA can play in ERM. It presents a range of ERM activities and indicates which roles an effective professional IA activity should and, equally importantly, should not undertake. The key factors to take into account when determining IA's role are: whether the activity raises any threats to the IA function's independence and objectivity, and whether it is likely to improve the organization's RM, control and governance processes.

The activities on the left-hand side in Figure 2.3 are all assurance activities, while the activities in the middle are consultation activities. An internal audit unit complying with the IPPF should be able to perform at least some of these activities. On the other hand, the activities on the right-hand side should not be undertaken by IA.

(Source: Institute of Internal Auditors United Kingdom and Ireland, 2004)

Figure 2.3: Internal Auditor Role in ERM

In order to add value and be relevant in the changing and challenging environment, the IA function seeks to make innovation in its services by focusing on its organization's needs and expectations. An IA function's involvement in RM can predominantly raise the profile of IA within organizations, particularly in the eyes of the governing bodies, senior management and regulators (Fraser & Henry, 2007; Sarens & De Beelde, 2006; Beasley, Clune & Hermanson, 2005). Sarens and De Beelde (2006) state that the: "IA role in monitoring and improving RM and control processes

has turned out to be an important contribution to corporate governance". Therefore, in dealing with emerging changes and corporate exposure challenges, more and more organizations are focusing on effective RM practices. However, many organizations struggle to improve their RM process from immature to mature and from isolated silos to integrated RM. The RM approach is to have a more integrated and holistic Enterprise Risk Management (ERM). This is to support a coordinated and integrated company-wide approach to the identification, assessment, management (control and other treatment responses), communication, monitoring and auditing of risks and RM processes (PWC, 2004; Liebenberg and Hoyt, 2003). If an organization put in place an RM framework to effectively manage and oversee the organization's entire portfolio of risks and this can have a significant impact on their organizational goals and objectives (Andersen, 2008; Mikes, 2005; Drew et al., 2005). The IIA calls for IA involvement in RM to help organizations to evaluate and improve RM processes; assist the board to fulfil its responsibilities in maintaining a risk oversight role; and to perform the activities depicted throughout the IIA Position Paper: "The Role of Internal Auditing in Enterprise-Wide Risk Management". This position paper provides huge opportunities for IA functions to add value to their organizations. However, the call for action in RM/ERM by the IIA also brings immense challenges for many IA functions, including protecting their independence and preparing their IA teams with the right level of skills, experience, adequate resources, confidence and an appropriate position and status in their organization. In addition, the sound skills, experience knowledge and understanding related to RM that possessed by the board, audit committee and management are crucial for IA functions to successfully discharge their role in RM.

2.3.2 The 'Three Lines of Defence' Model

As lessons have been learned from the recent huge corporate collapses, frauds and financial crises, RM/ERM is increasingly becoming embedded into the corporate culture of many of the public-listed companies and larger organizations. RM is a vital business tool for the board and management teams to manage business risks successfully in ensuring business survival and achievement of organizational objectives (Beasley et al., 2005; Spira & Page, 2003). Thus, there is a need for establishing a holistic, effective, integrated, cohesive, and coordinated approach to RM. This has given rise to corporate risk professionals to expand RM nature and scope to include enterprise-wide risks that go beyond the financial risk focus (to consider strategic, compliance, operational, reputation, cybersecurity and other types of risks).

As this occurs, at the organizational level, there are two major professional disciplines that dominate in providing services related to RM areas and activities. They are the IA function and the RM function. Without an appropriate framework or guideline to clarify issues related to the role, responsibility and authority in RM, IA function may have difficulty to work with RM function. Similarly, other departments, business units and people in organizations might also have difficulty in dealing with both functions regarding risk matters. These problems may arise if there is a lack of clearly defined roles among risk players, leaving unresolved lines of authority and reporting relationships. Therefore, in many organizations there is the potential for conflict between IA function, RM function and other units that responsible for the RM activity or scheme.

According to the IIA (2014), it is common practice to see diverse teams of supporting and compliance functions in today's business organizations, such as internal auditors, RM/ERM specialists, compliance officers, internal control specialists, quality inspectors, fraud investigators, and other risk and control professionals working together to help their organizations manage risk. This can lead to a lack of clearly defined roles and responsibilities across various supporting and compliance functions. Even though each of these supporting and compliance functions have their own perspective, specific skills, and duties of RM that spread over multiple departments, everybody needs to be given a role that collectively fills the gaps and ensures there is complete coverage and no duplication. The challenge is to find the right balance between the various supporting and compliance functions to ensure there are no gaps. The good coordination of these functions, therefore, is crucial in ensuring that duties are defined and segregated effectively, and responsibilities and boundaries are clearly understood. Besides coordination, communication is no less important as it helps disseminate necessary information related to duties and risks to be mitigated. Within most organizations, there is a clear different nature and objective between IA and RM in their risk responsibilities and coverage areas. Some of the specific roles and activities that may lead to conflicts of interest are noted in Table 2.3.

In order to help organizations and diverse supporting and compliance functions to clearly define their roles and responsibilities and set cut-off lines for scope of works across risk activities, the IIA has produced a position paper entitled the 'Three Lines of Defence' model. This contains best practices that can help organizations delegate and coordinate essential RM duties using a systematic approach. According to the IIA (2004), "The Three Lines of Defence" model provides:

"A simple and effective way to enhance communications on RM and control by clarifying essential roles and duties. It provides a fresh look at operations, helping to assure the ongoing success of risk management initiatives, and it is appropriate for any organization — regardless of size or complexity. Even in organizations where a formal risk management framework or system does not exist, "The Three Lines of Defence" model can enhance clarity regarding risks and controls and help improve the effectiveness of risk management systems" (IIA, 2004).

Table 2.2: Areas of Overlapping Interest

Source: http://broadleaf.com.au/resource-material/relationship-between-internal-audit-and-risk-management/

By adopting The 'Three Lines of Defence' model (refer to figure 2.4), the IA and RM functions can strive to maximize resource utilization, and benchmark and apply the best practices of risk frameworks and models (RBIA and the role of IA in RM position paper). This contributes to the effectiveness of RM. However, owing to the different risk cultures, sector complexities, sizes and natures of each organization, the extent of implementation and the coordination of The 'Three Lines of Defence' model is will vary.

Source: Adapted from ECIIA/FERMA Guidance on the 8th EU Company Law Directive, article

Figure 2.4 The 'Three Lines of Defence' Model

According to the model, governing bodies and senior executive management are not part of the three "lines" in the model. However, both governing bodies (i.e., boards of directors or equivalent bodies) and senior executive management collectively have the essential roles, responsibility and accountability for governance and management of the RM and control process in the organization. The second line and the third line will report to the board/governing body. The Chief Executive Officer (CEO) and executive management team are responsible for the management of the RM and control processes and ultimately held accountable to the governing bodies. The board responsibilities include authorizing the overall risk appetite and the philosophy of risk taking, setting the organization's goals and objectives, defining strategies to accomplish those objectives, oversight and developing governance structures and processes to best manage the risks in achieving those objectives (the IIA, 2013). The governing bodies and executive management teams are the principal stakeholders served by the "lines". Their support and guidance are crucial to the success of the implementation and realization of the 'Three Lines of Defence'" model in organizations.

Table 2.4 below summarizes the underlying role of each line of defence in the model. In brief, the operation and business unit management are the first line that is responsible for managing their own risks; the second line is where many support functions (i.e., RM, internal control, financial controller, compliance, inspection, business continuity, quality, security and legal) help the first line to ensure that significant risks are identified and managed effectively; and finally the third line

involves the IA function, which provides independent assurance, advice, insight, and objectively evaluates the effectiveness of the processes formed in the first two lines. The aim of the third line is to improve RM processes and protect organizational value. The second “line” can sometimes be quite a grey area, often incongruent and subject to functional silo-type structures that lead to a lack of communication, collaboration, and coordination. However, if proactively addressed, communication, collaboration, and coordination throughout the organization can be significantly improved.

Table 2.3: The ‘Three Lines of Defence’ Model

Line of Defence	Function	Description
1st Line	Operational management	Risk owners, business unit management, process ownership, responsibility and accountability for assessing, controlling and mitigating risks
2nd Line	Internal governance, RM and compliance functions (include support and control functions)	Monitors and facilitates the implementation of effective RM practices by the 1st line and assists risk owners in reporting adequate risk-related information throughout the organization
3rd Line	Internal Auditing	Provides assurance to the tone of the organization, governing body oversight, audit committee and senior executive management on the organization’s effectiveness in assessing and managing its risks and related internal control systems, including the manner in which the 1st and 2nd lines operate

In practice, organizations can choose whether to have a separate or combined IA and RM function. Basically, the choice of establishing either separate or combined functions of IA and RM does not affect the ultimate roles and responsibilities of each department. Nevertheless each approach provides mutual advantages and disadvantages to an organization. For example, maintaining separate IA and RM functions may mean collaboration between the two is more challenging but functional independence is more assured. On the other hand, by combining the functions, collaboration between them may be more assured, but the functional independence more challenging. Woods (2008) suggests that the separation of functions for RM may

possibly raise concerns regarding professional rivalry between internal auditors and risk managers. However, she highlights there is no noticeable intrinsic conflict between the objectives of RM and any other management control system (Woods et al., 2008). In order to reduce any professional rivalry, confusion or conflict between IA and RM functions, various initiatives and innovative measures have been put in place at the societal level by the IIA, and also through its collaboration with the FERMA, RIMS, ORACLE and IRM. There have been four important efforts made, concerning the IA and RM role in ERM/RM, including:

i) The IIA issued the position paper on the role of IA in ERM in 2009 as a guidance to IA practitioners explaining the “do’s and don’ts” of the IA role in RM;

ii) The IIA and Oracle released a white paper on the IA role in RM in 2011, to explore how the IAF can play an important role in RM;

iii) The IIA and RIMS produced a case study entitled “RM and IA: Forging a Collaborative Alliance” in 2012, to advance collaboration among IA and RM practices through their words and actions; and

iv) The IIA issued a position paper entitled “The Three Lines of Defence in Effective RM and Control” to clarify the different roles and responsibilities of, as well as the interaction between, the various actors. Further, the IIA and FERMA endorsed “The Three Lines of Defence” model in 2013, as an important mechanism, particularly for integrating, coordinating and aligning the respective roles and responsibilities of the IA and RM functions to help organizations effectively manage its risks.

Organizations’ efforts to incorporate and implement effective RM processes into their existing management control and performance management systems could be achieved successfully with the right implementation of “The Three Lines of Defence” model. Even though the model has its limitations, it does provides a mutual and common framework that enables organizations to formulate what it expects of the different functions to be accountable and responsible for. Despite the model’s weaknesses, it provides the common “rules of the game” for the supporting functions to plan and develop their processes and policies, and, remarkably, creates a common vocabulary that enables different functions to harmonize their roles and responsibilities more effectively. By misinterpreting the model, such as by assuming defence as fear of risk, would be a huge disaster to its implementation in organizations. If organizations

avoid or fear to take risks, it will wither away. A key for organizations is to strive for success by taking risks. Organizations must be risk savvy, so that they take the right risk, understanding the options, knowing what the risk is, realizing its effect on their strategic objectives. Sometimes a green model with known weaknesses is actually safer and more valuable than a more complex one that nobody fully understands.

2.3.3 The Increasing Significance of Risk-Based Internal Audit (RBIA) Approaches

The IA has become one of the fastest-growing professions over the past seven decades since the foundation of the IIA (Reding et al., 2013). A study by Selim and McNamee (1999) suggests that the IA paradigm has passed through three dominant phases: (1) focusing on **re-performance** (during the early days of IA) by performing observation and counting physical items or numbers representing them; (2) focusing on **controls-driven** audits (1940s–1990s); and (3) auditing of the business process through **business risk-driven** approaches (present). According to the IIA UK and Ireland (2003), the focal point of IA work has changed over the last decade from system-based internal auditing (SBIA) to process-based internal auditing (PBIA), and now to risk-based internal auditing (RBIA). This indicates that the IA focus has evolved over time in response to changes in the business environment to keep IA relevant. Considering the uncertainty and risky nature of today's business environment, the need to manage risks has been recognized as a central part of good governance practice (the IIA UK and Ireland, 2003). Risks affect and impede the achievement of an organization's objectives. Thus, in ensuring that an organization achieves its objectives, the effective management of risks is extremely crucial to mitigate all the risks which jeopardize the achievement of those objectives (Griffiths, 2015). This has led investors and regulators (especially for the financial sector) to demand organizations to disclose and explain how they identify and manage risks they encounter.

The emergence of RM as a key organizational process has increased the demand for IA to use RBIA and gives the IA profession a unique opportunity to shift its focus to risk (McNamee & Selim, 1998). According to Griffiths (2015, p. 24):

> *"RBIA starts with all the objectives of the organization and provides an opinion as to whether the risks threatening these objectives are being reduced to an*

acceptable level by internal controls, and that the objectives of the organization will therefore be achieved."

Therefore, RBIA is a methodology which the IA uses to provide assurance that risks are being managed within the organization's risk appetite; in other words, the processes that manage risks to a level that is considered acceptable by the board (Griffiths, 2006). In 2004, COSO released the ERM framework, which aimed to increase the achievement of organizations' objective in responding to the challenges of growing risks in the business environment. This ERM framework provides a basis for IA to practice RBIA. According to the IIA UK and Ireland (2009), the IA function must evaluate the effectiveness, and contribute to the improvement of, ERM/RM processes. In other words, ERM/RM drives RBIA, which IA that applies RBIA to any risk that threatens the achievement of the organization's objectives. In the IA new definition, the IA function is mandated to assist an organization in accomplishing its objectives. As RBIA directly relates to the achievement of objectives, this is an absolutely coherent approach to be embedded by the IA department (function) in order to be relevant to the board and management of the organization in the high-risk environment.

The use of risk information, assessment and framework in the IA process is not something new. IA functions have used risk techniques and information for many years and, historically, had ongoing concerns and interests in RM (Moeller, 2011). Specifically, IA functions have used risk assessments and risk prioritization data as one of the primary inputs to audit planning. Based on the latest list of most significant risks (from a risk register), IA functions decide which areas, functions or auditable units within organizations should be selected for IA activities in their upcoming IA plans. The approach used for preparing this IA planning is known as RBIA. As a rule of thumb, risk assessment and IA planning processes are subjected to ongoing updating. The use of RBIA is important in maximizing and making the best use of IA functions' limited time and resources, so that the IA function is able to focus on and allocate their time and attention to the riskier areas of the organization (Moeller, 2011).

The RBIA approach seeks to improve IA effectiveness and efficiency by shifting functions from a policing activity to one that adds value and contributes effectively to managing risk and achieving wider organizational goals. According to the International Standards for the Professional Practice of Internal Auditing (ISPPIA) Performance

Standard 2010 – Planning, the chief audit executive must establish a risk-based plan to determine the priorities of IA activities, consistent with organizations' goals (the IIA, 2013). In this context, IA functions' core role is to provide assurance to the management and board on the effectiveness of RM. On the occasion where assurance cannot be given, the onus is on management to implement the appropriate response. IA functions may still make recommendations, but this is the art of the "consultancy" role. However, within the context of RBIA, IA functions can only use RBIA if there is a mature risk practice and framework in place (Griffiths, 2005).

Griffiths (2006), defines risk maturity as:

> "*The extent to which a robust RM approach has been adopted and applied as planned by management across the organization to identify, assess, decide on responses to and report on opportunities and threats that affect the achievement of the organization's objectives.*"

Maturity shows the degree to which organizations understand risks and have implemented RM (Griffiths, 2006). In other words, risk maturity is about the quality or effectiveness of organizations' RM systems, in identifying, measuring, managing and monitoring their principal business risks. David Hillson (1997), one of the prominent writers and consultants (from The Risk-Doctor) in RM describes 'risk maturity' as the approach organizations use to benchmark their current RM practice against the best practice or framework available in the market, for the purpose of either: (i) organizations want to improve their existing approach or (ii) organizations desire to implement a formal approach to RM. Thus, the benchmarks of best practice are commonly characterized in terms of "maturity", which is generally reflecting advancing levels of sophistication together with other features (Hillson, 1997).

In general use, maturity is referred to as "fully developed" or "perfected" (Cooke-Davis, 2005). According to PM Solutions (2008), "maturity is a comparative level of advancement an organization has achieved with regard to any given process or set of activities. Organizations with more fully defined and actively used policies, standards, and practices are considered more mature". However, the question is how to measure the current level of risk maturity so that a gap analysis can be carried out against where an organization needs to be or aspires to be.

It is important to understand that, in reality, not all organizations are at the same risk-maturity level, due to different stages of ERM/RM implementation (the IIA UK and Ireland, 2003). RBIA is driven by the organizations' list of objectives and risks, not the IA functions' list (Griffiths, 2006). This means that organizations' most significant risks determine areas of audit, where and when IA take place. According to Griffiths (2006), IA functions use organizations' risk registers (not a separate list prepared by the IA function) and there is no separate schedule of IA and system auditing carried out on a cyclical basis. Since RBIA is dependent on the managements' list of objectives and risks, this safeguard IA independence. Nevertheless, the IA task is to evaluate and provide assurance that managements' list of objectives and risks is accurate and complete. For organizations that do not have mature (or effective) RM functions in place, this means that their IA functions are not supposed to use RBIA in preparing their IA plans. According to the CIIA UK and Ireland (2014), if the RM framework is not particularly sound or does not exist, the organization is not ready for RBIA. This is because immature risk process indicates poor RM practice in the organization, so that risks could be wrongly identified or assessed. In these circumstances, IA functions may be forced to undertake their own risk assessments; however in many circumstances IA functions have done their own assessments anyway, as a check on RM effectiveness or to assert their independence. Independence is important for IA functions in order to evaluate and audit their organizations' RM frameworks to provide assurance to the boards and senior management about the adequacy and effectiveness of the framework as required by the IIA ISPPIA.

Numerous methods and models have been developed to measure an organization's risk maturity level. These risk maturity models allows internal auditors and risk leaders to efficiently self-assess their organizations' RM frameworks and capabilities. The model assesses observable practices and structures including the degree of embedding RM framework into an organizational process and structure, control environment, monitoring environment, and risk culture. For instance, AON and Wharton *University of Pennsylvania* have developed the risk maturity index as a tool to gauge the effectiveness of RM and score existing RM system. According to the Operational Risk Consortium (ORIC, 2013), Deloitte (2012), AON (2012), Griffiths (2006), Software Engineering Institute (SEI, 2008), the IIA UK and Ireland (2003) and RIMS (1987), RM maturity can be assessed against the five levels of risk maturity. For example, Griffiths (2006) and the IIA UK and Ireland (2003) *have* defined risk maturity rating levels as: (1) risk naïve (2) risk aware, (3) risk defined (4) risk managed and (5)

risk enabled. Figure 2.5 below sets out a range of stages of RM maturity and the IA approach that might be adopted at each stage of RM implementation.

Source: IIA UK and Ireland (2003)

Figure 2.5: RM Maturities and IA Approach

The CIIA UK and Ireland (2014) states three stages (stage one, assessing risk maturity; stage two, periodic audit planning; and stage three, individual audit assignment) to be followed by organizations in order to implement RBIA and its ongoing operation (refer to Figure 2.6). According to Griffiths (2006) and Hopkinson (2010), before any IA functions adopt RBIA, they need to test their risk maturity level (to know the level of the practising of ERM/RM framework in the organization). To do so, RM maturity needs to be assessed by referring to an accepted framework and thus can be benchmarked against a recognized standard. By knowing their position in the level of RM maturity, organizations are able to have a structured system that leads them to improve their RM practice and climb up to a higher level of maturity. Through testing risk maturity, organizations are able to get a snapshot of where their risk programme stands. This information can be used to assist organizations in having a proper plan, finding ways to improve and strengthen the effectiveness of RM systems as well as creating risk mitigation strategies, so that they are better able to face uncertainties and eventually achieve their objectives (Hopkinson, 2011).

Key

Stage 1: Assessing risk maturity

Obtaining an overview of the extent to which the board and management determine, assess, manage and monitor risks. This provides an indication of the reliability of the risk register for audit planning purposes.

Stage 2: Periodic audit planning

Identifying the assurance and consulting assignments for a specific period, usually annual, by identifying and prioritizing all those areas on which the board requires objective assurance, including the risk management processes, the management of key risks, and the recording and reporting of risks.

Stage 3: Individual audit assignments

Carrying out individual risk-based assignments to provide assurance on part of the risk management framework, including on the mitigation of individual or groups of risks.

Source: IIA UK and Ireland (2014)
https://iia.org.uk/media/266012/rbia_overview.jpg

Figure 2.6: Implementation and Ongoing Operation of RBIA

Knowing the RM maturity level is also important for the purpose of assessing RM capability (such as the skills, methodology, experience, and culture of the people who use it). Determining the maturity level is an important step for internal auditors. By assessing the risk maturity of the organization, the auditor can decide what reliance to place on the list of risks provided by management when determining the audit plan. Nevertheless, testing and knowing the RM maturity level will be meaningless if it is just a box-ticking exercise. If this is the case, it means nothing will happen to improve RM

practice. It is not possible for IA function to carry out RBIA without a reliable risk register (which indicate an organization RM's system was at the risk naïve or risk aware stages). Therefore, organizations need to improve their risk maturity to a minimum of risk defined level before RBIA can be adopted by IA function (Griffiths, 2006). In this context, IA function should provide consultation work to help organizations to improve their risk maturity level and RM practice.

RBIA is a new approach in IA practice that is evolving fast. However, it is still in the early stages of implementation and there is not much of a consensus about the best way to implement it (the CIIA UK & Ireland, 2014). Even though RBIA is increasingly acknowledged as a key approach it does have its advantages and disadvantages that need to be considered and carefully implemented. In terms of advantages, RBIA is efficient because it determines and directs IA work in the high-risk areas, where resources can be justified and IA can reduce the risk of negligence (Griffiths, 2006). This is due to the IA plan being driven by the most significant risks and percentage of risks on which the audit committee requires assurance, and this validates the resources required. According to Griffiths (2006), RBIA can accelerate the audit work, help to allocate specialists to specific areas of the audit, and rank recommendations based on significant risk and objectives. These exercises can provide the greatest added value in terms of the risks mitigated and creates recommendations that contribute to the achievement of organizational objectives. RBIA can also improve IA efficiency by underlining excess risk avoidance activity that is caused by over-controlled strategies. Regarding disadvantages, however, if RBIA is not properly implemented, there can be impairment to IA independence and objectivity. If an organization implementing RM practice is only just reaching the risk aware or risk naïve level, it could lead the IA function to carry out its own risk analysis, which encourages management to continue believing that the IA function owns the risks and is responsible for RM (Griffiths, 2006). If the IA function is too defensive and is prone to being risk averse, this may lead to the function spending more time on the audit and raising costs. If this happens, organizations could lose business opportunities and it would not make economic sense. RBIA might cause some audits (small overseas subsidiaries, "petty cash" and the Staff Social Club) previously considered important by senior management to disappear (Griffiths, 2006). According to the Office of the Registrar of Indigenous Corporations (ORIC) 2010, the RBIA approach that concentrates on identifying high-risk areas sometimes put auditors into difficulties in deciding what evidence is required and in how much detail. Performing RBIA is time-

consuming and demands hard work from the IA function. This is particularly the case where the IA function has initially to sell the RBIA process to the organization. Then the IA function must get all risk owners in the organization to specify their risks, score them and then complete difficult audits some of which the IA functions has never done before (Griffiths, 2006).

In principle, RBIA is a very simple approach. However, it is quite complex when it comes to the delivery and the ongoing need of IA capabilities and resources to effectively implement it.

2.4 CONCLUSION

This chapter has covered the underlying context and the historical development and evolution of the IA role and profession, with particular reference to changes in the business environment and the IA framework. The chapter has shown the development and changes in the IA role and that the IPPF and definition of IA has altered to address the changes in the business environment and societal needs.

.This chapter should enable readers to gain an understanding of IA development over a long period of time; and provides evidence of how IA as a discipline has transformed its role to meet changing needs and expectations. Changes in the IA role is needed as today's IA profession sees itself as an adviser and a strategic business partner aiming to help the organization's management to tackle business risks and challenges, and eventually help them to achieve their strategic objectives (Pickett, 2003).

The level of practice and development of IA functions vary among organizations, which perhaps indicates the different quality and effectiveness of IA functions. Consequently, it also gives an implication to the ability of IA functions in meeting and satisfying its organizations and society. The development of the fundamental purpose, nature and scope of IA shows that the role of IA functions are continuously changing as they are significantly affected by contextual factors, such as the outstanding historical events (e.g., accounting scandals, financial crises, and the collapse of large corporations), the changing of regulations and standards, and technological developments (e.g., the advancement of IT, social media and Generalized Audit Software). In the end, it can be concluded that every major business event and change that have occurred in these contextual factors are likely to trigger a change in the IA profession, function and role.

IA can be seen to be changing and evolving over time in an attempt to remain relevant and to be accepted by business entities and society.

The following chapter explores the previous literature on IA related studies. In particular, the chapter focuses on the new definition of IA, changes of the IA role, and the characteristics of effective and quality IA.

Chapter 3

LITERATURE REVIEW

3.1 INTRODUCTION

This chapter comprises the review of related literatures that link to the research scope and objectives. The main purpose of this chapter is to present the literature on internal auditing and its expanding role. The chapter considers the existing academic discourse on the IA area and the development of IA in improving the effectiveness and quality of the IA function and practices. It also tries to understand the way ingenuity is applied by the IA profession and practitioners in facing the dynamic and uncertain business environment.

First, the chapter presents the global financial crisis, corporate governance mechanism, RM, and IA role in corporate governance. Next, the chapter reviews prior studies on the IA effectiveness and quality. This is followed by a review of the concept of organizational ingenuity, constraints, and innovation in the IA context. Finally, the chapter explores previous research concerning the changing of the IA definition and contemporary role and services of IA.

3.2 AN OVERVIEW OF INTERNAL AUDITING AND ITS ROLE IN CORPORATE GOVERNANCE

There are a plethora of definitions and meanings of the term “corporate governance”, ranging from a representation of the effectiveness and quality of organizations’ internal management to the authorization, direction, control, and oversight processes. Generally, in the Anglo-Saxon model of corporate governance, governance is defined as a process managed by the board of directors to inform, direct, authorize, manage, and oversee the management team and the activities of the organization in achieving its business objectives (IIA, 2004 & OECD, 1999).

In general, corporate governance is viewed as both the structure and the relationships among various participants (for instance, a corporation’s management, its board, its

shareholders, regulators, auditors, and other stakeholders), which determine the corporate direction and monitor corporate performance (Monks & Minow, 1995). Governance structure consists of the accountability, responsibility, and liability systems, which are of concern to stakeholders. These systems involve the application of external and internal control, and also the internal strategic direction and governance oversight mechanism. Good governance structure requires the effectiveness of the risk management (RM) function, internal control system, and audit function (internal and external), which are intended to achieve organizational objectives.

Figure 3.1 below shows how the board of directors serves as a "governance umbrella" that provides management with direction, authority to take actions, and "governance oversight" for the company's stakeholders to oversee the overall results of operations for the entire organization. Senior executives and line managers are responsible to ensure good governance practice through RM, of which IA might be seen as one element in its provision of assurance, as shown in Figure 3.2. In addition, internal and external auditors provide management and the board with assurances regarding the effectiveness of governance activities (Reding et al., 2009).

Source: Reding at al., 2009

Figure 3.1: Overview of Governance

Figure 3.2: Key Components of Governance Oversight

Figure 3.2 depicts four components of corporate governance, which are comprised of the corporation stakeholders, the board of directors as the governance "umbrella", RM, and assurance. The arrows within and between the four components signify the numerous channels of RM and corporate governance communications (Sobel &

Reding, 2004). Specifically, the board is responsible for “strategic direction” and guidance covering how an organization is managed toward achieving the organization’s key business objectives, consistent with stakeholders’ interests (Reding et al., 2009).

According to Chambers (2003), the principle of effective and good governance in the internal control context is comprised of a balanced and effective board of directors and its committees, reliability of corporate reporting and disclosure, and effectiveness of the oversight and monitoring mechanism. Chambers (2003) emphasizes governance oversight and the need for an effective RM, control, and assurance (internal and external audit) components, which are based on the principles of independence, responsibility, accountability, fairness, transparency, and social responsibility. Therefore, good governance is not just about achieving an organization’s desired results and profitability, but also achieving them in an effective, efficient, ethical, and right way.

In this context, the board and decision-makers must be accountable to and coherent with the needs and interests of key stakeholders (Institute of Governance, 2002). According to the World Bank (1999), one of the important characteristics of effective corporate governance is the capability of an organization’s directors to *“independently approve the organization’s strategy, key business plans and decisions, and of independently appointing management, replacing management when necessary, and monitoring management’s performance and integrity*” (www.worldbank.org, January 1999).

The recurrence of business scandals over time and the more recent global financial crisis (GFC) from 2007 to 2012 have caused significant concerns about the business environment, significant impacts on global equity markets, global economic recession, and the collapse of a number of large corporations (Bota-Avram et al., 2009; Argandona, 2011; Acharya et al., 2011). This has resulted in organizations’ RM and internal control practices becoming central to the public policy debates on corporate governance (Saren, 2007).

According to Cattrysse (2005), the GFC also led to damage to investors’ value, erosion of stakeholders’ confidence, a credibility crisis for corporate governance, and doubt about the soundness and effectiveness of current governance mechanisms. Key

elements of the corporate governance mechanism include: boards of directors, senior management, the rating agencies, oversight bodies, risk officers, and the external and internal auditors (IA) (Cattrysse, 2005). There are major questions and issues around all these elements in terms of accountability, performance, quality, efficiency, and effectiveness. One such question is: What were these elements doing to protect organizations and stakeholders' values during the GFC? According to economic experts, the crisis was not a natural disaster.

The economic experts claim it was due to the failure of regulators and credit rating agencies; and that it was also the result of ineffective RM processes, IA functions, and the market itself. In the view of some, these key governance players failed to address conflicts of interests and catastrophe risks, as well as failed to ensure effective corporate governance practices (Senate Financial Crisis Report, 2011). Therefore, recent reforms in regulatory and code of corporate governance (such as in the USA. and UK) have imposed and emphasized the critical role that should be played by boards of directors, audit committees and executive management to maintain sound RM and internal control systems(The UK Combined Code, 2012).

Generally, under the new UK corporate governance code, the boards and executive management are responsible for ensuring their organizations are in control by demonstrating publicly how they establish formal and transparent arrangements for applying effective and mature RM[5] and internal control principles. This includes determining the level of risk that organizations willing to take in achieving their strategic objectives and maintaining an appropriate relationship with organizations' auditors (The UK Combined Code, 2012, p.18). The code also requires audit committees to monitor and review the effectiveness of the organizations' IA function and external audit (The UK Combined Code, 2012, p.19).

These growing monitoring responsibilities have resulted in the IA function playing a crucial role in strengthening effective governance, RM and control processes. Executive management and managers are responsible for designing, operating and monitoring RM and internal control systems in accordance with the policies adopted by the board. In contrast, the IIA definition and standards require the IA function to

[5] The Code blends risk management and internal audit into the term "risk management", acknowledging the IA's role in providing assurance.

provide assurance and consultation services to help the board, management, and RM function, by evaluating and contributing to the improvement of the effectiveness of governance, RM, and control processes. This reflects how the IA profession and top management recognize the assurance and consulting role of the IA function in corporate governance.

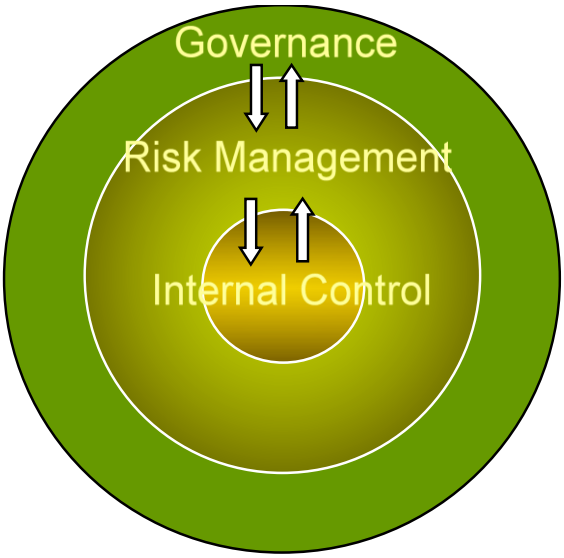

Figure 3.3: Depiction of Key Governance Elements

According to Reding et al. (2009), governance surrounds all activities in organizations (refer to Figure 3.3). RM is a key element and an integral part of the governance framework, and is executed by the management of organizations as their day-to-day governance role through risk management activity (Reding et al., 2009). Recent corporate governance reforms have driven RM beyond day-to-day activity, and RM is considered as part of the strategic planning process adopted by organizations in order to achieve their objectives (Selim and McNamee 1999; CIMA, 2002). Generally, the public and private sector have perceived RM as integral to business strategy and value creation to drive sustainable change throughout whole organizations (Power, 2004).

Today, organizations have to demonstrate that they are operating sustainably, especially during uncertain times. To achieve this, professional bodies, such as COSO, CIMA and IRM, have been promoting effective RM as the best answer and best tool needed by organizations. In general, RM can be defined as the process conducted by management to understand and deal with uncertainties (that is, risks and opportunities) that could affect the organizations' ability to achieve their objectives. The risk process includes how organizations set risk appetites, specifically the way in

which risks are identified, evaluated, controlled, communicated, and managed (ERM COSO, 2004). On the other hand, internal control is a process conducted by management as a strategy to mitigate risks to acceptable levels that are aligned with organizations' risk appetites. Overall, RM is a subset of the governance process and internal control is a subset and integral part of RM in executing organizations' risk treatment[6].

3.2.1 The IA Role in Corporate Governance

IA continues to evolve as a result of changes in business models and conditions placed on it by policymakers as business strategies move towards corporate sustainability and excellence. Sawan and Alzeban (2013) claim that the IA function is linked with the governance process; its role within organizations requires IA to be able to react to relevant regulatory requirements. According to a position paper on corporate governance reform issued by the IIA-UK and Ireland (2002), the IA function has an important role to play in evaluating and helping management improve the governance process (IPPF, 2015; Anderson et al., 2012; Protiviti, 2011; Prawitt et al., 2009; D'Silva & Ridley, 2007; Hermanson & Rittenberg, 2003).

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In comparison to RM's role to oversee, coordinate, and advise management in managing enterprise-wide risk exposures by serving as a fundamental element of corporate governance (Reding et al., 2009), IA plays an essential role as an assurance and consulting service provider in helping management to evaluate and improve the effectiveness of governance, RM and control processes. Management is the owner of the RM process and is responsible for establishing and operating the RM framework on behalf of the board (who provide strategic direction and oversight for the RM process). In exercising its IA role in RM (between assurance and consulting), the IA's core role is to provide assurance to management and the board on the effectiveness of RM. Other than its assurance role, IA provides consulting services to help organizations establish a sound RM practice. As a business partner to management, and playing a crucial part in helping organizations accomplish their objectives (IIA, 2015), it is a challenge for IA to exercise both assurance and consulting roles and to

[6] Risk treatment is a plan to identify options for treating strategies or controlling risk associated with achieving organizations' objectives, either reducing negative consequences or the likelihood of adverse occurrences, or enhancing positive or upside outcomes (AS/NZS 4360). The plans normally focuses on significant risks due to scarcity of resources, and it is impracticable, ineffective and inefficient (not cost-effective) to treat all risks.

maintain its independence. In addition, IA needs to be proactive and balanced in both assurance and consulting activities in order to be effective. Even though IA can facilitate or enable RM processes (consulting work), they should not "own" or be responsible for the management of the risks identified.

Prawitt et al. (2006) discover that organizations that invest more in the development and strengthening of their IA function are linked with decreased earnings management and fraud. Previous studies in this area by Gramling et al. (2004) and Cohen et al. (2004) explore the role that the IA function plays in ensuring sound governance practice. Their studies reveal the extent to which the IA function plays a crucial role in improving the effectiveness of governance processes, through effective interaction and relationships with the other governance key stakeholders, including audit committees, managements, external auditors and boards of directors (Gramling et al., 2004; Cohen et al., 2004).

The IA function has not improved and matured to the same degree in all organizations. According to Sarens and DeBeedle (2006), senior management has a huge influence in determining the scope of the IA function. In view of this, this study extends previous studies by examining the role of ingenuity in influencing IA effectiveness and contributing to improving the effectiveness of governance processes.

3.3 THE EFFECTIVENESS AND QUALITY OF INTERNAL AUDITING

Recent high-profile corporate and financial failures, malpractices, and scandals have caused a loss in stakeholders' confidence and have resulted in damage to organizations' reputation and trust. According to Power (1994), the practice of conscious checking becomes a more explicit action, especially in situations of uncertainty, crisis, distrust, conflict, doubt and danger. Therefore, the decline in trust and confidence has triggered an "audit explosion" which has mandated the need for additional safeguards, assurance and expansion of the "audit society" (Power, 1994).

As such, audits have significantly helped the wider community to enhance their social and economic prosperity, helping the "audit society" achieve its potential, and preserve trust and confidence among the wider community, investing public and business stakeholders in the market (ICAEW, 2005). Over the last two decades, increasing policy disputes around the world on an array of issues affecting business entities,

government entities, investment communities and the audit profession, collectively highlight the significance of auditing for investor confidence and well-functioning capital markets (Ernst & Young, 2011).

These confidence and trust issues have resulted in continuous global demand for improvements in IA effectiveness and quality, involving both internal and external audit functions. As a result of regulatory and social pressure, audit service providers must find ways to improve the effectiveness and quality of their audit methodologies and processes in order to meet the expectations of various stakeholders, including audit regulators (Ernst & Young, 2011).

However, continuous corporate scandals and the GFC, as discussed above, have raised a red flag that indicates the failure of governance, RM and control processes. As one of the main pillars in the corporate governance mechanism (Reding et al., 2009), these scandals have raised demands for improving the quality and effectiveness of IA in ensuring the efficacy of governance, RM and control processes in organizations.

The meaning of IA effectiveness has been discussed and broadly defined in the literature (for example, Badara & Saidin, 2013; the IIA, 2010; Mihret et al., 2010; Arena and Azzone, 2009; Ahmad et al., 2009; Dittenhofer, 2001). By analysing the IA literature, IA effectiveness can be concluded to be the degree or ability of the IA function to achieve established objectives and goals (including quality criteria) set out by its organization. This means the degree of IA effectiveness will vary according to each IA function (or individual internal auditor), depending on its (his/her) ability to achieve or fulfil the clients' desired objectives. Since the issuance of the IA new definition in 1999, numerous researchers (e.g., Jantipa et al., 2015; Badara & Saidin, 2014, 2013; Feizizadeh, 2012; Mohamad & Muhamad Sori, 2011; Dominic & Nonna, 2011; Intakhan & Ussahawanitchakit, 2010; Cohen & Sayag; 2010; Mihret & Yismaw, 2010; Arena and Azzone, 2009; Gramling & Hermanson, 2009; Sarens, 2009; Cassandra et al., 2008; Ridley & D'Silva, 2008; Felix et al., 2005; Van Gansberghe, 2005; Al-Twaijry et al., 2003; Dittenhofer, 2001; Bou-Raad, 2000) have studied, discussed, suggested and focused their debate on the determinants of IA effectiveness (including quality) and its effect on performance and the achievement of organizations objectives. In their studies, Badara & Saidin, (2013), Feizizadeh, (2012), Mihret et al., (2010), Cassandra et al. (2008), Dittenhofer (2001), and Bou-Raad (2000)

find that the ability of the IA function to meet key stakeholders' expectations and its contribution in helping organizations to accomplish their objectives are important evidence for IA effectiveness. For instance, Feizizadeh (2012) discover that many companies measure and quantify IA effectiveness through the strengthening and performance of their business activities. However, possessing "good" characteristics does not guarantee the achievement of IA effectiveness and quality. As IA effectiveness is subjective, a clear definition of its constituents are may help IA functions and internal auditors to set measurement criteria as key performance indicators. The process of achieving IA effectiveness is a continuous journey that may change over time.

Prior studies that investigate the characteristics of IA effectiveness have developed various approaches of measuring IA effectiveness. Generally, IA effectiveness is represented by two aspects: (i) IA function (department or unit), and (ii) individual internal auditors working in the IA function. Skills, talent, qualifications, competency and independence are examples of individual internal auditor characteristics. On the other hand, the degree of top management support; IA's ability to meet stakeholders' expectations; independence and objectivity; IA's capability; organizational culture; IA's performance, output and outcomes; IA tools and techniques; and a clear understanding of IA's role, structure and authority are examples of IA function characteristics that have a significant effect or influence on IA effectiveness. For example, studies by Lenz & Hahn (2015), Hailemariam (2014), Mohamad & Muhamad Sori (2011), Cohen & Sayaq (2010), Arena & Azzone, (2010), Sarens (2009), and Turley & Zaman (2007) explore the determinants of IA effectiveness. The results of their studies find that characteristics such as management support, management perception and valuing of IA work, IA's capability, competence and talented internal auditors, adequacy of IA staff and the presence of an approved IA charter have a direct impact on IA effectiveness. In addition, these studies also demonstrate that management support (especially support from the board and senior executives) is crucial to the success of IA activities. This is because top management influence can significantly affect other determinants of IA effectiveness, including the ability of the IA function to recruit talented internal auditors, develop IA careers and IA independence. Both Ahmad et al., (2009) and Dittenhofer (2001) claim that inadequate management support, unclear organizational objectives, and poor management controls can be key reasons for the ineffectiveness of IA. On the other hand, Dittenhofer (2001) suggests that IA must strive to maintain its quality to ensure the appropriateness of its

organizations' procedures and operations. By improving the quality, this can help IA to contribute to the effectiveness of management teams across entire organizations.

Besides considering management support and proficiency issues, there is an increasing discussion by a group of researchers who are extending the study of IA effectiveness and quality by looking at IA processes, outputs and outcomes characteristics. According to Arena and Azzone (2009), different research papers and writers link IA effectiveness to different issues by looking at IA processes, outputs or outcomes. For example, in studying the ability of IA to respond to its management and organizations' needs, Frigo (2002) and Ziegenfuss (2000) explore the relationship between IA effectiveness and the output of IA activities (management and other key stakeholders' satisfaction and the percentage of recommendations implemented by management). Likewise, Van Gansberghe (2005) views the management as a receiver of the service from IA function, where management's support and its commitment to implement IA recommendations are essential to IA effectiveness. However, the recommendations by the IA function could be meaningless and irrelevant if organizations are not committed to implement them. In this respect, Beckmerhagen et al. (2004) and Al-Twaijry et al. (2003) argue that the measurement of IA effectiveness should not be solely based on the achievement of the audit objectives or output, but must take into account the crucial factors that determine the quality, the scope of work, and the standard or criteria that govern audit planning, execution and communication.

In addition to studies on IA effectiveness, it can also be observed in the literature a trend of study in IA that focuses on IA quality. For example, studies by Kasim et al. (2012), Dieter De and Anne-Laure (2011), Prawitt et al. (2009), IIA (2007), IIAM (2007), Abbott et al. (2007), Sciarra, (2006), Gramling et al. (2004), Abdulrahman et al. (2004), Felix Jr et al. (2001), Lampe & Sutton, (1994), and Schneider (1985) concentrate on measuring quantitative and/or qualitative characteristics of IA quality. As a result, various frameworks and approaches have been developed to measure IA quality. According to Sarens (2009), IA quality consists of two components: (1) the characteristics of IA as a whole, and (2) the characteristics of the individual internal auditor. In addition, he also claims that IA quality is influenced by the quality of the RM and control processes, which are also much dependent on the governance culture that exists in the organization.

The quality of the IA service is somewhat dependent on the structure and organization of the activity being performed. IA quality is also driven by the leaders of the organization, as they are responsible for setting the “tone at the top” to deal with stakeholders’ expectations as well as professional responsibilities inherent in conforming to the standards (IPPF, 2012). IPPF (2012, p. 2) defines audit quality as “the degree to which existing products and services are fit for purpose and conform with standards, the efficiency of the service delivery process, and an assessment of the degree to which current practices will meet emerging stakeholder expectations”. IA function quality is a result of the combination of the right people, the right systems, and a commitment to excellence that incorporates retrospective and forward-looking elements (IPPF, 2012).

Carcello et al. (2005) and Gramling et al. (2004) suggest that the quality of the IA function depends on the IA’s effectiveness to provide a monitoring function to assess and improve the effectiveness of RM and control processes. Therefore, IA quality could significantly enhance various stakeholders’ confidence as well as the organizations’ potential for success. By ensuring that best practices are implemented, through having and using proper capacity, tools and techniques, organizations will be well on the way towards the remarkable outcomes achieved from having a high quality IA function. In recent years, researchers and practitioners have extensively argued about how and when the IA function acts as a key component of governance oversight, adding more value to their organizations’ operations and helping organizations achieve their objectives. This new standpoint has seized growing attention on issues such as quality measurement, performance review, efficiency and the effectiveness of the IA function (Sarens, 2009; Dittenhofer, 2001; Bou-Raad, 2000; IIA, 1999).

Research by Kasim et al. (2012) aims to extend the IA literature, by not just concentrating on the topic of IA quality but also focusing on the method. Consequently, in their study, Kasim et al. (2012) endeavour to construct a valid and reliable instrument to quantitatively measure the quality of the IA function through the level of conformance with the IPPF (particularly, the IIA Standard). This study finds that the internal auditors’ level of conformance with the IPPF clearly serves as a measurement for internal auditors’ competency (Kasim et al., 2012). As the standards apply to all IA practitioners and IA functions, Burnaby and Hass (2011) argue that conformance with the IIA’s standards is likely to increase IA quality and effectiveness, as well as help to create an environment where adequate and effective governance, RM, and control

processes can be put in place. Fadzil et al. (2005) and Spraakman (1997) conduct studies on the quality and effectiveness of IA practice concerning the degree of compliance with IIA standards, the quality of internal control, and the quality of IA procedures; for example, the ability of the IA function and its members to continuously adhere to IA procedures in executing the complete cycle of an IA plan, fieldwork and communication. However, there are shortcomings in these studies, as the researchers only test the premise that an IA activity is effective if IA procedures are carried out properly and comply with IIA standards, without taking into consideration the expectations and needs of key stakeholders in each IA assignment (Lampe & Sutton, 1994). In determining the quality and effectiveness of IA, appropriate consideration should be given to what matters most to satisfy key stakeholders' needs and situational specific issues t are crucial for improving the organizations' excellence. The quality of an IA function cannot be measured solely by how it follows best practices; how it adds value and fulfils its role in creating stakeholder satisfaction must also be taken into account.

Overall, the majority of prior studies on this topic incorporate the IIA standards in their measurement criteria and focus more on performing various statistical tests. There has been little attempt to investigate the impact of the IA quality on the management and organizations' satisfaction and performance. Thus, this study fills this gap and extends the coverage of prior research by looking at the association between IA quality and ingenuity practices.

Generally, prior research on the quality and effectiveness of IA concentrates on issues associated with compliance, staff competency and talent, internal control, corporate governance, management support, audit committees, IA processes, and output and outcome characteristics. However, no prior research links the quality and effectiveness of IA to ingenuity practices. Therefore, this study intends to extend and contribute to the IA literature by incorporating and explaining the role of ingenuity and the usefulness of the ingenuity concept in influencing the quality and effectiveness of IA in dealing with constraints through a real field case study carried out at a societal and organizational level.

3.4 INGENUITY, CONSTRAINTS AND IA INNOVATION

Studies on ingenuity have been carried out across diverse disciplines and settings, but only recently has a focus been placed on “organizational ingenuity”. Lampel et al. (2014) explain that organizational ingenuity consists of the capacity of organizations to resolve constraints and challenging problems creatively, but it also emerges when innovators strive for mitigating and tackling the challenges of problem-solving in a specific organizational context. According to Lampet et al. (2014), constraints can lead to organizational ingenuity. Studies on organizational ingenuity by Kannan-Narasimhan (2014) and Walker et al. (2014) concentrate on the types of ingenuity exercised by innovators to overcome the constraints they faced (for details, refer to Chapter 4, p. 96-97). For example, Walker et al. (2014) identify four types of ingenious solutions: challenging multi-stakeholder collaborations, escaping new product and market development, complying with new product partnerships, and escaping new product partnerships. These solutions were applied to deal with constraints faced by an organization in the solar industry.

On the other hand, studies by Dolmans et al. (2014), Rosso (2014) and Lombardo and Kvålshaugen (2014) emphasize the role of constraints in inspiring and driving innovators to become ingenious. Even though creativity theorists see constraints as the enemy of creativity, these researchers found that constraints can enhance ingenuity, heightening problem-solving abilities and the creativity of innovators. Likewise, Lampel et al. (2014), in their research paper, highlight: the nature of ingenious solutions; the structural, resource and temporal constraints that face problem-solvers; creative problem-solving under constraints; and the “induced” and “autonomous” problem-solving role as an ingenious act in confronting “product”[7] and “process”[8] constraints that stand in the way of creative problem-solving in a given organizational context.

[7] “Product constraints” define the features and functionalities that are necessary for a successful solution (Lampel et al., 2014).

[8] “Process constraints” stand in the way of creative problem-solving in a given organizational context (Lampel et al., 2014).

In the context of IA, the study of ingenuity can be found by looking at IA research that explores innovation[9] (i.e., Sumritsakun & Ussahawanitchakit, 2009) or the cutting-edge[10] (i.e., Ridley, 2008) concept. Although, both innovation and the cutting-edge concept may interchangeably represent ingenuity, generally they are not quite comprehensive in terms of application, definition and coverage compared to ingenuity. In their study, Sumritsakun and Ussahawanitchakit (2009) refer to IA innovation as new or developed IA strategies and techniques that internal auditors use to increase efficiency and effectiveness in their activities. For example, Sumritsakun and Ussahawanitchakit (2009) examine the relationship between IA innovation and organizations' stability via financial report reliability. Their study uses organization process improvement and RM effectiveness as mediators. In addition, Sumritsakun and Ussahawanitchakit (2009) test moderator effect of change awareness and test antecedence of IA innovation that consists of employee competency for operation, pro-activeness strategy and competitive learning. Interestingly, their study finds that employee competency for operation and competitive learning has an influence on IA innovation. Additionally, there is a positive effect of organization process improvement and RM towards forganizations' stability. However, the study by Sumritsakun and Ussahawanitchakit (2009) only focuses on the innovation of IA activities on financial report reliability, adopting a quantitative approach, which can be extended to incorporate the entirety of business activities. This study will be more meaningful by adopting a qualitative approach, so that it takes into account underlying causes and information on contextual factors to help interpret the results.

In view of the literature on ingenuity (specifically by Lampel et al.'s (2014) special issue on organizational ingenuity) and the study of innovation in the IA context, this study gives attention to combining an ingenuity and constraints concept to investigate organizational ingenuity in the IA context. Indeed, ingenuity in a service sector such as the IA professional practice that offers a supporting service to organizations and their stakeholders are frequently taken for granted; the continuous ingenuity that occurs in its activities are rarely noticed. According to Lampel et al. (2014), this is due

[9] Innovation can be categorized into two types: incremental and breakthrough. Incremental innovations are changes and improvements to old things; whereas, breakthrough innovations are something that is novel and unique (Garcia and Calantone, 2002).

[10] "Cutting edge" is a phrase frequently used to promote the idea of innovation and motivate customer interest. It has many synonyms: progressive, advanced, leading edge, best practice, forward-looking, radical, even revolutionary, and: rarely evolutionary (Ridley, 2008).

to the media, which tends to lavish attention on the ingenuity of high-tech pioneers, but marginalizes the ingenuity found in more traditional fields. This research firmly intends to explore the ingenuity concept as championed by Lampel et al. (2014, p. 479), which stated ingenuity as “not merely a term used to describe a highly creative solution to a problem, but a proper subject of research that is important to our understanding of how organizations make small improvements, that are nevertheless crucial, or achieve breakthroughs that can change entire industries”. The details of the ingenuity theory applied in the study is discussed further in Chapter 4.

3.5 REVIEW OF INTERNAL AUDITING RESEARCH ON THE NEW IA DEFINITION, ROLE AND STATUS

In order to concentrate on issues of current relevance, the majority of the discussion of prior studies in this section (and throughout this chapter) are restricted to those research papers that have been written since the revised definition of IA in 1999.The transformation of the IA role in response to the changes in global business practices is crucial for IA survival. In response to this, a new IA definition was issued in 1999 to replace the previous definition (1947). Both definitions emphasize that the IA function has to be independent from the activities they audit; however, the definitions vary significantly in terms of role, scope, nature and other features. The 1947 version of the definition states a clearly traditional role for IA in providing assurance-related and finance-and-accounting-related services. The new definition (1999) gives a more contemporary and broadened role, scope and nature and value-added activities of IA including promoting its new image.

A recent study by Sarens et al. (2012) discusses the concept of combined assurance. On the other hand, studies by Bou-Raad (2000) and Krogstad et al. (1999) show how the new definition of IA has moved from a traditional approach to become a more broad-spectrum and value-added approach, through providing assurance and consulting services to evaluate and improve the effectiveness of governance, RM and control processes. Examples of assurance services include reviewing or auditing of financial, operational, compliance, information technology, communication system, human resource, security, and processes (such as governance, RM, and control); whilst examples of consulting services include provision of professional advisory, counsel and partnership services pertaining to operational, managerial and strategic matters or providing training programmes (Reding et al., 2007).

The release of the new IA definition in 1999, which broadened the scope and nature of the IA role, triggered interest in IA research (Brody & Lowe, 2000). Over the last decade, many researchers in partnership with the IIA or IIARF have conducted studies that focus on IA (specifically studies that link with the expanded roles and new definition of IA). These studies address various issues in the research debate, including: IA independence and objectivity (Mutchler, 2003; Stewart & Subramaniam, 2010), outsourcing and co-sourcing IA activities (Caplan & Kirschenheiter, 2000; Selim & Yiannakas, 2000; James, 2003; Ahlawat & Lowe, 2004; Gramling & Vandervelde, 2006), IA capability (Quinn & Strategy, 2013), information technology (Kim et al., 2009; Ramamoorti & Weidenmier, 2004), IA as a management training ground (Goodwin & Yeo, 2001; Sarens & De Beelde, 2006; Christopher et al., 2009) and organizational status (Leung, et al., 2004; Sarens & De Beelde, 2006). The researchers' partnership with the IIA and IIARF in IA research has caused questions pertaining to researcher bias; nevertheless, these studies significantly contribute to the body of knowledge in IA.

Among the early research carried out right after the issuance of the new IA definition in 1999 is a study by Brody and Lowe (2000). They debate the independence issue as an effect of the broadening scope and role of IA. This is followed by studies by Chapman and Anderson (2002) and Nagy and Cenker (2002), which investigate the implication of the new IA definition for IA practices. Nagy and Cenker (2002) raise the question of whether the activities of internal auditors have really changed and been reflected in their charter and whether day-to-day activities are consistent with the new definition. This question opened a huge opportunity for research in IA. For example, Chapman & Anderson (2002) reveal the emergence of IA's new image in six imperative ways that are derived from IA's new definition. In addition, Chapman and Anderson (2002) explain that the IA new definition recognizes the IA function as an objective activity, which means it allows the IA function to be established as: fully in-house, co-sourced or outsourced (refer to Chapter 2, p. 37). In explaining the impact of the new IA definition, Parkinson (1999) describes IA as a dynamic and evolving profession that foresees change in the IA environment and adapts to the changes in organizational operations, structures, processes and technology.

The new definition also initiated a large research project in IA organized by the IIA Research Foundation (IIARF) in conjunction with academic researchers. This project focuses on the broader context of the IA role, scope and practices, as well as the

development of conceptual models for an effective IA function. In 2003, the IIARF issued a series of research reports in a monograph entitled *Research Opportunities in Internal Auditing (ROIA),* consisting of nine chapters of different IA topics (IIARF, 2003). This monograph was edited by Bailey et al. (2003), with the aim of achieving two main objectives: firstly, to encourage and boost academic research on topics of relevance to IA; secondly, to build a connection and close the gap between academics and practitioners. In an effort to inspire more academic research and bridge the gap between academic scholars and practitioners, the IIARF has played an important role through funding and developing a research networking scheme for both academics and practicing professionals to collaborate their research activities on important issues to the stakeholders and society. As such, in a few years' time the IA literature will be enriched by a mix of theory and practice, intended to familiarize academic researchers with IA practice. By forging cooperation and complementing each other, now academic scholars and practitioners can contribute to heighten IA literature and help to develop sound IA practice in the contemporary business environment.

The nine research chapters in the ROIA monograph concentrate on investigating and blending research issues across the new role, purpose, scope, mandate, image, status and nature of IA, as expressed by the new IA definition. One of the chapters is a study by Ramamoorti (2003) entitled "*IA History, Evolution and Prospects*". This study rigorously examines and evaluates the evolution of IA over time since its origins to the date of the IA new definition becoming effective in the year 2000. In demonstrating the development of IA, Ramamoorti (2003) critically discusses the prospects and expectations of the IA profession, including summarizing research issues that are derived from the new IA role and scope as defined in the new definition. In an attempt to stimulate more theoretical and applied research activities in IA, there is a discussion section at the end of each chapter of the ROIA that raises a series of research questions and issues related to a specific topic in IA, with the hope that these lead and give ideas to readers or researchers to think about the potential of future research (Bailey et al., 2003).

After about a half decade of the new definition coming into effect, a number of studies were carried out to investigate the magnitude of the changes and impact resulting from the implementation of this new definition. For example, in 2006, the IIA through its global Common Body of Knowledge (CBOK) and key researchers in the IA discipline conduct a series of studies to review the recent IA literature in the European, Americas

and Asia Pacific regions. The aim of these studies is to contribute to the IA literature by documenting how the IA function is changing in response to the revolutions in global business practices and to better understand the expanding scope of the IA practice worldwide (Hass, et al., 2006; Allegrini, et al., 2006; Cooper et al., 2006).

Inspired by the new IA definition, in their research paper titled "Internal Audit Independence and Objectivity: Emerging Research Opportunities", Stewart and Subramaniam (2010) carry out a comprehensive review of the recent literature on IA independence and objectivity. Their study offers rigorous discussion and proposed opportunities for future research related to IA objectivity and independence issues by examining the nature, scope and extended role of IA, as described by the new IA definition. The scope of their study covers various IA matters such as the organizational status, the IA role as assurance provider and consulting service provider, the IA role in RM, the sourcing arrangement of IA activities and the use of the IA function as a training ground for managers.

As discussed above, from the numerous studies (e.g., Stewart & Subramaniam, 2010; CBOK, 2006; ROIA, 2003; Chapman & Anderson, 2002; Nagy & Cenker, 2002; Parkinson, 1999) that investigate the influence of the new IA definition on actual IA day-to-day practice in organizations, it is possible to gain a clear picture of the changes and evolution of the IA function from 1999 onwards. Changes addressed through the new definition reveal an important step in keeping IA relevant in an uncertain and complex global business environment, in which rapid changes in regulation and technology occur. With newly expanded roles (such as consultancy roles, governance roles, RM roles and value-added roles), internal auditors need to prepare themselves with the appropriate knowledge, skills and creativity to match the new activities that emerge from the new regulations' requirements and key stakeholders' needs and expectations.

3.5.1 IA Competency and Professionalism

Continuous training, development, competency, professionalism, talent and experience of IA are regarded as important attributes of effective IA (Cohen & Sayaq, 2010; Arena & Azzone, 2010; Sarens, 2009; Turley & Zaman, 2007). The characteristic of IA experience encompasses the distinctive and diverse forms of knowledge, practical and technical know-how and skills that internal auditors acquire while practising IA. Al-Twaijry et al. (2003) in their study found that internal auditors

must possess the necessary knowledge and experience in order to gain power and respect. Similarly, Hass et al. (2006) and Stewart and Subramaniam (2010) claim that the internal auditors should have strong independence in minds and decisions, as well as tendencies for effective leadership, exceptional analytical skills, excellent communication and negotiating skills, and the ability to manage IA assignments efficiently under constraints, pressure and limited resources.

In addition, Intakhan and Ussahawanitchakit (2010) and Wang et al. (2012) suggest internal auditors should exploit their experience for achieving effectiveness. In the case where the IA function quickly and cost effectively requires specialized technical expertise, unique experience or niche talent to build the capacity needed, balance the skills gap (caused by career switching, staff turnover and job hopping) and improve the quality of the IA function, co-sourcing and outsourcing are the best alternatives (Steffee, 2011). On the other hand, Gramling and Meyers (1997) suggest that the education and certification of internal auditors are considered as a signal of IA competence. This view is supported by Mihret and Woldeyohannis (2008) and Flesher and Zanzig (2000). They argue that, in order to become a professional and contemporary assurance and advisory service provider, the IA function must be able to provide services that cover a wide scope of activities. To fulfil this wide scope and broad role, they claim that IA functions now require multi-tasking and multi-skilled internal auditors to enable the function to execute a new mandate beyond traditional IA activities. Nevertheless, the professionalism and proficiency of IA must be accompanied by appropriate status, management support, and independence and objectivity. This study intends to look at the role of training, professionalism, education and proficiency as crucial resources in boosting ingenuity practice as well as in influencing and improving the IA quality and effectiveness.

3.5.2 The IA Role in Consulting Activities

The involvement of IA in consulting activities is addressed by Christopher et al. (2009), Anderson (2003), Chapman (2001), and Bou-Raad (2000). In order for IA to successfully play its advisory or consultancy role, the IA function and practitioners need to transform the IA structure, status, and image so that it has an appropriate authority, status, capacity and to become more pro-active in its approach to be a business partner to management and the boards (Bou-Raad, 2000; Christopher et al., 2009). Chapman (2001), in her study *Raising the Bar,* suggests that extending the IA

role in consulting activities has lifted IA into a more strategic role and raised its image in the organization. In addition, the involvement of IA in consulting activities can be perceived as a proactive role that moves IA into a problem-solving force. This enables the IA function to adopt an advisory role and work closely with the board and management to help them achieve their desired objectives (Chapman, 2001). However, this may cause problems for the IA function, as its involvement in both consulting and assurance roles could expose it to a loss of objectivity and independence (Anderson, 2003). It may also damage the IA function's reputation if the consultancy works fail or does not achieve its objectives (Anderson, 2003). Consequently, the involvement of IA functions and practitioners in both assurance and consulting activities has stimulated researchers to investigate the practice and application of the new definition of AI in providing both assurance and consultancy services as well as in issues concerning IA independence and objectivity.

For example, Selim et al. (2009), Allegrini and Bandettini (2006), Allegrini et al. (2006), Hass et al. (2006), Woodward and Selim (2005), Anderson (2003), Paape et al. (2003), McCall, (2002) and Chapman (2001) explore various issues pertaining to the IA role in consulting activities. In a study that compares the nature, extent and consequences of the new IA definition (specifically on the application of consulting activities) among the IIA members in the UK/Ireland and Italy, Selim et al. (2009) show how there has been a significant growth in the levels and scope of consulting activities since 1999. This study is consistent with Allegrini and Bandettini's (2006) study of Italian companies, which demonstrates a rise from seven to 26 per cent of time allocated to consulting activities. However, according to Allegrini et al. (2006), the consulting activities performed by the IA function in several European countries, on the whole, represents a reasonably small proportion of the IA function's activities. On the other hand, a study by Hass et al. (2006) reveals that the extent of IA involvement in consulting activities is likely to fluctuate through time, influenced by changes in the economic and regulatory environment. No prior studies in IA literature, concerning the IA's role in assurance and consulting activities, address the aspect of ingenuity in keeping the IA's role sustained, advanced and relevant in order to meet stakeholders' expectations over time. This thesis covers the aspect of ingenuity in the IA's role and activities in order to fill the gap in research.

3.5.3 The IA Role in Risk Management (RM)

A series of regulatory changes, financial crises and corporate scandals has driven changes in global corporate governance practices, which have placed more emphasis on the effectiveness of RM processes within organizations. Over the last decade RM has become an important agenda in both public and private sectors (Wood, 2009). RM is the process of identification, assessment and evaluation of risks associated with business objectives and activities and developing strategies to manage, control and respond to mitigate the likelihood and impact of the occurrences of such risk (Vasile, Croitoru & Mitran, 2012).

As one of the main pillars in the corporate governance structure, IA plays a key role in providing both assurance and consulting services with respect to the management of risk within organizations (Sarens & De Beelde, 2006). The change of IA's role and a focus towards RM as defined in IA's new definition is evident from the *Pulse of the Profession Global Report* survey conducted by the IIA (2014). This survey attracted nearly 2,000 respondents from internal auditors worldwide. Interestingly, the results of the survey reveal that the IA focus on RM effectiveness is growing with the percentage increasing to ten per cent in 2014 from seven per cent in 2013. This is because an ineffective RM process can lead to the non-realization of organizational objectives (Sumritsakun & Ussahawanitchakit, 2009).

Therefore, Selim and McNamee (1999) emphasize the importance of IA to increase its role in RM and focus on aligning IA plans with organizational goals and strategies. As different organizations seemingly have different maturity levels of RM processes in place and are exposed to different regulatory requirements and levels of risk, the demand for IA assurance and consulting services varies (Arena et al., 2006). However, the core role of IA in RM is to provide assurance services, by evaluating and improving the effectiveness of the RM process to enable organizations to achieve their desired objectives (Gordon et al., 2009).

The growth of IA's involvement in RM has stimulated many studies concerning the IA's role in RM/ERM, such as Vasile, CroitoruI and Mitran, (2012); De Zwaan et al., (2011); Sobel, (2011); Schneider, Sheikh and Simione, (2011); Coetzee and Fourie, (2009); Fraser and Henry, (2007); Sarens and De Beelde, (2006); and Beasley et al., (2005). For example, De Zwaan et al. (2011) carry out a survey on 117 certified internal

auditors in Australia to examine the impact of IA's involvement in RM/ERM. The study highlights respondents' views pertained to their willingness to report a collapse in risk procedures, and whether a strong and close relationship with the audit committee affects their willingness to report. In addition, the study also examines the use of RM in the IA process and the role of the IA in RM. The results indicate that a strong relationship between the IA function and the audit committee does not seem to affect willingness to report the breakdown in RM procedures.

To be relevant in a challenging and contemporary environment, the IA function needs to adapt and change its services in accordance with the expectation of the clients, boards, senior management, regulators and other stakeholders (Fraser & Henry, 2007; Beasley, et al., 2005). Sarens and De Beelde (2006) state that the IA's role in RM is a contemporary service which continuously monitors and improves RM processes within organizations. Therefore, the effective role of IA in RM has turned out to be an important contribution to help establish sound corporate governance practices. For quick reference, a number of relevant studies in the area of the IA role in RM is provided in Table 3.1.

Table 3.1: Previous Studies on Internal Audit and Risk Management

Year	Authors	Method	Sample	Description of study
2011	de Zwaan, Subramania m & Stewart	Survey	117 Australian Certified Internal Auditors	Examine the impact of IAs' involvement in ERM on perceptions of their willingness to report a breakdown in risk procedures and whether a strong relationship with the AC affects such willingness to report
2011	Mohd Ariff Kasim et al	Survey	299 IA executives and 46 ERM executives of Malaysia G20companies	Examines the extent of IAs' role in implementation of the ERM
2011	Wan Norhayate	Survey	89 publicly listed companies that listed on the main board of Bursa Malaysia	Examines how the quality of IA support influences the relationship between factor influencing levels of ERM adoption.
2010	Norlida Abd Wahab et al	Survey	53 publicly listed companies of the Malaysia service sector	Examines theories and practices of EWRM on IA and RM functions
2009	Castanheira et al	Survey	96 chief internal auditors who were members of the IIA Portuguese	Examines company-specific factors associated with the adoption of RBIA
2007	Fraser & Henry	Interviews	5 UK listed companies and 'big four' audit firms	Examines mechanisms for the identification and management of critical risks and also identifies what the role of IA and the audit committee should be in RM
2007	de Zwaan, Subramania m & Stewart	Survey	117 Australian Certified Internal Auditors	Examines whether the internal auditor involvement in ERM, and the relationship with the AC have an impact on perceived objectivity
2006	Gramling & Myers	Survey	361 global Internal Auditors	Examines the extent to which IAFs adhere to the ERM roles recommended by the IIA
2006	Sarens & De Beelde	Multiple case studies	5 Belgian Companies	Examines the relationship between IA and senior management (expectations and perceptions relating with IA role in governance, RM and control)
2006	Sarens & De Beelde	Interviews	4 US and 6 Belgian Companies	Describe and compare in a qualitative way how IA perceive their role in RM
2006	Beasley et al	Survey	175 members of IIA's Global Audit Information Network (GAIN)	Examines the impact of RM/ERM on IAF
2005	IIA Research Foundation	Survey	Global online survey through 1800 GAIN members	Examines IA involvement in RM/ERM
1999	Selim and McNamee	Multiple case studies	29 public and private organization from various part of the world	Examines therelationship between IA and RM/ERM

From Table 3.1 it can be seen that research in this area can be categorized into two phases. The first is the exploratory or preliminary stage (before 2010), when most of the studies focus on exploring the impact of RM in IA roles and practices, the expectations and perceptions of IA's role in RM, the implementation and type of IA involvement in RM, and the factors that influence the adoption and extent of IA involvement in RM. Only few pieces of research, (i.e. Beasley, et al., 2006) examine the impact of RM/ERM on the IA function. On the other hand, the second stage (from 2010[11] onwards) of research concerning the IA role in RM seems to place greater emphasis on challenging issues, including the testing of theories and investigation of the impact of the IA role in RM to organizational performance, the use of the RBIA approach, and the factors that influence the quality or effectiveness of IA's involvement (or role) in RM. This is in line with Beasley et al., (2006) recommendation to conduct more research to examine the relationship between RM/ERM and IA.

In addition, Wood (2009) notices the need to carry out more research on RM. Sarens (2011) calls to address issues related to IA and RM effectiveness and quality, as well as to apply formally theoretical concepts to empirical observations. With the same intention, this study attempts to extend previous studies through looking at the relationship between IA and RM, particularly by considering the role of ingenuity in improving the effectiveness of IA's role and practices. Furthermore, this study also sees how the IA role in RM and the use of risk methodology (such as risk-based internal auditing) across the entire IA process can enable or motivate the IA profession and practitioners to creatively exercise ingenious solutions to solve constraints faced by them.

3.5.4 The IA Role in Value-Added Activities

The issuance of a new IA definition in 1999 prompted the IA function to place emphasis on helping management to achieve its organization's goals (IIA, 1999). Irrespective of whether providing assurance or consultancy services, the IA function must design activities that can feasibly add value (refer to Chapter 2, p. 36 for a definition of "value-added") to the organization, such as by partnering with top management to effectively manage strategic risks (Abdolmohammadi et al., 2006; Allegrini et al., 2006; Cooper

[11] The financial crisis in 2008 stimulated researchers to focus more on the effectiveness of the IA function, to reflect the increasing stakeholders' interest in the area.

et al., 2006). To do this, the IA function must contribute and help management to accomplish its organization's overall objectives, deliver what best suits its organization's needs in a given specific situation, and steer away from merely traditional/compliance audit activities that focus on finding mistakes and wrong-doings. Over the last two decades, a considerable amount of debate in IA value-added issues has significantly contributed to the development of the literature, conceptual frameworks and data in this area of study.

Key research in this area includes studies carried out by D'Onza et al. (2015), Grant Thornton (2014), IIARF and Protiviti (2014), IIARF (2011), Barac et al. (2009), Bota-Avram (2008), Mihret and Woldeyohannis (2008), Campbell et al. (2006), Sarens and De Beelde (2006), KPMG (2007), and Roth (2003), the IIA UK and Ireland and Deloitte and Touch (2003). For instance, in his study, Roth (2003) investigates how the IA can add value to the organization and management by examining the best practices of the value-added activities practiced by four world-class IA departments, as well as by creating a profile of a value-added IA function. Roth's study makes a remarkable contribution to the literature of IA in this area. Through his books *Adding Value: Seven Roads to Success* and *Best Practices and Value-Added Approaches of Four Innovative Internal Auditing Departments,* Roth (2003) generates a number of general rules that can help the IA function and practitioners to benchmark the best practices and discover how and what IA activities will add the most value to the organization.

Generally, prior studies concentrate on the vague value-added concept. Interestingly, these studies reveal how the roles, practices and activities of the IA function in creating or bringing value to the clients and organizations vary from one organization to another. The literature in this area also indicates that added-value activities are influenced by numerous factors, which depend on organizations' needs and situational contexts (Roth, 2003). However, the literature leaves a gap, as it does not explore the relationship between value-added activities and the organizations' performance (and achievement of goals); it does not apply theoretical perspective; and does not quantify the contribution of IA value-added activities during challenging times across different organizational contexts and/or situations.

Even though there is diversity in the value-added concept and practices, the IIA role through updating the IPPF and developing the value-added framework in the literature plays a crucial role in harmonizing and standardizing the underlying principle of value-

added practices among IA functions and practitioners (Bota-Avram, 2008). In order to contribute to the current IA literature, this study aims to extend the coverage of prior studies in this area by considering value-added activities as a medium for exercising ingenuity strategies to improve the effectiveness and quality of the IA role and practices.

3.5.5 The IA Status in Organizations

According to the standards and other guidance of the IPPF (the IIA, 2015) issued by the IIA, the IA function should be given an appropriate status and assigned sufficient authority in organizations to allow the function and IA practitioners to implement and discharge their roles and responsibilities effectively, independently and objectively. In addition, the IA function should possess appropriate and sufficient knowledge, capabilities and professionalism in order to execute its duties with professional due care. Appropriate status and authority play an essential role in enabling internal auditors, as employees of organizations, to perform assurance and consulting roles with the responsibility of reviewing and evaluating decisions made by management, including improving the effectiveness of governance, RM and control processes (Sarens & de Beelde, 2006).

Without appropriate status and sufficient authority, the IA function might be placed in a dilemma, politics, disputes, social pressures, threats, and conflicts with management, if they discover any inappropriate actions taken by management. The development of the corporate governance code in the UK (for example, from the UK Combined Code (2002) to the recent UK Corporate Governance Code (2014)), requires audit committees (AC) to play a more effective role in the appointment and dismissal of Chief Audit Executive's (CAEs), coordinating and overseeing IA practice and the communications between the IA function and management. Studies by Goodwin (2003), Gramling et al. (2004), Leung et al. (2004), Peursem (2005), Sarens and De Beelde (2006) and Christopher et al. (2009) highlight how the effective role of the AC, and the quality relationship between the IA function and the AC, is crucial in determining a proper environment and support system for the IA function to carry out their responsibilities effectively, and independently. In addition, Jackson (2007) highlights how the IA profile has changed tremendously in response to the new IA definition. Consequently, the higher profile of IA can influence and improve the status and authority of the IA function in organizations (Jackson, 2007).

According to Marinaccio (cited in Jackson, 2007), the status of the IA function in organizations plays an important role in demonstrating its value to the management. However, most prior studies relating to the IA status and authority in organizations concentrate on the relationship between IA and audit committee/management, compliance issues and a descriptive profile of the IA function. Research in the area of IA status was not widely or intensively studied. Taking this into consideration, studies in this area offer huge opportunities to researchers to contribute to the existing literature and practices of IA. Therefore, this study intends to link the practice of IA with the concept of ingenuity and constraints, which has been under-studied and reported in the IA literature. This thesis will explore the relationship between ingenuity and the organizational status of IA in influencing the effectiveness and quality of IA at the societal and organizational level.

3.6 CONCLUSION

This chapter has provided a general review of IA and its role in corporate governance, which is a move away from its traditional role to become more proactive and value-adding. This is thought to offer a more strategically important contribution to organizations' operations. The chapter reviewed the characteristics of IA effectiveness and quality. The last section reviewed the changing role of IA, as it attempts to retain the function's relevance during a period of increased uncertainty in the business environment. The discussion considered how these claimed changes in effectiveness, quality and improvement of IA have been achieved through practising ingenuity as well as solving constraints faced by the IA function and profession. The chapter has also discussed the consequence of the changing role and definition of IA in the IA literature. The next chapter focuses on the theoretical lens employed by the research. The ingenuity concept is discussed in detail in theorizing the empirical chapters that follow.

Chapter 4

THEORETICAL FRAMEWORK: THEORETICAL LENS OF THE STUDY

4.1 INTRODUCTION

The main objective of this chapter is to present and discuss the theoretical foundation of the ingenuity concept and its relevance to IA practice and the development of the profession. The aim is to identify an appropriate framework to show how ingenuity has been applied and interpreted in IA research, particularly in the context of IA changes made to improve the effectiveness and quality of IA. The chapter explores the concept of ingenuity within the context of constantly changing roles and practices in IA, and how and to what extent the IA professional body and practitioners are able to exercise ingenuity in advancing IA practice and dealing with the constraints faced by them.

The chapter presents the rationale and the details behind the choice of the theory, along with its contributions and limitations. This chapter also aims to develop the discussion from the literature review, highlighting the limited amount of academic research into organizational ingenuity and the lack of a solid and clear operational definition of what constitutes an ingenious solution in the IA context. In addition, this chapter illustrates the contribution and importance of the ingenuity concept in studying IA changes.

4.2 INGENUITY: WHAT AND WHY?

This section begins by discussing the definition and concept of ingenuity and organizational ingenuity. It also discovers the origin, or root, of ingenuity and organizational ingenuity. This is followed by reviewing the literature of organizational ingenuity, alternative theoretical approaches to ingenuity theory, prior research that adopted the ingenuity concept in the context of organizational studies and IA. Finally, this section concludes with explanation of why ingenuity is a useful concept in studying the changes in IA.

4.2.1 Definition of Ingenuity and Organizational Ingenuity

There are a variety of definitions or explanations of the term “ingenuity”. A plethora of meanings exist, both within the literature and in normal usage, according to the context of its use in different professions and disciplines. The word “ingenuity” comes from the Latin word *ingenuitas* (ingenuousness), which originated from the word *ingenuus* (inborn). When the word was adopted into English, it held the combination of the two words: ingenious (skilful, intelligent) and ingenuous (high-minded). In engineering, ingenuity comes from *ingenium*, the Latin word for engineering. According to the Oxford English Dictionary, ingenuity refers to “the quality of being clever, original, and inventive”, which implies an inherent or inborn talent to have practical ideas, be intelligent, ingenious, creative, and have the capacity to innovate, overcome problems, and produce new things and thoughts.

McGregor (1960), in the *Human Side of Enterprise,* describes ingenuity as the quality of being imaginative, creative, and being able to use these qualities to solve organizational problems and make things better, or make better things. This is in line with the Merriam-Webster dictionary definition on ingenuity, which defines ingenuity as “skill or cleverness that allows someone to solve problems or invent things”. On the other hand, Homer-Dixon (1995), defines ingenuity as ideas applied to solve practical, social and technical problems. That means, ingenuity does not necessarily mean new or innovative ideas, but it can refer to all ideas that are useful to solve practical problems. Although innovation requires novelty, practical ideas may include both novel and mundane ideas and still be ingenious. This means that the ingenuity concept is quite broad in its applicability, more so than simply innovative ideas (Homer-Dixon, 2000, 2002).

Ingenuity comprises human thinking, action, working, behaviour and ethics, activities, inventing, and creating, transforming and managing things and relationships. The ingenuity of humans has led to a range of scientific, technological, social, economic, and political developments. It has significantly affected humans’ creativity and capacity to create, innovate, transform, and improve their quality of life, businesses and various relationships among individuals, institutions, organizations, societies, and nations (Homer-Dixon, 1995). These include various human systems such as legal, value, cultural, trade, business, governance, monetary, financial, transportation, education, healthcare, sociological, ecological, industrialization, agricultural, and communication.

In a nutshell, ingenuity involves a process of finding solutions to problems using innovative, creative, imaginative, and useful ideas and activities; creating and dealing with risks and opportunities; and analysing the consequences, both individually and collectively to change and improve, whether for good/better or bad/worse.

The ingenuity concept used in this research context is focused on organizational ingenuity, rather than concentrating on its general usage in relation to individual or human ingenuity. Specifically, the term used in this study draws on Lampel et al. (2014); where ingenuity is defined as: “The ability to create innovative solutions within structural constraints using limited resources and imaginative problem-solving.” According to Lampel et al. (2014), ingenuity is generally associated with creative problem-solving. In a similar vein, Ungerer et al. (2011) defines organizational ingenuity as “getting an adequate flow of the right kinds of creative ideas and understanding the factors that govern that flow”. In general, organizational ingenuity includes not only “invention” (novel and new ideas) but also ideas that are useful (even if not a new or novel idea) to resolve problems, add value, and bring improvement and success (Ungerer et al., 2011). In addition, Ungerer et al. (2011) emphasize that organizational ingenuity happens when both: “things” innovations (new products and services) and “social” innovations (new interrelationships between people, organizations, institutions and communities) are experienced by and taking place in the organization. Thus, organizational ingenuity can be pragmatically exploited to enable an organization to improve, survive and become more competitive. In response to constraints, members of organizations improve and develop sets of skills, ideas, talents, tactics, and strategies that articulate “organizational ingenuity”. Improvements and competitive benefits can be achieved through inductively managing the flow of ingenious ideas and utilization of the process of managing constraints to apply ingenious solutions.

4.2.2 The Root of Ingenuity Theory

The ground-breaking work in ingenuity theory appears to have originated from the work of Homer-Dixon in his book *The Ingenuity Gap* (2002), which was written over the period from 1992 to 2000. The book discusses the issue of whether we, as a human society, can solve the problems of the future. Homer-Dixon suggests that the nature of problems faced by human societies and organizations have become increasingly more complex over time and that human or societal ability to develop and

execute ingenious solutions is not keeping pace with the expansion and complication of human societies and organizations. Homer-Dixon's approach is rooted in an interdisciplinary approach connecting political science with sociology, economics, history, and ecology; it comprises a robust set of ideas to address the incomprehensible complexity of economic and social systems. Principally, the ingenuity gap concept introduced by Homer-Dixon was inspired and influenced by the work and ideas of Simon (1981, 1996); Solow, (1957); Romer, (1990, 1994); Tainter, (1988); Holling, (1994, 2001); Barnett, et al. (1966); Falkenrath, et al. (1998); Barrow, (1998); Ostrom (1998), and Green and Shapiro (1994).

In explaining how society deals with complex challenges and problems, specifically for finding whether increasing scarcity would limit economic development, Homer-Dixon (2000) develops arguments linked with three different views, namely, Neo-Malthusianism, Distribution and Neoclassical. To differentiate, Neo-Malthusianism seeks to manage systems by strict physical limits and to control demand; Distribution emphasizes merely the social distribution of resources; while Neoclassical (market fundamentalism) believes the right economic institutions, such as free markets, can provide timely solutions to any problem (Homer-Dixon, 2000). According to Homer-Dixon (1995), the Neoclassical and Distributions views emphasize social causes like ineffective markets, bad economic and social policies, and skewed resource distribution among classes and groups. Therefore, he insists that social improvements such as effective markets and resource distribution are products of ingenuity, which often result in reducing scarcity. Further, Homer-Dixon identifies numerous problems in advancing basic science, including human cognitive limits, the intrinsic complexity of the field, limits of scientific institutions, and social and cultural values regarding science.

As the problems of human societies and organizations become harder and more complex, then the ability to create the solutions for them becomes more problematic. Homer-Dixon illustrates two different paradigms pertaining to how human beings make their choices and decisions. First, economic paradigm, which is derived from endogenous growth theory, and views human beings as "rational consumers" that make decisions based on the most cost-effective way to best achieve their objectives and maximize their personal advantage (Green, 2002). Rational consumers' actions can be explained by referring to rational choice theory, an approach used by social scientists to understand the rational maximizing behaviour of individuals in markets,

where rationality is seen as an attribute of patterns of choices, rather than of individual choices (Homer-Dixon, 1995). Homer-Dixon (1995) explains how ingenuity theory was influenced by the endogenous or new economic growth theorists in which ingenuity through investment in human capital (that is, ideas, innovation, knowledge and a productive labour force) is a factor of production that is independent of physical labour, capital and land (i.e., natural resources). According to Homer-Dixon, ingenuity usually complements physical and human capital. Endogenous growth theory argues that ingenuity can serve as a substitute for labour and land by increasing productivity. This means endogenous growth theory contends that the role of ingenuity, innovation and ideas, which are embodied in humans, institutions, and technologies, have intrinsic productive power and account for a significant contribution to economic growth and development (Homer-Dixon, 1995). According to Homer-Dixon, these points of view are an important starting point for understanding social and economic adaptation to scarcity.

The second paradigm that explains human choice and decision-making is the ingenuity paradigm, which views human beings as “pragmatic problem-solvers”. With regard to the ingenuity requirement and supply concepts (the difference between a requirement and supply is the ingenuity gap), pragmatic problem-solvers use their ability to find practical ideas and solutions by applying ingenious ideas and a combination of common sense, experience and intellectual knowledge to resolve problems of human societies and organizations (Homer-Dixon, 1995). Ingenuity is a set of instructions that tell humans, societies, institutions, and organizations how to arrange the constituent parts of their physical and social worlds in ways that help them achieve their goals (Homer-Dixon, 2000). Further, he introduces two types of ingenuity terms: social ingenuity and technical ingenuity − to cover ideas applied to both technical and social problems, particularly by taking into account how ingenuity can alleviate resource scarcity. In this context, Homer-Dixon’s perspective significantly contradicts the new economic growth theory, championed by Romer (1996) and other theorists.

Scholars of the new economic growth theory such as Romer (1996) place more focus on technical ideas such as manufacturing techniques, industrial designs, and chemical formulas that are mainly developed and applied within the firm (Homer-Dixon, 1995). However, Romer eventually accepts the idea that the marketing and distribution of the firm’s product contributes prominently to economic growth; this is similar to Homer-

Dixon's idea of social ingenuity (Homer-Dixon, 1995). Therefore, humans, societies, institutions and organizations need technical ingenuity to address problems in the physical world, and simultaneously they require social ingenuity to deal with problems in the social world (Homer-Dixon, 1995). To illustrate, Homer-Dixon provides examples of how industrialized societies typically think of resource scarcities as technological challenges that require scientists' and engineers' keen attention to develop new hybrid vehicles and green energy technologies that can save energy consumption.

However, the supply of this technical ingenuity hugely depends on an adequate supply of social ingenuity provided by humans at many levels of society. Homer-Dixon (1995) recognizes social ingenuity as central to the creation, reform and maintenance of public and semi-public goods such as markets, financial and funding agencies, educational and research organizations, and effective government. Additionally, Homer-Dixon (1995) claims that, if this institutional system operates properly, it provides psychological and material incentives to technology entrepreneurs and innovators, helps to stimulate more frequent contact and communication among experts, and channels resources, preferentially to those endeavours with the greatest prospect of success.

According to Homer-Dixon (1995), social ingenuity is a precursor to technical ingenuity, which means social ingenuity is the input to technical ingenuity, where the existence of social ingenuity leads to the presence of technical ingenuity. He suggests society needs ingenuity to get ingenuity (Homer-Dixon, 2002). Nonetheless, in solving a certain institutional problem, scarcity of resources has to be taken into consideration. In the IA environment, for instance, a department might need to adopt and solve the problems of capability, staff shortage and low levels of efficiency. In solving the problems, a few approaches might be applied, both with and without the involvement of technology. One of the approaches might be prioritizing the auditable unit in the audit plan based on Risk-Based Internal Audit (RBIA), to minimize the audit job, and looking for significant audit requirements. With limited staff, an automated audit using specific in-house designed and off-the-shelf software (such as IDEA, ACL) could be used. The best part of using an automated audit is that, instead of doing sampling of the documents to be audited, all documents can be included with the use of software. The use of terminology and segregation of duties between IA and RM should be clear so there is no overlapping work, and collaboration becomes easier when the tasks of

each role are clear. In the long run, the organization might consider hiring people with multi-disciplinary skills and knowledge, who can be seconded to other divisions when needed. Some of the above ideas, however, can only be put in place with the support of top management through instructions or policy changes.

4.2.3 Alternative Theoretical Approaches to Ingenuity Theory

As for alternative perspectives to the Homer-Dixon ingenuity theory, Walker et al. (2014), offer an ingenuity theory perspective to investigate the role of organizational ingenuity using institutional entrepreneurship that derives from the paradox of embedded agency. Institutional entrepreneurship is rooted from a neo-institutional theory that agglutinates historical, sociological and rational election focuses. It offers an understanding of change event in the organization; including how and why certain novel organizing solutions such as new practices or new organizational forms come into existence and become well established over time (Garud et al., 2007). The debate on the structure and agency issue within institutional theory often refers to the paradox of embedded agency (Garud et al., 2007). The paradox emerges out of the observation that, while organizational stakeholders are constrained in their behaviours by institutions in which they are embedded, and to which they owe their powers, they are nevertheless able to influence and change these institutions. The paradox of embedded agency is a theoretical framework that incorporates both top-down and bottom-up institutional developments to explain how the structure (the medium and outcome of social practices) and agency (especially dominant actors) manage and deal with change (DiMaggio & Powell, 1991; Sewell, 1992). In their study, Walker et al. (2014) identify two areas of investigation that have been labelled as the paradox of embedded agency. These areas are related to “how stakeholders are relatively passive recipients of constraints” and the “varying response of stakeholders to institutional pressures”. In this regard, despite having behaviour constraints, stakeholders still influence and change institutions (Garud et al., 2007). Walker et al. (2014) also show that stringent top-down constraints on the industry lead to a series of bottom-up ingenuity strategies. In particular, industry actors deal creatively with two major institutional constraints: limited grid access and political uncertainty. The resulting strategies display ingenious solutions to these constraints. They include collective mobilization to defy constraints, and the development of new products and markets that circumvent constraints. In their study, Walker et al. (2014) analyse each ingenuity strategy at different levels (industry level, firm level, partnership level and

collective level), showing that legitimacy is central to each of these strategies. In effect, legitimacy is a key, if not the key, consideration when it comes to devising strategies that comply or circumvent constraints.

According to Lampel et al. (2011), ingenuity focuses more on ideas implemented in the context of a constraining institutional environment, where change is uncertain. As Lampel et al. (2011) point out ingenuity takes place within institutional constraints; Walker et al. (2014) propose that ingenuity is important to the bottom-up efforts of stakeholders in the paradox of embedded agency. In addition, they highlight the importance of legitimizing change (Creed, Scully & Austin, 2002) and maintaining legitimacy for stakeholders who face institutional constraints (Ashforth & Gibbs, 1990; Greenwood et al., 2002; Suchman, 1995).

4.2.4 Overview of Prior Research Using the Ingenuity Concept

This section discusses prior studies of the ingenuity concept in both organizational studies and the IA context as follows.

4.2.4.1 Ingenuity in the Organizational Studies Context

Organizational ingenuity is still a relatively young domain of study (George, 2008), and the majority of research on this topic has employed laboratory or survey methods (Rosso, 2014). Prior to Lampel et al.'s (2014) publication of the special issue "Discovering Creativity in Necessity: Organizational Ingenuity under Institutional Constraints", most of the organizational ingenuity research concentrated on the creativity of individuals or environmental determinants, with limited research applied to creativity in groups or teams (Shalley, Zhou, & Oldham, 2004). In addition, there is limited research in field studies of real organizations focusing on the more contextual and practice-oriented aspects of organizational ingenuity Lampel et al. (2014).

The role of context is incredibly important in determining boundaries and in searching for the truth of the phenomenon to be studied. According to Barley and Kunda (2001), laboratory research largely focusing on individual-level creativity dominates creativity literature. It is difficult to come to profound and meaningful conclusions about organizational phenomena without the theory being developed and verified explicitly with the organizational context in mind (Weick, 1968). Instead Barley and Kunda (2001) argue that there is a need to bring work back in for organizational research in the "organizational" creativity literature. The ingenuity concept that is specifically

developed with the organizational context in mind is crucial for the selection of a valid framework to be used (George, 2008) concerning ingenuity in organizations. This is because ingenuity in an organizational context is expected to clarify and unfold differently to ingenuity in other contexts. For example, the organizational context has principally great influence on employee behaviour (Johns, 2006); contains unique social and structural factors (i.e., organizational goals, business models, standard operating procedures, management practices) (Hargadon & Douglas, 2001); and constraints (i.e., customer, marketplace, or regulatory demands) that may not be relevant or an issue for ingenuity activities in other contexts (Lampel et al., 2014).

Over the last decade there is growing interest by organizational theorists in the processes and the management of organizational ingenuity (Harhoff & Hoisl, 2007). Realizing that there is limited research in the field or subject of organizational ingenuity. Walker et al. (2011) called for papers for a special issue entitled, “Discovering Creativity in Necessity: Organizational Ingenuity under Institutional Constraints”. After three years of the call for papers, in 2014, five papers were published in this special issue. The purpose of the special issue was to examine real-life applications of ingenuity within institutions (Lampel et al., 2014). It was also meant to encourage research, promote understanding of the features of “organizational ingenuity” and to find out how an organization and its members exercise ingenious solutions in their struggle for change. According to Lampel et al. (2014), it is not easy for organizational members to exercise ingenious solutions because of structural constraints (i.e., norms, rules, procedures, rituals, business practices and models, corporate structure systems and lines of authority) and limited resources (i.e., time, human, funds, means). In this respect, Lampel et al. (2014) state that organizational members/actors who operate within the constraints embedded in the legitimate logics of the organization must be motivated to develop new approaches, processes, systems or services; change and improve old ideas; and exercise ingenious solutions to deal with their constraints/problems. Lampel et al. (2014) suggest that the constraints–creativity relationship provides good settings for research. Even though constraints are normally linked with negative connotations, for example creativity theorists posit constraints as the enemy of creativity and innovation (Amabile, 1983), many scholars challenge this view claiming that constraints can also trigger creativity and innovation. Previous studies on organizational ingenuity have been carried out across diverse settings and professions, comprising: large organizations (Kannan-Narasimhan, 2014), high-tech entrepreneurial start-ups (Dolmans et al., 2014), R&D

teams (Rosso, 2014), engineering consulting firms (Lombardo & Kvålshaugen, 2014), the solar energy industry (Walker et al., 2014), flash smelting in the copper industry (Korhonen & Välikangas, 2014), haute cuisine (Senf, et al., 2014), and microfinance (Siqueira et al., 2014). These studies reveal how organizations and their members are able to produce ingenious solutions to address constraints/problems so that improvements can be made to ensure sustained competitive advantage and success in achieving organizational goals (Lampel et al., 2014).

In studying organizational ingenuity in nascent innovations for large organizations, Kannan-Narasimhan (2014) argues that innovators act unconventionally and creatively to acquire resources under constraints. However, he notes that the effects of resource acquisition strategies on innovation legitimacy are not sufficiently appreciated. By blending acumen from institutional theories of legitimacy and resource acquisition with managerial attention theory, Kannan-Narasimhan (2014) identifies two types of ingenuity: material ingenuity and process ingenuity. Kannan-Narasimhan (2014) argues that, by manipulating the way these two types of ingenuity are employed at different stages of the innovation process, innovators are able to successfully obtain resources despite constraints and hence achieve their objectives.

Dolmans et al. (2014) use in-depth case studies of high-tech start-ups to demonstrate how perceived access to resources influence entrepreneurial decision-making, creativity and ingenuity. Whereas, Rosso (2014) examines how and when constraints affect team creativity and seeks to make sense of the paradoxical tensions between freedom and constraint in the creative process. Although creativity theorists perceive constraints as the enemy of creativity, in his research findings, Rosso finds that constraints can heighten problem-solving and creativity of R&D teams. Two types of constraints were identified by Rosso (2014): product constraints and process constraints. The product constraints show a positive impact on team creativity, whilst the process constraints had a negative effect. However, to the researcher, it remains hard to distinguish under what particular conditions constraints are likely to have a positive or negative impact on team creativity. According to Rosso (2014), the negative impact of process constraints on teams' creativity was due to the conflict between the teams and the structural constraints. For example there is a possibility of intragroup conflict around the goals and expectations, such as divisional product development staff seeking a marketable solution and corporate research lab staff seeking an elegant solution. In competing between these goals and expectations the teams may fear that

they could not win, thus had a negative impact on team creativity. The researcher agrees with Rosso that process constraint demotivate teams to create ingenious solutions. This findings could be different in other industries. Therefore, it is useful to extend the examination of process constraint in different setting.

Lombardo and Kvålshaugen (2014) study the politics of resource constraints by looking at how actors in an organization deal with constraints in ill-structured problem-solving situations and the impact on creative action. Though problem-solving theories have a tendency to assume that subordinates normally accept constraints as fixed, Lombardo and Kvålshaugen (2014) propose that actors employ “shattering” as a source of creative action to modify or circumvent the constraints that reduce creativity. “Shattering” is defined as a disruption of the status quo (Lombardo & Kvålshaugen, 2014).

According to Walker et al. (2014), institutional embeddedness suggests that actors will creatively solve problems by displaying ingenious solutions to their problems/constraints within the norms set by institutions without seeking to change the institutions. Using institutional theory, four types of ingenuity strategies are identified by Walker et al. (2014) as a result of examining the organizational ingenuity within the paradox of embedded agency at different times and levels (firms, partnerships, collective and institutional level). They are: challenging multi-stakeholder collaborations, escaping new product and market development, complying new product partnerships, and escaping new product partnerships. These ingenious strategies can be categorized into three typologies: challenge, escape, or comply with constraints.

For example, via forming multi-stakeholder collaborations, organizations can challenge institutional constraints that exist in their industry. They can collaborate to reject and refuse to accept publicly institutionalized norms and strive to modify institutional constraints by mobilizing resources and promoting institutional change (Walker et al., 2014). To escape the difficulties related to challenging constraints, Walker et al. claim that organizations develop ingenious solutions to adapt by developing customized products and niche markets to survive. Alternatively, a complying strategy suggests organizations comply with institutional constraints while “consciously and strategically complying in anticipation of self-serving benefits” (Walker et al., 2014, p. 627).

Research by Korhonen and Välikangas (2014) describes how constraints promote innovativeness through the adoption of existing technological ideas by examining the development of autogenous smelting and the accumulation of innovation increments of flash smelting in the copper industry over time. The study by Korhonen and Välikangas is quite easy to follow, in that innovation is seen as the key to improving existing ideas. In another study, Senf et al. (2014) explore the institutional context and its impact on, and interplay with, creative freedom. This study suggests that the space for creativity is often limited by institutional forces. Siqueira et al. (2014) examine how the ability of individuals or groups to create ingenious solutions is often influenced and inspired by their social and institutional environment. To carry out their research, Siqueira et al. investigate circumstances under which organizational ingenuity emerged in specific low-income communities that usually faced institutional constraints, including poverty, a deficient basic infrastructure, violence, and low levels of education.

Overall, prior studies on ingenuity in the organizational context regards the importance of constraints in the organization as something to be overcome (see Table 4.1). For quick reference, Table 4.1 summaries the types of ingenuity and/or types of constraints that have been identified, focused and discussed in the main previous research in the organizational ingenuity.

Table 4.1: Summary of Types of Ingenuities and Constraints

Study by	Types of Ingenuities	Types of Constraints
Lampel et al.	-	Structural, resource, temporal, product and process
Kannan-Narasimhan	Material and process	-
Dolmans et al.	-	Resource
Rosso	-	Product and process
Lombardo & Kvålshaugen	-	Resource
Walker et al.	Challenging multi-stakeholder collaborations, escaping new product and market development, complying new product partnerships, and escaping new product partnerships	Institutional: limited grid access and political uncertainty

4.2.4.2 Ingenuity in the Internal Auditing Context

Although there appears to be no research directly using the term “ingenuity” in prior IA studies, the broad idea of ingenuity can be found in studies examining aspects of “innovation” and “cutting edge”. The concepts of Innovation and cutting edge both overlap with ideas of ingenuity.

Chaiyot & Phapruke (2009) posit that IA innovation is necessary and suggest that organizations have to improve the effectiveness and efficiency of their IA functions through innovation. Garcia and Calantone (2002) define two types of innovation: incremental and breakthrough. Changes, adaptation and improvement made to existing or old mechanisms, or way of practices, are classed as incremental innovations. Conversely, breakthrough innovations are original, different, new, novel or unique (Garcia and Calantone, 2002). In their study, Chaiyot & Phapruke (2009) describe IA innovation as newly developed IA strategies, tools and techniques that are used to carry out IA activities. Their study identifies four types of IA innovation: auditing integration, corporate risk evaluation, Computer-assisted audit techniques (CAATs), and control self-assessment.

The researcher agrees with Chaiyot & Phapruke (2009) that IA functions must exercise IA innovation in order to increase the efficiency and effectiveness of IA activities as a strategy to confront corporate scandals. However, the researcher sees the need to study and discover a broader concept of innovation, specifically to explore the wider concept of ingenuity as defined by Lampel at al. (2014). In addition, instead of only examining innovation as a response to corporate scandals (the focus of Chaiyot & Phapruke’s research), the study of the ingenuity concept can be expanded to a broader context that comprises features such as structural constraints, scarcity resources, and the use of imaginative problem-solving that internal auditors can use to conduct IA activities (Lampel et al., 2014). Chaiyot & Phapruke’s (2009) research on innovation and IA performance employs quantitative or survey methods. Therefore, the researcher sees a need to conduct a thorough investigation using an in-depth, richer and more dynamic qualitative data collection strategy, including expanding the study by considering the role of constraint in stimulating the generation of ingenious solutions and creative processes of IA practice.

Ridley (2008) employs “cutting edge” as a term representing ingenuity in the context of IA practice. He focuses on imaginative ideas and changes in IA that continuously

create, improve and influence IA practices. Stakeholder expectations, customer needs, resource availability, talent and knowledge management, competition, and capability all drive change (Ridley, 2008). Ridley describes cutting edge as:

> *"Creating practices that meet the needs of its customers, but most of all it is about the imagination to create and innovate. Imagination to know which structures, operations and methods need to be created: and innovation to action the best ways to do this*. *Cutting edge in science is always about innovation and pioneering change. Often not just 'nudges' but 'paradigm shifts': shifts to improve directions, operations, products, services, achievements and satisfaction; shifts to improve the way life is lived and work is performed" (Ridley, 2008, p. 5-6).*

In addition, Ridley develops a cutting-edge IA model:

> *"To represent the growing professionalism of IA services, changes that are continuous and the never-ending road to better quality: interactions that exist in the operations in every organization" (Ridley, 2008, p. 2-3).*

Ridley (2008) highlights the idea that the term "cutting edge" is often used to promote innovation, motivate customer interest, and use imagination in all IA activities (from the planning process; objectives setting; risk assessment; evaluation of RM, governance and control processes; field work; and reporting and communication of findings). The researcher agrees with Ridley (2008) as he stated that imagination and innovations are needed in the technology development. Similarly, imagination and innovations are applies equally in developing the strategies, frameworks, standards, policies, guidelines, processes, approaches, tools and techniques, and even attitudes. Likewise, ingenuity such as imagination, creativity and innovation exercise by the IIA and IA functions in their strategies, frameworks and approaches, are key aspects for improving IA effectiveness and quality.

In the context of IA, there is no specific study that investigates direct links between ingenuity and the constraints issue. Prior studies have concentrated on the significance of innovation and cutting edge to assure the success of the IA profession, function and practices. Thus, this research aims to fill the gap in the literature by combining and linking the organizational ingenuity and constraints concept in the IA context in one study. This will provide huge opportunities and constitutes a promising research stream to be explored. The issues that can be addressed by future researchers include: the key constraints faced by IA; how these constraints affect the

quality, efficiency and effectiveness of IA; and, to what extent does an ingenious solution lead to the leverage and delivery of ingenuity in a constrained situation?

There is a case to be made for a thorough study of the role of constraint in stimulating the ingenuity of the IIA and IA functions that provide IA services. Instead, to date, a very limited amount of the organizational ingenuity research has focused on the ingenuity of a discipline (such as IA) and its associated institutions (the IIA) and functions (IA functions). So far, there is almost no specific research devoted to the study of the relationship between ingenuity and constraints in IA.

4.2.5 Why Ingenuity Is a Useful Concept for Studying Changes in Internal Auditing

Most of the theory underlying IA research has derived from accounting, finance, economics, strategic management, and behavioural and organizational literatures. Generally, prior to 1999, IA was part of accounting and auditing research (part of the external audit or management accounting literature) (Sarens, 2011). However, after 1999 (following the introduction of IA's latest definition), IA research has increasingly emerged as a separate area (Sarens, 2011). Based on the observation of IA literature and data from the Institute of Internal Auditors Research Foundation (IIARF), Sarens (2011) argues that, compared with other research disciplines, IA is still a relatively unexplored area. Research in the IA discipline has remained largely descriptive in nature and relatively limited (Sarens, 2011; Bailey et al., 2003). Sarens (2011) also argues that many studies in IA lack a solid theoretical foundation. Ingenuity theory is chosen for this study because it helps to explain the changes made by the IIA and IA functions in order to resolve their constraints in meeting the stakeholders' demand and expectation. The detail reasons for choosing this theory are discussed further below.

The IIA in its IPPF defines IA as:

> *"…independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization to accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes" (The IIA, 1999).*

The IIA standards and other IPPF components provide underlying rules, guidance and values that need to be conformed to by IA practitioners worldwide. The proactive implementation, compliance and appropriate interpretation of the IPPF by IA

practitioners at the organizational level is fundamental in ensuring that the quality and effectiveness of the IA profession, its activities and services can be achieved. However, structural constraints (i.e., management mission, procedure, power and authority) and the voluntary self-regulatory nature of compliance to IA standards within the existing regulatory frameworks have created: huge complexities and distinct levels of practice; different interpretations and degrees of implementation; and situational specific needs of IA activities among IA practitioners worldwide.

According to Arena and Azzone (2009), in the last ten years, the researchers and practitioners in the IA field have broadly discussed the need for IA to add more value to their organizations' operations and contribute to the achievement of corporate objectives. In reaction to international events, such as the worldwide financial crises (2007 – 2012), the collapse of big corporations, the meltdown of economic stability, failure of corporate governance systems, fraud cases and risks inherent within corporations, sectors and industries, and the world's uncertain business environment, legislators worldwide have reformed corporate regulations and corporate governance requirements in order to recover and instil stakeholder confidence (Mohamad & Muhamad Sori, 2011; Arena & Azzone, 2009). The new requirements have influenced the way governance, RM and control systems are expected to be practised and evolved across the world, and play a critical part in business strategy and legislation reformation. The ingenuity concept is useful to explain if and how IA profession and practitioners exercising changes in IA (such as in role, practices, activities, framework, methodology and approaches) to improve the quality and effectiveness of IA. The exercise of ingenious solutions by the IA profession and practitioners has to operate both within and through existing rules (i.e., the Company Act, Corporate Governance Code, Stock Exchange Listing Requirement, Sarbanes-Oxley-Act, Company Policy, IPPF) and boundaries (i.e., Organizational Structure, Audit Charter) to solve existing and future problems. Yet, how did the IA profession and its practitioners change in response to the recently altered legislation and business environment? And how does an effective IA function monitor, review and prepare itself for any future changes?

Based on the new IA definition, IA must continuously change to enable the IA function to add value and improve the organizations' operations through improving the effectiveness of governance, RM and control processes in order to stay relevant. According to Mohamad & Muhamad Sori (2011), effective IA is important as a preventive measure to mitigate governance failure and global financial crises.

Nevertheless, Sarens (2011) claims that much of the research in IA has been conducted on a superficial level, such as by examining the type of activities that can be considered as IA involvement in RM or investigating the extent of the IA functions' compliance with IA standards, and not going any deeper. These pieces of research are a little "touch-and-go", where the researcher touches on a topic but quickly moves on to the next area of immediate interest. In addition, these studies have been performed without having a solid theoretical foundation explaining the positive (or negative) impact on the effectiveness and quality of IA activities in meeting the stakeholders' expectations and resolving their problems. For example, Sarens (2011) raises the question: "when can we talk about an effective IA function?"

As a central component of corporate governance mechanism, IA must continuously change and improve its quality and effectiveness in order to meet stakeholder expectations, changes in business strategic plans and new legislation requirements (Zain et al., 2015). To be successful, the changes in IA practices and activities must embed ingenuity elements that comprise of innovative thinking, creative ways of working and ingenious problem-solving approaches to provide the business insights that stakeholders demand. The term "ingenuity" is also interchangeably defined as: innovation, cutting edge, creativity, invention, imaginative problem-solving, imagination, originality, creation, change, revolution, progress, growth, development, new ideas and novelty. At present, there is a lack of a coherent concept of ingenuity and concept of constraints that is necessary to explain the changes in IA and the impact of these changes in solving the constraints faced and in strengthening the IA value proposition, status and quality. There needs to be a strategy in order so that effective changes in IA are made to add value, improve the organizations' operations and improve the effectiveness of RM, governance and control processes. Thus, the search for a definition and explanation for the concept of ingenuity is crucial for the IA profession and its practitioners in order to stay relevant and continue to change to meet key stakeholder expectations. This study also accepts Sarens' (2011) challenge to conduct research that has a solid theoretical foundation, which can contribute to the literature and the body of knowledge and enable IA practitioners to justify their efforts in developing and making changes in IA practices and activities. The objective of this research is thus to examine whether the exercise of ingenuity (ingenious solutions) by the IIA (at the societal level) and IA functions (at the organizational level) through continually changing and improving IA practices and activities can improve IA quality and effectiveness.

The current business, financial, economic, legislative and policy climates require that IA functions undertake more activities with less resources; demonstrating more value; and using appropriate strategies to deliver quality, and effective and efficient services in order to achieve a better performance. In dealing with scarcity resources, ingenuity becomes a critical organizational skill. This necessitates the IA profession and its practitioners to develop a set of skills, social strategies, and mindsets that express and perhaps create organizational ingenuity. It also requires a dedication to improvement and a commitment to fundamental, incremental and continuous change in the way IA capabilities, activities and services are planned, resourced, organized and delivered. This merits an ingenuity concept study in the context of IA to explain why changes in IA are important in the context of various challenges and constraints that confront the IA practice and profession. The researcher endeavours to extend work by Lampel et al. (2014) on organizational ingenuity by taking the concept of ingenuity with reference to constraints. Ingenuity will be used as an umbrella concept that articulates various features and processes that have previously been explored independently within the context of IA studies.

4.3 THE CONCEPT OF CONSTRAINT

Undeniably, we live in an increasingly complex and uncertain world which is interrupted by many sudden surprises. The human way of life and values, societies, and institutional, organizational, political, economic, social, technological and ecological systems are becoming more complicated and changing tremendously over time. The demands placed on natural systems worldwide due to increasing populations and consumption levels create problems of resource scarcity and thus create constraints, at both societal and organizational levels. In understanding constraints, the Oxford English Dictionary defines it as “limitation or restriction”. It is a scarcity of the resources necessary to attain an outcome. More specifically, Lombardo and Kvålshaugen (2014) define constraints as “limitations or restrictions for what can or cannot be done in the problem solving, and for what the final solution should fulfil”.

As discussed in subsection 4.2.4, Rosso (2014) claims that constraints have both a positive and negative impact on creativity and ingenuity. Similarly, Lampel et al. (2014) argue that constraints not only have a negative connotation as generally thought, but also a positive implication as well. However, the researcher believes the positive or negative implication is contingent on how it is managed, the governance umbrella and

environment in which it occurs. A study from Lombardo and Kvålshaugen (2014), for instance, reveals that ill-structured problem-solving situations subject to constraints may lead to creative action. In this regard, Lampel et al. (2014) argue that creativity and constraints have both negative and positive relationships. Constraints can be portrayed in various forms such as structural, resource scarcity, temporal, and framing problems. Negative constraints include limits, boundaries, prescriptions and prohibitions, whereas positive constraints are associated with rules and regulations that protect key stakeholders and the public in general (Lampel et al., 2014). This research seeks to understand and explain the implications of both positive and negative relationships between ingenuity and constraint by exploring how and when constraints affect the IA profession and creativity in IA practices.

A structural constraint is the level of limitation or restriction placed on someone's options by their social role (functionalist perspective) or from their lack of access to social, cultural, economic or political resources (conflict perspective) (Lindblom & Ruland,1997). For example, in this thesis, the researcher suggests that the IA function has broken structural constraints to become an adviser and a strategic business partner in the strategic planning process, previously dominated by the board of directors, executives and managers (functionalist perspective). Similarly, another example of a structural constraint is that not everyone can sign the statutory audit report that contains the auditor's view on the truth and fairness of financial reports. Similarly, a different form of structural constraint arises as the greater the number of auditable units in the audit universe, the lower will be the chances of any individual unit being chosen in the audit plan (conflict perspective). This researcher believes that political pressure, management objectives, culture and rivalry between actors within the organization could present a major challenge to overcoming structural constraints.

Resource scarcity occurs when resource demand is greater than resource availability (Dolmans et al., 2014). Resource constraints can take place in two forms: (i) scarcity of financial or technical resources (Lampel, et al. 2014) or (ii) the scarcity of operational/production/ capacity and human knowledge (Dolmans et al., 2014). In business, resources include assets, capabilities, organizational processes, information and knowledge (Daft, 1983). For example, in the context of the IA function (especially a small function), resource constraints can be triggered by the limited capability of the IA function to provide assurance and consulting services to all the organization's activities, owing to time, financial, staff, skills and knowledge constraints. Resource constraints can cause problems and make innovation difficult

and complicated; on the other hand a lack of resources can help generate new approaches, systems, ingenious solutions and initiate conventional solutions (Lampel et al., 2014).

Constraints can be a catalyst to ingenuity (i.e., an introduction of a new idea, unique product or service to resolve daily-life problems), or they can be a very critical enabler for someone to relinquish or pursue another objective (i.e., falling of fossil energy stock boosting new technology in renewal energy). Gibbert and Valikangas (2004, 2009) show how resource constraints have become an enabler of innovation and breakthrough performance, where through the strategic use of constraints, managers focus on the right goals and innovate their organization. Moreover, Gibbert and Valikangas state that, even though managers see resource constraints as obstacles, entrepreneurs use them as a framework for invention. Similarly, Hoegl et al. (2008) claim that lack of resources could restrain creativity and innovation. By using a contingency model, they manage to reveal conditions that illustrate how scarce resources can enable creativity and innovation.

According to Walker et al. (2014, p. 615), institutional constraints occur when there are "limitations or restrictions on the behaviour of stakeholders". However, these institutional constraints normally help organization actors to create ingenuity strategies by implementing ingenious solutions to handle the constraints (Walker et al., 2014).

4.3.1 Ingenuity in Dealing with Constraints

There has been rigorous discussion about the role of ingenuity as an innovative activity and a solution to the pressing economic and social problems within institutional constraints, and important for social well-being and economic prosperity and development (Walker et al., 2014; Lampel et al., 2014; Awrey, 2013; Lawrence & Suddaby, 2006; Courpasson & Clegg, 2006; Homer-Dixon, 2002). Ingenuity comes in various forms; these include social ingenuity and technical ingenuity (Homer-Dixon, 2002), individual genius ingenuity (Fisk, 2009), technological change and economic development ingenuity (Galbraith, 1967), and managerial ingenuity (Eichenewald, 2012). A key feature of these theoretical models is that social ingenuity consists of ideas applied to the creation, reformation and maintenance of institutions such as professional bodies (Homer-Dixon, 2002). As stated earlier, Homer-Dixon's (2002) study explores how social ingenuity influences technical ingenuity. Similarly, this study explores how societal ingenuity influences organizational ingenuity by depiction of the

social construction and adaptation to complex change to link the insights of professional body practice and leadership capacities, professionalism and capabilities, collective action and social change within the IA profession. Lampel et al. (2011) contend that organizational ingenuity is comprised of innovative activity within institutional constraints. According to Lampel et al. (2014), ingenuity is generally associated with creative problem-solving. This is in line with the Merriam-Webster dictionary definition of ingenuity, which it defines as “skill or cleverness that allows someone to solve problems or invent things”.

Ingenuity plays a crucial role in human survival as argued by theorists of new economic growth. Founded on this conception, Homer-Dixon conceives ingenuity to be a factor of production, and to be treated similarly to labour, capital, and land (i.e., natural resources) (Homer-Dixon, 1995). According to Homer-Dixon, it is common for natural resources such as labour and land to be complemented by ingenuity, which boosts their productivity. Thus, ingenuity usually complements physical (land, labour) and human capital (ideas embodied in humans, institutions and technologies) (Homer-Dixon, 1995). Organizational ingenuity comprises innovative activity within institutional constraints. In their study, Hoegl et al. (2008) find that, by leveraging domain-relevant skills and bounded creativity approaches, organizations can overcome their financial constraints. In another study conducted by Gibbert and Scranton (2009) that involved managers’ experiences in four historical cases in the jet propulsion industry, the findings show that the constraints of knowledge, material and financial resources result in radical innovations. Likewise, Hoegl et al. (2010) state that arranging for sufficient resources is no assurance of an innovative outcome; instead having fewer resources can lead to more innovative results. The next section explores how the ingenuity concept will be conceptualized in this research.

4.4 CONSTRUCTING A THEORETICAL LENS FOR THE RESEARCH

Lampel et al. (2014) argue that the ingenuity concept offers three forms of methodological bracketing, which give emphasis to: (i) processes involved in the managing of constraints and development of ingenuous solutions, (ii) ingenuity strategies, and (iii) types of ingenuity.

Burgelman (2002) divides problem-solving into two forms, “induced” and “autonomous”. Induced problem-solving occurs when stakeholders, top managers or someone with authority induce tasks that define problems to be resolved by individuals

or groups (Lampel et al., 2014). On the other hand, autonomous problem-solving is a situation whereby individuals or groups are the ones who recognize and define problems to be resolved by themselves. Further, Lampel et al. (2014) argue that, in dealing with both “induced” and “autonomous” problem-solving, problem-solvers that wish to act creatively are confronted with “product” and “process” constraints. According to them, product constraints characterize the features and functionalities that are crucial for a successful solution; while process constraints are those that prevent creative problem-solving in a given organizational context.

The work of Lampel et al. (2014) is relevant to the research reported in this thesis because their methodological perspective is useful as a wide-ranging reference point for understanding the social and technical ingenuity context of the IA profession. Passing through the evolution and continuous changes of the IA profession and practices, this research portrays how a professional body manage and conducts a continuous process and effort to interact, transform, and refresh its professional practice. Then the study discovers how the IIA improves, draws, updates and changes the framework, rules, standards, and practice guidance to manage constraints and develop ingenuous solutions. This is a continuous process by the IIA to ensure that the weaknesses, failures and inappropriateness of the professional practice are improved and resolved. This research also analyses the conduct of the IA function at the organizational level, focusing on how the IA function (as an actor), uses the process of managing constraints and ingenuous solutions to fulfil the demands and expectations of their institution’s management and a professional body that is representing its discipline, regulators and key stakeholders.

Walker et al. (2014) uses a case study and longitudinal analysis of the Ontario solar industry to develop a process model of the development of organizational ingenuity strategies in response to institutional constraints. They analyse each ingenuity strategy at a different industry, firm, partnership, and collective levels, showing that legitimacy was central to each of these ingenuity strategies (Walker et al., 2014). The analysis permitted them to determine if a strategy was novel and innovative, answer the “how” and “why” questions, and examine the successes and failures of the strategies used within the period examined. In the study, they find that ingenuity evolved and developed over time in a sequence of strategic responses characterized by challenge, escape, and comply with institutional constraints. Additionally, in developing ingenious strategies where ingenuity is needed, Walker et al. (2014)

investigate the relationship between different types of ingenuity and different dimensions of legitimacy over time, which is necessary for surviving in strong institutional environments (Greenwood et al., 2002; Meyer & Rowan, 1977). Thus the perspective and analysis of ingenuity strategies and legitimacy dimensions by Walker et al. (2014) is adopted in this study to investigate how ingenuity strategies at the societal level of the professional body and ingenuity strategies of IA at the organizational level, unfold over time in the IA profession. This approach allows the researcher to reflect on how the IIA and IA profession might repair the disruption caused by changing regulatory and stakeholder demands and re-asserting and re-establishing the norm of institutional interaction. It also allows the reproducing of institutionalized practices and continuously producing and reproducing the development of the standards, frameworks and practice guidance needed for the progress and survival of the profession. In this regard, IA as a management control mechanism and the 'Third Line of Defence' in the organizational governance mechanism has recharged and reformed to become an effective function to help organizations to achieve its objectives and manage the organizations' enterprise-wide risks effectively. Further, how legitimacy is preserved by the professional body at the societal level, as well as by the IA function at the organizational level are investigated in the sequence in which they are manifested (Rao, 1998; Creed et al., 2002; Lounsbury et al., 2003; Perkmann & Spicer, 2007).

Kannan-Narasimhan (2014) in his study asserts that successful innovators employ two types of organizational ingenuity, which is material ingenuity and process ingenuity in gaining resources in the face of constraints. Innovators such as the IA function will creatively re-imagine the use of resources in the material ingenuity to maximize managerial attention; and use the creative process to gain resources when utilizing the process ingenuity to minimize managerial attention. In the early stage, innovators in large organizations exploit managerial attention as a drive to focus on managing their innovation's legitimacy to gain resources in either type of organization ingenuity (Kannan-Narasimhan, 2014). In the organizational context, the internal and external pressures, combined with the requirement to fulfil regulatory and professional body requirements, have urged organizations to embed the IA function within every aspect of the organization's wide operation. Without a doubt, organization culture, governance environment, c-suite and other key stakeholder demands and expectations create a complexity and paradox of resource constraints in the implementation and practices of IA among different organizations. Ingenuity and

legitimacy perspectives proposed by Kannan-Narasimhan (2014) offer insights into how IA might innovate at the meso-level (by IA function in the organization) and macro-level (by the IIA and IA profession).

This research desires to depict the process of the professional body as an institution and how IA functions in individual organizations apply social and technical ingenuity, manage their constraints and legitimacy in self-regulatory environments. The analysis is conducted at two levels, which is at the professional body (societal level) and individual organization (organizational level). This research investigates how the IA professional body and organizations' IA functions perform and implement social and organizational ingenuity in order to improve the effectiveness and maturity level of IA processes and practices. The analysis at the professional body and organizational level inductively explores the process of managing constraints and ingenuous solutions, the use of ingenuity strategies, and the type of ingenuity implemented as a concept of organizational ingenuity within the IA profession. Learning from organizational ingenuity concepts, processes and strategies literatures (such as Lampel, et al., 2014; Walker et al., 2014; Kannan-Narasimhan, 2014; Rosso, 2014; Drori and Honig, 2013; Morris et al., 2010; Zott and Huy, 2007; Greenwood et al., 2002; Zimmermann and Zeitz, 2002; and Homer-Dixon, 2002 & 1995), the researcher, therefore, conceptualizes social (the professional body and IA profession) and organizational (the organizations) ingenuity as a continuous improvement of the IA profession and practice.

This research tests the idea suggested by the literature that IA will use creative and innovative strategies to deal with resource constraints, resulting in solutions characterized by ingenuity, to survive and grow its profession and practice. Ingenuity involves various interactions between the external and internal environment in dealing and fulfilling the clients' and stakeholders' requirements, issues, demands and expectations through organizational ingenuity. Ingenuity is used to improve, maintain and transform the IA standards and practice for the survival and legitimacy of the IA function in providing assurance and consultation services to help the organization effectively manage its risks and eventually achieve its desired objectives.

4.5 CONCLUSION

Reflecting on the objectives of this chapter, the organizational ingenuity concept has been selected as an appropriate conceptual framework for explaining and characterizing IA ingenuity and how it has influenced and improved the quality, effectiveness and success of the IA profession. Homer-Dixon (2002) highlights the essence of social ingenuity as being the institutionalizing of social constructions that consist of ideas that have been applied to the creation, reformation and maintenance of institutions such as professional bodies. It is also clear that there is a link between social and technical ingenuity, where social ingenuity is a precursor to technical ingenuity. Ingenuity is "the ability to create innovative solutions within the structural constraints using limited resources combined with imaginative problem-solving" (Lampel et al., 2014, p. 465). Following on from this, it is possible to say that constraints act as catalysts or enablers that encourage creative thinking, ingenious solutions and strategic actions to cope with constraints. As stated by Young (2011, cover page), "In the face of constrained resources, some people demonstrate ingenuity; they are able to do unexpectedly more for less".

Within an organization, the IA function typically faces constraints in performing its role as well as to comply with the IIA's standards and other IPPF components. In dealing with these constrains, the IA function has the potential to draw on ingenuity at both the organizational and societal levels. Organizational ingenuity not only shapes innovative solutions, but also affects innovators' legitimacy, social responses, and the resources that they receive. Ingenuity theory is a useful tool to explain the changes and evolution that have occurred in the IA profession. Consequently, this research focuses on investigating the continuous creation of ingenuous solutions/strategies and the use of ingenuity to manage constraints throughout the development of the IA profession and practice. Later in the thesis the role that organizational ingenuity plays at both the societal level (the professional body and other external factors) and organizational level (the IA function in the organization) are evaluated. It is argued that ingenious practices have helped the IA profession to improve, reform and innovate. Ingenuity in IA practices is important to ensure the survival and relevance of the IA profession, as well as to preserve its position as a central element in organizational governance processes.

Chapter 5

RESEARCH METHOD

5.1 INTRODUCTION

The purpose of this chapter is to present the research methods adopted in conducting this research. It focuses on the key aspects of the research design, strategy, empirical techniques and procedures involved in collecting and analysing data, and these are applied in conjunction with the philosophical assumptions underpinning this thesis. The chapter explains the selection of research strategies and the justification for choosing those strategies. A qualitative approach to data collection and analysis is used in the study.

The structure of this chapter is as follows. It begins by reviewing relevant prior research methodologies, broad philosophical stances and the most applicable and appropriate research methods. Prior to interview, a preliminary survey and expert interviews were carried out to gain early knowledge about IA practice and to identify potential participants for the case study. The case studies and steps taken during the data collection are then described. It also shows an examination of the type of data and appropriate analyses used to demonstrate the novelty of the research process. This is followed by a discussion of the validity of the research data and analysis. The chapter concludes with a brief discussion of issues of trustworthiness and the ethical concerns associated with the research processes conducted.

5.2 RESEARCH METHODOLOGY

Research methodology is a collective term for the structured process of conducting research, including the strategy, plan of action and process of governing the choice and adoption of particular research methods (Crotty, 2009). It can be a quantitative or qualitative approach, linking assumptions related to theoretical, philosophical features and the choice of methods to the desired research outcomes (Crotty, 2009; Saunders et al., 2009). On the other hand, a research method is commonly defined as the

technique and procedure used to obtain and analyse research data in relation to the research questions or hypotheses tested and countered (Crotty, 2009).

Before determining the most applicable and appropriate research methodologies (design and strategies) and methods (techniques and procedures) to be employed in this study, the possible alternatives were considered. The considerations address the alternative fundamental research terms as depicted in Figure 5.1. They are comprised of research philosophies or theoretical perspectives (epistemology, ontology and axiology), research approaches, research strategies, research choices, research time horizons and research techniques and procedures. The research terms underlying the concepts depicted in Figure 5.1, which are relevant to this research, will be explained in the following sections.

5.2.1 Research Philosophies

Saunders et al. (2009) list four different types of philosophical concepts of management research as shown in Figure 5.1. The concepts of positivism, realism, interpretivism, and pragmatism are subsets of the three main branches of research philosophy (epistemology, ontology and axiology).

According to Myers (1997), all research is based on some underlying assumptions about what constitutes “valid” research and which research methods are appropriate. Thus, in conducting a research, it is important to know the underlying assumptions before proceeding with the research approach. These assumptions relate to the underlying epistemology which provides a philosophical grounding for deciding what kind of information is possibly available, how it can be obtained and how to make sure it is sufficient and legitimate to guide the research (Maynard, 1994). In the context of this research, only the two most distinguished research philosophies, positivism and interpretivism (also called phenomenology), are discussed below, as they are deemed relevant to the study.

Source: Saunders et al., 2009 (© Mark Saunders, Philip Lewis and Adrian Thornhill, 2008)

Figure 5.1: The Fundamental Research Term Continuum in Management Research

Interpretivism

Different from positivist studies that follow the methods of natural sciences (refer to Table 5.1), interpretive studies use social science approaches that require a different research philosophy to understand phenomena or everyday social roles through the meanings that people assign to those roles (Myers, 1997; Saunders et al., 2009). According to Crotty (2009, p. 67), an interpretive researcher "looks for culturally derived and historically situated interpretations of the social life-world". Interpretivists argue that basic rules are not enough to understand the whole complexity of social phenomena, thus they assume that access to reality (given or socially constructed) is only appropriate through social constructions such as language, consciousness and shared meanings (Myers, 1997). Interpretivists do not predefine dependent and independent variables, but attempt to understand subjective realities by offering interpretative explanations that are meaningful for research participants and focus on the full complexity of human sense-making as the contexts emerge (Kaplan & Maxwell, 1994).

In Table 5.1, Saunders et al., (2009) highlight the fundamental principles of interpretivism to include three core elements: the social world is constructed and is given meaning subjectively by human intentional behaviour and actions; the

researcher is part of what is being researched; and research is driven by interests. According to Blumberg et al., (2005, p. 19) “knowledge is developed and theory built through developing ideas inducted from the observed and interpreted social constructions”. Interpretivists place emphasis on making sense of what is happening, even when unexpected results beyond current common scientific knowledge take place (Blumberg et al., 2005). Interpretivists deny the notion that research is value-free; this is the opposite of the approach of positivists.

Table 5.1: Comparison of the Four Philosophies in Management Research

Positivism

Positivism is the epistemological position that adheres to a concept of the objective nature of social reality, which reflects the philosophical stance adopted from the natural sciences (Saunders et al., 2009). From Table 5.1, it can be seen that the fundamental principles of positivism include that: the social world exists externally and is viewed

objectively and independent of social actors; research is undertaken in a value-free way; the researcher is independent of the data and take the role of an objective analyst. Myers (1997) suggests that positivists are those who mainly assume that reality can be seen objectively and can be explained by measurable properties that are independent of the researcher and their instruments. According to Remenyi et al. (1998, p. 32), the finding or "end product of positivism research can be law-like generalizations similar to those produced by the physical and natural scientists". In general, studies carried out by a positivist attempts to test theory and to increase the predictive understanding of phenomena (Myers, 1997). Therefore, according to Orlikowski and Baroudi (1991, p. 5), research can be categorized as positivist if there is evidence of formal propositions, quantifiable measures of variables, hypothesis testing, and the drawing of inferences about a phenomenon from the sample to a stated population. Those taking positivist approaches normally assume there are always true answers to the research phenomenon, and that the researchers' role is to hypothesize about the nature of the world studied and then search for the data to either confirm or disconfirm their hypotheses (Easterby-Smith et al., 2008). Moreover, Easterby-Smith et al., (2008) also perceive that researchers pose several hypotheses and work towards data that leads to the correct hypothesis. In terms of the data collection technique, positivist researchers are most likely to use a highly structured methodology and large samples in order to facilitate replication (Gill and Johnson, 2002).

5.2.2 Research Approaches

Research methodology is a systematic way to address research problems, our attitudes and understandings of research, and strategies chosen to answer research questions (Kathori, 2004). It is different from research "methods" which refer to specific activities designed to generate and obtain data. In methodology, methods are looked at, and also the reasoning behind the methods chosen. How is research done in a systematic way? A research project should have clear objectives, defined research problems, hypotheses formulated (if appropriate), and accurate and understandable questions asked of the right population or sample. Data is then analysed systematically and rigorously by using certain tools (when applicable) and the findings are related back to the objectives and research questions. For data collection, researchers have to decide upon the approach to be used, as to whether it is quantitative, qualitative, or a combination of both. Figure 5.1 shows the inductive approach to be generally

associated with qualitative research, whilst the deductive approach is more commonly associated with quantitative research (Saunders et al., 2009). Deductivists aims to test theory, while inductivists usually use research questions to narrow the scope of the study. However, there are no set rules, and qualitative studies may also employ a deductive approach.

Qualitative vs. Quantitative Approach

Both approaches represent fundamentally distinct paradigms of inquiry. Researcher actions are based on the underlying assumptions of the chosen paradigm. There has been a large amount of discussion and argument over the years surrounding the topic of social research methodology and the theory of how an inquiry should proceed. Phenomenological inquiry (qualitative research) uses a naturalistic approach that strives to understand phenomena in context-specific settings. Alternatively, logical positivism (quantitative research) applies experimental methods and quantitative measures to test hypothetical generalizations. As noted above, therefore, inductive research is commonly conducted using a qualitative approach to data collection. Much debate has centred on the issue of qualitative versus quantitative inquiry – which is the best and which is more “scientific” (Dawson, 2009), and triangulation of methods in contemporary research is common (Crossan, 2003).

The Qualitative Approach

Prominent scholars in the qualitative field, Mays and Pope (1995) define qualitative research as attempting to study things in their natural settings in an effort to discover the meanings seen by those who are being researched (or subjects) rather than that of the researcher. Patton (2002) defines it as attempting to understand unique interactions in a particular situation. Examples of qualitative research are action research, phenomenology, case study, ethnography and grounded theory study. A qualitative type of study is appropriate when: little is known about a social and cultural phenomenon; the topic is not fully understood yet; there is a need to understand the social world and context from the perspective of participants; meaning and understanding are sought; an in-depth exploration of phenomena relating to or involving quality is desired, such as investigating the reasons for human behaviour (Kothari, 2004). The sources of data for qualitative research include: participant observation (field work), direct observation, interviews and questionnaires, focus

groups, documents and texts review, surveys, historical archive reviews, photographs, voices and the researchers' impressions and reactions (Myers, 1997).

The Quantitative Approach

According to Myers (1997), a quantitative research approach originates from the natural sciences and to the study of natural phenomena. Generally, quantitative researchers seek causal determination, prediction, and the generalization of findings (Saunders et al., 2009). Greener (2008) views this approach as likely to be associated with the deductive approach using a positivist and natural science model. This is in agreement with Crossan's (2003) suggestion that positivism adopts a clear quantitative approach to investigate phenomena. Kothari (2004) adds that quantitative research is applicable to phenomena that can be expressed in terms of quantity, since this approach is based on the measurement of quantity or amount. According to Myers (1997), examples of the quantitative method widely acknowledged in social sciences include: survey methods, laboratory experiments, formal methods and numerical methods (mathematical modelling).

5.2.3 Selection of Research Strategies and Field Research Processes

A range of research philosophies create complex challenges for the researcher in terms of the selection of appropriate research strategies. This study took an **interpretivist approach and qualitative research methods**. In terms of the research method choice, there are three types that can be used by researchers: mono method, multi-method and mixed method. This study used a **multi-method technique** (using more than one data collection technique but **all of them are qualitative**), which framed the research around **case studies, interviews** and **documents** (virtual documents, articles, news, websites resources and reports from all over the world). Adopting an appropriate research strategy is important in conducting a research to ensure that it is consistent with the research philosophy selected. Figure 5.2 shows the research strategies that were adopted in this study.

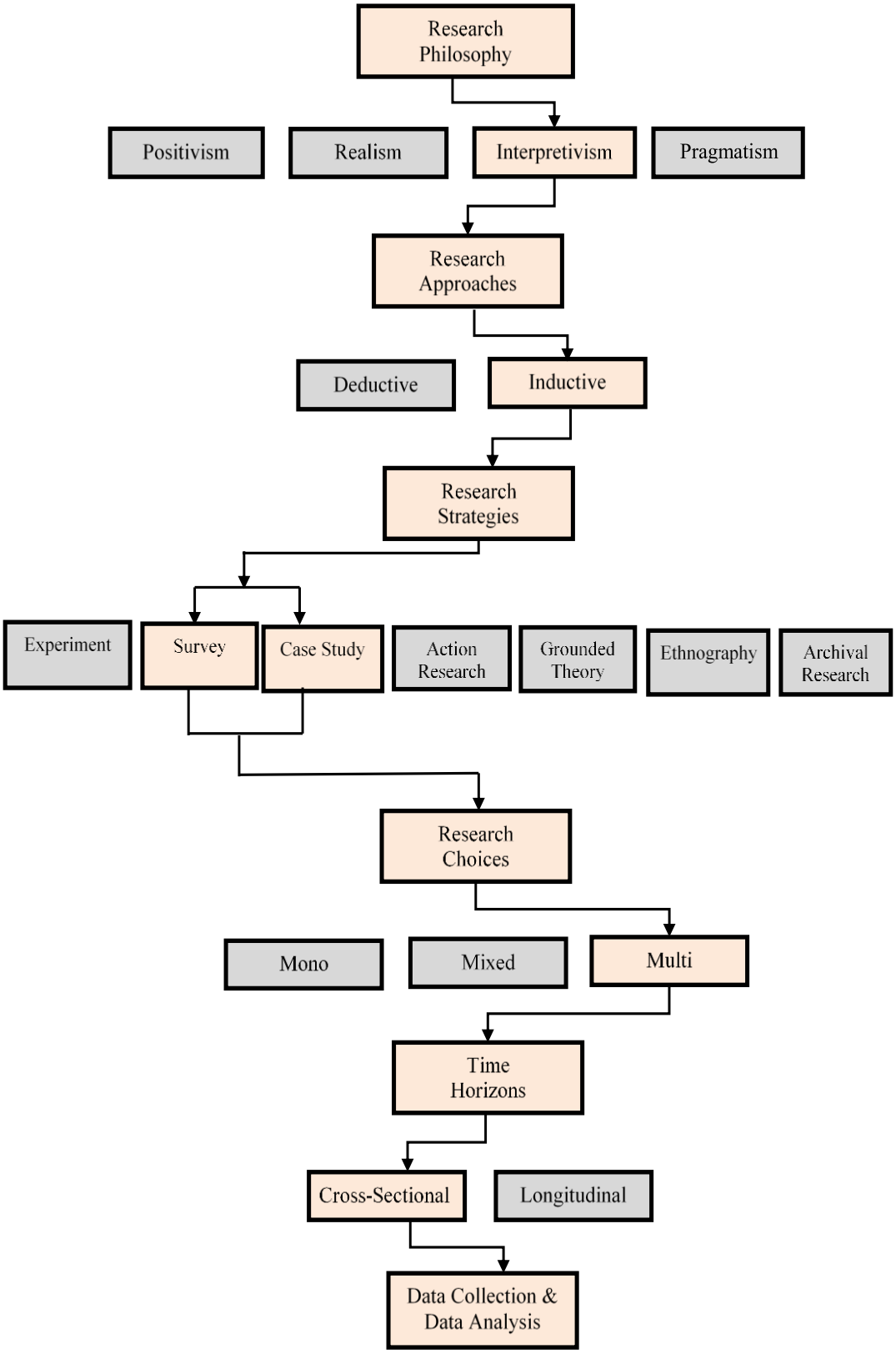


Figure 5.2: Research Strategies Diagram

According to Blaikie (2000), the choice of ontology and epistemology aspects must be aligned, matched and connected to the research problems/questions to avoid methods incompatible with the research stance, which may cause the final work to be undermined through lack of coherence. Bisman (2010, p. 7) insists that "the underlying research philosophy [is] to be made explicit in the writing of the research". Figure 5.2 shows that the researcher of this study considers interpretivism (epistemology) as the most appropriate research philosophy to address the research questions outlined in Chapter 1, which aim to understand solutions to problems faced by the IA profession and its practitioners. It enables the researcher to interpret empirical patterns or regularities by exploring and discovering the subjective meanings and contexts of the world of IA practice and the profession. Assuming a world that is socially constructed (ontology), the selection of the interpretivist paradigm as a philosophical world view underpinning the research design helps the researcher to focus on qualitative research strategies and methods that involve contacts with the IA practice and practitioners (Blaikie, 1993). Qualitative research that relies on textual data allows the researcher, using a contextual approach, to generate rich and deep data. It also enables the researchers to extend his involvement in the research process to increase understanding of how the IA professional body and practitioners continuously improve IA quality and effectiveness in order to survive, remain relevant and eventually solve practical problems.

The researcher adopted a qualitative research approach in this study. It allowed the researcher to choose a case-study and in depth field-based inquiry as a research strategy. This provided the researcher an opportunity to carry out research in the natural and real-life settings of participants' organizations, such as in the IA functions and the IA professional body (Yin, 2009). The field-based research used in this study contributes to enrich the type of research methodology in the IA literature. The chosen research design enabled the researcher to be involved in the in-depth study of real-world phenomena through direct interaction with IA participants and helped the researcher to collect rich data in response to the research questions. It also supported the researcher with dynamic data that covers the past and current critical issues and accounts for unrecorded subsequent change events. Further, the interview transcripts and documentary data (a qualitative data set) collected through the case study was analysed by searching for themes and patterns across the data set (refer to Section 5.4). Once the data analysis process was completed, the researcher focused on theory

discovery by inductively examining the existing theory to position the new theory within the IA discipline.

According to Sarens (2011), since IA is still at the early stage of development, it creates unique opportunities to study the way the IA profession (at a macro level) is developing. This is because the developmental stage of contemporary IA plays a huge role in identifying a fit between theory and method (Edmonson & McManus, 2007). According to Sarens (2007), existing theories or findings are taken into the field to assess whether they capture the heterogeneity and complexity of contemporary IA practices. This requires that core concepts and relationships may need to be re-conceptualized, refined or elaborated in order to come up with more specific and structured conclusions (Keating, 1995). Thus, qualitative data allowed the researcher to explore the unexpected insights to this study in answering the 'why' and 'how' questions (i.e., why does the IA role change over time? And, how does IA improve its service and quality to meet the different business environment and stakeholder expectations?). The qualitative methods is a useful tool to understand in detail why an entity or individual does something and why it is important. The research methods chosen here perfectly suit and match the research questions studied by the researcher.

However, the qualitative approach is not designed to collect quantifiable results, gather data from many respondents, examine sensitive subjects that respondents refuse to talk about, profile the IA function or create models that predict a certain act based on shared characteristics. The research strategy used in this study required quite a lot of time for data collection (e.g., to gain access to people and conduct interviews) and a huge amount of data collected can be time-consuming in sorting, coding, categorizing and then analysis. Obviously, qualitative research did not allow the researcher to measure attitudes and behaviour, or to use statistical techniques such as correlation, regression, cluster analysis or factor analysis. A further limitation of this research method for assessing research is discussed in Chapter 10 and Section 5.6 of this chapter.

The sequence and processes of this research is represented in Figure 5.3 below.

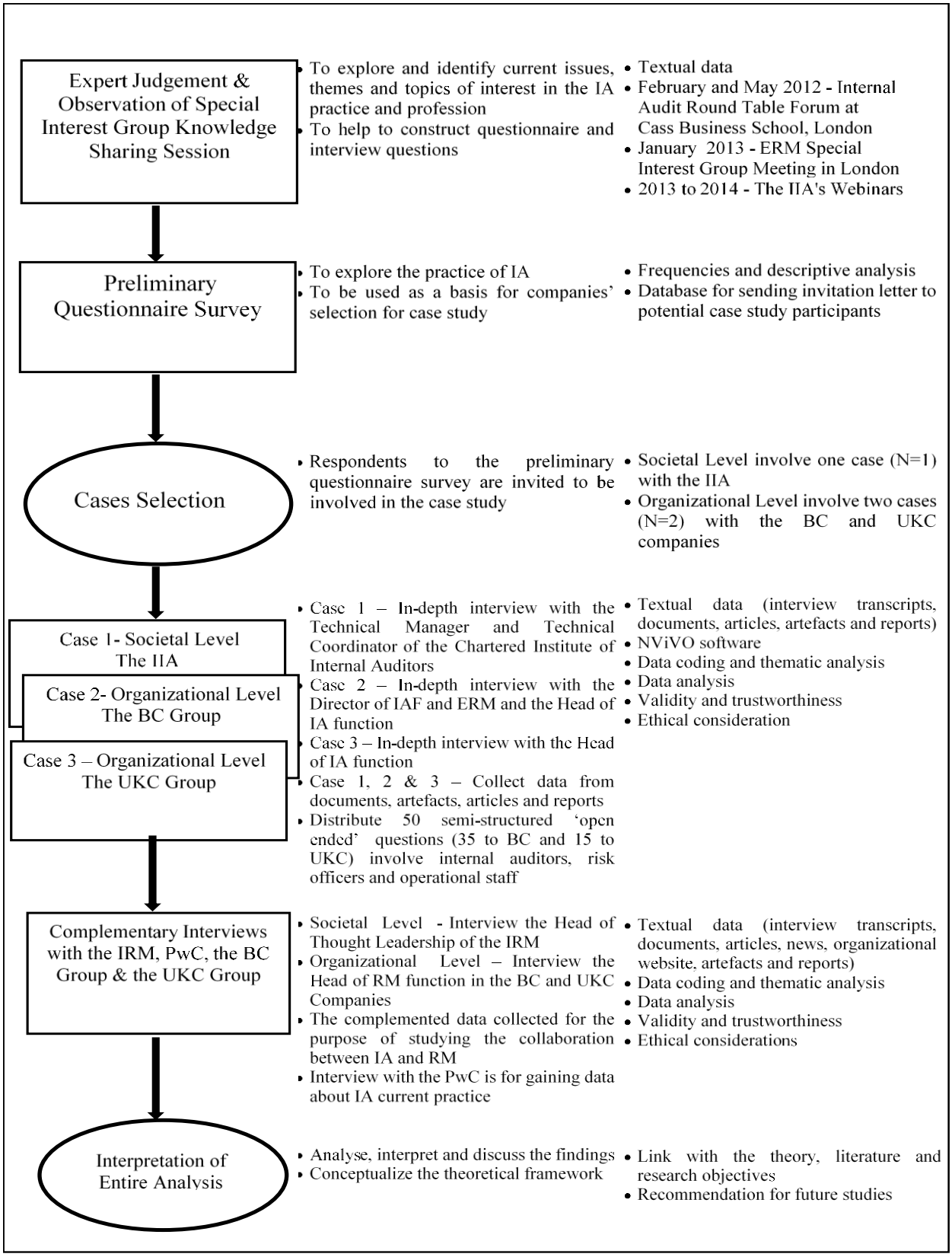


Figure 5.3: Research Sequential and Process

5.2.3.1 The Research Sequential and Process

This section describe the sequence and processes of this research as illustrated in the above Figure 5.3.

First Step – Get to Know the Current Issues in Internal Auditing

As an effort to understand and acquire an update about the current issues encountered in the IA profession and practice, the researcher took the initiative to attend several special interest group workshops, conferences and also participated in internal audit round table discussions, forums and webinars.

Second Step – Preliminary Survey

Prior to conducting the case study and interviews, a preliminary online questionnaire survey was carried out. A different set of questionnaires was prepared for internal auditors and risk practitioners. During the survey process, the Chartered Institute of Internal Auditors (the CIIA) and the Institute of Risk Management (the IRM) in the United Kingdom gave their support and cooperation for inviting their members to complete the survey. The survey provided a useful database of the IA function's profile to help the researcher in planning for the case study. The primary **objective** of the **preliminary survey** was to explore the current practice of IA (particularly, the IA role in risk management) and to establish a network as **a database** for **inviting and selecting** potential companies for the **case study**.

Third Step – Case Study

The preliminary survey recorded 116 respondents who completed the questionnaire survey, where 65 of the respondents were from IA functions and 51 from RM functions. All of the IA functions' participants were then contacted and invited to participate in the case study. As a result, only three companies accepted the call and agreed to be involved in the case study. However, owing to the resignation of one of the Chief Audit Executives (CAE), only two companies remained for the case study. The case study was carried out at two levels: the societal and organizational level.

At the societal level, data was collected in a series of online and face-to-face interviews (from 2012 to 2015) with the Technical Manager of the Institute of Internal

Auditors UK and Ireland (the CIIA). The same online interview was also conducted with the Technical Coordinator of the CIIA. From the interviews, the researcher obtained verbal data (answers and comments to the questions asked). Besides interview data, the document (textual) data such as the professional practice framework, standards, mandatory and recommended guidance, regulations, implementation guidelines, research reports, the IA magazine, technical papers, practice advisory and other resources from the CIIA and the IIA global were collected, analysed and used as the evidence and discussion in the Chapter 7, 8, and 9.

At the organizational level, the case study was conducted at the IA functions of two companies listed on the London Stock Exchange (LSE). The data from the case studies was collected through interviews with the directors/chiefs/heads/managers of the IA functions, and reviews of documents (IA charter, audit committee charter, organizational structure, key performance indicators, strategic plan, various reports and the IA function profile). To protect anonymity, the two companies participating in the case study are referred to in this thesis as “Britain Communication” (BC) and “UK Communication” (UKC). The case study of BC and UKC involved a total of six in-depth, semi-structured interviews with key senior personnel in the IA and RM functions, consisting of three interviews with internal auditors (two in BC and one in UKC) and three interviews with RM officers (two in BC and one in UKC). The details of the interview participants can be seen in Table 5.3.

Each interview session lasted between 90 and 120 minutes. Initially, ten interviews (nine in BC and one in UKC) were scheduled to be held with internal auditors, risk officers and operational staff. However, the interviews were cancelled owing to the time constraints and busy period of the respective respondents. Instead of these interviews, a total of fifty open-ended questionnaires were circulated to internal auditors, risk officers and operation personnel (specifically 35 were distributed in BC and 15 in UKC) during the group-administered survey session. Out of these, 13 were completed and returned, representing a response rate of 25%. The findings of this survey were analysed using an inductive approach. Finally, the case studies for both societal and organizational levels were complemented by data collected from the interviews with the Head of Thought Leadership of the Institutes of Risk Management (the IRM), and an IA expert from PricewaterhouseCoopers (PwC). This data provided useful insights into the collaboration between IA and RM.

Fourth Step – Data Analysis

The data collected for the case study was analysed qualitatively. Details on data analysis are covered in Subsection 5.4.

5.3 NEGOTIATING ACCESS FOR DATA COLLECTION

The qualitative approach used in this study enables the researcher to examine issues in detail and in depth. Interviews questions range beyond the specific focus and enable the researcher to reorient the inquiry in real time as new information emerges. However, one of the key challenges that most qualitative researchers have to deal with is to be granted access by the targeted organization. The data collection at the societal level involves only one professional body that represents the IA profession globally: the Institute of Internal Auditors (the IIA). As the sole targeted respondents, emails were sent to the IIA UK and Ireland (the CIIA), together with an official invitation letter and a brief proposal that explained the research objectives. The researcher was very fortunate that the CIIA accepted to be involved in the case study, including assisting in sending out invitations to CIIA members to participate in the online survey and updating the researcher with current developments in the IIA and the IA profession. In addition, the Technical Manager of the CIIA granted the researcher permission to contact him whenever assistance was needed. As mentioned earlier in the second step of the research sequential and process, all preliminary online survey respondents' organizations were considered as targeted case studies. Therefore, the proposal for the case study and interviews were sent to the respondents and the organizations' authorities by email. In most cases, the researcher sent emails and proposals to the organizations' Chief Audit Executive (CAE) or Director of IA function (or any equivalent post) and Chairman of the Audit Committee. The response to the invitation was not good, as most targeted organizations replied that they only had the time to participate in the online survey. Originally, three companies agreed to participate in the case study. However, one company was withdrawn following the resignation of the Head of the IA function.

Generally, the proposal sent to the targeted participants was prepared and designed to anticipate participants' queries about the credibility and trustworthiness of the findings. In this respect, the researcher justified the motivation and objectives of the

research, and how the research findings would be beneficial for practitioners, regulators, organizations' governance, key stakeholders and the general public. The proposal also aimed to make a comparison of practices across the participating companies. It also underlined the importance of understanding and seeking explanation for the socially constructed problems which lie within the IA practice in the complex and uncertain business environment. To make sure the privacy and confidentiality of individual participants and their organizations were safeguarded, it was made clear that participating organizations would not be expressly identified.

5.3.1 Case Studies and Case Selection

As mentioned in Subsection 5.2.3 and shown in Figures 5.2 and 5.3, a case study approach was identified as the most appropriate research design to address the three key research objectives. These research objectives are intended to answer the question of "how" the IA profession and practice has survived and remained relevant through the creation and implementation of ingenious solutions at the societal level (by the professional body), at the organizational level (by the IA function) and the collaboration between IA and RM at both levels. According to Yin (2009) and Gomm et al. (2000), a case study is the preferred research strategy to conduct an in-depth study of a small number of cases and to investigate a contemporary phenomenon within its real-life context, particularly when the borderlines between the phenomenon and its context are not noticeably evident. In accordance with these views of Yin (2009) and Gomm et al. (2000), this study adopted a case study method as follows:

i) Case I (societal level): The IIA UK and Ireland from January 2013, and numerous ongoing interactions and contacts between May 2013 to May 2015

ii) Case 2 (a) (organizational level): The BC Group, From July to August 2013, and 11 online communications from June 2013 to March 2015

iii) Case 2 (b) (organizational level): The UKC Group, From June to July 2013, and eight online communications from May 2013 to February 2015

iv) Complementary to case study 1: Interviews with the IRM were conducted in February 2013 and with PwC in December 2014

v) Complementary to case studies 2 and 3: Interviews with the Head of the RM function of BC (conducted in July 2013) and UKC companies (conducted in June 2014) and several online interviews (conducted in June to July 2014) with

the Head of the IA function and senior internal auditors (members of the IIA – from the IIA LinkedIn group and regional IIA group)

vi) Complementary to Case studies 1, 2 and 3: Observations of (a) the Internal Audit Round Table Forum entitled *"The Internal Audit Friend or Foe and to Whom"* on 20 February 2012 and *"Internal Auditing Effectiveness: A Quantitative and Qualitative Study that Hardens New Theories"* on the 24 May 2012 in Cass Business School, London; (b) ERM Special Interest Group Knowledge Sharing Workshop on the 25 January 2013 in the IRM headquarters, London; and (c) Numerous of the IIA's *W*ebinars (via online) *and online discussion on various practical topics and issues (via the IIA LinkedIn,* Facebook, Twitter groups), from 2013 to 2014.

These case studies enabled multiple sources of data to be used for data collection including: interviews, observations, archival documents, reports and writing artefacts of the IA discipline and practice. These allowed comprehensive findings to support the phenomena studied.

The BC and UKC companies were selected as case study organizations based on the initial processes of the online questionnaire survey. The population and targeted participants for this survey were among all the IIA and IRM members. Through the assistance of the IIA and IRM, members were invited to participate in the online survey. The invitation was made to all IIA and IRM members via both the institute monthly e-newsletter in February 2013 and a follow-up in March 2013. Besides the e-newsletter, several heads of both institute local chapters and special interest groups also helped to send the invitation to their members. In addition, the invitation was sent to 230 organizations listed in the *Management Today* magazine of Britain's most admired companies. After all the efforts made, the survey managed to get 116 respondents. All of these 116 respondents were then invited to participate in the case study. Unfortunately only three companies agreed to participate and allow access to carry out a case study in their companies. Owing to unexpected issues, only two companies, the BC and UKC, participated in the case study at the organizational level. The data gathered through the questionnaire survey revealed that both of these companies have an established IA function which has been in existence for more than 20 years. In this regard, the researcher strongly believes that these organizations were able to

give valuable input for the research, thus making them the most appropriate and suitable cases for this study.

5.3.2 Interviews

The interviews were carried out with the IIA, IA practitioners (in the two case study organizations), and also some additional interviews with field experts, practitioners and scholars in the IA society, as represented in Table 5.2, 5.3, 5.4 and 5.5. In handling the semi-structured interviews, a flexible interview guide was used, in which questions were customized according to the interviewee and the specific environment. All interviews were conducted, recorded, and transcribed in English. Written notes were also taken during the interview sessions. Recording was dependent on the discretion of the interviewee and this agreement was not typicallly forthcoming. Interviewees were encouraged to submit to the resercher whatever other documents they considered important in clarifying their answers. As IA is highly sensitive, confidential and central to governance and management control systems, the researcher was bound to comply with the agreement to observe and protect confidentiality. Hence, interviews and all data collected were only accessed by the researcher and supervisors. To safeguard the comparability between different interviews, the interview questions were characteristically focused around four main themes: (1) the changing role of IA, (2) the resource and capability of IA, (3) the quality and status of IA, and (4) the collaboration between IA and RM.

Table 5.2: Case 1 – the Interviewees of the IIA (the CIIA)

Person Interviewed	Method of Interview	Number of People
The Technical Manager of the CIIA	Face-to-Face & Online	1
The Technical Coordinator of the CIIA	Online	1

Table 5.3: Case 2 & 3 – the Interviewees of the BC Company

Person Interviewed	Method of Interview	Number of People
The Director of IAF and ERM	Face-to-Face & Online	1
The Head of IA	Face-to-Face & Online	1
IA Manager	Group Administered Survey & Email	1
Senior IA	Group Administered Survey & Email	3

Table 5.4: Case 2 & 3 – the Interviewees of the UKC Company

Person Interviewed	Method of Interview	Number of People
The Head of IA	Face-to-Face & Online	1
Internal Auditor	Group Administered Survey & Email	2

Table 5.5: Additional Interviewees for Case 1*, 2 and 3*****

Person Interviewed	Method of Interview	Number of People
The Technical Director of the IRM	Face-to-Face & Online	1
The Head of ERM in the BC Group	Face-to-Face & Online	1
The BC's Head of Risk & Governance	Group Administered Survey & Email	1
Senior Risk Officers in the BC Group	Group Administered Survey & Email	3
Operational Staff	Group Administered Survey & Email	3
The Head of RMF in the UKC Group	Group Administered Survey & Email	1
IA Executive of the PwC, UK	Face-to-Face	1
The CIIA Members (Practitioners)	Online	5
The IRM Members (Practitioners)	Online	2
The Former Director of the IRM	Online	1
The Founder of the Risk Doctor	Online	1
Academic Researcher in IA	Online	1
Academic Researcher in IA	Face-to-Face	1

* Case 1 – Societal level with the IIA (Chapter 7)
** Case 2 – Organizational level with the BC and UKC (Chapter 8)
***Case 3 – IA and RM collaboration (Chapter 9)

5.3.3 Review of Documents

Reading and analysing documents was undertaken to help understand and draw conclusions about the way IA is practised. Accordingly, the case study data for this research became richer by locating and obtaining both public and private documents and reports that linked the development of the IA role and practice with the survival and improvement of IA quality, effectiveness and performance. A wide range of documentary sources, particularly for the study of the societal level, was available to be used to carry out a profound analysis. These documentary sources comprise of public and private documents (Bryman, 2012; Yin, 2009). Examples of public documents include electronic or virtual documents, regulatory and professional guidance documents, various reports and publications published by the IIA, the case organizations and mass media. On the other hand, private documents regarding IA practice include publications only available to IIA members: for example, management

reports, minutes of meetings, audit working papers, risk profiles and strategic analysis reports. This research included both public and private documents related to the IA profession to enhance the progress, development, quality and effectiveness of IA practices, such as represented in Table 5.6 below.

Table 5.6: Examples of Documents Analysed

Level	Types of Documents
Societal	The IIA's International Professional Practice Framework Updates Guideline, Practice Guide and Member Guidance Periodical IA Magazine and Research Reports Corporate Governance Code and Stock Exchange Listing Requirement Position Papers Practice and Technical Advisory Updates Regulations
Organizational	Internal Audit and Audit Committee Charter Internal Audit Profile and Key Performance Indicators IA plans and reports IA satisfaction and quality reports Published documents

To ensure the review of documents became a significant part of the data analysis, considerable attention was given to avoiding personal bias. In doing so, the researcher sought peer assistance from other PhD students to read the documents and share their views and understanding. Generally, the researcher managed to obtain a substantial amount of documents and reports for the societal-level case-study organization. However, owing to confidentiality, the researcher found it difficult to get significant access to documents and reports from the two case organizations at the organizational level. It was a challenge to utilize the documents and reports as meaningful data for analysis. Yet, those documents and reports offered an opportunity for the researcher to understand the changes and development of IA practice in both organizations, which opened an avenue for the researcher to discuss and explore new issues, obtain more relevant information and clarify the researcher's understanding of IA in the case organizations through follow-up email or online interviews.

5.3.4 Additional Data Collection Techniques

In addition to the interviews, the researcher employed additional methods for collecting data; for example, observing discussions between internal auditors, IA practitioners, scholars and experts relating to current problems, practical issues and the latest developments concerning the IA role and practice. This was done through the IIA webinars, IIA online discussions (through the CIIA UK and Ireland official LinkedIn, Facebook and Twitter groups) and a Special Interest Group (SIG) meeting at the IRM headquarters on RM. These provided invaluable opportunities to explore and understand practical issues and the development of IA; updates on the IA practice framework and standards, the new regulatory changes affecting the IA profession; IA collaboration with RM; and the ingenuity, ideas and actions taken by IA practitioners and other stakeholders to deal with IA present and future matters.

Regarding the two case study companies, the researcher did not manage to get access to conduct observations owing to confidentiality safeguards and a busy period for the IA functions. The researcher only had the opportunity to tour the participants' offices, meet with the IA function staff and obtain some relevant documents, which were to be used strictly for this study purpose only.

5.4 DATA ANALYSIS

This section explains how the data was analysed using thematic analysis. Further, details of the analysis process and how ingenious solutions are identified within the themes of coded empirical data are also discussed.

5.4.1 Thematic Analysis

The aim of data analysis is to make sense of the interactions between actors and the meaning attached to their daily activities within the context (Ahrens & Chapman, 2006). In qualitative research, during the transcription process, the interview data needs to be analysed and transformed into a more logical and meaningful form to make it understandable. In this respect, the broad and complex data from the interview transcripts needs to be extracted, selected and translated into a logical and clear form by discovering patterns and developing themes. Theme analysis is a common approach used in analysing the interview transcripts to construct explanations that

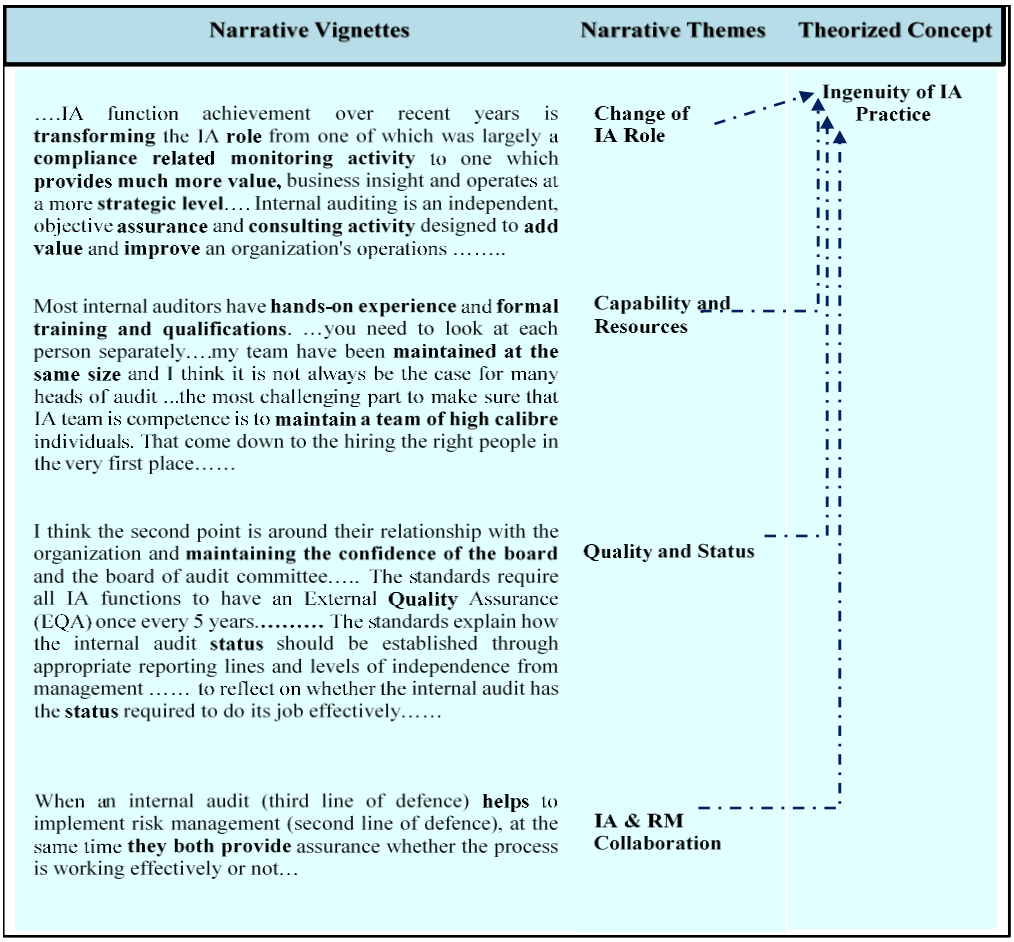
could make sense of the data (Strauss & Corbin, 1990). According to Boyatzis (1998, p. vii), thematic analysis is a process of "encoding qualitative information", where the researcher develops "codes", "words" or "phrases" that serve as labels for sections of data. By looking at the themes (which represent the words or events that interviewees use a lot, or most frequently), it becomes possible for the researcher to better comprehend interviewees' ideas and what they are talking about.

In this study, the researcher performed qualitative data analysis of the interviews and documents using a combination of both manual analysis (using analysis of Microsoft Word®) and NVivo 9.2 software. The justification behind the combination is to improve and heighten the effectiveness of using the NVivo software. The role of the researcher in the central analytical process in the qualitative analysis process is crucial in understanding the meaning of text, which cannot be computerized (Kelle, 1995). According to Roberts and Wilson (2002), computer or artificial intelligence software do not and cannot absolutely replace human intellect and creativity in analysing data.

The data analysis process begins once data transcriptions are ready. The process includes coding, extracting ideas, print list of nodes and build a categorization of themes. In the coding analysis process, the themes for this study were discovered and constructed based on the data collected from the interview transcripts and documentary narratives. The themes were extracted, evaluated and selected from the recurrent or dominant issues in the interviewees' answers and comments. For this purpose, the researcher used a thematic analysis on the narratives of the empirical data. This was performed through identifying, analysing and recording the repetitions of particular events, dominant issues and occurrences (repetitions or synonyms) of the texts and phrases at a considerable frequency within the interview transcripts and documentary narratives data sources (Braun and Clarke, 2006). As a result, the dominant or recurrent themes identified were then coded into four categories. They are: (i) the changing role of IA; (ii) resource and capability of IA; (iii) the quality and status of IA; and (iv) the collaboration between IA and RM.

For instance, as shown in Figure 5.4, the text that has been extracted from the interview transcript data (*…is transforming the **IA role** from one of which was a largely **compliance-related monitoring activity** to one which provides much **more value, business insight** and operates at **a more strategic level**…source – Interview, the BC's Director of IAF and ERM*) and the IIA's document narrative data (*IA is an*

independent, objective assurance *and* ***consulting activity*** *designed to* ***add value*** *and* ***improve*** *an organization's operations – source Definition of IA, 1999*), have been highlighted with a bold mark depicting how these narrative have been grouped and coded into one category of theme, which is the changing role of IA. These texts represent the occurrence and dominant issues about the role of IA as a theme of study. Over a broad thematic analysis, the study managed to inductively uncover the concept of ingenuity. The sample of coding the themes and the theoretical processes to define a theorized concept is shown in Figure 5.4 below.



Source: Researcher Analysis

Figure 5.4: Sample Coding, Themes, and Theoretical Process

In analysing the empirical data, the researcher's analysis process was constantly iterating between the data and reflecting on aspects from the literature. According to Bulmer (1979) and Maxwell (1996), the themes come from the characteristics of the phenomena being studied and by reviewing the literature, where richer literatures

create (or could construct) more themes. Moreover, the themes were also derived from already-agreed-upon professional definitions (such as the one used in the IA study), local common-sense constructs, researchers' values, theoretical orientation, and researchers' personal experience with the subject matter (Blumer, 1979; Strauss et al., 1997; Maxwell, 1996).

It is challenging for a researcher to analyse qualitative evidence gathered from the field and interpret the social understandings captured. Using the empirical data to develop a comprehensive and convincing research outcome in explaining the phenomena to be studied is not an easy task. In this context, Alvesson and Sköldberg (2000, p. 248) state that data analysis is an iterative process that requires "reflexive interpretation" and interpretation on several levels. Further, Alvesson and Sköldberg (2000, p. 245) emphasize that reflection entails the researcher taking into account and thinking about the phenomena studied by examining how "the theoretical, cultural and political context of individual and intellectual involvement affects interaction with whatever is being researched".

In relation to researcher involvement in the research process, a researcher using the inductive approach indicates that research leads to the creation of theory (Bryman, 2012). To explain the phenomena under study, the "reflexive interpretation" concept requires the researcher to match the empirical data and material gathered from the field with the underlying theory of the research. In another remark, Carcary (2009, p. 13) states that interpretation takes place on four levels, including: (i) interaction with the empirical material; (ii) interpretation of underlying meanings; (iii) critical interpretation; and (iv) reflection on text production and language use. There are no rules of thumb for data interpretation; thus a researcher's judgement, intuition and ability to highlight issues play an important part in the process (Carcary, 2009). In line with the research by Bryman (2012), Carcary (2009), and Alvesson and Sköldberg (2000), the four coded themes as per Figure 5.5 were inductively matched with the underlying theory of the research. It is found that ingenuity theory is a suitable concept to explain the data collected for this study. The following section discusses how the data was analysed with the intention of identifying the ingenious solutions at the societal and organizational levels.

5.4.2 How Ingenious Solutions Were Identified in the Data

The concept of ingenuity used in this study refers to the quality of/or feature of being creative and/or innovative in the process of exercising ideas to solve problems within structural constraints and limited resources to meet stakeholders' expectations and challenges. In this context, **ingenuity is not merely a term used to describe a big or highly creative solution to a problem**, but also as to understand how the IIA (at the societal level) and IA functions (at the organizational level) **make small improvements, that are nevertheless crucial, or achieve breakthroughs** that can solve big problems, change the IA function's practice in the organization or change the entire IA profession and practices (see Chapter 4, p. 88-90).

For example, an ingenious strategy to the solution of IA practice problems through the process of designing and preparing an effective IA plan and selecting appropriate IA assignments can be better achieved via the development and execution of risk-based internal auditing (RBIA). The development of an ingenious solution signifies the ability of IA to meet challenges and exercise solutions to problem-solve. The aim is to eliminate or reduce mistakes, surprises or avoid missing opportunities that might prevent an organization from achieving its objectives. The IA exercises ingenuity by using imaginative problem-solving techniques in prioritizing risks (through measuring and evaluating probability and the impact of risks for the organization). The ingenuity of IA practice involves practitioners' and professional body's complex intellectual or thinking processes. Bringing together both parties thinking would improve the IA practice and profession individually and collectively to take advantage of opportunities and/or overcome problems.

This study concentrates on the identification of ingenious solutions exercised by the IA professional body and IA practitioners in solving the constraints faced by them in order to fulfil stakeholder expectations. The uncertain and challenging business environment has constantly influenced the IA profession to change and improve its role and practice framework. In improving the quality and effectiveness of IA, a lack of resources and capability in discharging the IA broadened role (including the IA role in RM, as a business advisor, an added-value function, and to improve organizations' operation efficiency and effectiveness, as defined in the IA new definition in the IPPF) are examples of the constraints that require a solution. In identifying ingenious solutions, the study only focuses on the IIA (i.e., the professional body representing

the IA profession (at the societal level) and IA practitioners (at the organizational level) and does not place emphasis on human ingenuity (the internal auditor's ingenuity at the individual level). The IA professional body is represented by the IIA[12] at the societal level; and IA practitioners are represented by the IA function[13] at the organizational level. The societal level focuses on how the IIA exercised ingenuity to determine the overall direction and development of the IA profession and practice. Whereas, the organizational level focuses on how the IA functions exercised ingenuity in implementing those developments and deal with the specific situational issues and challenges in order to fulfil stakeholder expectations.

The study addresses a number of major areas that needed ingenious solutions (ingenuity) at the societal and organizational levels. These ingenious solutions are important for the IIA and IA functions to enhance IA practice and effectiveness in order to survive and sustain its relevance. Figure 5.5 below depicts examples of how various factors/drivers trigger changes to IA practice and effectiveness. Subsequently, this indicates how various forms of constraints emerge and are confronted by the IIA and IA function. This requires the IIA and IA function to proactively and reactively deal with the changes and make appropriate improvements to strengthen the IA profession and practice. Figure 5.5 also shows how the IIA exercises ingenuity in dealing with various forms of constraints, and how these constraints have motivated the IIA and IA function to act creatively to improve their quality and effectiveness. The figure shows the dynamic nature of the business environment that exhibits processes of change, constraints and ingenious solutions that influence the IA profession and practice success. Figure 5.5 below shows the framework of the relationship between changes, constraints and ingenious solutions, which explains how ingenious solutions are identified for three cases in the three phases. Each phase represents one case study that comprises three steps to show how ingenious solutions are identified.

[12] The IIA is the IA profession's global voice, recognized authority, acknowledged leader, chief advocate, and principal educator (the IIA, 2015).

[13] The IA function is a supporting service function (established within an organization or external service provider) that performs the roles and responsibilities of an IA.

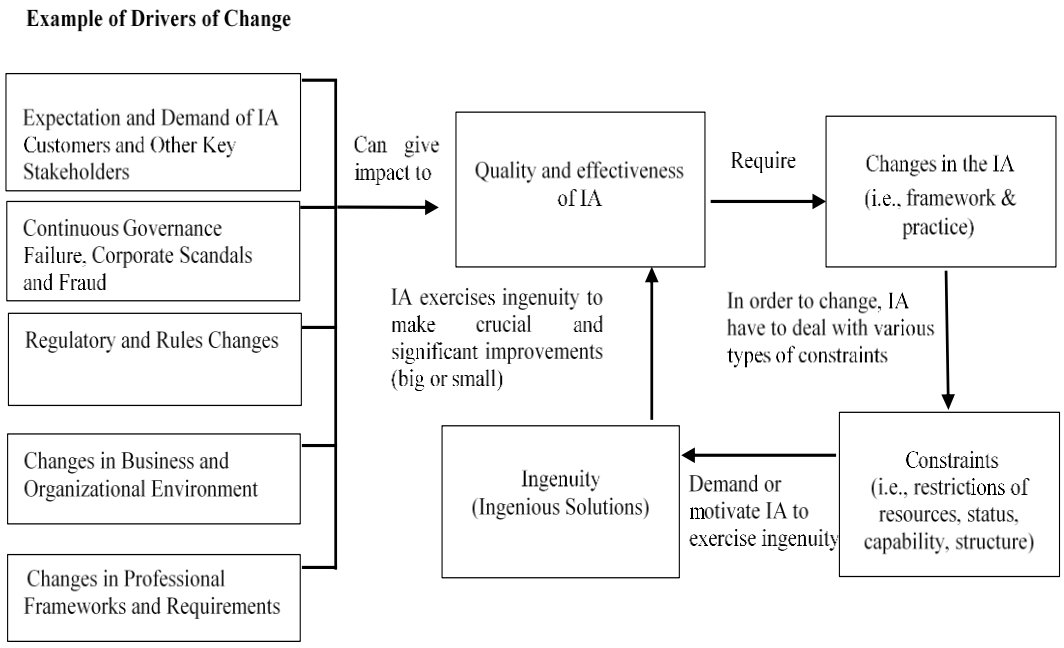


Figure 5.5: Changes, Constraints and Ingenious Solutions

In a nutshell, Figure 5.5 shows how the drivers of change force IA to change (for example, financial crises and regulatory changes have led the board of directors to ask IA to provide assurance and consulting services to improve the RM process in the organization). So, IA needs to change and fulfil the demand to maintain or improve its quality and effectiveness. But, in order to fulfil the change, IA may be subject to constraints (such as, the IA function may not have the resources or specific skills needed to perform the service). Thus, the constraints restrict IA's ability to make the demanded changes. That is why ingenuity is needed (for example, ingenuity through allowing IA to make co-sourcing arrangements with external service providers enable the IA function to acquire the skills needed to perform the service asked of it).

Phase 1 (Case 1 – the IIA) – Identify Changes, Constraints and Ingenious Solutions at the Societal Level (for Chapter 7)

Figure 5.5 above shows how the change factors (or drivers of change) affected the IA profession and practice. The gap between IA current practice and stakeholders' expectations has caused constraints that required ingenuity from the IIA as the recognized authority for IA practitioners to lead IA development. The data for the societal level was collected through interviews with the IIA and textual materials, such as standards, guidelines, frameworks, technical reports, practice updates, magazines,

research reports, and various publication materials published by the IIA. The following are three steps used in identifying ingenious solutions:

(i) Step 1 – Analyse and identify changes and their impact on the IA practice and profession

In order to identify ingenious solutions (ingenuity) at the societal level, the first step is to identify, assess and seek to understand how changes in the business and regulatory environment, such as changes in the professional practice framework (for example, the COSO ERM framework) affect IA practice. The study seeks to understand how drivers of change (refer to Figure 5.5) give impact to the IIA in relation to IA practice and effectiveness. In this respect, the IIA constantly attend and pay attention to its members' and stakeholders' expectations and needs by keeping informed of the profession worldwide and responding with guidance to address IA's emerging challenges and evolving role. For example, corporate governance failure, such as Enron case, led to the change in the regulation or code of professional practice like the issuance of the US Sarbanes-Oxley Act (2002), the COSO Enterprise Risk Management (ERM) framework (2004), and the UK Corporate Governance Code (2003, 2005, 2009, 2010, 2014). It is important to understand how and to what extent the driver of changes impact the IA role and practice. As the body that represent all internal auditors worldwide at the societal level (as a governing body and recognized authority in developing and enhancing the IA profession and practice), the IIA must respond to and deal with the changes. For instance, in the case of the Sarbanes-Oxley Act (SOA), Sections 302 and 404, the IIA and IA profession were confronted with an array of issues and questions relating to their role and involvement in the SOA. These issues and questions included how Section 302 and 404 would affect the IPPF (the IA definition, standard, code of ethics, training and development, implementation and supplementary guidance) both in the short and long term, particularly with regards to practice, professionalism, capability, status, and the role of IA.

(ii) Step 2 – Identify constraints caused by the changes

It is not easy for the IIA to respond and manage all the changes that affect IA, and which require an improvement to the IA practice and profession. This is owing to the nature of IA services that serve all sectors and entities, with different regulations, sizes and complexities of business activities. It is crucial to identify and recognize the constraints that affect the IA practice, objectives, quality and effectiveness in fulfilling

stakeholders' expectations. As mentioned in Chapter 4, constraints often set boundaries and restrict the extent to which someone can do, or implement, something; yet, at the same time, constraints will often motivate someone to act innovatively to resolve the problem (Lampel et al., 2014). Therefore, the researcher is keen to identify the constraints that emerge as a result of changes and categorizes them in various forms. This is in line with Lampel et al. (2014), who portrayed constraints in various forms, such as structural, resource scarcity, temporal, and framing problems. Identifying constraints is crucial for understanding the source and inspiration for creative and ingenious solutions. For instance, through reviewing IA literature, the CBOK practitioner study and the Institute of Internal Auditors Research Foundation (IIARF) research report, some key constraints that confront IA practice have been identified. Those constraints include issues pertaining to the best practice, framework, legitimacy, status, talent, quality and effectiveness, capability, competency, resources, independence and objectivity, political, authority, professionalism, tools and techniques, methodology, communication, size, ideal role and focus, as well as uniformity and consistency of the IA practice.

(iii) Step 3 – Identify ingenious solutions to resolve constraints

Performing step (i) and (ii) above is crucial in identifying and understanding what changes and constraints are faced by the IIA and IA profession. The purpose of the third step is to discover how the IIA evolves and transforms IA practice through exercising ingenious solutions (Lampel et al., 2014). The focus of this study, however, is to identify ingenious solutions through solving the constraints associated with the changes in the IA role; its resources and capabilities; and its quality and status. Having a knowledge and understanding of how various changes and constraints have impacted the IIA and IA practice has enabled the researcher to evaluate how the IIA has responded to keep IA practice up to date.

Ingenious solutions are needed to resolve, challenge or escape from the constraints and to make changes and improvements to the organization. The researcher used Lampel et al.'s (2014, p. 467) definition of organizational ingenuity, where he defines ingenuity as "the ability to create innovative solutions within structural constraints using limited resources and imaginative problem-solving". In addition, the ingenious solutions identified are not restricted to novel, big innovation and new ideas ("invention") but also any ideas that are useful (even if a small idea, or not a new or

novel idea) to resolve constraints and improve IA performance (Ungerer et al., 2011). Ingenuity enables the IIA to improve the IA practice and profession, and makes IA relevant and able to provide quality and effective services as needed by its clients and stakeholders.

Phase 2 (Case 2 – BC and UKC Companies) – Identify Changes, Constraints and Ingenious Solutions at the Organizational Level (for Chapter 8)

In Phase 2 the same process of identifying ingenious solutions, as stated in (i), (ii) and (iii) in Phase 1 and Figure 5.6, are replicated**.** However, the aim of Phase 2 is to identify ingenious solutions at the organizational level. As mentioned previously, in Phase 1, Step 1, the research specifically concentrated on identifying ingenious solutions exercised by the IIA for the entire IA profession. For example, in the context of the IA framework, the new IPPF was issued for improving the IA profession and practice after it went through a consultation process with various stakeholders and responses from public comments at the societal level. On the other hand, for the organizational level, the study aims to identify how IA practitioners and functions in organizations deal with changes, constraints and the IIA's IPPF, through exercising ingenuity and imaginative problem-solving approaches. IA functions in are self-regulating and self-evaluating, and vary from one organization to another. The functions vary in terms of size, capability and resources, status, level of maturity, management support, and the extent to which the IPPF is implemented. The level of IA maturity and activities in the organization tend to reflect politics and particular objectives of the board of directors and senior executive management.

Data for the organizational level was collected by carrying out two case studies at two organizations, which included interviewing the Director and Head of internal auditors. In addition, a small group of internal auditors, risk officers and operational personnel were asked to answer open-ended questions in writing (they also could be contacted by the researcher through email for clarification). In addition to interviews, secondary data, such as documents and reports, was used in the case studies. For example, the IA charter, key performance indicator (KPI) and assignments/projects reports were used as evidence to show how the IA function has changed and innovated to improve its role to meet the board and management expectations.

The IA function usually operates under an audit committee approved charter that defines their authority, role, objectives, and scope of work. Normally, the IA function compares the existing state of affairs to what should be in place (IPPF) and exercise ingenious solutions to achieve the ideal. Therefore, each IA function has to earn its legitimacy and status with the organizations they serve by delivering an effective IA service in accordance with the IIA IPPF. The IA function may be constrained by the audit committee's and executive management's objectives and politics, if they have a (negative) distinct level of trust, acceptance, support, view or attitude towards IA. According to IIARF's (2015) research report, the politics of the IA function provides significant insight into what it found to be continuing efforts within organizations to manipulate the IA function to cope with adverse influences so that the IA function is able to anticipate the needs and expectations of key stakeholders, comply with the IPPF and fulfil its real mission. In general, each IA function is confronted with various forms of constraints in discharging their changing role as well as in implementing the IPPF. Identifying how the IA function exercises ingenious solutions in managing its constraints helps to give a clear picture of how the IA function survives and remains relevant at the organizational level.

Phase 3 (Case 3 – IA Collaboration with RM) – Identify Ingenious Solutions through Forging a Collaborative Alliance (for Chapter 9)

In Phase 3 the ingenious solutions are identified by examining how IA and RM collaborate and partner to manage constraints and create advantage at both the societal and organizational levels. The data for the organizational level is collected by interviewing the Technical Manager of the IIA, the Technical Director of the IRM, and the Director and Head of the IA functions of the two case study organizations. In addition, a small group of internal auditors, risk officers and operational personnel were asked to answer open-ended questions in writing (the researcher was granted direct access to these participants through email). Secondary data, such as documents and reports on collaborative effort, were also used for this purpose.

5.5 MAINTAINING CREDIBILITY AND TRUSTWORTHINESS

The role of the researcher's acumen, intuition and potential bias in interpretivist, qualitative research gives rise to the concern of how to demonstrate the trustworthiness of qualitative research findings. It is important to develop a convincing

or plausible research outcome or research story (Carcary, 2009). In dealing with this issue, Guba (1981) and Bryman (2012) identify four criteria that may be addressed by qualitative researchers wishing to present a plausible case and validate that their work is academically sound. The four criteria are **credibility** (known as internal validity in quantitative research); **transferability** (known as external validity/generalizability in quantitative research); **dependability** (known as reliability in quantitative research); and **conformability** (known as objectivity in quantitative research).

The credibility criterion *deals with the question of how congruent the findings are with reality. According to Guba (1981), ensuring credibility is one of most important factors in establishing trustworthiness (Merriam, 1998).* Shenton (2004 p. 73), suggests possible strategies that can be used by the researcher to maintain credibility, including: developing early familiarity with the culture of the participating organizations, using iterative questioning in data-collection dialogues, using “reflective commentary”, and applying triangulation by using different methods, sources of data, different types of informants and different sites. Thus, to maintain credibility of findings in this study, the researcher conducted cross-checking of different data sources from the interviews and documents, as well as (post-interview) clarifying with interviewees any vague or unclear information.

The transferability criterion is concerned with the researcher using a rich and sufficiently thick description to demonstrate the case data and findings and to provide readers or other researchers with references for making judgements about the possible transferability of the findings to different environments or other contexts (Bryman, 2012).

Dependability is the third criterion, which seeks to ensure the reliability and consistency of the research inquiry *processes* used. To achieve dependability, the researcher must have a complete record of the entire research process and activities, such as the research plan, the process of selecting case organizations and interviewees, the development and specification of research questions, the conceptualization of the study, the collection of data, the interpretation of findings and the report of the results. Dependability can be assessed by performing a *dependability audit to* examine the records of the researcher’s activities to see how well the research procedures, scientific processes and techniques for meeting the credibility and transferability have been followed. By referring to sections 5.3 and 5.4 of this chapter

and the research questions defined in Chapter 1, this research justifies the theoretical implications and addresses the dependability criteria as outlined by Guba (1981) and Bryman (2012).

Lastly is the conformability criterion. This is whereby the researcher acknowledges the difficulty of ensuring and achieving absolute objectivity. In applying the conformability criterion, the researcher has considered different organizational cultures and the scope for the intrusion of the researcher's biases, beliefs and assumptions. In this study, the researcher has sought to ensure conformability by using triangulation, continuous discussion with supervisors, research colleagues, expert judgement, peer review and presenting the research findings at four conferences. Confirmability is achieved when the researcher demonstrates that findings emerge from the data and not from the researcher's own biases. Ultimately, the implementation of credibility, transferability, dependability and conformability criteria are crucial in the pursuit of a trustworthy research study.

5.6 RULES ON ETHICS AND CONFIDENTIALITY

As mentioned in Section 5.3 and 5.4, invitation letters (refer to Appendix 2) were sent to the respondents' companies that participated in the questionnaire survey. The companies were contacted through survey participants (the majority of these were heads of IA functions), as well as through their public relation personnel emails (especially for the 230 "Britain's Most Admired Companies"). As for the professional bodies (the IIA and IRM), an invitation letter was emailed through their public relations office and persons in charge of students' affairs. The invitation letter was accompanied by a supporting letter from supervisors and an information leaflet. The summary of the research objectives, the confidentiality of the data, the anonymity of the participants were explained in the information leaflet (refer to Appendix 3). The participants then contacted the researcher through email and the details of the interviews, such as venues and times were arranged mutually by both parties. There was no potential harm to participants in either a physical or psychological sense, as the interviews were either conducted by telephone or in the participants' office. In addition, the questions asked were strictly professional and approved by the Aston University Ethics Committee. The questions were also sent to participants in advance upon their request.

At the beginning of the interview session, the participants received a verbal explanation regarding the research, as well verbal assurance regarding the confidentiality of the data. When participants were satisfied and ready to start the interview, the consent letter (refer to Appendix 4) was signed by both the researcher and the participant. The consent letter made participants aware that their participation is voluntary and that they had the right to withdraw at any time, without giving any reason. In the consent letter, participants were also asked for their agreement to be recorded. In addition, if further clarification was needed, participants were free to ask questions before or during the interview session.

In regard to the companies' documents, data was collected from two sources (publicly and privately available resources). No consent was necessary for data that is publicly available, such as data from the companies' website, annual reports, or other publicly published documents. Regarding the private documents, these were obtained in person from the company during the interview and permission was obtained prior to their usage in the research. The data collected was stored in password-protected files that only the researcher could access. In reporting the study findings, the participant companies were made anonymous and had different names assigned to them. Moreover, regarding the professional bodies interviewed (the CIIA UK and Ireland and the IRM UK), the names of the participants were not revealed, but the report included their positions in the organization, with their permission. In the event that consent was withdrawn (this was not the case in this study), their data would have been destroyed or deleted to ensure it was not used.

5.7 CONCLUSION

This chapter has presented the research method and procedures involved in collecting and analysing data (in Chapters 7, 8 and 9). The data analysis section has particularly explained how data was analysed using thematic analysis and described how ingenious solutions were identified in the data. The chapter also shows how the researcher sought to assure participants on the ethics and confidentiality of the research, to maintain the credibility and trustworthiness of the data and research process in order to produce innovative, meaningful results and worthwhile conclusions. Overall, this chapter demonstrates that the research was planned and conducted using an appropriate research design endeavour to contribute to the

knowledge in the area of IA (and to a lesser extent RM) and ingenuity. The next chapter presents the preliminary survey carried out quantitatively in order to get some overview of the IA practice. The contacts and networks established from the survey become the basis for selecting the participants for case study interviews.

Chapter 6

PRELIMINARY STUDY

6.1 INTRODUCTION

This chapter presents the results of the preliminary Internal Audit Survey (IAS) conducted within the IA functions of companies in the United Kingdom (UK). It contains background information and a descriptive analysis of the IA functions' characteristics. The main objectives of the survey is to gather contact details of the heads of IA departments, such as chief audit executives, directors of internal auditing, heads of internal auditors, internal auditors and equivalent others. The contact details from this survey are then used to communicate with and invite respondents to participate in the case study element of this research. In addition, the survey is also useful for the researcher in better understanding IA practices within the IA functions of companies in the UK through the snapshot of their profile and characteristics. This knowledge is essential to help the researcher to develop a preliminary understanding of IA practices before carrying out the case study.

6.2 THE PARTICIPANTS OF THE INTERNAL AUDIT SURVEY (IAS)

An online survey was used to collect data by inviting potential participants from the Directors of IA departments, chief audit executives (CAE), heads of internal auditors, internal auditors or equivalent others to answer a set questionnaire. Invitations to answer the survey were made to members of the Chartered Institute of Internal Auditors (CIIA) United Kingdom and Ireland through the monthly Audit & Risk E-newsletter (which goes out to about 1,000 people) and nine heads of CIIA regional networks (each of the regional network heads emailed the link of the online survey to their network members). In addition, the invitation to participate in the IAS was sent to heads of the IA functions of 254 companies listed in *Management Today*'s "Britain's Most Admired Companies". This mailing was sent to those companies through their investors' relation office. The survey was conducted in mid-2013 in order to find out features and observations of IA practices in the United Kingdom. The questionnaires contained semi-structured and closed-type questions that offered one or more

answers. Overall, the online survey recorded a total of 136 respondents; of which 71 cases (more than 50 per cent) were incomplete. . This resulted in an effective sample size of 65 respondents, representing 65 organizations. The high rate of incomplete questionnaires was mainly owing to the respondents being junior staff with not enough knowledge, or not wanting to trouble themselves to obtain the necessary information, to answer all the questions.

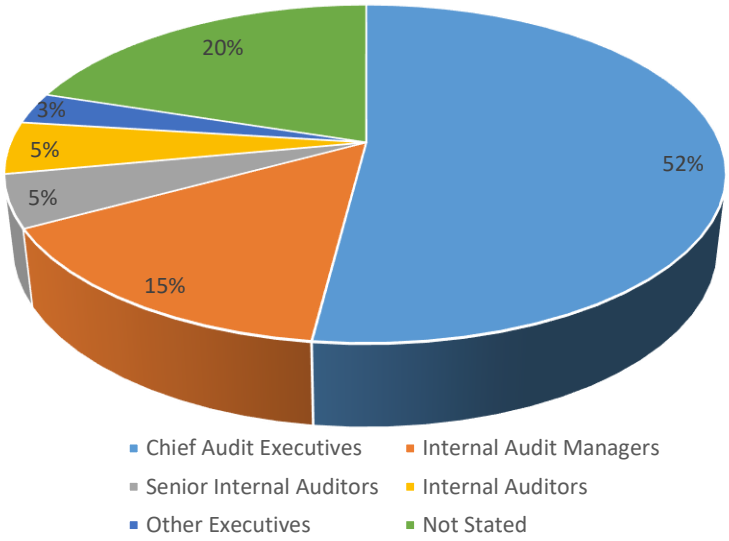


Figure 6.1: Respondents' Backgrounds

Figure 6.1 shows that around 67 per cent of the respondents were directors, heads, chiefs or managers of their IA functions, and the remaining 33 per cent consisted of staff in other (less senior) roles. It was considered preferable to use responses from chief audit executives (CAE) or those in equivalent senior roles, as the sample frame. This was because these respondents had the capacity to give appropriate information about the entire operation and activities of their IA functions. On the other hand, the knowledge and information obtained from experienced internal auditors and other executives was also valuable and relevant; thus were included in the analysis.

6.3 BACKGROUND AND CHARACTERISTICS OF THE INTERNAL AUDIT FUNCTIONS FROM THE IAS RESULTS

This section outlines the background and characteristics of the IA functions according to the information provided by respondents to the IAS. It discusses, among other aspects, the age and composition of the IA functions and their level of conformance with the International Professional Practice Framework (IPPF).

6.3.1 Background Information on the Internal Audit Functions from the IAS

This section consists of background information including the age, relative size, setting, qualification and staff turnover of the IA functions studied.

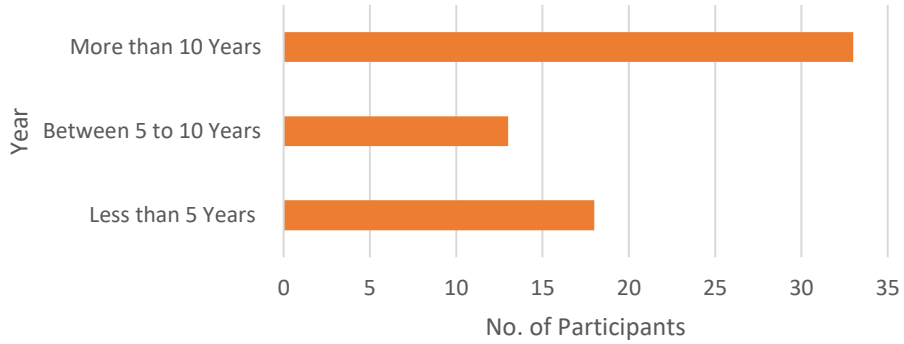


Figure 6.2: Age of the Internal Audit Functions from the IAS

Figure 6.2 shows that, at the time of surveying, 51 per cent of the IA functions were in existence and operating for more than ten years; while 49 per cent were less than ten years old. This reflects the fact that nearly half of the IA functions were relatively young. In terms of the IA function setting, a large majority of participants (86 per cent) responded that they had a fully in-house IA function, with minimal co-sourcing (9 per cent) and fully outsourced (5 per cent). This finding is consistent with Burnaby et al. (2007), who report that less than 10 per cent of IA work is outsourced. On the other hand, the relative size of the IA functions was quite small with 38 (58.5 per cent) of the respondents stating that their AI function's size made up just about 2 per cent of the total employees in their organizations.

For the 65 respondents that completed the survey, about 70 per cent said that all their full-time auditors had professional qualifications. Moreover, 25 per cent and 33 per cent of the total number of full-time auditors had obtained IA qualifications and become members of the IIA respectively. There is an annual turnover of internal auditing staff of approximately 9 per cent.

6.3.2 Characteristics of Internal Audit Functions from the IAS

This section explores the characteristics of the IA functions of the survey respondents, using information gained from the survey results. The key characteristics of the IA functions included compliance with the IIA standards, independence, quality assurance, the IA role in RM, and training and development.

Compliance with the IIA's Standards and Organizational Procedures

This section aims to discover to what extent the IA functions of the organizations studied complied with the IIA's standards and their adherence to the policies and procedures developed for internal auditors working in those IA functions.

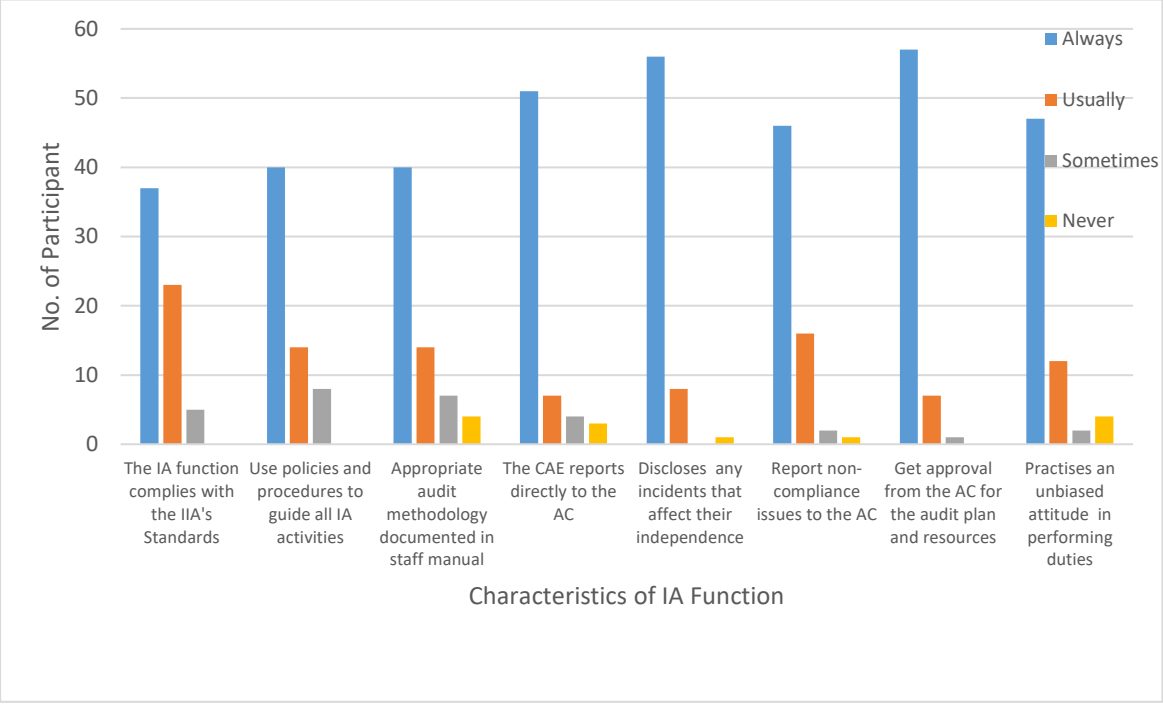


Figure 6.3: **Characteristics of IA Functions from the IAS**

The survey results show that the majority of respondents (92 per cent) claimed that they ran their IA functions and performed IA activities in conformance (always [57 per cent], usually [35 per cent]) with the IIA's standards. Nevertheless, 8 per cent of the respondents admitted that they were not always compliant with the IIA's standards. On the other hand, a majority (65 per cent) of the respondents believed that their IA functions were always developing and adhered to policies and procedures to guide all of their IA activities.

In exploring whether the IA functions concerned maintained continuity, sustaining the level of quality or standardization of IA work, the survey found that 65 per cent of the respondents always documented the audit methodology in their IA policy manuals. A residual of respondents reported: "usually" (22 per cent), "sometimes" (11 per cent) and "never" (6 per cent). These criteria describe the important characteristics of IA functions and management that can be used in assessing their quality and effectiveness (Arena & Azzone, 2009).

The findings are consistent with research by Kassim et al. (2012), which highlights that the quality of IA functions much depends on their level of conformance with the International Professional Practice Framework (IPPF). It is also one of the aims of the IIA to see stronger conformance towards its IPPF across the IA profession and practitioners globally (Chambers, 2013; Burnaby & Hass, 2011; Sadler et al., 2008; Coetzee & Bruyn, 2001).

Independence

In their study on IA independence, Christopher et al. (2009) investigate the independence of IA functions by looking at reporting structures and the relationship of CAEs (or IA functions) with both management and their audit committee. Their study finds that the CAEs' independence is under threat if the management (not the audit committee) is in charge and responsible for appointments, terminations and appraisal of the CAE performance.

Furthermore, they also claim that the independence of the IA function could be impaired if CAEs do not report functionally (or do not have direct access) to the audit committee. In investigating the independence of respondents' IA functions, this survey finds a clear message indicating that the IA functions were independent in executing

their roles and responsibilities within their organizations. Almost all of respondents confirmed that they were “always” (57 per cent) or “usually” (35%) in agreement with the IIA’s standards that require them to be independent and free from circumstances that impede the capacity of CAEs and internal auditors to discharge their professional responsibilities in an unbiased manner. For example, it is stated in the IIA’s standards that independence can be best achieved through the CAE functionally reporting to the board of directors (or audit committee) and administratively to the chief executive officer.

The results of the AIS are very much in agreement with the IIA’s standards on independence, as in excess of 90 per cent of the respondents (refer to Figure 6.3) reported that their IA functions complied with the requirements. They reported that the CAE is “always” or “usually” are compliant with the IIA’s standards; functionally report directly to the audit committee; report non-compliance issues to the audit committee; get approval from the audit committee for the audit plan and resources; and practise unbiased attitudes in performing their duties. For example, when asked the question whether the IA function and its internal auditors strictly at all times practised an unbiased attitude in discharging their roles and responsibilities, the survey results recorded: “always” (72 per cent), “usually” (19 per cent), “sometimes” (3 per cent) and “never” (6 per cent).

The survey also finds that nearly 94 per cent of the respondents stated that their IA function had used formal monitoring procedures to oversee and follow up the implementation of IA recommendations to management. The capacity of the IA function to influence its organization (especially the board, audit committee, senior executives and all managers) to implement the recommendations suggested by them is one of the indicators that shows the achievement of IA effectiveness, independence and IA’s customers satisfaction (Arena & Azzone, 2009). Overall, characteristics, such as: functional reporting to audit committees; overseeing recommendations to be implemented by management; audit committees being responsible for approving IA plans, budgets, and other resources; and ensuring that non-compliance issues are addressed, are essential in determining the independence and objectivity of IA functions.

Quality Assurance in the IA Function

Internal and external quality assurance assessments are crucial for improving, setting and benchmarking the performance, quality and effectiveness of the IA function and its activities. For instance, through internal quality assurance (IQA), such as an IA annual survey and IA' feedback and satisfaction survey, the IA function is able to obtain significant input, comments and responses from its organization (including top management) concerning its services, assignments and activities.

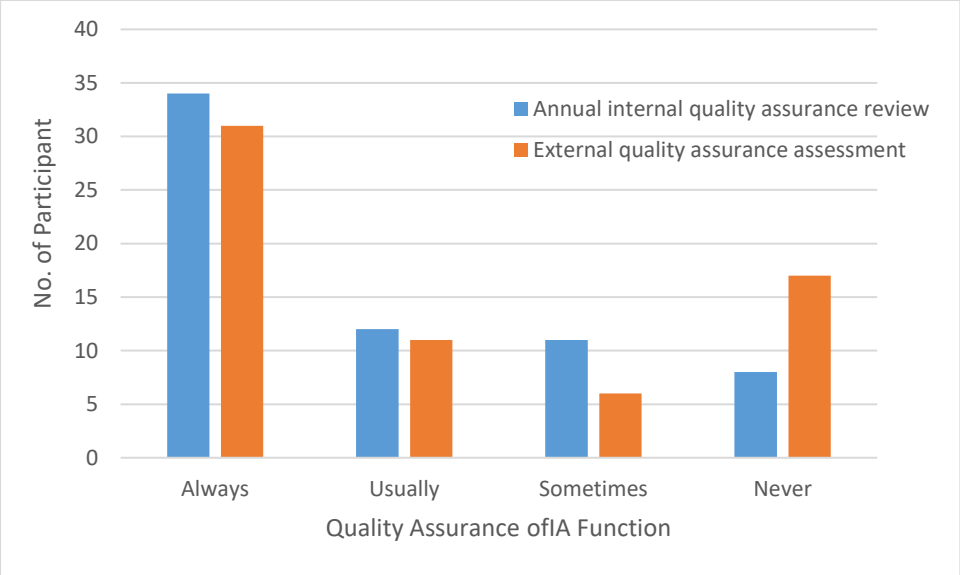


Figure 6.4: Quality Assurance of the IA Function

Figure 6.4 shows that 53 per cent of respondents answered that their IA functions "always" performed internal quality assurance assessments, 18 per cent "usually" do, 17 per cent "sometimes" and 12 per cent "never". On the other hand, when asked whether they carried out external quality assurance (EQA) assessments by appointing a qualified and independent reviewer, only 48 per cent of participants said "always", 17 per cent "usually", 9 per cent "sometimes", and 26 per cent "never".

This result, therefore, reveals that more than a quarter of IA functions surveyed had not had an EQA for at least five years. A lack of an EQA could jeopardize the performance and quality of their IA functions. According to the IIA's standards, IA functions ought to be externally assessed every five years or less by an independent reviewer. The boards and their CAEs need to address this to promote quality and innovation through conformance to the IIA's standards. Regarding non-compliance,

the survey records that almost 85 per cent of the respondents indicated that their IA function had to clearly disclose reasons for and the expected impact of any non-compliance with IIA standards.

Internal Audit Role in Risk Management

The relationship between IA and RM is complex and at a developmental stage. This means that there is some uncertainty around the demand for assurance and consulting services by the board of directors and management of the organization and the delivering of services by the IA function (ICAEW, 2011; IIA, 2004). According to Griffiths (2006) and the IIA position papers on the IA role in ERM (2009), the extent of IA assurance and consulting roles in RM is contingent on the maturity and future direction of the organization's RM system. Basically, if the risk maturity level in the organization is high, the IA function is likely to provide less advice on fundamental RM matters, but likely to use RBIA, and give more reasonable assurance to the board and management of how well risks have been managed and aligned with the organization's strategic objectives.

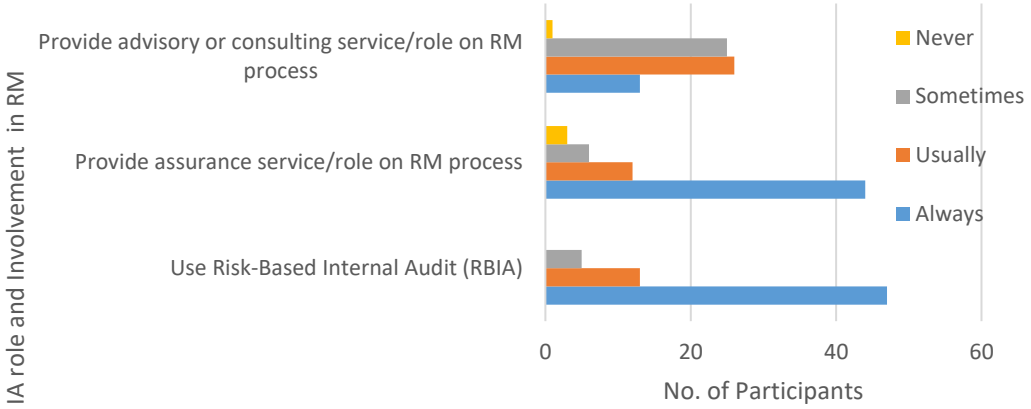


Figure 6.5: IA Involvement in RM

From Figure 6.5, it can be seen that almost all of the respondents (95 per cent [68 per cent "always", 18 per cent "usually", 9 per cent "sometimes"]) reported that their IA functions were involved in providing assurance services on RM activities; while, the other 5 per cent were "never" involved in RM activities. Likewise, 99 per cent of the respondents agreed that their IA functions had provided (at least to some degree)

consulting services on RM processes. However, the results clearly show that only 20 per cent reported that they were “always” involved in providing consulting services for RM processes in their organization. This indicates that the respondents’ organizations had more mature risk processes in place. In this respect, more than two-thirds of respondents (>75 per cent) reported that they felt the level of risk maturity within their organization was at an intermediate stage of implementation, and just 25 per cent at a development or at a non-existent stage. Consistent with these findings, Figure 6.5 demonstrates that 100 per cent (72% “always”, 20% “usually”, 8% “sometimes”) of the respondents to some degree acknowledged that they were using RBIA (a more advanced approach) in preparing their audit planning.

In addition, more than half of the respondents claimed that their IA functions’ plan is significantly linked to their RM processes. The IA function’s contribution to the maturity level of RM practice in its organization strongly depends on the satisfaction and quality perceived by its customers towards them (Arena & Azzone. 2009).

Training and development

It is critical for the IA function to be able to perform its responsibilities through successfully employing and maintaining talented and competent staff (IIA, 2006). Having appropriate and sufficient skills and competencies in its staff is vital to the IA function in meeting the expectations and serving the outcomes required by boards and audit committees. Therefore, the survey asked respondents to indicate whether they believed that all the internal auditors in their IA function had adequate opportunities to improve, develop and update their knowledge, experience and skills by continually attending training, workshops, certification programmes, or other equivalents. Figure 6.6 shows the results.

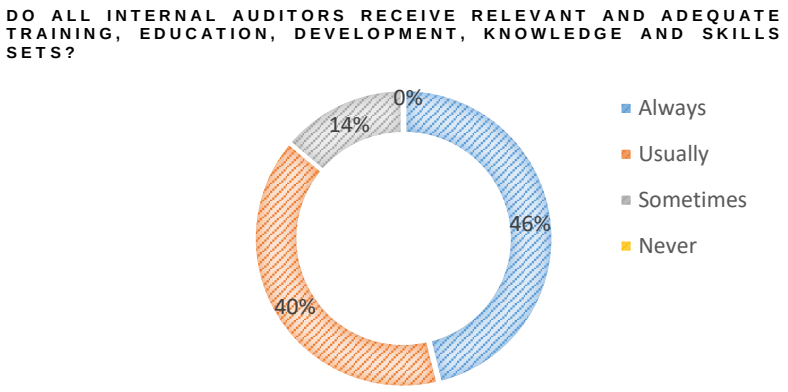


Figure 6.6: Internal Auditors' Training and Competence

Overall, of the respondents, 46 per cent claimed that their internal auditors "always", and 40% of them "usually", received adequate opportunities to improve and enhance their knowledge, skills and talent. The remaining 14 per cent reported only "sometimes" in answer to the question. In addition, in regard of the allocation of resources, 89 per cent of the respondents agreed that the necessary allocation of time and resources had been made to all critical areas and activities to ensure the achievement of audit, assurance and consulting engagement objectives. On the other hand, 21 per cent stated otherwise. According to the IIA's standards, internal auditors should not be given, or should not accept, assignments without having the adequate and appropriate knowledge and proficiency.

Besides training and competency, the efficiency and effectiveness of internal auditors and the IA function can be improved through the use of technology throughout IA processes and activities (Moorthy et al., 2011). The utilization of advanced tools and techniques, such as Computer-assisted audit techniques (CAATs) and generalized audit software (GAS), are fundamental for internal auditors to perform audit processes efficiently and to automate various IA tasks. In exploring the usage of GAS and CAATs among the survey respondents, the results show that just about half (51 per cent) stated that GAS and CAATs were adequately and widely used by their IA functions throughout audit processes and activities. However, the remaining 49 per cent reported that they were not adequately utilizing audit software in executing audit processes and activities.

6.4 CONCLUSION

The ideal characteristics of the IA function are essential for developing and improving the quality and effectiveness of IA services and performance in order to meet management and other key stakeholder expectations. By recognizing and understanding the IA function profile and features, CAEs can benchmark against the best practices and ensure conformance towards the IPPF (particularly the standards). Awareness of the current state of good practice and environmental challenges can enable the IA function to identify and adopt innovative responses in managing constraints. Such innovations serve to enhance the necessary attributes of effective IA. In addition, the IA function can benefit from performing EAQ, leveraging the external reviewer's tools and techniques or the expertise of co-sourcing/outsourcing services. The understanding of the profile and characteristics of the IA function that the researcher gained from a broad survey of IA functions and practices in UK organizations proved to be very useful for establishing contacts, the planning and performance of the case study for this research. To be relevant, the characteristics and profile of the IA function should change accordingly with the pace of the changes in the business environment. Ultimately, the IA function must be able to play an effective role and offer services that can drive its performance and help management to achieve its corporate objectives.

Through these preliminary survey findings, the researcher learned some ideas relating to the general characteristics and practices of effective an IA function. The characteristics of the IA function, such as the quality assurance, IA role in RM, co-sourcing, RBIA, the use of technology, training and development, are important findings in determining the effectiveness and quality of IA, as discussed in the IA literature. Consequently, these characteristics are explored further in the two case studies (Refer to Chapter 7, 8 and 9). The results from the IAS provide valuable insights on aspects of IA at the societal and organizational (institutional) levels in the main empirical chapters. Taking into consideration all the criticism about IA ineffectiveness in preventing corporate failure, this preliminary survey also provides a broader picture on how the IIA (at the societal level) and IA practitioners (at the organizational level) are striving and struggling to develop, reinvent and strengthen the IA profession and its practices. The next chapter presents the empirical findings of this research by investigating the exercise of ingenious strategies at the society level.

Chapter 7

INGENUITY OF INTERNAL AUDITING AT THE SOCIETAL LEVEL

7.1 INTRODUCTION

The main objective of this chapter is to evaluate the incidence of ingenious IA practices at the societal level. In accordance with the aim of the research, this chapter explores the way in which ingenious initiatives are being developed by the Institute of Internal Auditors (the IIA). These developments are explored in order to explain the IIA influence at the societal level and the extent to which these innovative practices have benefitted IA practice and the IA profession. The study also explores how ingenious practices exercised at the societal level help in advancing IA practice and solving constraints faced by those in the IA profession. These ingenious strategies are critical to fulfil the demands and expectations of IA key stakeholders, including the board of directors, audit committees, external auditors, regulators, creditors, other assurance providers, and management teams, all of whom rely upon IA work. Ingenuity is conceptualized as the ability to create innovative solutions within the structural constraints, using limited resources and imaginative approaches to problem-solving (refer to Chapter 4, p. 90). Ingenuity can either be a new idea or an existing idea that enables those in the IA profession to tackle constraints they face (Lampel et al., 2014)

The study found that the constraints faced at the societal level include: (i) IA role and practice framework; (ii) capabilities and resources; and (iii) status and quality of IA. Consequently, ingenious strategies for resolving these constraints are crucial for the IA profession to survive, progress, and maintain relevance in the dynamic, complex and challenging business environment.

7.2 REDEFINING AND UPDATING THE IA ROLE AND PRACTICE FRAMEWORK

The role of IA can be expected to evolve continually to meet the needs and demands of the business environment of the day (Rossiter, 2007; Ramamoorti, 2003). The evolution of an IA role and International Professional Practices Framework (IPPF) aims to address constraints that may prevent internal auditors from performing their services

to meet key stakeholders' expectations. Table 7.1 shows that the changes in the IA role and IPPF are driven by various factors, such as the regulatory requirement (UK Corporate Governance Code, 2014; Solvency II, 2016; Basel III, 2011; Dodd-Frank Act, 2010; Sarbanes-Oxley Act, 2002), corporate fraud (Lehman Brothers, News Corp, BCCI, Polly Peck, Enron), and financial crisis (European debt crisis, subprime mortgage crisis). The following discussion explores the constraints, their impacts and how constraints drive ingenious solutions, particularly in the case of changing the IA role and International Professional Practice Framework (IPPF).

Table 7.1: Constraints and Ingenious Solutions to Address Changes in Regulations, Business Environment and Key Stakeholder Interests

	Driver of Constraints	Impact	Constraints	Ingenious Solution
1	(i) Fraud and corporate scandals (ii) Changes in regulatory and business environment (iii) Economic and financial crisis	Stakeholders expect IA profession to play a central role in improving RM system effectiveness	Traditional narrow coverage of IA role and services unable to meet the changing needs of business	Continuously improving and updating the IA role and the IPPF

7.2.1 Redefining the Role of IA

During its early days, IA acted almost exclusively as an independent internal function to identify fraud and misstatement by performing checks on administrative and clerical procedures through the recalculating of accounting records (Pickett, 2010; Ramamoorti, 2003). Figure 7.1 below illustrates IA's historical roles prior to 1999 (before 1941 and after the foundation of the IIA [from 1941 to 1999]).

Before 1941: Checking the Companies' Fidelity

Role:
Clerical and checking (or recalculating) organizations' economic transactions/performance

Main Functions:
To discover theft/fraud, checking accounting records and detecting financial errors and irregularities
To check the sampling work the auditee/client has already done
To recalculate the mathematical accuracy of figures and totals on a document
To review transactions' accuracy or to verify the honesty of persons charged with fiscal responsibility

From 1941 to 1999: Providing Assurance to the Companies' Control System, Financial and Operational Activities

1940s
Role: Extension to external audit
Main Functions: To perform accounting-related function, financial statement review, to test the reliability of accounting records to discover theft/fraud

1950s – 1960s
Role: Operational/performance/management/value for money
Main Functions: To evaluate corporate areas, processes and operations for improving performance, value for money, ethics, equity, environment, economy, efficiency and effectiveness

1970s – 1990s
Role: Internal control/internal check, compliance of business operation, social and information system audit
Main Functions: To perform independent appraisal function to provide advice and assurance that the internal control system is adequate, effective and working as intended, as well as to check compliance with all policies, plans, procedures and rules, to review corporate social responsibilities programme and to provide wider range of information system audit service

Figure 7.1: The IA's Historical Roles Prior to 1999

Historically, before 1999 (from 1941 to 1999) the objectives and scope of IA that guided IA practitioners in performing a technical role to support business operations is represented in the following IIA's Statement of Responsibility (SOR):

> *"The IA role is to review accounting, financial and other operations as a basis for service to management" (the IIA, SOR, 1957).*

According to the SOR above, the early role of IA in organizations was relatively narrow and the scope of their service was limited (Moeller, 2005). The role of IA during this period was viewed to be more of a non-strategic function (such as checking the accuracy of mathematics in regular business documents (refer to Chapter 2, p. 32). Without broadening its traditional[14] role, IA's scope of practices remained around an appraisal function that only focused on financial, control and compliance matters. As a consequence the role of IA in the organizational structure prior to 1999 was positioned at the lower managerial and operational level. There was a lack of strategic connection to influence the decision of the board of directors or chief executive officer (CEO).

[14] IA role in figure 7.1 refers to as the traditional role

> *"The scope of IA encompasses the examination and evaluation of the adequacy and effectiveness of the organization's system of internal control and the quality of performance in carrying out assigned responsibilities" (the IIA, SOR, 1993).*

The role of IA as represented in the SOR above was concentrated on reviewing the internal control system in the organization. The main focus here was on control and compliance. This led organization members to see and portray IA as a "policeman" or as the "ears and eyes" of the management. This policeman image might have aroused negative impressions and brought fear to some of the IA clients when cooperating with the IA team (Chambers, 2012).

> *"Traditionally, internal auditing viewed accounting as its true discipline, accounting control as its true concern and the audit committee of the Board as its true client. The modern understanding of internal auditing does not reject the substance of the traditional understanding, but seeks to extend it beyond its traditional narrow scope of accounting related concerns" (*Plant & Steyn, 2009, p. 4).

However, scandals and financial crises have influenced organizations to extend the responsibility of IA to cover some of the managerial spectrum (Moeller, 2005)[15]. Following the scandals and crises, key stakeholders, such as investors, customers and regulators, have become ever more intolerant of unethical and bad corporate conduct[16] and the regulatory framework imposed on organizations[17] has been reformed. The regulatory reformation has increased the expectations placed on the board and its committees (Hennessey & Whitman, 2002).

> *"The board is responsible for determining the nature and extent of the principal risks it is willing to take in achieving its strategic objectives. The board should maintain sound risk management and internal control systems" (Section C: Accountability, UK Corporate Governance Code, 2014).*

[15] Financial crises (such as the European debt and subprime mortgage crisis) and the biggest corporate fraud and accounting scandal (involving Enron, Lehman Brothers, News Corp and BCCI) are factors that spurred key stakeholders' criticism and called regulators for strengthened scrutiny and corporate governance mechanism (Bota-Avram, et al., 2009; Carcello, et al., 2005; Hennessey & Whitman, 2002).

[16] http://www.ey.com/GL/en/Services/Assurance/Fraud-Investigation---Dispute-Services/EY-reinforcing-the-commitment-to-ethical-growth

[17] Regulators have responded to reforms and enforce good corporate conduct; for example, by focusing on improving the corporate governance code (such as UK Corporate Governance Code, 2014) and the issuance of new regulations (such as Solvency II, 2016; Dodd-Frank Act, 2010; Sarbanes-Oxley Act, 2002).

The code above requires boards and audit committees to establish effective governance, RM and control mechanisms to help them achieve organizational goals. This is important because the deficiencies in RM were recognized as one of the factors that caused the crises and failures in corporate governance systems (Bota-Avram, et al., 2009).

As regulatory scrutiny of governance systems has intensified, this has triggered boards and executive management to seek assistance from the IA function to help them evaluate and improve the strategic and risk oversight roles in organizations (Seago, 2015). However, the limited role of IA, as represented in the definition below, has constrained the IA's ability to meet the new expectations.

> *"IA is an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization. The objective of IA is to assist members of the organization in the effective discharge of their responsibilities" (the IIA, 1979).*

To fulfil the changing expectation of the key stakeholders, the IIA expanded the role of IA and attached a new role as assurance provider and strategic business partner in organizations. IA has to ensure the effectiveness of governance, RM and control processes. The role expansion represents an ingenious measure introduced by the IIA in 1999.

> *"Internal auditing is an **independent, objective assurance** and **consulting activity** designed to **add value** and **improve an organization's operations**. It helps an organization **accomplish its objectives** by bringing a **systematic**, **disciplined approach** to evaluate and **improve the effectiveness** of **risk management**, **control**, and **governance processes**" (the IIA, 1999).*

The new definition significantly expanded the role and scope of IA. Figure 7.2 below illustrates IA's new broader role (post 1999). It enables professional bodies, including IIA, to include new approaches to expand the role of IA. Professional bodies introduce the use of the Risk-Based Internal Audit (RBIA), to combine the audit function and advisory, strategic planning and system monitoring functions for IA to cover (Anderson et al., 2009).

Post 1999: Providing Assurance and Consulting Services to Added Value and Improving Companies' Operations (with the Emphasis on Improving the Effectiveness of Companies' Governance, RM and Control Processes)

Role:

Independent and objective assurance, consulting activity, added value and improving organizations' operations, strategic orientation, business partner, data analytic and Information Technology (IT) consultant

Main Functions:

To provide assurance, evaluating and improving the effectiveness of RM, control, and governance processes
To provide business advisory, financial consultancy, fraud investigations, and risk advisory
To align IA activity with corporate objectives
To create partnership and collaborate with organization to adding value to the business
To improve organization operation and run IA operation like a business
To help organization to achieve its objectives through evaluating the effectiveness of RM system and playing a prominent role in organizational issues, data analysis, privacy, cyber and IT security

Figure 7.2: The IA New Role (Post 1999)

Now, IA no longer plays a reactive role but is expected to be problem-solver in the search for solutions to the constraints in organizations (Lampel et al., 2014). The IIA ingenuously developed a definition to expand IA's traditional role by incorporating the dual service features of assurance and advisory, and at the same time providing a solution for organizations to address their need of a risk function.

Importantly, it also repositions IA at the strategic and upper level of management by bringing out the IA role of providing services across the entire organization. For instance, in exploring the ingenuity aspect of the changing role of IA, the respondent from the CIIA UK and Ireland provided an interesting response:

> *"IA has significantly evolved and improved over the last ten years.… The change is driven by greater expectation and demands from the IA customers and stakeholders. Today, the IA function has to prove its value, especially during an economic and financial crisis; drive efficiency; and provide more quality for less cost. People want to get more value out of what they have spent on the IA function. So, they pay more attention to the IA function by looking at the overall impact on the organization. Overall, now everyone wants to get more from what they are spending" (The Technical Manager of the CIIA UK and Ireland – interview).*

The new role has provided greater prospects for those in the IA profession to shift focus from assurance to value-added[18]. The IA function also now has the opportunity to provide insights to top management on current trends and topics, including independent quality reviews of other internal assurance functions (such as compliance officers, internal control specialists, quality inspectors, fraud investigators) and quantifying IA's return on investments (the EY, 2012, the IIA 2013 & 2014). In addition, instead of treating only the audit committee as its major client, the IA also has senior executives, line managers and the entire board as their key clients to whom assurance, advisory and consulting services are rendered (Sumners, 2005 [as cited in Plant and Steyn, 2009]).

7.2.2 Ingenuity via Expanding the Framework of Professional Services

The IA profession now has a broad role to play (as defined by the IA new definition discussed in the above subsection); but the big question is how to implement it. The solution to this problem is that IA practitioners need a comprehensive practice framework that can guide them in determining the objectives, scope of work, professionalism, values and best practices to provide services to organizations. To fulfil this need, the IIA established a Guidance Task Force in 1997 to formulate a clear and neat guidance framework for IA practitioners (Anderson and Dahle, 2009).

As a result, in 1999, the IIA approved a new definition of IA and a new framework to guide IA practice known as the Professional Practices Framework (PPF). As a global voice and recognized authority for the IA profession, the IIA is responsible for updating and improving the PPF and its components. The purpose of improving the PPF is to ensure that IA practice remains current and relevant. The IIA conducts a complete review to consider the appropriateness of the PPF guidance every three years. However, to accommodate the changes within the three-year interval, the Standard

[18] The term "value-added" can vary in meaning from one IA function to the next. For many practitioners, "value-added" describes audit activity that helps management improve the business and organization operations, beyond testing basic compliance with policies and procedures. In general "value added" is about how the IA function identifies the practices that will add the most value given its own specific situation. According to Roth (2003, p. 2), "there are four factors that can help auditors determine what will add the most value to their organization: (1) A deep knowledge of the organization, including its culture, key players, and competitive environment; (2) The courage to innovate in ways stakeholders don't expect and may not think they want; (3) A broad knowledge of those practices the profession, in general, considers value added; and (4) The creativity to adapt innovations to the organization in ways that yield surprising results and exceed stakeholders' expectations" (Roth, J. (2003).

Board of the IIA continuously update, improve and enhance the recommended guidance at any time when required. It means, if any of the existing recommended guidelines are no longer appropriate, they can be updated or replaced before a complete review takes place. Changes and improvement made to the PPF by the IIA at the societal level are crucial in providing a clear directions and prospects for internal auditors about their new role, practices and activates. In this respect, the Technical Manager of the IIA stated that:

> *"The changes made to the PPF are driven by the expectations of the stakeholders, such as audit committees, directors, regulators such as the FCA, and perhaps the general public. Organizations and individuals are encouraged to respond and the Standards Board will make adjustments prior to final publication. However, this does not mean that older versions are ineffective. It is simply that the PPF needs to keep up with changes and developments to ensure the internal audit provides value to the organization"* (*Technical Manager of the IIA – interview).*

In 2009, the PPF was replaced with the International Professional Practices Framework (IPPF) to fulfil the need to standardize authoritative guidance and to meet stakeholders' new expectations. The IPPF aims to ensure relevant and internationally consistent guidance supporting the IA profession throughout the world (Anderson et al., 2009). Through the IPPF, the IIA promotes guidance and sets the bar for IA quality, efficiency, effectiveness, and professionalism (Anderson et al., 2009). The new IPPF is organized in (i) a mandatory guidance (consisting of the definition, standards and code of ethics) and (ii) strongly recommended guidance (consisting of practice advisories, position papers and practice guides).

Further, in responding to the changing business environment, recently (2014), the IIA has proposed enhancements to the IPPF (2009 version), which later were approved by the IIA and became effective in 2015 (refer to Figure 7.3). The 2015 version of IPPF introduces a new mission statement and the core principles of IA. At the same time, it removes practice advisories, position papers and practice guides and replaces them with implementation and supplemental guidance.

The improvement process is an example of how the IIA creates innovation to proactively resolve structural and capability constraints which confront the IA profession at the societal level. The proactive and creative action taken by the IIA in response the constraints faced by the IA profession is in line with Lampel et al., (2014)'s autonomous

problem-solving approach discussed in Chapter 4. In this respect, the IIA has set out that the IPPF must be reviewed at least every three years and needs to be adjusted and updated as required. Figure 7.3 shows how the IPPF has evolved over time.

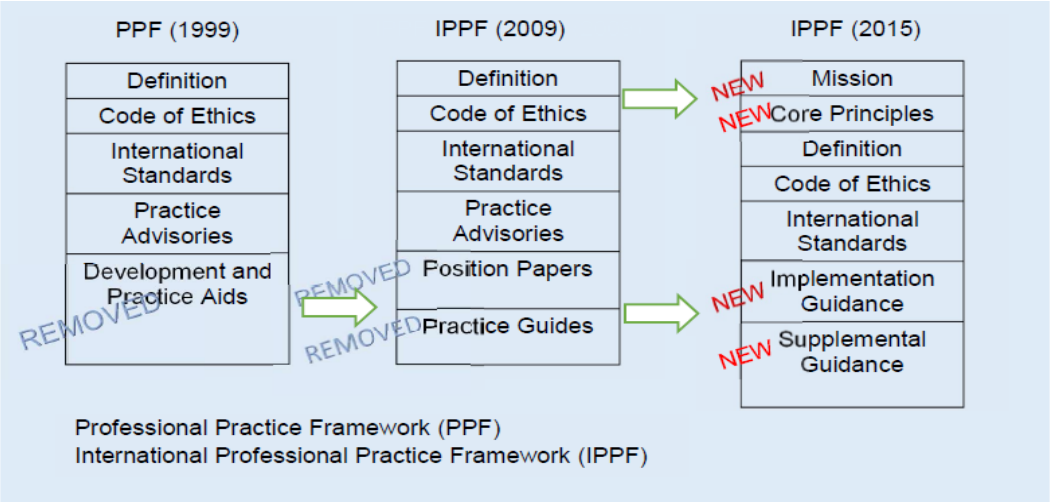


Figure 7.3: The Changes to the PPF and the Updated IPPF

The ongoing changes to the IIA Standards are important in order to meet the challenges of today's changing business environment and to address key changes to the new IPPF. The Standards ingenuity at the societal level is essential to maintain the legitimacy of the IA role in organizations. It represents a fundamental part of the IPPF that provides a framework to be benchmarked by IA practitioners at the organizational level. In addition, the framework developed at the societal level is important to the boards, top management and those who rely on the use of the services of the IA function.

> *"The changes in the IPPF are driven by the expectations of stakeholders such as audit committees, directors, regulators (such as the UK Financial Services Authority), investors and the general public. For instance, the draft of a new IPPF will go through to a public process to receive a variety of input and comments from various interest groups and the general public. This public process will be carried out once every three years. The changes are also required to make sure the IPPF remains current and relevant to serve the IA profession and organizations. This does not mean older versions are ineffective, it is simply that the IPPF needs to keep up with change and developments to ensure IA is innovative and provides value to the organization" (Technical Manager of the CIIA UK and Ireland – interview).*

Constant changes in the business environment have impacted and significantly influenced the technical ingenuity and development of IA approaches. At the societal level, the IIA seems to be able to exercise ingenuity by responding to constraints faced by the IA profession to fulfil its members' and key stakeholders' needs. This ingenuity is important to keep the IA role and function relevant. However, on the adoption and implementation of the IPPF by practitioners, it is questionable whether IA functions at the organizational level have fully embedded, interpreted and executed the IPPF to perform their broad role. Have they acted as intended by the IIA, clients and other key stakeholders? An example of the adoption and implementation of the IPPF and IA's extended role at the organizational level is shown in Chapter 8. The next subsection will discover how the IA profession deal with the capability and resource constraints in realizing the new definition and IPPF.

7.3 INGENIOUS SOLUTIONS TO ADDRESS CAPABILITY AND RESOURCE CONSTRAINTS

This section explores the factors that cause resource and capability constraints to the IA profession. Table 7.2 shows the constraints, their impact and how these constraints lead the IIA to exercise ingenious solutions

Table 7.2: Ingenious Solutions to Tackle Capability and Resource Constraints

	Driver of Constraints	Impact	Constraints	Ingenious Solutions
1	IPPF and stakeholder expectations required IA to broaden its role and services	Broad role demanded more resources, new expertise, talent, and skills sets	Limited resources and capabilities	• The use of co-sourcing and RBIA • Greater use of technology • Talent management via training, learning, recruiting, motivating and retaining talent

To enable IA functions and practitioners to perform the broad roles as required by the IPPF, internal auditors or IA practitioners must possess the appropriate capabilities and resources. As a global voice and recognized authority of the IA profession, the IIA must understand and recognize the constraints that affect the IA profession. For example, the capability constraints that the IA profession encounter include: a lack of knowledge, competencies, skills, qualifications, interpersonal skills, inherent personal

qualities, professionalism, tools and techniques, theory, methodology, capacity, resources and new speciality experience. On the other hand, the resource constraints include: financial, time, budgeting and staffing levels, talent, technology aids, and tools and techniques aid. Understanding these constraints allows the IIA to identify and exercise the best and appropriate ingenious solutions to overcome the constraints and to ensure the survival and success of the IA profession.

Although factors such as stakeholders' expectations and the broad role of IA (drivers of constraint) offer tremendous opportunities (impact) for the IA function and practitioners to serve their clients, yet, without appropriate capabilities and resources (constraint), it is impossible for them to perform the new broad role and activities. According to the CIIA Technical Manager, with regard to the challenges and constraints faced by the IA profession, there is a:

> *"Lack of experienced and qualified people, and if you haven't got the right people, then you can't be effective" (The Technical Manager of the CIIA UK and Ireland – interview).*

The statement above indicates that resource and capability constraints can limit IA's ability to operate effectively. Even though in some organizations IA budgets are on the rise, IA function leaders are being asked to do much more with far less. To resolve this at the societal level, the IIA must formulate appropriate ingenious strategies via revisiting the IA practice framework, tools and techniques, methodologies, capabilities, education, training and development programmes. The following are four examples of the ingenious strategies created and implemented by the IIA (or other parties) to solve capability and resource constraints. These are crucial for the success, efficiencies and effectiveness of IA both now and in the years ahead.

7.3.1 The Use of Co-Sourcing and RBIA

Corporate fraud, financial crises and emerging of new risks are examples of factors that have driven changes in corporate regulations. For example, the UK Corporate Governance Code (2014), Dodd-Frank Act (2010) and Sarbanes-Oxley Act (2002) have influenced how the board and management are required to strengthen corporate governance systems, such as improving board governance oversight, strategic direction and RM processes to effectively manage business risks. In order to help organizations' management and key stakeholders to fulfil their corporate governance

expectations, the IA function has evolved by broadening its role and services. As stated earlier, the IA function also has a broader range of clients (not just the audit committee), covering all business functions, units and divisions across the entire organization. With a broad role, an unlimited area of services and a large client base there is a significant impact to the work load and an increase to the size of audit universe. The audit universe size is becoming bigger owing to the increase of auditable units available to be audited and served by the IA function.

However, it is impossible for the IA function to serve and carry out IA assignments for each and every auditable unit due to limited resources and cost-benefit considerations. In addition, the challenges of today's economic condition have affected the IA function's annual budget. Indeed, recently some IA functions have not received an increment to their annual budget (and some are experiencing reductions), as a result of their organization's strategy to cut business operating costs. As an organization's cost centre, the function has become a key target for cost saving and strategic sourcing. Since organizations are being driven to do more with less, IA functions are challenged to maximize the use of their limited resources and their capabilities of efficiency and effectiveness in rendering their services.

To tackle the constraints (such as financial, time, talent), the IIA has introduced outsourcing, co-sourcing and RBIA approaches. These approaches are ingenious solutions to help the IA function with sourcing its activities. This means that organizations can fully outsource the entire function or, when needed, to co-source certain critical components of IA services to external providers. These different sourcing arrangements, as clearly stated in the new definition of IA and IPPF, require the IA function to remain independent and objective in their work (the IIA, 1999). Co-sourcing is an innovative approach designed to assist the in-house IA function to reduce costs in performing their assignments; especially for those assignments for which the in-house IA function does not have the required capability and expertise. It takes time and a lot of resources to develop a new capability and expertise. Hence, co-sourcing is a quicker way for the IA function to enhance its capability into specific skill sets and industry know-how on an 'ad hoc' or 'as needed' basis (for details about the sourcing of IA activities refer to Chapter 2, p. 40).

One more ingenious response to resource constraints is RBIA (see Chapter 2 for details). This is an innovative approach adopted by the IIA to help IA functions and

practitioners to identify and select audit assignments based on risk assessment and risk prioritization (by rating the risks that are most significantly and likely to affect the achievement of organizations' objectives). RBIA is used throughout the whole cycle of the IA work process, starting from planning to the preparation of the IA report. It aims to improve IA coverage, reduce waste of resources, and more effectively allocate and use valuable IA resources. RBIA helps the IA function to allocate its limited resources to the areas that matter most to the achievement of organizational objectives and performance.

Various standards and guidelines have been developed by the IIA at the societal level to guide the implementation of RBIA and sourcing of the IA activity. For example, the IIA has issued: (i) the Role of IA in Enterprise-wide RM (2009) and (ii) the Role of IA in Resourcing the IA Activity (2009). How RBIA and Co-sourcing approaches are implemented at the organizational level will be discussed in Chapter 8.

7.3.2 Enhancing IA Function through Training and Talent Management

Increasing demand for high performance, quality, effective, efficient and valuable services have challenged the IA profession to attract, develop and retain the appropriate capabilities required to deliver the new mandate. The gaps between IA practitioners' services and changing stakeholder expectations lead to capability or competency constraints. The changing expectations require IA practitioners to constantly enhance and expand their competency, talent and set of skills. In response, the IIA has come up with an ingenious strategy to assist IA practitioners and functions by issuing the Global IA Competency Framework in 2013 and Talent Management Practice Guide (2015).

The Competency Framework is a tool that defines the competencies needed by IA practitioners to meet the IPPF requirements and changes of stakeholders' expectations. It contains 48 key competencies that can be benchmarked by IA practitioners to improve and update their knowledge and skills. The framework enables the IIA members and IA practitioners to assess their competencies against the best practice and plan their continual professional development (CPD) programme accordingly. Roughly, the framework covers four competency areas, including: (i) IA standards, theory and methodology; (ii) knowledge areas; (iii) interpersonal skills; and (iv) tools and techniques.

On the other hand, Talent Management is a practice guideline that provides the IA function with the best practices and recommendations for recruiting, developing, motivating, and retaining staff. This management process is important in helping the IA function to appoint the right people with the right skill sets. Overall, the process comprises of strategies for assessing competencies, selecting candidates, accessing succession planning, and managing performance, training, and development programmes. It aims to better source the IA function to meet their stakeholders' expectations. In addition, the IIA also released the Internal Auditing Capability Model (IACM) to facilitate the IA function for benchmarking and accessing its maturity level. This consists of five progressive capability characteristics and levels to provide a framework for assessing quality, impact, efficiency and cost-effectiveness of IA activities. The innovation of the IA training and talent management programme is vital for the IA function to progress from one level to the next higher level, until eventually reaching the highest level in the model. Even when the IA function has reached the highest level, overtime, ongoing changes in the business environment are likely to make their highest level of capability outdated and in need of further improvement and updating. It is a learning process where an organization will need (or be forced) to find ways for continuous improvements and innovations.

The IIA are also very active and play a major role in designing and developing training courses and educational aids as a strategy to support IA practitioners to enhance their capabilities. It provides general training, customized training, in-house training, workshops, conferences, professional certification, research publications, books, journals and articles. Innovation in training and education are crucial for helping IA practitioners to keep up to date, stay connected and for raising the bar to reach new successes. Committing to training and a development programme can enable IA practitioners to adopt and implement the IPPF agenda. Any changes to the IPPF and its components will be integrated by the IIA into existing training courses and education programmes to support, prepare and produce talented, knowledgeable and competent internal auditors. In this context, the Technical Coordinator of the CIIA said:

> *"The Institute exists to support the professional development of its members. This includes building resources, guidance and training courses so internal auditors can provide an effective and valuable service to their organizations" (The Technical Coordinator of the CIIA UK and Ireland – interview).*

In order to achieve the above aims, training and educational programmes must also be aligned with the organizations' strategic objectives, the IIA's competency framework and stakeholders' expectations. In general, training and education is a continuous developing process that should build on internal auditors' existing skills and knowledge to increase their degrees of expertise and improve their current level of performance. This is to ensure that IA practitioners or trainees receive the relevant skills and knowledge they and their organization need. For example, the type of training courses offered by the IIA include an introduction to IA topics, auditing specialist topics, tools and techniques, strategy and leadership and soft skills. Some examples of the current training topics include: auditing social media, data security risks for IA, keeping up with technology (better governance and control), RBIA (practitioner's course), and dealing with challenging conversations.

In an effort to provide more resources and increasing IA capabilities, the CIIA and IIA Global are committed to improving services by putting digital technology at their heart, so their website has loads of useful and important resources for members. To fully utilize its limited resources, the CIIA also make use of its regional network, discussion forum, magazine and results from external quality assessments of IA functions to support members through sharing knowledge and responding to new technical issues. For example, the CIIA Technical Coordinator gave the following remark:

> *"Our web-based resources include specific pages on governance, risk management and control. This is particularly important to us, given that the definition of IA refers to all three of these areas. The Technical Manager and Technical Coordinator keep these pages up to date by staying abreast of current developments and highlighting these to members. We invite volunteers to write specific sections on subjects such as bribery, ethics and fraud based upon their knowledge and experience, but we have to prioritize our efforts based on time limitations" (The Technical Coordinator of the CIIA UK and Ireland – interview).*

The IIA's slogan "progress through sharing" can only be realized via members joining volunteering activities such as by working with their local region's group (for instance District Societies[19] and Committee Meetings[20]), special interest independent networking groups or institute resources team to help in offering advice to other members. The IIA strategy to widen the networking channel is an ingenious solution exercised by the institute to overcome IA capability and resource constraints. Networking is an innovative way for IA professionals to share, exchange and disseminate knowledge. It is a good source and a better way for asking questions, discovering best practices, discussing issues important to professionals, and receiving comments, insights, and advice from peers who face the same challenges and specialized experiences. Overall, at the societal level, the IIA must continuously find innovative ways of improving the practice framework to produce credible IA practitioners that possess the appropriate talent, knowledge, professionalism, qualifications, and soft and hard skills, (Lenz & Hahn, 2015; Mihret &Yismaw, 2010; Arena & Azzone, 2009; Mat Zain et al., 2006; Smith, 2005; Van Peursem, 2005; Pickett, 2000; Griffiths, 1999).

7.3.3 Greater Use of Technology

In order to enable and support the IA profession to complete more assignments, increase more detailed coverage and effect a real-time monitoring of the emergence of new risks covering all business operations[21] across the entire organization, the use of technology is necessary. A greater use of technology is an ingenious way to tackle IA functions' resource and capability constraints that are caused by a lack of staff, time, financial resources, and skill sets. In addition, the use of technology and data analytic techniques can enable IA functions to handle huge amounts of business data and to improve their productivity and effectiveness. Today, sophisticated technology and the advancements in IT mean that most of an organization's data and transactions can be kept electronically, processed and completed via online and in a real-time

[19] District societies: The IIA members are divided geographically into districts where they meet regularly to exchange views, benchmark best practice and organize events and seminars that may be used in developing the audit function. Source - https://www.iia.org.uk/

[20] Committee meetings: A proactive approach where members are actively involved in the various committees and working groups that help shape the overall direction of the IA profession. This not only ensures that one is up to date with current developments but also allows an input into the actual development process itself. Source - https://www.iia.org.uk/

[21] This includes more assignments (assurance, consulting and insight), more coverage, more samples (100%), more data analytic and more timely or real time in converting information into knowledge in order to help management and the board in making wise business decisions.

manner. With these advancements, the IA function and practitioners have to manage data electronically. For example, by using generalized audit software (GAS), the entire client's data can be extracted and analyzed in accordance with recognized audit procedures. This advanced technology brings a lot of opportunities and benefits, but at the same time it exposes organizations to serious risks (such as in security, virus attacks, hackers, cybercrime, confidentiality and privacy issues, and loss of assets) and service disruption if not wisely embedded and managed. Generally, these resource constraints and risks to businesses have provided opportunities and encouraged Software and IT Companies (such as ACL, SAP ERP, Microsoft, Sage, Oracle) to design and develop innovative IT products and services. These are ingenious solutions initiated by Software and IT Companies at the societal level to help the IA function and IA practitioners to perform their roles in a highly cost-effective, efficient, high quality, productive and timely manner and to be able to provide huge coverage. GAS is one of the most common computer-assisted audit tools (CAAT) used in recent years. GAS products such as ACL, CA's Easytrieve, Statistical Analysis System (SAS), Statistical Package for Social Sciences (SPSS) and IDEA are innovative tools and techniques used for enhancing the timeliness, availability, and accuracy of information; resource planning; audit sampling; audit planning; report writing; and data extraction and analysis. In addition, these products are also used for data gathering and interpretation; data reporting, documentation or work papers; process mapping (flowcharting and relevance, sufficiency, and competence evaluating of evidence); data-driven insight for better assurance (identifying, investigating, and mitigating business risks); and reducing the risk that controls will be circumvented. Specifically, in one of its products, ACL has developed an integrated software solution to standardize and seamlessly form data analytics capabilities into a comprehensive risk assessment, audit management, work papers, issue tracking and remediation workflow with powerful visualization and dash boarding.

7.3.4 Ingenuity through Social Media Networking

Attending training, workshops, or conferences provides only limited time, space, and access to communicate, share experience, seek advice or discuss issues. In addition, in times of difficulty or when facing problems of a practical, working or conceptual nature, it is hard to get help and free advice for a reasonably substantial time. To tackle this resource (or process) constraint the IIA has introduced an ingenious solution through social media networking to enable IA practitioners to stay connected with the

global and local IA network and communities. This is additional to the member networking platforms as discussed in 7.3.2. According to the Internal Audit Director and Risk Assurance of PwC:

> *"At the moment, the main issues highlighted in the annual survey of the IA profession are about the data, social media and IT service security" (The Internal Audit Director & Risk Assurance, the PwC, UK – interview).*

The quote above highlights the vast usage of social media as a medium for sharing and disseminating knowledge. In this context, the IIA is no exception for utilizing this social networking platform. For example, the CIIA UK & Ireland has created Facebook, Twitter and LinkedIn accounts. Similarly, IIA Global has established several global social networks, such as LinkedIn (under The IIA Official Global Group), Facebook, Twitter, Specialty Centre/Group, InternalAuditor.org Blogs, AuditChannel.tv, Webinars, IIA Smart Brief, and much more. All of this is done at a societal level, where, by joining and becoming a member of the group, IA practitioners and other interested parties can exchange ideas, share practical experiences, share success and failure stories, seek advice, look for clarifications regarding practical matters, and discuss topics or issues of interest. For instance, there are increasing debates among internal auditors about the advantages and disadvantages of using the Three Lines of Defence and Risk-Based IA (RBIA) model, which have led to the existence of potential new solutions such as the Five Lines of Defence and Objective Centric IA Models as alternatives to both previous models.

In summary, various ingenious solutions have been introduced and adopted by the IIA at the societal level to solve resource and capability constraints faced by the IA profession. This includes the use of the RBIA approach, co-sourcing methods, training and talent management, technology and social media in order to perform an effective, efficient and high quality IA service. The IIA aims these ingenious strategies to give guidance and to provide practical solutions to resolve resource and capability constraints. How these strategies or approaches are implemented by IA practitioners at the organizational level will be discussed in Chapter 8. The next subsection will discuss how the IA profession deals with status and quality constraints.

7.4 INGENUITY VIA IMPROVING IA STATUS AND QUALITY

Table 7.3 summarizes the ingenious strategies exercised by the IIA to solve the status and quality constraints in the IA profession. This section explores how the IIA innovates to improve the IA status and quality to acquire legitimate power to deal with the constraints.

Table 7.3: Driver of Constraints, Impact and Ingenious Solutions to Solve IA Status and Quality Constraints

	Driver of Constraints	Impact	Constraints	Ingenious Solutions
1	IA mandate to become a business partner and provide strategic insight at board level	Require legitimate power, authority and quality to carry out IA big mandate	Status and quality	• Improve IA status • Use three lines of defence model • Quality assurance and continuous improvement programme

The IA function and IA have to create and maintain an appropriate status and quality, as well as consider how their clients value and accept them. It is important to build clients' trust and demonstrate that the IA function is capable of becoming a strategic adviser to the board and fulfilling its expectations. As previously discussed in 7.2, the IIA has made changes to the IPPF and its components. These changes have had a major influence on the status and the demand for IA services. According to the IIA's Implementation Standard 1000, the Chief Audit Executive (CAE) must formally document the purpose, authority, and responsibility of the IA activity in the IA charter. It is an important document, comprising the agreed records between the IA function and audit committee (on behalf of the board). The charter defines reporting relationships, organizational independence and access to information. Therefore, to prepare the IA charter, the CAE must understand the IPPF and the board's expectations. This may be constrained by the audit committee and senior managers, who may have a particular view or attitude towards IA.

In explaining issues pertaining to IA's status constraint, the CIIA Technical Coordinator shared the following view:

> *"The Standards explain how the internal audit status should be established through appropriate reporting lines and levels of independence from management. We encourage members to share these Standards and other*

Policy documents produced by the Institute, such as the paper we have published on the three lines of defence with stakeholders to reflect on whether the internal audit has the status required to do its job effectively" (The Technical Coordinator of the CIIA UK and Ireland – interview).

The independence of the IA function is critical for the function to obtain sufficient status and to be able to be express opinions freely and to stand back from the operation under review. An impairment to independence would cause a fundamental flaw in the IA service and could result in partial incompliance to the IIA Standards. The 'Three Lines of Defence' model (refer to Chapter 2, p. 46) best positioned the IA function within the organization's structure to obtain an appropriate status and provide opportunities to serve the organization at the board-room and strategic level. According to the model, the IA function forms the organization's third line of defence to provide assurance and an advisory role to the board and senior management on the effectiveness of governance, RM and control processes.

On the other hand, to ensure a high quality IA function that can have a good impact on the IA status, the Standards require all IA functions to carry out ongoing periodic reviews of internal quality assurance (QA) and external quality assessment (EQA) by a qualified independent reviewer once every five years. The purpose of these is to review how well the IA function and its activities conform to the professional requirements set out in the Standards. This is an effective quality assessment of the IA function's capability and competence. According to the CIIA Technical Coordinator:

"Although the Standards require all IA functions to have an EQA once every five years; however, we do not enforce this requirement as we do not have the resources to check that every IA function has organized and delivered an EQA. We have designed a self-assessment checklist that encourages IA functions to review themselves against the Standards and to seek advice and support from the technical team where there are any non-conformances. Finally, we require all members to maintain and submit upon request details of how they are building their capability and competence through continuous professional development (CPD)" (The Technical Coordinator of the CIIA UK and Ireland – interview).

The IA function can used the QA and EQA as ingenious ways to benchmark themselves against leading or best practices to nurture continuous improvement and meet current expectations and needs. Failure to conduct QAs and EQAs mean that

the particular IA function cannot confirm the quality and high status of their practices and services against the Standards. This may tarnish the IA function's status and legitimacy.

Status constraints can contribute to a loss confidence and low acceptance of the IA function among the top, senior and middle management in working closely with them. In order to solve this status constraint, the IIA has introduced the 'Three Lines of Defence' model, the CAE position and broadened the IA role to enable the CAE to take part at board level and become involved in the strategic process. This is an ingenious strategy to drive and strengthen the position of the IA function and internal auditors in the organization's structure. The strategy aims to help raise the IA function, CAE and internal auditors' status and profile, as well as clarify the IA role and its independence to fulfill its professional remit. This has allowed the IA function to audit and provide assurance and consulting services to the organization. The involvement of the IA function at the strategic level has raised its status and moved it away from the complement of junior staff that have smaller roles, little independence and a low profile in the organization.

Having talented and qualified internal auditors is essential for ensuring their professionalism and in acting according to professional standards. So, appointing qualified staff helps the IA function to avoid the risk of non-compliance, poor application of tools and methodologies and inconsistent actions, especially from non-IA members that carry out IA services. Professional internal auditors receive a relatively higher salary, which means the status and quality of internal auditors are recognized by the organization.

7.5 CONCLUSION

This chapter has explored the understanding of constraints and ingenuity practices of the IA profession at the societal level. It shows how the IIA develops and shapes the IA profession and practice by using ingenious solutions to resolve the constraints faced by the profession, and helps to improve IA effectiveness and survival. The analysis of the findings is categorized into three constraints or themes, which are: (i) IA role and practice framework; (ii) capabilities and resources, and (iii) status and quality of IA.

First, the results from the interviews and documentary evidence show that the IIA has, at different times, adopted ingenious strategies, such as the reinventing of the IA definition and IPPF. As the role of IA evolved along with stakeholders' expectations to reflect changes taking place in the business environment, the IIA has responded through creating ingenious strategies to update the definition of IA in order to cope with these developments. For example, the IA value agenda, the broadening of the IA role, and its service strategy was introduced by the IIA to transform the IA role and ensure the profession improved and added value to the organization by tackling IA's narrow role constraints.

Secondly, the research findings reveal the ingenious solutions created to overcome capability and resource constraints. The use of the RBIA and co-sourcing approaches, better sourcing via training and talent management, the use of technology and social media are among the key innovative solutions exercised by the IIA (or other parties for the use of technology) to deal with the constraints.

Table 7.4 summarizes the issues and ingenious solutions exercised by the IIA to assist and guide IA practitioners to deal with constraints that confront them.

Table 7.4: Summary of Issues and Ingenious Solutions

Constraints	Solution Taken by the IIA
7.2[22] – Role Narrow role and work scope of Traditional IA **7.2 – Outdated framework [PPF (1999) and old version IPPF (2009)]** Non-standardized practice among IA practitioners and outdated practice framework in dealing with current business need and expectations	**7.2.1 – Redefining IA Definition** Created new IA definition that broadens the role and promotes new image of IA **7.2.2 – Review & Update IPPF** Ongoing and periodic review to improve and update IPPF. Use one standardized practice framework worldwide.
7.3 – Lack of Resources Limited resources (financial, time, staff) to discharge or carry out IA broad role and responsibilities. Do more with less	**7.3.1 – Use of Co-sourcing Approach** To perform assurance and/or advisory role on an 'ad hoc' or 'needed' basis whenever in-house IA function does not have required capability and expertise to complete a new or specialized work; to reduce the cost of developing new capability for work that may not have been done before
7.3 – Limited and Insufficient Capabilities Lack of skills set, competency, talent, knowledge, tools and techniques to perform broad and multi-tasking role, specialized areas and deal with emerging risks	**7.3.1 – Use of RBIA Approach** To allocate limited resources to the area that matters the most to the achievement of organizational objectives and performance. To select auditable units based on risk prioritization in preparing IA plan **7.3.2 – Enhancing IA Function through Training & Talent Management** Build and organize training, workshops, courses and educational material to equip IA practitioners with appropriate skills, knowledge and qualification. Create talent management to provide the best practice and recommendations for recruiting, motivating, developing and retaining staff. The competency framework provide a tool that defines the competencies needed by IA practitioners **7.3.3 – Use of Technology** To enable IA function to handle business' big data and improve IA productivity and effectiveness **7.3.4 – Use of Social Media Networking** To enable IA practitioners to stay connected with the global and local IA network and communities. Social media provide unlimited access and free space for IA practitioners to exchange ideas, share practical experiences, seek advice and discuss current topics or issues of their interest
7.4 – Status & Quality Issues of low status within the organizational structure and quality of IA function. The IA function does not have the appropriate status required to discharge its role effectively. Traditional IA function just provides services for activities at the lower operational level.	**7.4.1 – Improve IA Status & Quality** To provide a new definition which broadened the IA role to cover consultancy services. The CAE position and advisory and strategic business partner roles enabled the IA function to serve the board and executive management. The QA and EQA give a good impact to IA status and professionalism to attain and resume management and stakeholder confidence. Quality assessments enable the IA function to measure their capability and competency against Standards and the best practice for improvement. The three lines of defence model, IA charter, and value charter are important to improve status and effectiveness of IA function.

[22] The numbering refer to the section in the chapter

Thirdly, as for the status and quality constraints, the IIA has adopted creative and problem-solving techniques, such as the use of the three lines of defence model, appointing the CAE, developing the IA charter, creating the value charter and performing quality reviews to improve IA independence, status and quality. This has enabled the IA function to provide consulting and insight services to the board and executive management at the strategic level in the organization. The IIA has constantly changed their objectives and strategies over time to ensure the role and services provided by IA functions meet the current and future expectations of the business environment and stakeholder. The next chapter will discuss the ingenious solutions implemented by the IA function at the organizational level.

Chapter 8

INGENUITY OF INTERNAL AUDITING AT THE ORGANIZATIONAL LEVEL

8.1 INTRODUCTION

The main objective of this chapter is to present and discuss the findings of the case studies carried out in two companies listed on the London Stock Exchange (LSE) and New York Stock Exchange (NYSE). To uphold an ethical approach in the research, the company names are anonymized in the thesis. For this reason, the two companies selected for the case studies are referred to as “Britain Communication” (BC, hereafter) and “UK Communication” (UKC, hereafter). In accordance with the ontological, epistemological and methodological views discussed in Chapter 5, the case studies examine evidence of ingenuity practices in the context of the efficiency, effectiveness and continuous improvement of the IA services provided by the IA function in BC and UKC. Using both IA functions as the case unit of analysis, this study focuses on examining how and to what extent the ingenuity and practice framework (the IPPF and its components) developed and promoted by the IIA at the societal level (see Chapter 7, p. 158) are deliberated and adopted by the IA function at the organizational level.

The study seeks to identify and explore ingenious practices exercised by both company’s IA functions. The companies’ efforts to solve constraints in providing services to meet stakeholders’ expectations and demands are explored. As discussed in Chapter 4, ingenuity is conceptualized as the ability to create innovative solutions within structural constraints using limited resources and imaginative problem-solving (Lampel et al., 2014). Ingenuity is not restricted to novel and new ideas (“invention”) but also includes any ideas that are useful to resolve constraints and bring improvement and success (Ungerer et al., 2011).

There are three constraint themes discussed in this chapter, namely the changing of the IA role; resource and capability; and IA status and quality; which are in line with the constraints identified in Chapter 7 at the societal level. The chapter also includes the strategies and techniques used by BC’s and UKC’s IA functions to successfully manage and conduct their IA activities in dealing with the constraints (surrounding the

three themes). These constraints led to the emergence of five ingenious solutions (see Table 8.1).

Table 8.1: Types of Ingenuities and Constraints

Item	Types of Ingenuities	Types of Constraints
1	Changing and extending IA's role	Structural and Service (or product)
2	Use of Co-sourcing and RBIA	Resource (financial, time, human & operational/process capacity)
3	Better sourcing IA function through training and talent management	Resource (competency & talent)
4	Greater use of technology	Resource (time and capacity)
5	Improving IA status and quality	Structural (power, trust & satisfaction)

Generally, the constraints shown in Table 8.1 can be categorized into two types: structural (items 1 and 5) and resource (items 2, 3 and 4). Types of services that organizations (or IA's clients) need vary considerably across different organizational structures, business operations and management missions. According to Lampel at al. (2014), organizations normally develop structures and systems to tackle and cope with routine problems in order to achieve better performance. However, when organizations too often use (or overuse) the systems and structures in dealing with their routine problems, they run the risk of losing their ability to solve problems creatively (Miller, 1991). Organizations may create structures that impede creativity and reduce resource mobility (Nelson, 1992). On the other hand, structural constraints could motivate and trigger IA functions to be creative to change and extend their roles in order to meet continuous changes in stakeholders' expectations. The phenomenon of structural constraint as discussed by Lampel et al. (2014) is explained in Chapter 4 (p. 90). For example, structural constraints, such as managements' missions, standard operating procedures or IA charters (which define the IA functions' purpose, authority, responsibility and position in organizations), in the IA context are coupled to the organizations' structures to govern, define rules and delineate activities. According to Meyer and Rowan (1977), norms, rules, and rituals are intensely embedded in organizational routines and practices that define organizational life, regardless of their efficiency or contribution. Therefore, organizations need ingenuity strategies to tackle and adapt to organizational constraints (Walker et al., 2014). Walker et al. (2014) suggest that organizations frequently require different types of ingenuity strategies,

such as escaping, improving, re-focusing or changing strategies, to overcome these organizational norms and constraints.

On the other hand, Lampel et al. (2014) suggest that resource constraints (refer to Chapter 4, p 105), such as limits of time, funds, operational capacity and human talent, are often sources for ingenuity that motivate actors to operate or work towards high, fitness-for-purpose solutions: bricolage, improvisation, bootlegging and scavenging activities (Baker & Nelson, 2005; Kannan-Narasimhan, 2014). Through these activities and practices, actors show ingenuity by addressing constraints that stand in the way of attaining their goals (Lampel et al., 2014).

8.2 INGENIOUS SOLUTIONS TO DEAL WITH CHANGES IN THE REGULATORY AND BUSINESS ENVIRONMENT

This section presents and explains the constraints and ingenious solutions exercised by the IA functions of the studied companies. The constraints that emerge through changes, including regulations, structures, and missions, have led organizations to develop ingenious solutions through modernizing and expanding its services, as explored in the following discussion.

8.2.1 Ingenious Solutions through Changing and Extending the IA Role

The business environment is continuously evolving and changing, along with regulations, technologies, the global economy and competitive pressures (Cosby, 2016; PwC, 2015; EY, 2013; Deloitte, 2012). Companies such as BC and UKC compete in global markets. They are exposed to huge uncertainties and have to comply with numerous local and international acts and regulatory requirements (such as the UK Bribery Act, the US Sarbanes-Oxley Act, the US Foreign Corrupt Practices Act, and the Dodd-Frank Act). Where appropriate and applicable, companies have to comply with professional (or technical) standards and requirements, such as the IIAs' IPPF, the corporate governance framework, the COSO ERM framework, the stock exchange listing requirement, the International Organization for Standardization (ISO) standard, and financial and rating agency criterion (the IIA's Audit Executive Center, 2016; Brandt, 2010; Karapetrovic & Willborn, 1998).

These regulatory changes have affected the business models, governance structures, strategic plans, and risk environment of many organizations (Teece, 2010; Xu et al., 2006; Fruhling & Siau, 2007; Rudd, 2003). Companies are required to comply with multiple rules and regulations (see the Companies Acts, the Listing Rules, the Turnbull Guidance (2005), the Corporate Governance Code (2014)). In turn, organizations, to some degree, require the board to report their RM practice in the company's annual report.

Consequently, those changes have created an increased pressure for board, executive management and key stakeholders to show effective governance, RM, and control processes in organizations (KPMG, 2014; Spira & Page, 2003; Bou-Radd, 2000; Chambers, 2000; Salem & McNamee, 1999). This leads to the need for the IA function at the organizational level to expand its traditional role by offering wider and contemporary services. The role changes in both case study companies are discussed below.

(i) <u>The Case of the BC Company</u>

BC acknowledges the need to expand the IA role due to the changes in regulations and business environment. In discussing this change, the Head of the IAF shares his thoughts below:

> *"As the organization's and stakeholders' needs and expectations are changing over time, the IA function has to understand these developments and expectations, now and in the future, and* ***align its roles, resources, competencies*** *and focuses to* ***keep pace*** *with that* ***expectation*** *and organization's strategic goal" (Head of the IAF, BC – interview).*

As stated in the quotation above, IA functions need to transform in parallel with the change in needs and expectations of their clients and stakeholders in order to stay relevant. To be responsive to such stakeholder needs, the Director of IAF and ERM claims that the role of IA in BC is evolving, innovating and extending to meet the organization's contemporary needs. In this context, he said:

> *"Over recent years the IA function has transformed from a function which was a largely compliance-related monitoring activity to one which provides* ***much more value-business insights and operates at a more strategic level.*** *In doing so, the IA function has carried out a considerable amount of work that helps to confirm whether BC and its members are doing a right and the best thing as an organization. The IA function at BC is acting as the third line of defence by*

providing independent objective assurance, consulting and quality reviews of existing internal functions and strategies to the board" (Director of IAF and ERM, BC – interview).

The quotation above shows that the role of the IA at BC has: (i) transformed from one that focused on the control validation and compliance audit to one that focuses on value-added functions; and (ii) shifted in status, as discussed in the following quote.

"Increasingly, we support the management decision-making process by helping the business to take decisions on levels of controls and mitigations based on a greater insight of risks and optimization of controls" (Director of IAF and ERM, BC – interview).

Services provided by the IA function on its insight of risks and its alignment with control strategy in mitigating risks have added value to the management team in terms of providing what they needed most to improve their operation. The IA function has expanded from the previously provided control and appraisal service that merely focused on compliance. The advisory service to the board and top management has lifted the status of IA in organizations. This transformation is one of the ingenious ways the IA function has been able to provide services to fulfil its organization's needs. As organizations' structures, business models, strategies, risks exposures, regulations, and environmental conditions are likely to alter over time, IA functions need ingenious solutions to tackle problems or constraints caused by these changes.

The above claim regarding the transformation of the IA role in BC is supported by the documentary evidence of the BC's IA function charter. The charter specifies that: "the role of the IA function covers the assurance, RM, fraud and consulting/advisory activities." The RM and consulting/advisory activities are extensions to the existing traditional role and provide opportunities for IA to contribute to more value-business insights and operate at a board or strategic level. Meanwhile, the coverage of existing assurance and fraud roles are widened (beyond traditional control and compliance coverage) according to the organization's needs.

Risk Management Role

Paragraph 3.2 of the IA function charter of BC required IA activity to monitor and evaluate the effectiveness of the organization's RM system and cover all significant risks associated with change.

In relation to the changing roles stated in the quote above, the IA function received a demand from the board for greater assurance on the effectiveness of the management of risks to help them to address the organization's key business risks. For instance, one of the senior internal auditors said:

> *"We are risk-based auditors, so our main focus is to assess our organization's RM process, seeing what controls are mitigating those risks that have been identified, and testing them. In addition, we also give a good picture to management about how their controls are operating and if they really are effective in managing the risks in their departments" (Senior Internal Auditor, BC – interview).*

According to the Director of IAF and ERM, the move by the BC's IA function to expand and increase its role in RM in 2007 is a significant change from the previous focus on compliance. Their role in RM signifies that the function seeks to develop into a relatively new area. To help the IA function to effectively review and improve the RM practice across all parts of the organization, the Audit and Risk Committee (the ARC) are required to:

> "*monitor and review the effectiveness of the company's internal audit function in the context of the company's overall risk management system" (BC Audit and Risk Committee Charter, 2015, principle duties para 3.4.7).*

In this context, the BC board, audit committee and management are expected to play their role to support the IA function to enable them to discharge effectively their role and responsibility. Consequently, this helps the IA function to provide independent and objective assurance services to assist management identify all significant risks for the entire BC Group. For example, as a third line of defence, the IA function provide assurance concerning the effectiveness of BC's RM process in identifying all significant risks faced by them. According to the Director of IAF and ERM, the IA function plays an important role in providing assurance to the board and executive management on the potential opportunities and emerging risks before BC expands its business ventures overseas.

One of the Operation Manager in BC acknowledged that:

> *"The IA function provides valuable independent assurance on compliance with policies and standards, operational activities, and independent opinions on the effectiveness of RM. Also a risk-based approach to IA work generally produces*

audit plans that are relevant and supportive" (BC's Operation Manager – interview).

Even though recognition from management and independent non-executive directors (stakeholders) can credibly ratify the effectiveness of the IA function in BC, it is not the whole story. This is because, in some organizations, stakeholders are only aware and see past accomplishments and have a limited knowledge of IA practice (Roth, 2002). As a result, their expectations are likely to be lower than what IA can offer. Hence, the IA function needs to further innovate, demonstrate and sell to stakeholders to let them know how much they can serve and deliver to add value (see Chapter 2, p. 36) and raise management or stakeholders' expectations. According to Roth (2002), the type of work or services that constitute value-added practice is largely situation specific, and generally refers to activities that help management achieve business objectives, rather than merely validating compliance with policies and procedures. For example, if weak control processes are a problem, the use of compliance auditing to test the working, adequacy and appropriateness of internal control systems, is considered value-adding practice (Roth, 2002; IIA-UK, 2003).

In addition, there is a small part of business operations that is new to BC, which needs attention and improvement to their RM process. According to the Director of IAF and ERM, it is their role to help make these improvements so that this part reaches similar maturity levels to the rest of BC's business operations. To sum up, in BC, the IA function has innovated through extending its role in the RM process in two distinct ways:

"Through BC's IA function work in which the function evaluates the RM and control framework that management has in place to mitigate against risk over the specific operational processes being audited; and

"Through quarterly integrated assurance reviews in which the IA function provides a high-level opinion of the BC management's RM and control framework over Group Risks function." (Director of IAF and ERM, BC – interview).

The IA function must provide a proactive risk assurance service and help its organizations to integrate business risks and objectives into their strategic plan, instead of treating them in isolation and only reacting to the risks after they have affected business operations. For example, in 2010 the management team of BC's

Global service division failed to align its division objectives and risks exposure with its business strategy for its global expansion plan. As a result, the division did not earn anything close to its cost of capital. In addition, the poor returns required BC to take over £1 billion in write-offs over a two-year period, which also consumed much of management resources and valuable time. The division was forced to make the write-offs because of over-optimistic assumptions made on large international contracts.

Technically, the global expansion plan usually involves multiyear contracts that last between five to ten years. The contract usually has significant upfront costs, and potentially can generate greater returns on investment. However, if the BC's RM process for the global expansion strategic plan is ineffective (such as the risk process did not link with the strategic plan or the estimated returns were too aggressive), it could entail an operating loss. Therefore, the change from reactive to proactive assurance over the RM process, as well as the alignment of the RM process with the business strategic plan for the BC global expansion plan, is an ingenious solution made by the IA function at the organizational level to prevent losses from over-optimistic assumptions and to solve the ineffectiveness of the RM process in BC. This assurance service is important in helping the division to establish a holistic business strategy and take right risk decisions for its global expansion plan. The success of this global service division is important to BC's overall performance because it accounts for approximately 30 per cent of the Group's sales. Overall, the IA role change at the organizational level is consistent with the IIA IPPF recommendation at the societal level to establish a proactive, mature and effective RM process. This is crucial for resolving existing poor return problems and helping for the success of future business activities.

Consulting/Advisory Role

According to paragraph 3.4 of the IA charter:

> "The IA function may undertake consulting activities to extend its service to the organization, but the charter requires that such reviews should only be undertaken when these conditions are met: *(i) the subject of review is material to the interests of the Group as a whole; (ii) sufficient IA resource is available to discharge the activity without compromising the delivery of the audit plan; and (iii) IA has the appropriate skills to perform the advisory role" (BC IA Function Charter, 2012/13, consulting role para 3.4).*

In BC, there is an agreement and expectation from top management that the IA function must be involved in major areas of growth and development. In this respect, the IA function can provide consulting roles, such as insight, strategic advice and support, on an informal as well as formal basis. Therefore, at the strategic level, the IA function is offering acumen, insight and foresight services by developing risk-based strategies to assist the board of directors and executive management to improve BC's strategic planning and business decision processes. It is important for the IA function to balance the demands (between assurance and advisory roles) and continue to innovate around an ever-changing business environment so that it can provide best services to its organization. In addition, the IA function must know where the organization is heading in order to discharge its role effectively and efficiently to meet the organization's strategic direction needs.

Another example of how ingenious strategy is used by the IA function to operate at a strategic level is through selecting key issues across all of its audit reports. For example, the IA function identifies three big areas and produces a hit list for the Audit and Risk Committee. According to BC's Head of the IAF, this is a very powerful way to get the committees' attention and drives forward the strategic objectives and control changes. As Head of the IAF, it is crucial for him to play a significant role in advising the board and executive management during the strategic planning process.

The advisory role can be considered as an ingenious way that goes beyond the narrow traditional IA service. For example, the Director of IAF and ERM disclosed that they have been involved in providing consulting and assurance services to BC in helping the organization's management to effectively manage risks and discharge its RM role in a project of great importance as a television broadcast and communication provider for one of the world's biggest sports events. In order to discharge its role successfully, the IA function identified what would be important in making sure that BC was prepared for the event. This was done through evaluating RM processes to ensure whether management had thoroughly identified and analysed key strategic risks and developed practical RM treatment strategies to address those risks well ahead of and throughout the event. In addition, the function also provides advice and insight surrounding RM activities to the special project teams to support them managing the RM programme, and formally communicate the results of those consulting services to the audit committee and management for each of the key milestones of the project.

To sum up, the study found that the IA function at BC has changed from a largely compliance-related monitoring activity to assurance and consulting activities. The IA function now has new status and roles in BC, acting as adviser and strategic business partner, and reviewing RM effectiveness and providing assurance to meet the expectations of the organization and its stakeholders.

(ii) <u>The Case of the UKC Company</u>

As discussed in Chapter 7, the IA role has changed at the societal level to solve IA's profession constraints. This section investigates whether the change has occurred in the IA function of UKC. In this respect, when asked whether the UKC's IA function has extended its role beyond traditional IA services to increase its capability to add value to the organization, the Head of the IAF at UKC said:

> *"I do believe the IA function is here to add value. Value would have a different meaning to different people. To be clear, it has not necessarily been proved in terms of profit because some of the things that we do and suggest involve cost/money. But we do believe that it is necessary to enable the business to run efficiently, securely and reliably. …. **We believe we have done a good job, if we can help people to make a right decision. That is added value"** (Head of the IAF, UKC).*

According to the Head of the IAF, an **advisory role** is one of its extended services. For instance, one of the constraints faced by the IA function is to clearly understand the business operational unit objectives and integrate it with the organization's risk and strategic plan. The problem arises when the operational unit team fails to effectively set its own business objectives. Without a proper understanding of the business objectives, it is difficult for the IA function to provide services to improve the organization's RM process. According to the Head of the IAF:

> *"One of the problems faced by the IA function is not knowing the objectives of the business operational unit. This is often because this unit may not have a very clear objective itself" (Head of the IAF, UKC – interview).*

In solving the above constraint, the IA function needs to tackle the problem with the operational unit first. The function plays a strategic adviser role, which is an extension to their traditional, limited compliance service. The first step is helping the unit to fully understand its business operation to enable it to set clear business objectives. When

the operational unit and the IA function are clear on the business objectives, then it is easier for them to identify significant risks that may affect the business operation. Regarding this aspect, the Head of the IAF commented that:

> *"In this case, we help them to appropriately set and align their objectives and risks exposure. We play a strategic advisory role to help the business unit to establish their short- and medium-term objectives, particularly in identifying Key Performance Indicators that would help them to focus on what they would deliver" (Head of the IAF, UKC – interview).*

The above scenario is an example of how the IA function broadens its scope of work, makes it more challenging and requires more responsibility, capability and resources. This increasing demand of IA services does not match with the narrow or limited services of the traditional IA function. Therefore, it is necessary for the UKC IA function to expand its role to include an advisory role to better serve management and its organizations expectations.

Another example of how the UKC IA function broadens its role can be seen when it provides advisory services to improve the RM function. It was found that there are weaknesses in the RM and control processes caused by the lack of adequate business information to diagnosis risk exposure to UKC's business operations. This lack of information is a result of the lack in documentation as mentioned by the Head of the IAF in the following statement:

> *"Sometimes business units do not have adequate information or knowledge of the business operations, due to the lack of documentation. To resolve this constraint, we then provide a consulting service by conducting workshops with the business teams to work through the issues and identify their priorities and solutions" (Head of the IAF, UKC – interview).*

The above example shows how the change of role to consultation took place in UKC. This type of service is important to help the organization to achieve effective governance practice, manage risks well, and be more prepared to face the uncertain, challenging and dynamic business environment. The contribution raises the profile of the IA function within UKC as well as among key stakeholders. As commented by its Head of the IAF:

"We provide them with a different perspective. We consider their business objectives, risks and so on; and we hope this can help improve their situation. That is the value we add to the process" (Head of the IAF, UKC).

It is not easy for the IA function in UKC to extend its role as a business partner to assist management in improving its business operations. In addition, not all advice from the AI function is accepted and implemented by management, especially when it involves a big investment or incurs a large cost.

"For example, when we assessed our IT system and found out that they are exposed to risk, then there is a need to install new software to manage the situation. This will cost money…

"Whatever we do, we have to make sure that objectives are well achieved and there is a balance between costs and benefits. Some of the solutions might cost management less, and some cost them more, but the question is: which one gives better returns? We want the management to consider that. However, if they take more risk, they can reduce the costs, quite possibly" (Head of the IAF, UKC – interview).

In improving the RM process, the IA function exercises innovative solutions using forward-looking approaches to diagnose the inherent and residual risks, and taking into account the organization's risk appetite (a type of structural constraints). Their advisory service to the management goes beyond profit or return on the investment measure. In this context, the IA function offers more than just testing control systems to find out whether the control system is working as intended and complying with policies and standards. It also evaluates, improves and provides assurance on the effectiveness of RM, governance and control processes.

Summary of BC and UKC Case Studies

The IA function's role is more than reporting and providing controls assurance. The BC's and UKC's IA function have expanded their mandate to become business partners and consultants, such as being involved in RM, broadening their focus to perform value-added activities and improve their organization's operation. These ingenious strategies exercised by them to overcome constraints they face are found to be consistent with the suggestions made in Chapter 7 and the literature of IA, (EY, 2014, 2013 & 2012; Nagy & Cenker, 2002; Bou-Raad, 2000; Krogstad et al., 1999). An appropriate organizational culture, encouragement and support from the board and

management team are crucial in realizing these challenging roles. As the demand for advanced IA services, such as IA involvement in RM and value-added activities, are higher than ever, IA functions need to equip themselves and internal auditors with sufficient and appropriate capabilities (capacity, competencies, skills, methodology, and professionalism) and resources. These attributes should be at the level that allows IA functions and practitioners to be ingenious and proactive in carrying out value-added activities in order to achieve institutional legitimacy and to become recognized as strategic business partners. The ingenious solutions in dealing with the capability and resource constraints faced by IA functions at the organizational level in exercising their extended role will be discussed in the next section.

8.3 INGENIOUS SOLUTIONS TO ADDRESS CAPABILITY AND RESOURCE CONSTRAINTS

As discussed in Chapter 7, the IIA has introduced various ingenious strategies to guide IA functions and practitioners at the organizational level in applying and sourcing their resources to overcome constraints triggered by the lack of capabilities and resources. Hence, this section explores how the IA functions in BC and UKC tackle their constraints in order to meet with the IIA's IPPF requirement and changing board, management, and stakeholder expectations. As discussed in Section 8.2.1 above, the extended role of IA to perform a new mandate beyond the traditional IA control and compliance role has brought both opportunities and constraints for the IA function. The effectiveness of the IA function will be in jeopardy if the function does not have the appropriate capability, and is incapable of attracting the necessary resources for executing its new role and mandate. In general, the age of the IA function does not reflect its capabilities and availability of resources. There are many factors that influence the IA function's capabilities and resources. These include: the relative size of the IA function, approved annual budget, pace of industry innovation and technology, IA performance and achievement, staff experience and expertise, talent and quality of internal auditors, organizational culture, top management support, regulatory requirement, and the maturity of the IA function at the organizational level (Aldrich & Fiol, 1994; Lounsbury & Glynn, 2001; Zimmerman & Zeitz, 2002).

It is crucial for the IA function to be cost-effective in discharging its expanding role and increasing its capability. Based on Table 7.2 from the previous chapter (which portrayed the factors of constraints, their impact, and ingenious solutions to tackle

those constraints), the IA functions of BC and UKC apply the following four ingenious strategies to ensure their function's activities are properly resourced and that they possess appropriate capabilities.

8.3.1 The Use of Co-sourcing and Risk-Based Internal Audit (RBIA)

This subsection covers two ingenious solutions, namely, co-sourcing and RBIA approaches, which are applied by the IA function of BC and UKC in tackling constraints confronted by them in planning and performing their IA activities.

i) The Use of a Co-sourcing Approach to Support Existing In-house IA Function

In solving the capability and resource constraints as addressed in Chapter 7, the IA function can apply any of these four alternative sourcing arrangements. These include: (a) in-house sourcing (where the company maintains its own IA function/department/unit through permanently employed internal auditors); (b) in-sourcing (where the IA function borrows staff from other departments of the company for a limited period of time); (c) outsourcing (where the whole of the IA function is outsourced to outside parties or service providers, such as independent audit firms; or (d) co-sourcing (where the IA function is conducted by a partnership between in-house staff and an IA service provider (outsourced).

The BC Company

BC operate in a rapid technology sector and highly competitive customer segment. It is obliged to comply with many national and international standards and regulations. The IA function needs to serve six different lines of business, with around 90,000 employees and customers in over 170 countries. According to the Director of IAF and ERM, the main challenge for the IA function *"will always be around the resources and the allocation of resources*". With resource and capability constraints in hand, the IA function has to make sure they channel the resources appropriately and sufficiently on issues that drive the organization's businesses and to areas that matter most to the organization. The IA function must optimize and save its limited resources and also build the appropriate required capability. This necessitates wise planning and a

practical view of the budget and skills that the IA function has, in order to support BC's six different lines of business that operate in the domestic and global market.

Generally, BC maintains an in-house IA team to cover UK, European, and North American operations, while regional IA teams cover Indian and Latin American business operations. In an effort to optimize IA function resources and instantly add capability and new skills to enable them to deal with emerging risks, the function uses co-sourcing agreements. New skills sets or expertise are important to the Group's business operations because of the nature of BC's business, which is significantly influenced by rapid technological change and innovative product cycles. Overall, there are three regionally based co-sourcing arrangements between BC's IA function and the 'big four' accountancy firms to support its IA work in Asia Pacific and other locations. These co-sourcing arrangements are critical for the IA function as a solution to transform the function from a silo basis to a more effective role. BC also uses outsourcing owing to financial constraints. According to the Director of IAF and ERM (from the interview), the IA function uses an ingenious strategy in sourcing its extended IA services. In this context, he said:

> "*For BC's key business operations, the IA function* ***concentrates in investing in a training and development programme*** *for its staff to develop required capabilities and skill sets in-house. However, some business operation areas* ***require a special skills set or expertise****, which the in-house IA team cannot accommodate or* ***it is not cost-effective to invest and develop a particular capability in-house****. To fulfil this need, the IA function acquires the expertise from an independent IA provider, which BC has contracted with for a co-sourcing arrangement. Overall, 92 per cent of IA activities in BC were undertaken in-house with only eight per cent being undertaken through an external co-sourcing arrangement" (Director of IAF and ERM, BC – interview).*

The above quotation indicates that, when the IA function requires a skill set or expertise that it does not have in-house, then they can co-source it from external providers. This action can be considered as an ingenious solution. As stated by the Director of IAF and ERM in the above quotation, the IA function is very prudent in choosing which IA assignments require co-sourcing arrangements. This is because the IA function has only a limited allocation for co-sourcing externally, amounting to approximately eight per cent of its budget. In this respect, BC limits its co-sourcing activities to the areas critical to its key operations, strategic objectives and overseas operations. The focus area for co-sourcing arrangements must clearly exhibit merit for

the immediate development of required new expertise, capability and skill sets (such as for the BC's overseas business where there are different cultures and regulations). Therefore, a co-sourcing arrangement is a smart way to bridge the in-house IA function with best practices from outside. This has opened access to the IA function to learn from leading practices and experienced professionals within specialized business and/or technical capabilities. As a result, the co-sourcing arrangements enable the IA function to redeploy its valuable resources towards attaining BC's strategic goals and objectives. It also helps the IA function to minimize areas of duplication in the work that it does, as well as other lines of defence that provide assurance to the business. As highlighted by the Director of IAF and ERM, the latest development in BC shows a trend of reducing co-sourcing contracts due to the expansion of IA regional teams in the Asia Pacific, Middle East and Latin America. Apparently, this trend includes bringing back in-house core activities that were previously co-sourced. This indicates a successful technology transfer from leading expert providers to regional BC IA teams in areas that make a significant contribution towards BC's strategic business objectives.

In a nutshell, the co-sourcing practice in BC highlights that there are two main areas in which the IA function chooses to co-source its work. First, the main use of co-sourcing is for reviewing BC's international operations, where there is a sound economic or other benefit for using a local co-source. Examples here include some of the IA function reviews in Latin America or Asia, where the organization has only a small IA presence and add an external co-source with local language skills to support the IA function work. Second, co-sourcing is used for those matters in which reviews are conducted infrequently and require deep expertise (an example of co-sourcing for this purpose in 2015 is for the Tax Governance review).

The UKC Company

The UKC's IA function is experiencing a few resource and capability constraints. First, the size of the IA function is quite small: they have only four members in the team. With limited capacity, it is hard for the AI function to delegate tasks for increasing assignments, especially when performing a newly expanded role such as a risk advisory role. As commented by the Head of the IA function:

"When the IA function has a small team of people, it is difficult to have the spread of expertise necessary for conducting certain types of assignment" (Head of the IAF, UKC – interview).

In addition, the IA function staff did not possess the multi-skills required to conduct their new roles. This resulted from being too long in the same position and dealing with the same type of work. The Head of the IAF added:

"When staff (internal auditors) stay in the same job for a lengthy period of time, this could slow down their professional and personal development" (Head of the IAF, UKC – interview).

To solve the above constraints, the IA function used a co-sourcing approach. Co-sourcing is the best and an ingenious way for the IA function to tackle its capability and resource constraints because the in-house IA function can leverage a specialist co-sourcing provider's knowledge, business best practices, savvy and expertise. As stated by the Head of the IAF:

"Resource and capability constraints can be handled by using a co-sourcing approach. The co-sourcing model is well suited to cover both capability and competency issues. Typically, expertise from professional firms would allow us to conduct assignments with the expertise required. This also helps IA function staff members to learn new skills as they work alongside the outside firm." (Head of the IAF, UKC – interview).

The quotation above indicates that the UKC's IA function uses co-sourcing arrangements when it urgently needs to conduct a new IA assignment. Co-sourcing is the best solution for the small IA team, as new ideas and expertise can be contributed and the in-house IA team is able to extend its capabilities.

ii) The Use of RBIA

The UKC Company

Like most IA functions in other organizations, the BC's IA function is facing similar constraints of scarce resources that need to be budgeted and managed carefully. In reality, it is impossible for the IA function to allocate its resources to every business activity. Instead, the IA function must carefully construct its audit universe in order to prioritize and select the right auditable units to be covered and included in the IA plan.

To achieve this, the IA function has transformed the way it prepares the IA plan. This began when the IA function moved from using a traditional method[23] to using a RBIA[24] approach. This move started in 2007 when the Director of IAF and ERM joined BC. It was his decision to turn around one of the key problems faced by the IA function at that time: the ambiguous processes for determining and selecting "auditable units"[25] within the "audit universe"[26] of the BC Group. Correctly conducted, this process is critical for deciding appropriate levels of auditing coverage and dedicating suitable levels of resources to each unit selected. It is also necessary to be aligned with BC's risk profile. According to the Director of IAF and ERM, he discovered that the previous traditional approach of determining the audit universe and auditable units was improperly planned, constructed and managed. This resulted in the IA plan not functioning well, being unmanageable, and not aligning with emerging risks and strategic objectives. It was a silo process (that is, it was not integrated); it provided ineffective coverage; and there were both redundant activities and duplication of efforts. In his comments in regarding this matter, the Director of IAF and ERM made the following remark:

> *"When I joined BC eight years ago, I found the previous audit universe was not really functioning effectively, no priorities were set up, it seemed a bit unmanageable, and had a lot of duplication of work. This was due to the ineffective method that BC's IA function adapted to plan and maintain an audit universe for the company and its Group. As a result, the IA coverage in some areas was not good enough and the annual IA plan prepared by the previous IA function team had not full coverage of all BC Group's activities. For example, the IA plan failed to take into account the significant auditable units of overseas assets that the company had bought through some major acquisition exercise by the company" (The Director of IAF and ERM, BC Group – interview).*

The above quotation illustrates the example of autonomous problem-solving done by the IA function; where the function identify the problems and try to resolve it on their own (Burgelman, 2002). From the quotation, it is clear that the failure to include the BC's auditable units of overseas assets in the IA plan led to ineffective preparation. It

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[23] The traditional IA plan methodology focuses more on policies, transactions, multi-year coverage and compliance matters.

[24] The RBIA approach concentrates on goals achievement, strategic planning, RM processes, business focus, process improvement, and continual-risk-reassessment coverage.

[25] An organization, activity, operation, individual, or other discrete entity that can be subjected to an audit.

[26] Represents the total potential range of all auditable units and its scope of work within an auditor's remit.

also caused inappropriate prioritization of risks and selection of potentially inappropriate auditable units, resulting in a waste of resources. Before the adoption of RBIA, the Director of IAF and ERM revealed that the total auditable units identified in the previous audit universe was 6,000, compare to 600 in the current revised version. The adoption of a new approach serves to illustrate the use of an ingenious solution to resolve or mitigate resource and capability constraints. According to the Director of IAF and ERM, using RBIA has benefited them as follows:

> *"Since the adoption of the RBIA approach, the audit universe prepared by the IA function has provided a complete view of areas that need a review, a clear objective and notion of each of the auditable units or entities that the IA function should cover (including the scope of coverage), as well as risks that may be rising. Since the adoption of RBIA, our audit universe contains just about 600 identified auditable units, whereas before the adoption of RBIA, due to duplication, it was 6,000" (The Director of IAF and ERM, BC Group – interview).*

The quotation above reveals that the use of RBIA by BC's IA function for planning their work improved auditing integration and effectiveness. This integration process is crucial to improving IA coverage, and allocating limited resources effectively and efficiently (Ziegenfuss, 1995). The use of RBIA has minimized the IA function's resource constraints through risk assessment and risk prioritization. Based on risk prioritization, the IA function selects and determines which business activities are to be included in the IA plan so that it can then provide either assurance or consulting services in areas that really matter to the organization. In other words, the IA plan concentrates on the areas of greatest risks, which could affect the organization's goals and keep it away from achieving its objectives. RBIA is an innovative way of determining that appropriate and sufficient resources are allocated to the areas that matter most to the achievement of organizational objectives and performance, considering the nature and complexity of each engagement, time constraints and available resources.

The Director of IAF and ERM pointed out that the use of RBIA and the re-organization of the IA function have improved their audit plan coverage and helped the function to make a better allocation and utilization of valuable IA resources and capabilities, regardless of a slightly reduced headcount and co-sourcing activity. Taking into account the acquisition and expansion of the BC Group's business operations and activities worldwide, the IA function resources have to be well planned. Therefore, the Director of IAF and ERM expressed the following view:

"The IA plan must not only be sound but it also has to be earned through delivering good services and products. If the quality audit service is not delivered, then it is not adding value to the organization. If you have got the right person, the right process, and the right tools, and show the findings based on evidence, this will influence the appropriate conclusion. However difficult that message, however negative the finding, auditors will report that opinion. Nevertheless, the organization will work toward resolving that" (The Director of IAF and ERM, BC – interview).

In supporting the above statement, the Head of the IAF explained that the IA function will carry out a risk assessment to see how material the risks are (for the audit unit within the audit universe). The materiality criteria measured here include: financial impact, residual risks, and overall likelihood and impact to the business. The use of RBIA drives the priority order of audit needs by linking the risks and strategic objectives. Currently, around 60 per cent of the IA function's time and resources are aligned with BC's key risks. This helps the IA function to make a better allocation and utilization of its valuable resources and to balance its capabilities. In BC, the RBIA plan is prepared annually and subject to quarterly review. This has allowed the Director of IAF and ERM to re-evaluate and rebalance their capability and resources if necessary, including additional co-sourcing arrangements.

The UKC Company

The approaches and level of practices for implementing RBIA are different among organizations. This is in accordance with the IIA standards that embrace principle-based rather than rule-based practices. The IPPF and the standards are not intended to form a hard-and-fast rule but simply to serve as a guide. Thus, the level and extent of implementation should differ among organizations, reflecting the different interpretation of the IPPF, philosophies, risk appetites, organizational cultures and structures, processes and procedures, and subject to different regulations and standards. For instance, some organizations have not entirely adopted RBIA but have combined it with other approaches. In relation to this context, the Head of the IAF at UKC emphasized that:

"I think it depends on the type of operation. Sometimes we take an ad hoc project whenever the CEO, CFO or others in the senior management team have got some concern and suggest that we should spend some time on it. So those

projects may not necessarily be in our key risk report, because the key risk report essentially comes from the key risks and are typically the larger ones.

"However, when there is a concern about it and the management do not feel comfortable with it, I think we could take time to look at it. Perhaps, this is the right thing to do, because when there is a small concern and we take action now, then it could prevent something much worse happening later. I would not say I would do it in real time, but I would look at the issue and update the IA plan. We actually do some ad hoc projects when we gather information from discussion with senior management because they run the business, they know better" (Head of the IAF, UKC – interview).

Besides the RBIA, IA function of UKC also carried out audit assignments based on management requests or using elements of traditional approaches. However, the RBIA is used to identify and cover significant risky areas that are unable to be addressed using a traditional approach. Problem-solving process by which senior management identify the problems and induce task to a group (such as IA function) to resolve is known as induced problem-solving (Burgelman, 2002).

The RBIA allows the IA function to alert management to potential problems that might impede the organization from meeting its strategic objectives. Potentially, RBIA is an innovative tool that can support the IA function to build credible and justifiable annual and individual IA assignments. It helps to provide valuable contributions to the organizations governance and performance equation. Managing RBIA is more challenging than the traditional approach because the wrong application of RBIA could result in the misallocation of audit resources and lead the IA function to work on the wrong audits assignments.

In UKC, the Head of the IAF presents the annual IA plan to the audit committee. According to him, before the audit committee approves the plan, it will raise anything it thinks should be included in the plan. The Head of the IAF continued:

"If we go back one step, when we prepare the plan, we look at the key risks in accordance with the RBIA and determine what we should do. We also have a discussion with senior management of what concerns they may have and think about it. We try to maintain our independence but, as I said before, we still have to listen to the business guys who run the business. They know better in term of the business operation, they know better about some of the concerns, since they are the ones who run the business" (The Head of the IAF, UKC – interview).

Here, the Head of the IAF indicates that the IA function listens to management and considers the areas that they might look at for audit. In addition, there may be areas that management are not going to look at and this is something that the IA function needs to be aware of and prepared to deal with it. Further, the Head of IA points out that, if necessary, after having discussions with senior management, he has the chance to see the chairman and draft the plan. If this is not necessary, he just has a list of key issues that address what IA needs to cover in the forthcoming year rather than a very detailed plan. When the detailed plans are ready, the chairman will have enough time to look at the key issues and decide on what he agrees or disagrees with. Then, the Head presents the plan to the audit team for consultation and they will discuss together the management's, chairman's, executives' and internal auditors' views. Finally, the Head of the IAF will present the IA plan to the audit committee. Normally, questions are received from the committee to justify the areas that are being selected or excluded by the IA function. At the end, the IA function will arrange its resources according to the plan that has finally been agreed.

In response to the question about the current state of RBIA practices at the organizational level, the Technical Director of the CIIA UK and Ireland said:

> *"RBIA is still developing and people are still working hard to implement it. At present, RBIA is not reaching the level that the IIA wants. Many people are still working towards developing and continually improving it. It is not complete yet, or reaching a satisfactory level. The progress of RBIA very much depends on the maturity of RM in the organization. Almost every IAF (99 per cent) would claim that they are practising RBIA; however, the degree of implementation and practice are not at the same level. If you looked in detail you would find a different version, a different level and quality of practising it" (Technical Director of the CIIAUK and Ireland – interview).*

This view is consistent with Griffiths (2006), who suggests that organizations must reach or should improve their risk maturity to a minimum defined level (level three out of five) to enable RBIA to be applied by their IA function. For instance, without an effective RM process in place, it is not appropriate for the IA function to use the RBIA approach. RBIA is an approach that evolves fast; yet there is still not much consensus about the best means to implement it. The ongoing monitoring of the RM process against an IA plan that is constantly changing is a challenge. It necessitates ingenuity solutions from the IA function to excel and effectively help management to achieve the organizations' objectives.

8.3.2 Enhancing the IA Function through Training and Talent Management

The capability, talent and quality of audit teams are essential in determining the IA function's eligibility to provide and expand its responsibilities and services as discussed in Section 8.2 above and Subsection 7.2 of Chapter 7. The mixture of skills, qualifications, experience, and training must match with the type of services the IA function offers to its organization. Thus, this subsection explores how the IA function in BC (at the organizational level) applies ingenious solutions to overcome their skills set and talent management constraints.

The BC Company

Recruitment is the most vital management activity that any leader of an IA function needs to carry out. In order to retain and attract the best talent to join the function, sound recruitment processes must be in place. The IA function must ensure it has the right mix of people, so it should be clear about the skills it needs and recruit the people that have them.

According to the Director of IAF and ERM, he cannot simply increase the number of internal auditors to enhance the IA function's capability and counteract talent constraints. Not only would this be unviable from a financial perspective (BC's IA function finance budget has been maintained and protected for five years), it is also the case that quantity does not necessarily equal quality. Different IA functions may take different approaches in order to attract, improve, and retain staff. In this respect, BC provides an interesting example of how its IA function applies ingenious strategies to overcome such issues via its recruitment and talent management process.

In 2007, the BC's IA function introduced innovative tactics in the recruitment process of internal auditors. It was important for BC's IA function to ensure the best and the right mix of candidates were hired for the right development practices to enhance IA capability to solve constraint issues related to the lack of talent and professionalism. As highlighted by the Director of IAF and ERM,

> *"When I headed the IA function in 2007, most of the IA team members were 'generalists' with around 25 percent of them having a professional qualification" (the Director of IAF and ERM, BC – interview).*

BC's operation and business activities are driven by extensive use of information technology (IT), privacy and security issues, and high technology equipment. In addition, IA is a profession that builds on a professional, systematic and disciplined approach (the IIA, 1999). The profile of an IA function made up of "generalists" and low IA professional qualifications signalled significant capability and talent constraints. There was not the right mix of talents and professionalism for performing effective and efficient IA practice to meet BC's needs. Thus, appointing, allocating and maintaining the right talent at the right time and in the right locations with the right skills and experience for fulfilling extended roles and services as reflected in the IA charter were key challenges to be resolved.. For this purpose, a new recruitment strategy was put in place by the BC's IA function as an ingenious strategy to overcome its capability and talent constraints. According to the Director of IAF and ERM, the new recruitment strategy entailed refusing to recruit non-qualified internal auditors; instead, the entry level of new candidates had to be qualified internal auditors or other relevant qualified professionals. Further, he commented:

> *"The new recruitment strategy of targeted recruitment process has been fruitful in transforming the IA team from just 25 per cent of the team possessing a professional qualification in 2007 to currently 70 per cent of the team holding a professional qualification, in either IA, Information Technology (IT) or another accountancy discipline. This has also transformed the IA team from one largely made up of 'generalists' to one with a strong accountancy, IT and Information System (IS) capability" (Director of IAF and ERM, BC – interview).*

The above quotation shows how BC's IA function has managed to transform their IA team from one largely made up of "generalists" in 2007 to one with a strong IT and Information System (IS) capability (i.e., the function now has ten IT auditors) as well as having a sound accountancy and finance IA team. This new model of IA team talents and skill sets are built to match BC's three key functional sections, covering Group services (including finance), technical services (including IT, networks and data), and customer services (covering all customer-facing activities). As a technology-driven organization, sound IT and IS capabilities are crucial for BC to ensure its service continuity and to safeguard commercially sensitive information. IT and IS infrastructures and networks need to be secure, resilient and reliable as they are important to BC's overall performance. Therefore, in order to provide effective advisory and assurance services regarding IT and IS operations, it is vital that the IA function has strong IT and IS capabilities.

The innovative recruiting approach applied by BC's IA function is found to be consistent with the IIA Attribute Standards 1210 – Proficiency Internal Auditors requirement. The availability of professional qualifications, such as Certified Internal Auditor (CIA) and Certified Information Systems Auditor (CISA), helps BC to easily identify and recruit qualified staff with the required relevant skills. In an effort to nurture and realize the recruitment of qualified people, the BC IA function has also initiated an apprenticeship scheme as a channel to develop a new in-house IA talent. In addition to a selective recruitment process, the Director of IAF and ERM stated that:

> *"We run a systematic training programme to continue the professionalism of the IA function. There is also some flexibility for internal auditors to work from home or in local BC sites, which is an ingenious strategy to attract and retain talented staff" (Director of IAF and ERM, BC – interview).*

It is a strategic move made by the IA function to invest in the relevant training programme to acquire the necessary experience and skills in its staff. This strategy is crucial for expanding the IA function talent pool, knowledge and capability in new areas, such as risk management, cyber security, and cloud computing to meet with its extended services and the changing demands of the BC Group. BC's new recruitment process means that all potential candidates wanting to join the IA function have to go through a very rigorous interview and recruitment process, which includes completing a case study. Candidates may also have to undergo second- and third-stage interviews. This recruitment process is important in order to ensure the IA function employs the right people with the right talents and skills to develop their careers in line with the IA function's new scope of service and structure. In addition, the process aims to build specialist expertise that aligns with BC's lines of business needs (such as IT and insight on key risks) and issues facing the company.

To build a strong IA capability requires a sufficient human and financial resources allocation. One of the main constraints faced by the IA function is its high turnover of team members that move into other roles within the six lines of business units across the BC Group.

> *"We see a great deal of movement from our audit team into other roles in the business" (Director of IAF and ERM – interview).*

To rectify this constraint that negatively affects the IA function's capability and talent pool, the function seeks to utilize its ex-staff's knowledge and skills on risk and control

disciplines to nurture a strong governance culture in the BC Group. In this case, the IA function is acting as a training ground in developing and nurturing the talent and skills of employees before they are promoted or moved to other business units within BC. The absorption, or promotion, of IA talent into other roles in other business functions is part of the ingenuity in talent management, as it ensures that IA skills are recognized and used right across the whole business. This is a very good development as those who understand the role of IA become embedded consultants in operational areas. The risk, control and audit knowledge that they have can be shared and transferred to other units, and perhaps their presence improves the units' cooperation with the IA function. This then makes the IA function's work much easier. In addition, this strategy can bring benefits to other members in the business units, including beginning to understand the purpose of the services that the IA function provides. Instead of viewing IA as a function that finds only negatives or weakness, unit members are perhaps able to learn from ex-IA staff that AI aims to help them to achieve their desired business objectives.

On the other hand, despite the high staff turnover, the IA function is still able to maintain its size. As stated by the Director of IAF and ERM:

> *"I have received approval budget from the ARC to recruit externally for the skilled people we need to fill vacancies created by those leaving our function. I have a really large team. I am in a fortunate position that the team has been raised and protected over the last four or five years when other parts of our business are reducing the headcount. That is a great privilege that my team has been maintained at the same size." (Director of IAF and ERM, BC – interview).*

As can be seen from the above quotation, the BC Group has adopted a different human resource strategy for the IA function: other parts of the business are experiencing headcount cuts, but this is not the case for the IA function. The IA function is able to recruit new staff whenever needed. According to the Technical Manager of the CIIA UK and Ireland, many IA functions are suffering a reduction in headcount, but, at the same time, the function is required to take on more responsibilities. In this context, the Technical Manager highlighted that the actual scenario very much depends on which area or sector organizations are operating in. He suggests that the private sector is very buoyant with opportunity, but that it is very much more challenging in the public sector IA; for example, in local and central government, internal auditors have struggled and lost jobs because of downsizing.

On the other hand, recruiting new staff also means more cost. Therefore, it would be better if the IA function can maintain their staff for a long period of time, so they can channel the recruiting cost to other things.

> *"Nevertheless, with a lack of financial resources, you have to be proficient and innovative in terms of determining where you are going to direct your resources and what you can produce with it" (Director of IAF and ERM, BC – interview).*

In terms of financial resources, the Director of IAF and ERM felt very thankful to have a supportive management who had approved, maintained and protected a long-term resource budget for the IA function for five years. Creating a five-year-protected financial resource could be considered as an ingenious problem-solving approach used by the BC Group to overcome long-term resource constraints and ease the human resources planning and development process for the IA function.

According to the Director of IAF and ERM, the old model and structure of the IA function in BC was run inefficiently and ineffectively. This resulted in a waste of resources and lots of duplication of works. For instance, before 2010, each of the six lines of business in BC were assigned with a separate dedicated IA team. This meant each line of business had their own separate IA team that operated without integrating, sharing and coordinating resources and talent among them. As a consequence, each IA team was doing the same audit assignment separately for the business unit to which it was attached. For example, the same type of audit assignment (such as IS auditing) was being duplicated and performed separately by a different IA team. Hence, in 2010, the IA function was restructured and realigned across the BC Group to manage the IA function efficiently, sharing resources, minimizing the duplication of work and optimizing the use of the talent pool. As a result, the same IA team now performs the same IA assignment, such as evaluating the cyber-security protection system for all six lines of business.

The IA function also experiences the same challenges faced by other functions within BC. For instance, it is hard to find high-calibre people, given that the average period between someone leaving the function and securing a replacement is about two months. This is because the newcomer will have a period of notice to serve before joining the IA function. When new members of staff start at BC, the IA function has a systematic training and continuous development programme for them. This is in line

with a major part of BC's IA resource strategy (professionalism ingenuity) which is devoted to training and development. The IA function encourages and supports internal auditors to take professional qualifications and ongoing training, so that they can progress and acquire the right skills set to enable them to discharge their IA role and responsibilities. In terms of a performance measurement of internal auditors, the IA function has a monthly one-to-one meeting, quarterly performance rating and twice-a-year performance and rating review. For internal auditors who do not hit their performance targets, additional coaching and guidance are provided. In addition, more formal procedures are put in place to help them improve their performance and achieve the required quality and standards.

In summary, the IA function uses ingenious strategies through: a new recruitment process, a flexible working scheme and a systematic staff training and development programme to enhance its capabilities and to retain talented staff. Such strategies help the AI function to mitigate the capability constraints (such as high staff turnover, shortage of talent and lack of experienced staff). Having a strong capability helps the IA function to raise its profile and status in the organization.

8.3.3 Greater Use of Technology

In accordance with the resource and capability constraints occurring at the societal level as discussed in Chapter 7, this subsection sees how the IA functions in BC and UKC apply ingenious solutions to overcome these constraints at the organizational level. To meet today's business environment, regulatory reforms and key stakeholder expectations, the AI functions must be able to: undertake more work with less resources; perform continuous auditing and monitoring; produce faster and real-time information for decision-making; and be analytical and accurate in processing vast quantities of information and data. Thus, this subsection covers the ingenious solutions that BC's and UKC's AI functions employ to leverage technology as a methodology to build their capacity.

The BC Company

BC has a large and geographically spread IA function (mainly UK based and a few regional teams), serving BC Group's operations in the UK, Europe, North America,

Latin America, the Middle East, Asia Pacific and Africa. Appropriate IA tools and techniques are much needed by BC's IA function to serve the entire Group's six business lines, each with their own risks and strategic objectives. This issue has caused resource and capability constraints for BC's IA function, especially in managing large quantity of data in the changing regulatory and business environment, providing timely, ongoing assurance on risk and control processes, and performing continuous auditing.. To meet these needs, BC's IA function is increasingly applying technology-based tools. In explaining the use of innovative tools and techniques, the Director of IAF and ERM at BC said:

> *"We are constantly looking to evolve and improve our work. ... Use of Computer Assisted Audit Techniques (CAATS) is an area of constant focus to increase sample sizes and also as a means of identifying potential Continuous Controls Monitoring (CCM) that the business can apply themselves in the future. ... We are currently growing our overseas audit teams to reduce dependency on co-sourcing and to increase the frequency and depth of audit reviews" (Director of IAF and ERM, BC – interview).*

The application of CAATS has helped the IA function to overcome resource scarcity and enhance the capability of the IA team, by helping to improve the quality and breadth of IA coverage and better leverage data analytics to increase sample size and analysis of information. The use of CAATs has improved focus on assessing the effectiveness of BC's risk management processes. This includes the IA function using CAATs as part of the audit and then handing over the tools to the business units to facilitate running CCM themselves in the future. According to the Director of IAF and ERM, the tools are used to audit the integrity of spreadsheets and manage electronic audit working papers to help improve efficiency and consolidated reporting. The adoption of process-mapping tools helps to illustrate graphically the process with its control points for management to more readily understand its business operation and RM strategy. In addition, the Director also mentioned that these tools are really meaningful for BC to spread the IA function and for those who work from home to discharge their duty effectively.

The UKC Company

Similar evidence of the use of technology is also found in the UKC's IA function. According to the Head of the IA function in UKC:

"Using audit software helps us focus on key issues and potential significant anomalies. There are smaller issues we have to let go at times as we do not have the resources to deal with every potential anomaly. Moreover, we need to decide if there are things that management should attend to; for example, in improving control design in general, rather than spending our time identifying individual errors in transactions" (The Head of the IAF, UKC – interview).

The above quotation shows how the IA function uses analytic technology in discharging its responsibility for managing risks and control systems. This is crucial in improving the effectiveness and efficiency of the IA process and providing timely management of anomalies, errors and control weaknesses.

Overall, both IA functions of BC and UKC have use CAATs beyond ad hoc testing of transactions, by embedding automated continuous monitoring controls in their companies. The next subsection will discuss how the IA profession deals with status and quality constraints.

8.4 INGENUITY THROUGH IMPROVING IA STATUS AND QUALITY

In accordance with Table 7.3 in Chapter 7, this subsection discusses the status and quality constraints of the IA functions of BC and UKC, and how the functions adopt ingenious strategies to solve constraints faced by them.

The BC Company

Developing the appropriate quality, status and authority to perform an effective service is what the IA function should aim for to remain relevant. In the case of the BC Group, there is a large in-house IA function in the UK and a few regional IA teams in different geographical locations, including internal auditors that work from home or in different local BC sites, and this has raised quality issues for the Director of IAF and ERM in terms of quality control and monitoring activities. To deal with the quality constraint, the IA function must adopt a strategy of auditing and tracking its own contribution and performance as well as the satisfaction of business units it serves. In order to provide new extended roles and services in conformance with the IIA standards, the BC IA function must raise its status, profile and quality to the appropriate level. This is crucial in order to earn top management and other clients' trust and confidence. For this purpose, the Director of IAF and ERM highlights that:

"In February 2015, the Chartered Institute of Internal Auditors (the CIIA) UK and Ireland, at our invitation, conducted an External Quality Assessment which confirmed our conformance to the standards" (Director of IAF and ERM, BC – interview).

Receiving an accreditation from the CIIA has provided assurance of the AI function's quality and raises its status. Indeed, to survive and be successful, the BC IA function must continuously improve its quality, efficiency, effectiveness, and professionalism. Besides performing the external quality assessment (EQA), in order to track the IA function value to the organization, the Director of IAF and ERM of BC emphasized that it is important for the IA function to:

- Perform a reaction or feedback survey after every audit activity it undertakes;
- Perform an annual client satisfaction survey;
- An annual survey assessing the quality of its staff
- Conduct a periodical quality assurance and improvement programme (QAIP);
- Communicate and share IA performance and survey results with audit clients, executive management, board, the Board Audit Risk Committee (BARC) and other key stakeholders.

According to the Director of IAF and ERM, it is vital for the IA function to seek feedback and input from IA clients and top management (including the CEO, COO[27], the board, BARC members and other executive management) individually across the business. Through performing a quality or clients satisfaction survey, the IA function is able to receive detailed feedback about its activity's effectiveness and potential opportunities for improvement. In addition, information that the IA function receives from surveys completed over the years can be used as a benchmarking tool against the standards and best practices. This can be considered as an ingenious solution taken by the IA function and is beneficial in terms of the decision-making process of the board of directors, audit committee and other regulatory bodies to augment the IA profession. It is also important for the acknowledgment of the IA function as a trusted strategic business partner that helps the management team to achieve organizational success.

Many IA functions claim that they have added value to their organization by looking at good ratings given to the min post-audit and annual survey results. According to the Director of IAF and ERM:

[27] COO – Chief Operating Officer

"We have taken a post-audit survey from the management after every audit activity we undertake. Furthermore, we take feedback annually also from senior people across the business, including the CEO, COO, BARC members and a number of MD level staff individually from each line of business. There are many organizations that track their value in a different fashion. So some IAF will, for example, track savings as a result of their audit; that is exactly what we do as well at BC. So, saving that derives directly from our activity is one measure" (The Director of IAF and ERM, BC – interview).

The quotation above shows that, besides the IA's customer satisfaction survey, the IA function also track the value it provides across the BC Group. For example, the IA function's performance can be tracked through the feedback and perception of the IA's customers within BC and through independent stakeholders (non-executive directors).

"I think the major achievement of our IA function is the impact of the contribution that we make to the company and the positive perception that we receive from the stakeholders about our ability to help the organization's success" (The Director of IAF and ERM, BC – interview).

Based on the feedback survey and value tracking carried out by the BC's IA function, the team has received paramount achievement and success, where both executive and non-executive directors are happy and satisfied with its performance.

In order to ensure that its service quality and status are at the appropriate levels, the IA function in BC also benchmark and learn from the best practices of other IA teams, or from staff previously employed elsewhere who may have other useful experience of best practices. For this purpose, the BC's IA function has a "Practice Office" that is made up of a small quality assurance team within the IA function. This team is responsible for: (i) continuously reviewing IA working papers and methodology; (ii) sharing good practice and training; (iii) benchmarking the best practice within IA teams and other operations within the BC Group; (iv) observing changes in the IIA's IPPF; and (v) benchmarking what IA functions in other organizations and external IA providers are doing (source – the Director of IAF and ERM). This innovative medium is vital for the IA function to discover and understand the emergent practical issues surrounding the IA profession, as well as to learn from the best practices of others. In addition, it is helpful for the IA function to improve its effectiveness, by understanding and learning how IA functions in other organizations operate and so increase its capabilities and apply its resources to maximize usage and overcome constraints.

The UKC Company

The UKC's IA function plays a dual role as a business partner and "policeman" to deal with different levels of customers within UKC's organizational hierarchy. In this context, the IA function works with senior management as a strategic business partner or consultant to help it mitigate risk, align risks with strategic objectives and to provide assistance in achieving the organization's objectives. This can be seen in the following statement made by the Head of the IAF:

> *"Some clients see us as a policeman. So, they might not do certain things because someone is watching them. But that tends to be perhaps in more junior levels of staff or more on operational sites. However, for the senior management team, they see us as closer to helping them than worrying about us being policemen" (Head of the IAF, UKC – interview).*

To improve its status, the IA function in UKC has actively marketed its new image and role as a business advisor, and a professional, independent and objective assurance provider. This is especially the case to those members of staff who still view the IA function as "a policeman" that is looking for mistakes, or ticking boxes and merely being a checking function. To change this perception among junior-level staff, according to the Head of the IAF, the IA function has published reports to show the types of work it carries out, as well as the findings and recommendations that aim to improve the effectiveness of clients' operations. In addition, it also organizes more open forums and meetings, so that stakeholders can get to know more about the IA function's services.

Overall, it is very challenging for the IA function to build an appropriate status and quality to gain clients' trust. In fact, management support and the continuous improvement of IA quality are critical factors to enable the IA function to effectively discharge its role and responsibility as a business partner and a catalyst of value-added activities, and to work with the management for the sake of improving and changing the organization as a whole.

8.5 CONCLUSION

This chapter has provided evidence in support of the ingenuity concept at the organizational level. Emphasis is placed on discovering the practical aspects and experiences of BC's and UKC's IA functions in exercising ingenuity to deal with

constraints and to continuously improve the quality and effectiveness of IA services, particularly, in contributing to the improvement of the effectiveness of RM and control processes.. This chapter focused on the three major constraints. They are: changes in the IA role; capabilities and resources; and the status and quality of the IA function. In dealing with these constraints, this study has examined how the IA function generates its own innovative solutions or applies ingenious solutions created by the IIA or other parties at the societal level.

Ingenious solutions are necessary to continuously improve IA services and to gain efficiency and effectiveness of the IA function. Developing the right strategy for continuous improvement of the IA function through ingenuity is crucial to ensuring the continued recognition of IA as a valuable organizational function. Owing to resource and capability constraints faced by the IA function, identifying the IA team's capabilities and talents to perform IA assignments; deciding how to train, manage and retain talents; and determining the IA's status are important issues that both BC and UKC IA functions have to consider before developing and implementing their strategy.

Table 8.2 summarizes the ingenious solutions exercised by the BC and UKC's IA functions at the organizational level to deal with the constraints confronted by them.

Table 8.2: Summary of Constraints and Ingenious Solutions

Constraints	Solution Taken by BC	Solution Taken by UKC
8.2 – Role Narrow role of traditional IA that largely focuses on compliance-related monitoring	**8.2.1 – Broadening IA Role** • Expand & increase IA role in RM • Provide consultancy, advisory & business insight service • Increase value-added activity	**8.2.1 – Broadening IA Role** • Expand IA role in RM • Provide consultancy, advisory & business insight service • Focus on adding value and improving operations
8.3 – Lack of Resources Limited resources (financial, time, staff, assets) **8.3 – Limited Capability** Lack of skills set, competency, talent, knowledge, tools and techniques to perform broad roles and deal with emerging risks	**8.3.1 – Use of Co-sourcing** Contract three co-sourcing arrangements for international operations and areas that require deep expertise **8.3.1 – Use of Risk-based Internal Auditing (RBIA) Approach** • Improve audit universe coverage, reduce duplication of work, and build effective IA plan • Make a better allocation and utilization of its limited resources • Better link risks and business strategic objectives **8.3.2 – Better Sourcing via Training & Talent Management** • Improve recruitment process and strategy • Focus on recruiting qualified internal auditors • Transform the IA team from largely made up of "generalists" to "professional" practitioners • Invest in relevant training and systematic development programme • Protect with long-term resource budget • Allow flexibility for staff to work from home and local sites • Encourage promotion of IA staff into other role in the business **8.3.3 – Use of Technology** Use of CAATS in an area of constant focus to increase sample size and for Continuous Control Monitoring (CCM)	**8.3.1 – Use of Co-sourcing** Appoint external sourcing provider on ad hoc basis to conduct assignments that need specialist expertise **8.3.1 – Use of RBIA Approach** Use RBIA to determine what IA function should do and to fulfil management needs **8.3.3 – Use of Technology** Use audit software to focus on key issues and potential significant anomalies
8.4 – Status & Quality Essential for IA to be trusted, competent and qualified in providing consultancy services and become a strategic business partner	**8.4.1 – Improve IA Status & Quality** • Perform QA and EQA and communicate its performance result across organization • Benchmark best practices • Strengthen business partner role	**8.4.1 – Improve IA Status** • Improve IA image and clients' confidence • Focus on improving operation effectiveness to raise IA status

The findings for the first constraint, the changes in the role of IA, showed that at the organizational level the IA functions of BC and UKC companies have endeavoured to transform their functions by pursuing and replicating the changes that have taken place at the societal level. This transformation is evidenced in the way the companies applied the new definition of IA by offering an extended IA role and became strategic business partners to the boards and management. There are some differences, as well as similarities, in the ingenious strategies adopted by both companies in solving the constraints. However, although their strategies and processes may vary, the IA functions of both companies seem to have evolved to provide added-value activities by offering objective assurance and relevant consulting services. These roles and services have significantly contributed in the improvement of the effectiveness and efficiency of governance, RM, and control processes. Both IA functions seem to have creatively placed their function at the strategic level and developed the function to fulfil the present and future needs of its clients and stakeholders. For example, in the case of BC, its IA function has become involved in providing advice to the executive management at the early stages of the merger and acquisition process.

As for the second constraint (IA capability and resources), the BC's IA function (which has a bigger size) seems to be more aggressive compared to UKC (which has a small size) in creating solutions to enhance its capability and adequately securing its resources. This has been achieved through the appointment of qualified and talented staff; using the IA function as a training ground, having a co-sourcing arrangement, using technology and use of RBIA as ingenious strategies to carry out an extended IA role and to improve the effectiveness and efficiency of the IA function.

Finally, for the third constraint, the status and quality of the IA function; these attributes need to be managed wisely. Appropriate quality assessment, client satisfaction surveys and continuously improving organizational operations are among the key ingenious strategies adopted by either or both companies' IA functions to solve the constraints encountered by them during the process of building their status and quality.

Overall, at the organizational level, the IA functions of both companies show that they are evolving and moving consistently towards adopting the direction set by the IIA and IA profession at the societal level. Nevertheless, the IA function at BC appears to be better structured and staffed, as well as receiving adequate financial resources and support from top management, compared to UKC. As one of the IIA's Audit Group

members, the IA function of BC is substantially driven by the IIA, which usually tends to make an early adoption of the IPPF. On the other hand, although the UKC's IA function is relatively in line with the development of the IA profession championed by the IIA, it seems to customize its approach and practice from that recommended by the IIA. This is to match with the small nature of its IA function, which consists of only four members, and the culture and structure of its organization.

All in all, the findings of this chapter have depicted the importance and necessity of ingenious solutions in helping both IA functions in achieving effectiveness, quality and to gain extended legitimacy. In order to survive and maintain relevance in a dynamic and challenging business environment, the study has explored how ingenuity plays a crucial role in advancing IA practice and resolving IA function constraints in order to fulfil the demands and expectations from various key stakeholders. Accordingly, the outcomes of ingenious solutions of IA activities have offered assistance, recommendations and value-added supports to help both the BC and UKC companies to achieve their business objectives and become more competitive (Sueyoshi, et al., 2008). The next chapter discusses the collaboration between the IA function and RM function as ingenuity solutions to overcome the conflict of role and waste of resource issues.

Chapter 9

INGENUITY THROUGH FORGING A COLLABORATIVE COOPERATION BETWEEN INTERNAL AUDITING AND RISK MANAGEMENT

9.1 INTRODUCTION

The main objective of this chapter is to present the findings of the case studies carried out in the internal audit department and the risk management department of two companies listed on the London Stock Exchange (LSE), as are also discussed in Chapter 8. The study also incorporates interviews with senior executives from the Charted Institute of Internal Auditors (the CIIA) UK and Ireland, and the Institute of Risk Management (the IRM) UK. The chapter explores the collaborative effort between the Internal Audit (IA) and Risk Management (RM) professional bodies and practitioners from an ingenuity perspective at both a societal and organizational level.

This chapter describes the case studies performed to inductively investigate the use of ingenuity practice among different professional bodies and the two companies, BC and UKC. Ingenuity is conceptualized as the ability to create innovative solutions within structural constraints using limited resources and imaginative problem-solving (see Chapter 4). This ingenuity concept provides the key theoretical perspective used in discussing and illustrating the strategies adopted by professional bodies (such as the IIA, Risk & Insurance Management Society (RIMS) and IRM) and both companies (BC and UKC) to encourage collaboration between IA and RM functions. This collaboration is viewed as an important step to safeguard IA's and RM's imperative position in the governance mechanism (specifically to improve the quality, effectiveness and efficiency of IA and RM functions as described in the 'Three Lines of Defence' model. Through this collaboration, both functions are able to retain and strengthen their respective separate roles at the societal and at the organizational level, as the collaboration mitigates the competition between them.

Table 9.1: Ingenious Solutions to Solve the Rivalry Constraint

	Driver of Constraints	Impact	Constraints	Ingenious Solution
1	Financial crisis, fraud, and corporate scandals have driven changes in regulatory requirements and stakeholder expectations for board and management to effectively manage risks and improve integrated risk reporting	Need for IA and/or RM functions to play a central role in helping board and management to improve RM practice and effectiveness	Structural, rivalry and waste of resources caused by overlapping and redundancy of works Confusion about the role and responsibility of the different function and professional group in RM	Forging alliance between IA and RM

This chapter explores how the ingenious solutions (refer to Table 9.1) performed at the societal and organizational level mitigates the constraints faced by IA and RM professional bodies and practitioners. This is important in assisting both professions in improving their practices and effectiveness. In order to survive and maintain relevance in the changing business environment, the study uncovers how an ingenuity strategy of collaborative initiatives are used by the IIA, RIMS and IRM at the societal level. This strategy (at the societal level) is in line with the strategy identified by Walker et al. (2014) in studying the Ontario solar industry, where companies in the solar industry ventured into partnership at the institutional level in order to overcome the institutional constraints they faced (Walker et al., 2014). Moreover, this chapter also explores how collaborative initiatives between different professional bodies at the societal level influence the partnership between IA and RM functions at the organizational level.

9.2 ALLIANCE AS AN INGENIOUS SOLUTION AT THE SOCIETAL LEVEL

Repeated corporate scandals, the 2008–2009 financial crisis, and the European debt crisis have evidenced how essential it is to have a mature and effective RM practice in place. In addition, there are strong calls from regulators, news media and other stakeholders for more comprehensive and effective RM practice and oversight to deal with evolving and emerging risks in the complex business environment (the IIA and RIMS, 2012). However, to form a mature and effective RM practice, organizations need support from professional and talented people with adequate and sufficient capabilities, as well as resources.

Although the IA function and internal auditors have many years of tacit and explicit knowledge of risk (and control) and risks data in performing their work assignments, their involvement in RM becomes especially important only after the issuance of the RM standard (2002) by the Institute of Risk Management (IRM), the Association of Insurance and Risk Managers (AIRMIC), the National Forum for Risk Management in the Public Sector (ALARM), the COSO Enterprise Risk Management-Integrated Framework (ERM, 2004), and Australia/New Zealand (AS/NZS) 4360, RM standard (2004). This is in line with the revised definition of IA released by the IIA in 1999, which covered both assurance and consulting services across the three interconnected areas of RM, governance and control (Sarens & De Beelde, 2006; the IIA, 1999).

Providing assurance services to the board, management and audit committee on the effectiveness of the RM system is not entirely the province of the IA professional. Other assurance providers such as RM, fraud, safety, control, and other compliance and quality professionals acting within the second line of defence perform similar roles. However, IA has advantages in terms of independence, objectivity, access and tacit knowledge of risk, control and business insight. In order to protect IA independence, the appointment and termination of IA is made by the audit committee. In addition, functionally, the chief internal audit executive (IA function) reports to the audit committee's chairperson and, administratively, to the chief finance or chief executive officer. The 'Three Lines of Defence' model (the IIA, 2013) constructively suggests a structure for the roles and responsibilities of the IA function (third line), other assurance providers (second line), and managers and front-line officers (first line). Therefore, forging effective cooperation and a working alliance among these three lines of defence can help organizations to boost their existing assurance resources by avoiding work redundancy and duplication, and so reduce costs.

The IIA'S IPPF offers a formal role and opportunity for IA to become more involved in RM processes. The mission of the IPPF is: "to enhance and protect organizational value by providing stakeholders with risk-based, objective and reliable assurance, advice and insight" (the IIA, 2015). According to the CIIA UK and Ireland, the core role of IA in ERM/RM is to provide objective assurance to the board on the effectiveness of organizations' ERM/RM activities (see Chapter 2 for details). The IA role in RM is important in order to help management (first line) and the RM function (second line), by providing independent and objective assurance as to whether key business risks

are being managed appropriately and that the system of internal control is operating effectively (the IIA UK and Ireland, 2004). On the other hand, according to the CIIA UK and Ireland (2004), several consulting roles that the IA function might also undertake are:

- being a champion for introducing ERM into the organization, leveraging its expertise in RM and control and its overall knowledge of the organization;
- providing advice, facilitating workshops, coaching the organization on risk and control and promoting the development of a common language, framework and understanding;
- acting as the central point for coordinating, monitoring and reporting on risks; and
- supporting managers as they work to identify the best way to mitigate a risk.

According to the IIA's Performance Standards 2120 on Risk Management (the IIA, 2012, p. 11), "IA activity must evaluate the effectiveness and contribute to the improvement of RM processes" in the organization. However, this depends on the capability and effectiveness of the IA function. In this context, the effectiveness of the RM process can be assessed by IA through checking whether: organizational objectives support and align with the organization's mission; significant risks are identified and assessed; appropriate risk responses are selected that align risks with the organization's risk appetite; and relevant risk information is captured and communicated in a timely manner across the organization to enable staff, management and the board to carry out their responsibilities (the IIA, 2012).

At the same time, uncertain business conditions and RM standards have stimulated the rise of a RM profession out of a finance and insurance scope and moved it into the broader corporate arena. For example, since the release of the RM standard (AIRMIC/ALARM and IRM, 2002) and COSO (COSO, 2004), there has been a global move towards what is termed an enterprise-wide approach to RM. The rise of the RM profession (through the rise of many RM professional bodies and risk professionals) has become a potential rival to the IA profession in providing RM services to organizations (see Table 9.2). As a result, the IA profession is seen to be competing with the RM profession at the societal level; and similarly, the IA function (or internal auditors) is competing with the RMF (risk officers) at the organizational level. Such rivalry could be interpreted as both functions aiming to get boards of directors, management, and other key stakeholders' attention and recognition as the leading preeminent provider of RM services.

Table 9.2: Risk Management Bodies and Professional Organizations

No	Risk Management Bodies and Professional Organizations	Date Founded
1	Association for Project Management Risk Management Specific Interest Group (APM Risk SIG)	1972
2	Association of Insurance and Risk Managers (AIRMIC)	1963
3	Business Continuity Institute (BCI)	1994
4	European Institute of Risk Management (EIRM)	2001
5	Federation of European Risk Management Associations (FERMA)	1974
6	Global Association of Risk Professionals (GARP)	1996
7	Institute of Operational Risk (IOR)	2004
8	Institute of Risk Management (IRM)	1986
9	International Risk Governance Council (IRGC)	2003
10	International Risk Management Institute (IRMI)	1978
11	New Zealand Society for Risk Management (NZSRM)	2000
12	Professional Risk Managers' International Association (PRMIA)	2002
13	Project Management Institute (PMI)	2000
14	Risk Management Association (RMA)	1914
15	Risk Management Institution of Australasia (RMIA)	2004
16	Society for Risk Analysis (SRA)	1980
17	The Risk Management Society (RIMS)	1950
18	UK Public Risk Management Association (ALARM)	1991

The IIA must overcome constraints related to status, clarity of role, authority, rivalry or turf war with other professions (or professional bodies) to avoid potential confusion among stakeholders on the provision of risk services. How do stakeholders or organizations decide which professionals or functions are likely to most effectively discharge their role in RM as required by the regulatory requirement? One of the solutions is to forge mutual collaboration between the two professions. In this context, the CIIA Technical Coordinator highlighted that:

> *"To further supplement our resources we occasionally work with other professional bodies such as the Risk & Insurance Management Society, the Institute of Risk Management and Institute of Business Ethics to jointly produce materials on governance, risk management and control. This adds additional authority and relevance to the resources we deliver. We may also create working groups and committees where we invite experts to work with members to conduct surveys and produce case studies on a volunteer basis or where*

specific research is funded by a sponsor" (Technical Coordinator of the CIIA UK and Ireland – interview).

This collaboration is an example of an ingenious solution for both professions to solve the constraints arising from the rivalry and "grey area" of functionality (see Chapter 2, p. 43-46). In addition, the collaboration also provides: new opportunities; utilization of experience, resources and technology; and the motivation towards creativity and innovation to find out-of-the-ordinary and practical solutions to solve problems, overcome challenges and deliver value. Simply put, ingenuity through collaboration not only reduces the rivalry between the two functions and professions but is also important for the survival, effectiveness and progress of the IA and RM professions in navigating the global and competitive business environment.

At the societal level, active promotion and calls for forging a collaborative alliance between the IA and RM disciplines have been championed by the IIA and the Risk Management Society (RIMS). As the initiatives are not driven by statutory requirements, it forms another example of autonomous problem solving; where the IIA and RIMS identify the problems and try to resolve it on their own (Burgelman, 2002) through collaborative action. According to these two bodies, collaboration will make both professions more effective than working separately. By having a common understanding of each other's roles and responsibilities, partnership can lead to stronger risk practices to fulfil customers' and stakeholders' expectations. In the IIA and RIMS' joint report, it is stated that:

"The two functions make a powerful team when they collaborate and leverage one another's resources, skill sets and experiences to build risk capabilities within their organizations. The adage, 'the sum is greater than the parts,' certainly applies. And, it is clear that leading organizations have discovered efficiencies, better decision-making and improved results by forming strong alliances between the risk management and internal audit functions" (the IIA and RIMS, p. 3, 2012).

Failure to work in each other's mutual interest could undermine the combined capabilities and lead to organizational silos, which could be disadvantageous to company performance. The main constraint resulting from the uncoordinated structure and power of the IA and RM functions is the confusion caused to organizational members, management and other stakeholders in understanding the responsibilities among different functions and the distinction between roles. To deal with this, the IIA

issued a position paper in 2013 entitled, the 'Three Lines of Defence' model (see Chapter 2, p. 46) which provides guidance and clearly specifies the roles and functions of the players by distinguishing three groups (or lines) involved in effective RM (the IIA, 2013). The position paper emphasized that the RM process and practice in the organization will get stronger when there are three separate and clearly identified lines of defence. This includes the functions that own and are responsible for managing risks (first line – the operational management), functions that oversee and coordinate risk activities (second line – RM function), and functions that provide independent assurance and an advisory service (third line – IA function). This IIA position paper stated that: "all three lines should exist in some form at every organization, regardless of size or complexity" (the IIA, 2013).

In real-world practice, neither function (IA or RM) can claim or play total ownership of the RM role, where the operational management and front-line managers have ownership, responsibility and accountability for absolutely assessing, controlling and managing risks. As a second line of defence, the RM function acts as a specialist of risk and control functions that monitor and facilitate effective RM practice run by the first line, and makes sure that communication and risk information moves up and down the organization. The IA function is the third line of defence and provides independent and objective assurance to the board on the effectiveness of the RM process and activities of the first two lines. The IA function also supports the audit committee and board in challenging management executives on risk matters (the IIA, 2013).

In an effort to guide the IA function and internal auditors to protect their independence and objectivity, the IIA produced a position paper entitled "The Role of IA in ERM" (2003 and 2009). This is an innovative solution created by the IIA to define the "dos and don'ts" and indicate which roles or activities the IA function and internal auditors should and, equally importantly, should not undertake. In deciding which roles and activities to undertake, the key aspects that the IA profession should take into account are: (i) whether the activity raises any threats to the IA function's independence and objectivity, and (ii) whether the role or activity is likely to improve RM, control and governance processes in its organization (the IIA, 2009). This is crucial for the IA function and internal auditors in order to enhance their value to the organization by improving efficiency and cooperation with other lines of defence.

Considering the different origins and historic roles of both IA and RM functions in relation to the management of risk, it is not surprising that there are some confusions and overlapping of roles played by both functions in discharging their RM responsibility. Realizing that they are two key actors (the IA and RM professions) providing RM services, both aim to help organizations to effectively manage risk, the collaboration between the IIA and RIMS is an ingenious strategy that originated at the societal level. The strategy solves the structural constraint of the grey area of functionality and optimizes the potential of both functions. Therefore, a well-coordinated and sound collaboration between the two professions is the key element of a strong governance structure which appears to be crucial in avoiding confusion pertaining to the role, responsibility, independence and objectivity of the IA and RM disciplines. According to the Technical Manager of the CIIA UK and Ireland:

> *"If the organization has both functions, there might be a chance of confusion. ...When both the IA function (third line of defence) and RM function (second line of defence) are helping to implement RM in the organization, at the same time they both provide assurance whether the process is working effectively or not" (Technical Manager of the CIIA UK and Ireland – interview).*

A clear distinction of the roles of the IA and RM functions ensures that there are no duplications or gaps in coverage. This ensures the maximum use of a common framework (a collaborative framework instead of many frameworks) and cooperation in the planning and execution of their roles in RM. In addition, the clarity of roles to be undertaken by different lines in the organizational structure also ensures that all significant risks are identified and managed appropriately, thus reducing the ineffective use and waste of resources. This is in line with the recommendation made by the Technical Manager of the CIIA, where he states that when there are conflicts and confusions between the two, the IA function and practitioners must refer to the IIA's IPPF (standards and guidelines),in particular, the position paper on the IA role in RM to understand the "dos and don'ts". In addition, the IA function must clearly state its role in the IA charter, as well as disclose its role pertaining RM to the audit committee and management.

A sound collaborative alliance between IA and RM can potentially create synergies that can reduce: the prospect of duplicated efforts, rivalry for attracting top management recognition, costs, usage of different risk tools and language, assurance gaps and significant operating losses (FERMA/ECIIA, 2014). Commenting on the

collaboration between IA and RM, the Technical Manager of the CIIA UK and Ireland stated that:

> *"The collaboration between IA and RM functions can raise the profile of RM in the organization and how well it works. But managers should own and control risks. The IA should not provide RM services. The IA must work together and work closely with RM to ensure that RM is working properly. Yet, it depends on the risk maturity and the effectiveness of a RBIA approach adopted by the IA function in order to provide value-added activity. The IA function provides assurance and advice to management and board that RM and control are working well and are effective. The roles and responsibilities of the IA and RM are best served by being independent and objective from the operations they assess and assurance they provide. Key to the success of both functions is arriving at independence, good governance, proper lines of reporting and authority, suitable organizational placement and appropriate organizational access" (Technical Manager of the CIIA UK and Ireland – interview).*

On the other hand, a member of the RM profession stated:

> *"It is vital that the assurance functions are well coordinated. Regular meetings between CRO[28], CCO[29] and CAE[30] are valuable. At the end of the day, any organization is dependent on a well-managed first line" (Hans Erik F. Anderson, Board member of Gjensidige Group – Source: Federation of European Risk Management Associations (FERMA) / European Confederation of Institutes of Internal Auditing (ECIIA), 2014, Guidance for Boards and Audit & Risk Committees).*

Based on both quotations above, the success and extent of the coordination effort between IA and RM largely depend on the maturity of the RM practice and the independence and objectivity of both functions from the operation they review. Examples of coordination efforts include: (i) holding regular meetings between the heads of the three lines (CRO, CCO and CAE), (ii) having periodic meetings of the members of the IA, RM and executive management to share information, (iii) aligning top risks and discussing collaborative strategy, and (iv) creating an integrated perspective of risk across the entire organization. In addition, appropriate consideration must be given as to how an organization forms and maintains its IA and

[28] CRO – Chief Risk Officer
[29] CCO – Chief Compliance Officer
[30] CAE – Chief Internal Audit Executive

RM functions (i.e., combined, split or outsourced) to determine the mode and extent of the collaboration.

On the other hand, relying on “The Three Lines of Defence” model alone cannot promise a successful collaboration, as there are other contributing factors, such as: organizational culture, other supporting functions, and top management commitment. Generally, the implementation of the ‘Three Lines of Defence‘ model is still at the early stage and many organizations are struggling to understand and improve its implementation. Thus, the effectiveness of the model is debatable if it cannot generate a comprehensive mapping of risks. There is no “absolute right answer” to this model issue. The IA function and internal auditors must understand the guidance on the IA role in RM and the role of other lines of defence. It is important to re-evaluate the maturity of the organization’s RM practice, framework, processes and the extent to which the IA function can add value to the RM process. The role and degree of the collaboration between IA and RM functions within an organization may differ from one organization to another and, possibly, will vary over time.

9.3 ALLIANCE AS AN INGENIOUS SOLUTION AT THE ORGANIZATIONAL LEVEL

> *“In theory IA and RM have the same objective, but in practice they are competing for the attention of senior managers and time at board level, particularly if there is a joint Audit and Risk Committee” (Technical Manager of the CIIA UK and Ireland – interview).*

According to the Technical Manager of the CIIA, organizations that have separate IA and RM functions are normally competing with each other to attract top management attention. Not having a clear distinction in both functions’ role and responsibility can cause overlapping of tasks, redundancy, gaps, and ultimately competition between the two. These are the main constraints that prevent the IA and RM functions from efficiently and effectively discharging their roles and responsibilities. A member of the IRM special interest group (in RM) stresses that, rather than being rivals, forging a collaborative alliance is the best strategy for the IA and RM functions to perform their tasks more effectively.

> *“In more mature businesses, both RM and IA functions have a voice at the board and their input is seen as complementary. However, in less mature*

organizations, the IA function is seen as more important because it is a corporate governance requirement, and the RM function is seen as an optional extra" (A London RM Interest Group Member, the IRM – interview).

The above statement indicates that the IA function normally has a dominant and central role in RM, and this could jeopardize its independence in less mature or emerging organizations. However, in more mature organizations, by collaborating and coordinating on works and activities in RM, both IA and RM functions can be strengthened and complement each other. There are some organizations already coordinating their IA and RM roles and responsibilities to make their RM process more efficient and effective; but many are just starting soothe process (the IIA and RIMS, 2012). To demonstrate how the collaborative strategy initiated by the professional bodies at the societal level has inspired IA and RM functions to collaborate at the organizational level, evidence from the two case companies (BC and UKC) are presented and explored.

In the case of BC, the Director of IAF and ERM explained the nature of the IA and RM collaboration in the BC Group by expressing the following view:

"I see the two functions as complementary and in my experience our board gives appropriate time and attention to both functions. We are in the fortunate position where the contribution of both IA and RM functions are respected and valued by our board and the senior executive management team" (Director of IAF and ERM, BC – interview).

This finding is consistent with the above view of the IRM member of the London RM Interest Group, where RM and IA are viewed as complementary to each other. In addition, the above quotation also indicates that BC's top management supports the collaboration effort of both functions as they believe that there are potential benefits to it. Thus, a crucial factor in forging success and enhancing collaboration is that all parties involved in RM activities admit that they are getting stronger by working together rather than competing with each other.

Interestingly, the above view by the Director of IAF and ERM on the cooperation between IA and RM was shared by the Risk Development Leader of the RM function in BC. He stated:

"IA and RM are complementary disciplines, and in BC we work very closely. Both are highly respected functions, and as such do not have to compete for agenda time. The ultimate success of RM is its ability to allow for better decisions to be made. In BC we are seeing an increase in this, and as risk maturity increases, so does the application of RM when making decisions" (Risk Development Leader of the RM function, BC – interview).

It is clear that the IA and RM functions in BC are exercising a collaboration strategy to progress and complement each other. According to the RIMS and IIA (2012), when RM and IA functions perceive themselves as complementary to each other, they will work more effectively to add more value to the organization's operations, and ultimately contribute to the achievement of organizational objectives. The IIA and RIMS research outcomes highlight four important impacts of collaboration, which are to:

- Link the IA plan and the enterprise risk assessment, and share other work products. This provides assurance that critical risks are being identified effectively.

- Share available resources wherever and whenever possible. This allows for efficient use of scarce resources, such as financial, staff and time.

- Cross-leverage each function's respective competencies, roles and responsibilities. This provides communication depth and consistency, especially at the board and management levels.

- Assess and monitor strategic risks. This allows for deeper understanding and focused action on the most significant risks.

This study also finds similar effects of collaboration in the studied organizations, especially in terms of resource sharing and the cross-leverage of competencies, roles and responsibilities. This is evidenced by the interview responses received from the BC and UKC staff (see Table 9.3, R6, R10 and R11). In the case of BC, collaboration is perceived to improve communication (R2) between the two functions and improve the RM system (R3). The view of R2 is in line with the IIA recently released position paper, "The Three Lines of Defence" model.

The following statement by the Head of IAF at UKC supports the idea expressed by the leaders of both the IA and RM functions in BC, making clear that IA and RM are not competing functions:

"IA does not compete with RM as each has its own role. RM is part of the business operation, not just a reporting mechanism; hence we expect the RM to operate at various levels and throughout business decision-making" (Head of the IA function, UKC – interview).

In addition, the Chief Risk Adviser of the RM function at BC sees more potential for synergy rather than conflict when IA and RM collaborate, and suggests that the alliance between the IA and RM functions has strengthened and improved the capabilities and RM talent among the staff of both. The following list shows examples of how both IA and RM functions in BC and UKC constantly collaborate, interact and communicate.

i) In the BC Company

- The IA function uses the Group Risk function as a feed into their IA plan;
- The IA function reports on its assessments of how well controls operate against their key group risks;
- The Group Risk function and IA function have collaborated on work on integrating assurance provision around risks in the business;
- The Director of the IA function sits on BC's Group Risk Panel; and
- The Board of Audit and Risk Committee has oversight of both activities.

ii) In the UKC Company

- The RM team and IA function organize regular meetings to discuss the key risks faced by their organization and mitigation activities to manage those risks.
- The IA team reviews the key risk reports prepared by the RM team and any queries or suggestions from the IA team are then sent to the RM team for consideration.
- The IA team assesses the RM process, the RM function and reports at least on an annual basis on the adequacy of the RM process to the audit committee. The report of this assessment is also discussed with the RM team.
- The IA function is involved in the briefing and induction course when new members are introduced to the RM team to ensure that they fully understand their roles.

However, a key question that remains unanswered is whether collaboration between RM and IA has significantly improved the RM process? The answer depends on many factors, particularly, the level of management support, organizational culture, ethical values, the willingness of parties involved in the RM process to cooperate and mitigate

differences, as well as the type and degree of cooperation that both functions realize in actual practice. Whether the collaboration effort between the IA and RM functions are welcomed and appreciated by members of both functions and whether collaboration actually provides value as expected are exciting areas to be explored. Table 9.3 below illustrates some respondents' responses from both IA and RM functions of BC and UKC regarding how they collaborate their RM activities in their organizations.

Table 9.3: How RM and IA Collaborate

Respondent	Existence of Collaborative Effort
R1	Cooperation exists at a senior level but, at an audit level, joint working varies
R2	Working with the same director means we cooperate. We have a high-level leadership team meeting, which the heads of the IA function and RM function attend
R3	Both functions are fully coordinated, with IA feeding directly into RM reporting and RM working with IA and the organization to address weaknesses identified
R4	Currently working well to embed RM in the organization, but need to retain the distinction to allow the IA to audit and report on the RM objectively. In addition, we have also provided in-house training together, such as joint RM workshops/control risk self-assessment sessions for business units
R8	There is some degree of collaboration, but the collaboration is limited, and it is more procedural than valuable as a combined service
R10	RM and IA are very collaborative and work as a team in providing and improving risk management services to the organization
R11, R12 & R13	Three respondents agreed that their RM and IA cooperate well to enhance RM effectiveness throughout the organization. However, there is no information on the nature, extent and type of collaboration they are involved in

Based on these 13 respondents (ten respondents from BC, of which five are IA staff [R1-R5], two RM staff [R9-R10] and three operational staff [R6-R8]; and another three from UKC, of which two are IA staff [R11-12] and one RM staff [R13]) participated in the study, 62 per cent of them agreed that the RM and IA functions were positively cooperating with each other, acknowledging that cooperation took place in their organization. In their opinion, the collaboration had somewhat resulted in benefits to their organization. However, there is still much room for improvement that needs to be

done by both functions. This is because around 38 per cent of the respondents agreed that they were not so clear about collaborative efforts in their organization. Nevertheless, they believed that cooperation still brought benefits to the organization.

From the respondents' feedback in Table 9.3, some of them (a minority) admitted that they could see there was cooperation and integration between both functions, but that it was unknown to the front line of the internal community. They asserted that collaboration activities were only known by those who were involved in the process, but unclear to everyone else. This is evident in BC, which has large IA and RM functions: the collaboration is very good among top staff in both functions, but, among the junior staff, there are signs of confusion and ambiguity about collaborative efforts. In order to counter this constraint, a clear structure is necessary, and collaboration information should be clearly disseminated across the organization. Based on R1's statement in Table 9.3, I would suggest that regular coordination meetings should not always be restricted to the heads and team leaders only, but occasionally should be held with all members. Good collaborative ties between IA and RM functions in BC may a result of the mature risk process that they have in place, as well as the fact that both functions are headed by the same director.

On the other hand, in the case of UKC, a good collaborative effort is quite understandable, owing to the small size of the IA function (4 people) and RM function (one people as a coordinator). To ensure success of the collaborative effort between IA and RM functions, it would be best if all mandatory and recommended guidance addressed in the IPPF and position papers about the IA's role in RM; the 'Three Lines of Defence' model, and the good examples of collaboration actions recommended by the IIA and RIMS research are followed and fulfilled. However, every organization is unique, even those in the same line of business. Guidance and best practices are meant as a benchmark for making potential changes and determining the organization's position and level of maturity compared to current best practices. If something is proven, or appears to be a better practice model than the current one practised, indubitably it is worth investigating, learning and experimenting with it, in order to make both functions perform better. In investigating respondents' views concerning the two functions working together, the respondents expressed their opinions as follows, in Table 9.4.

Table 9.4: Respondents' Views on Collaborative Efforts

Respondents	Views Showing Strong Collaboration and Benefits from Efforts
R1	I think it is important for both functions to work together, but at the moment, I am not clear how well embedded this joint working is
R2	It has its pros and cons. Firstly, it does help with communication and, if issues arise, it is down to the director to deal with, which keeps it in-house. The problem I see is, we could potentially end up as an audit division, giving recommendations to the director of the IA function if we see problems with the ERM/RM processes
R3	It is vital for both functions to work together to improve the risk management system in the organization
R4	Currently the cooperation between RM and IA are working well to embed RM in the organization, but we need to retain the distinction to allow us to audit and report on the RM function objectively
R5	It would be positive for RM and IA to work together rigorously to help the board and management to effectively manage all significant risks faced by the organization
R6	It really makes sense that they coordinate with one another to maximize use of resources and effectively provide risk management services to the organization
R10	The two functions seem to be working well together with a clear division of roles
R11	The cooperation is vital as the RM function and IA function are complements of each other
R12	It makes sense to improve understanding and avoid misunderstanding
R13	It is crucial, as this can be beneficial to the organization
Respondents	**Views Showing Weak Collaboration**
R7	They do not currently work closely together, but they are trying, as the RM function is new
R8	The collaboration is limited, and it is more on procedural than valuable as a combined service
R9	As long as people take care to manage any potential conflicts of interest, then fine

The findings show that the collaboration activities were seen clearly by some respondents, but vaguely by some others. The majority of the respondents supported collaboration efforts between IA and RM and saw that there was more value by working together than working alone and isolated. Some of the collaboration benefits highlighted by respondents include: improved RM communication and practice, and

better allocation and use of resources. However, there is still much room for improvement; there is especially a need for making a clear distinction between the roles played by each line of defence, avoiding conflicts of interest (not impairing independence) and working by focusing on mutual interests rather than differences. Instead of competing to attract management attention, it is crucial for IA and RM disciplines to exercise ingenious strategy by forging collaborative efforts to optimize use of resources and become effective. Therefore, professional bodies (at the societal level) and both RM and IA functions (at the organizational level) should strengthen collaboration and explore ways to maximize the potential of both functions in increasing capabilities and effectively resourcing their activities and services to the organization.

9.4 CONCLUSION

In facing the twenty-first-century business environment, the IA profession has extended its roles and focus to enhance its value, maintain relevance and to survive. One of the main focus areas for IA to add value and drive improvements in the organizational operational is through greater involvement in the RM process. The core role of IA in RM/ERM is to provide independent and objective assurance (besides providing consulting services) to the board on the effectiveness of RM and to help management to ensure that significant business risks are being managed appropriately. Therefore, the quality and effectiveness of the IA role in RM is crucial in helping organizations to form a holistic and mature RM practice, and improve the effectiveness of the RM process. To make these initiatives successful, one of the innovative solutions created at the societal level is to forge a collaborative alliance between IA and RM disciplines. This collaboration effort aims to solve rivalry and process constraints, such as unclear role divisions and rivalry issues between the IA and RM professions at the societal level, and between both IA and RM functions at the organizational level. At the societal level, for instance, the IIA and RIMS issued a joint report promoting a collaborative alliance between both disciplines to solve the rivalry problem. The report illustrates innovative examples of alliance activities and best practice case studies, which exemplify both the successes and challenging stories of collaborative efforts. In addition, the IIA's "The Three Lines of Defence" model (the IIA, 2013) serves to illustrate innovative ways in structuring RM practice and confirms the complementary roles played by both IA and RM functions. These

ideas are complemented by the IIA's guidelines about the "do's and don'ts" of the IA role in RM in "The Role of IA in ERM" position paper (the IIA, 2003).

Pertaining to the collaborative alliance at the organizational level, the study reveals how IA and RM functions in BC and UKC collaborate to resolve rivalry and resource constraints, and confusion about their respective roles. The collaborative effort is seen by them as a way of improving the effectiveness and efficiency of both functions. It is in line with the moves taken by the professional bodies of IA and RM at the societal level. In general, the majority of the executive management and staff of the IA and RM functions in both companies appear to understand and support the collaborate efforts as a way of achieving mutual benefits and maximizing the company's potential performance.

The case study outcomes also identify some weaknesses in the implementation of the collaboration effort. For example, in the BC Company, lower-level staff in the IA and RM functions cannot see a clear picture of how well the collaboration is working. For them, the collaborative effort seemed to be more focused on procedural matters rather than emphasizing the potential value of a combined service. Therefore, there is still much room for improvement, as referred to in the views expressed by R7, R8 and R9 in Table 9.4 and by acknowledging that the collaboration effort is still new, and might take time to mature into better and effective practice.

The maturity level of the RM practice, the IA profile and the uniqueness of each line of defence (including organization culture) in RM activities are among the important factors that need appropriate consideration before developing a collaborative strategy (the IIA & RIMS, 2012). Both IA and RM functions need to be creative, innovative and using imaginary problem-solving approaches to create a collaborative alliance to help them strengthen their role in RM. This eventually will help the boards and management to improve risk culture in their organization and ensure that risks are being managed effectively. To achieve this, it is important for both IA and RM functions to have an effective strategy, a deep understanding of the risks and business environment, the ability to innovate and adapt, and the ability to collaborate and align strategy across the entire organization.

In conclusion, collaboration is an ingenious strategy that could help the IA and RM profession to improve RM practice. This strategy is supported at the societal level by

the IIA, such as through the issuance of “The Role of IA in ERM” and “The Three Lines of Defence” model, and the RIMS and the IIA in their combined report on “RM and IA: Forging a Collaborative Alliance”. At the organizational level, the adoption of a collaborative alliance is confirmed and supported by the respondents’ responses on this matter.

It is evident that a key reason why both functions make efforts to collaborate and reduce rivalry is because a clear distinction of roles helps them to secure and strengthen their role and position in RM at both organizational and societal levels. According to volume nine of Protiviti’s “Internal Auditing Around the World” report (Protiviti, 2013), fostering collaborative cultures assists an organization in striving for more effective use of resources, fuels innovation, helps the organization to better understand its risks, and encourages staff to play their part in managing and mitigating significant risks. Put simply, by collaborating, the IA and RM disciplines are seeking to not only promote the interests of their own profession at a societal level, but also their own status at the organizational level.

The next chapter presents the conclusion and discussion part of the thesis, by further discussing the empirical findings in comparison with previous literatures, highlighting the limitations of the study, as well as providing suggestions for future research.

Chapter 10

DISCUSSION AND CONCLUSION

10.1 INTRODUCTION

The purpose of this chapter is to further emphasize the research findings presented in Chapter 7, 8, and 9. In summarizing the research, underlying limitations are also noted. Based on the findings and limitations, the researcher highlights the implications of the study and suggests areas for future research. In addition, some reflections on the researcher's personal journey in doing this research are outlined.

This study uses the concept of ingenuity in the organizational context to orient the study and find whether the IA profession and practitioners are exercising ingenious solutions to deal with the constraints they face. The research focuses on the role of ingenuity in the development of IA practices and the continuous changing of the IA role. This is to help IA to remain up to date and relevant in order to improve the quality and effectiveness of IA and fulfil major stakeholders' demands.

The findings of this research are in accordance with Lampel et al.'s (2014) argument that organizations' ingenuity is important for economic and social development. In a world that is undergoing profound change, ingenuity has a huge potential role to play in modifying and adapting to changes in business and regulatory environments through exercising ingenious solutions within structural constraints. It is not just an issue of reaction to change but how to be proactive and creative in using limited resources and imaginative problem-solving to manage the changes and to deal with organizations' and key stakeholders' current and future needs.

In line with Lampel et al. (2014), ingenious solutions are identified, as discussed in Chapter 7, 8 and 9 of this thesis, through the IA functions' activities to engage with changes and constraints in order to improve effectiveness and promote the continuous evolution of the IA role. This evolution is a necessary response to corporate governance failures and changes in regulations, technology and business environments.

10.2 DISCUSSION, IMPLICATIONS AND CONTRIBUTIONS

This study reveals a number of ingenious strategies implemented at both the societal and organizational level. These strategies are illustrated in the analysis presented in Chapter 7, 8 and 9 and are categorized and shown in Table 10.1 below. From the table, it can be seen that some of the constraints faced by IA functions are similar to those discovered in previous studies, such as resource constraints (Walker et al., 2014; Lombardo, 2014; Narashimhan, 2014; Dolman et al., 2014; Korhonen & Valikangas, 2014), structural constraints (Lampel, et al., 2014; Rosso, 2014); product and process constraints (Rosso, 2014), and legal constraints (Walker et al., 2014). This study contributes by identifying the ingenious solutions exercised by the IA profession and practitioners for each category of constraints as identified below.

Table 10.1: Types of Ingenuity, Ingenious Solutions, and Constraints Which Have Been Solved by IA Functions

	Types of Ingenuity	Ingenious Solutions/Strategies	Constraints Categories	Societal Level	Organizational Level
1	Framework	Renewal of the IPPF and changing role of IA (through IA definition, standards, implementation guidance, supplemental guidance and code of ethics)	Structural, legal, status, resources, capability and independence	√	-
2	Methodology (tools and techniques)	Use of RBIA, co-sourcing and outsourcing, social media, CAATs, and technological advancements	Resources, capability, and status	√	√
3	Organization	Use of The 'Three Lines of Defence' model	Structural	-	√
4	Collaboration	Forging a collaborative partnership between IA and RM	Resources, rivalry and role ambiguous	√	√
5	Talent and competency	Use of continuous training and development programme, competency framework, create Chief Audit Executive (CAE) post, certification, increase professionalism, enhance recruitment process and perform quality assurance programmes	Resources, quality and capability	-	√

Constraints Indicators

i) Capability (competency talent, facility, experience, skill)
ii) Resources (financial, human resource, time)
iii) Legal (law and regulations requirements – external factor)
iv) Structural (power, independence, rules and policies, work norms and boundary)

Table 10.1 above shows some of the ingenious solutions/strategies used by the IIA (at the societal level) and IA functions in both BC and UKC Companies (at the organizational level) to overcome the constraints faced by them. These ingenious strategies are classified into different types of ingenuity. Similarly, constraints are also categorized according to the nature of IA activities.

10.2.1 Theoretical and Academic Implications

This research seeks to make a contribution to both our knowledge in IA and the role of organizational ingenuity. Much extant IA research has lacked a theoretical framework; where theoretical studies have been done they have concentrated on explaining IA issues using agency theory or institutional theory (Sarens, 2009). This study uses ingenuity theory to provide new insights to IA practices.

This research explores whether the role of ingenuity and constraints helps in the development of IA and improves its quality and effectiveness. Having effective IA in place can potentially help organizations to assure the effectiveness of their governance, RM, control and business processes within current business models and strategies. For example, from Table 10.1 we can see how the IIA exercised ingenious solutions through ingenuity at the societal level to deal with structural constraints confronting the IA profession.

In explaining structural constraints, Lampel et al. (2014) give an example of organizational barriers where the remoteness of the decision-makers at Xerox headquarters to their research centre caused their creative solutions to fail commercially. Similarly, in the IA context, with the existence of structural constraints (authority, status, work rotation and scope of work, access, line of reporting and independence issues), typically, heads of IA are not easily able to expand the running and the role of their functions as demanded and expected by various stakeholders without making necessary changes to the IA structure and framework. In order to resolve this, the IIA has exercised a number of ingenious strategies.

An example of these strategies include the revision, changes and/or updates to the IPPF, such as the change in the definition of IA (1999), changes and/or updates to the standards (initially in 2000 and subsequently once every two years), continuous

guidance and issuing position papers, such as: RBIA (2003), the IA role in RM (2009), and “the ‘Three Lines of Defence’ model (2013) (see Chapter 9).

The discussion of the role of IA in the position paper on RM, for example, has provided an important framework and guidelines (the “do’s and don’ts”) that have helped the IA profession and its practitioners to resolve their constraints surrounding authority, job scope and independence issues. As stated in the IA definition, the key role of IA in organizations is to add value to organizational operations through evaluating and improving governance, RM and control processes. This role is rendered by IA functions through being involved in business processes by developing assurance and advisory capacities. Positioning IA functions as a business advisers or partners at the strategic level can be considered as an ingenious solution. Ingenuity is useful in explaining the improvement and changes made by the IIA and IA functions with limited resources and structural constraints.

Another example from Table 10.1 (in row 2) is the type of ingenuity that is categorized under methodology (tools and techniques). Limited access to resources and capabilities are key constraints that often affect most IA functions in organizations. For instance, resource constraints include financial, time and human constraints. This finding is consistent with Rosso (2014), where he defines process constraints, such as time, equipment, human resources, technology, manufacturing capabilities, and organizational structures, as those that “stand in the way of creative problem-solving in a given organizational context” (Rosso, 2014, p. 465).

In the context of IA, the use of RBIA (refer to Chapter 8) and CAAT (refer to Chapter 8) in the audit process helps IA functions to resolve problems regarding scarcity of resources and lack of capabilities. IA functions are then able to effectively perform strategic advisory roles and IA roles in RM. As an example, the use of CAAT has reduced the required auditing time and man hours (or human resource), increased the volume of data (transactions) processing and coverage, provided more analysis, and allowed more varied job tasks. All these improvements enable audit work to be done in a timely manner to help the decision-making process.

As addressed in Chapter 1, Section 1.5, the researcher extends the use of the ingenuity theory into IA research and contributes to the literature by investigating and simultaneously considering the relationship of ingenuity and constraints. To date, the

researcher has not found any studies in IA that look at the ingenuity and constraints perspective simultaneously.

This study uses a theoretical lens that helps make sense of the impact of the type of constraints that confront the IIA and IA functions by matching them with the type of ingenuity. This is done by explicitly examining whether constraints affect ingenuity practice at the societal level (by the IIA) and organizational level (IA functions or practitioners). According to Lampel et al. (2014), the link between constraints and creativity is both negative and positive.

The findings of this study (see Chapter 7, 8 and 9) show that constraints have motivated the IA profession and its practitioners to identify and exercise ingenious practices and become the source for creativity and innovative problem- solving. By not exclusively focusing on the effects of single constraints, the empiric data of this research enriches the literature of IA in terms of the impact of constraints on ingenuity, by examining multiple different types of constraints together, including structural, time, capabilities, resources, legal, standardized routines, methodology and processes (see Table 10.1).

By exploring the relationships across multiple different types of constraints and ingenuities simultaneously, the researcher was able to develop answers to whether constraints affect the ingenuity of the IA profession and its practitioners. Similar types of constraints are likely to be relevant for many types of ingenious solutions in IA settings. The findings of this study suggest that the impact of constraints on ingenuity depends on the type of constraints, organizational culture, management support and legitimate element of IA.

This research seeks to evidence the ways in which the IA profession and its practitioners have been stimulated to be ingenious in responding to pressures from the lack of resources and challenges from both the external and internal environment. For example, resource constraints have exposed the IA profession and its practitioners to the environment of “managing with less”, which has helped to facilitate the IA functions’ capability for ingenuity.

By manipulating the limited resources available, IA functions exercise ingenuity in an attempt to improve and develop capability and knowledge in the IA discipline. Ingenuity

has become a means for IA functions to search for solutions to cope with constraints (Lampel et al., 2014). Therefore, in situations where IA functions are constrained to perform their work effectively, they must consider what would be the best way to deal with those constraints and to meet key stakeholders' requirements. Nevertheless, this much depends on organizational culture, top management support, and the IA strategic direction, capability and leadership. Overall, the main discussions of this research are the following.

10.2.1.1 Repackaging the Existing Tools/Ideas to Resolve IA Constraints

Regarding the implications of prior IA literature, research that is similar to that using IA ingenuity can be found in studies on IA innovation (i.e., Chaiyot & Phapruke, 2009) and cutting-edge of IA (i.e., Ridley, 2008). The use of Lampel et al.'s (2014) definition of "organizational ingenuity" and the term "ingenuity" (see Chapter 4, p 89) have provided a wider coverage of noun and structure to help with the examination as to whether the IIA and IA functions have made ingenious solutions across IA activities and frameworks.

This study portrays ingenuity both in IA activities and its practices. The study is in line with Ungerer et al.'s research (2011), which suggests ingenuity comprises of both the terms "invention" and "useful ideas". "Invention" refers to novel and new ideas. In contrast, "useful ideas" refers to any type of ideas (whether old, new or novel) that are useful to resolve problems, add value, and bring improvement to organizations (Ungerer et al., 2011).

In addition, as addressed in Chapter 4, Garcia and Calantone, (2002) describe innovation in two categories: incremental and breakthrough. Incremental innovation is about the changes and improvement of old things. On the other hand, breakthrough innovation is something novel or unique. Based on these terms and interpretations, this study refers to ingenuity (or ingenious solutions) as strategies, approaches, tools and techniques exercised by the IIA (at the societal level) and IA functions (at the organizational level) to carry out IA activities. Consistent with Homer-Dixon's (2000) argument, this study believes ingenuity does not have to be new or big inventions to be useful.

Ingenuity can be in the form of a big change or a small improvement to the quality, effectiveness and efficiency of IA activities. The IIA and IA functions have to create and exercise strategies, approaches, tools and techniques (either new or old) that can improve IA activities (either big or small) in response to corporate governance failures and to respond to changes in regulations, technology and business environments.

In order to create and exercise ingenious solutions, IA functions need to be knowledgeable and sensitive to present and foreseeable future events that may affected their organizations. By constantly assessing and seeking to understand changes in business environments, structures, strategies and key risks to organizations' objectives, IA functions can seek to respond appropriately to management and stakeholders' expectations.

Research findings in Chapter 8, for example, reveal that IA functions' depth of knowledge on business insights and situational specific issues or challenges can help them to use appropriate strategies and approaches in performing IA activities that are needed most by its customers. IA functions do not have to create something that is major or even new to be ingenious. There may be a small change required to address a basic issue. However, it is unnecessary for IA functions to provide new or advanced services if they are not needed by their organizations.

Based on the case study with UKC Company in Chapter 8 of this thesis (p. 191), IA functions can exercise ingenuity through repackaging their existing ideas such as to: (i) help business operating units to set clear business objectives, (ii) help business units to set and align their objectives and risk exposure or (iii) provide traditional control or compliance services that are needed in their organizations. Through these ideas, strategies and approaches (which are not new ideas), IA functions can provide advisory services (a new role) to improve some serious weaknesses in internal control systems in organizations and ensure all business units know and understand their risk exposure to help them to set clearly their objectives.

These strategies and approaches can help IA functions to choose and perform activities that add more value to organizations and resolve issues relating to IA customers' negative perceptions of IA (i.e., if they have the perception IA being solely to find out mistakes and weaknesses). Through resolving these issues, IA customers

will be more cooperative with IA and will give full commitment before, during and after the IA assignment.

As stated by the Head of IAF in the UKC Company, the IA function's presence is to help its customers and organization to make the right decision and improve performance. This is how IA adds value to its customers, rather than IA functions finding mistakes and punishing those that make them. Now IA functions and its customers can work closely and objectively to overcome organizations' challenges and achieve common objectives. By repackaging existing ideas (rather than new ideas) IA functions are able to meet their customers' needs and to remain relevant.

10.2.1.2 Co-sourcing and collaboration between IA and RM to resolve resource constraints

The ingenious solutions undertaken by the IIA (Chapter 7) and IA functions (Chapter 8) are relevant in explaining whether these solutions influence (or do not influence) the performance, quality and effectiveness of IA. Without examining the effects of various types of constraints, such as structure, capabilities, resources, role and status at both the societal and organizational level on ingenious strategies, it is impossible to explain their influence on IA quality and effectiveness. The effects of IA functions' approaches, such as co-sourcing, their role in RM, and collaborations between IA and RM in overcoming IA constraints, are areas of study that have not been deeply researched before. For example, co-sourcing and collaborations between IA and RM functions, which may not significantly correlate to IA effectiveness in the quantitative analysis. However, the case study in Chapter 7, 8 and 9 shows that co-sourcing and collaborations are exercised by the IA profession and its practitioners to leverage, strengthen and fill the gaps in IA capabilities. For example, the findings in Chapter 8 (page 195) indicate that a co-sourcing approach was used by BC and UKC to overcome their resource and capability constraints in an effort to improve their IA quality and effectiveness. This included: when the IA function urgently needed to conduct a new assignment for which it did not have the expertise: to help a small IA function to have the spread of expertise necessary for conducting certain types of assignment; and to learn new knowledge and acquire new expertise from leading expert providers or consulting firms.

On the other hand, research findings from Chapter 9 (page 220) reveal how the quality and effectiveness of IA can be improved through forging a collaborative partnership between IA and RM functions. The partnership helps both functions to avoid the overlapping and redundancy of works, waste of resources, rivalry between them, and confusion to stakeholders about their roles and responsibilities on RM in the “grey area”. However, the findings in Chapter 9 also highlight issues, such as: the cooperation between IA and RM functions was seen to exist strongly at the top level of management(not at the operational level), and the absence of clear and formal structures on collaboration needs to be addressed in order to make collaboration effective.

10.2.1.3 The Use of RBIA for Planning IA Work

As discussed in Section 3.3 of Chapter 3, this study contributes to the literature by enriching prior researches on the characteristics and determinants of IA effectiveness (Lenz & Hahn, 2015; Hailemariam, 2014; Mohamad & Muhamad Sori, 2011; Cohen & Sayaq, 2010; Arena & Azzone, 2010; Sarens, 2009). Characteristics, such as independence, professionalism, support from the audit committee and management, contemporary role, methodology and approaches, processes, conformance to frameworks, capability and competency, adequacy of IA staff, IA charter and quality assurance, all have impacts on the effectiveness of IA.

This study extends prior research on effectiveness by examining whether ingenuity helps to enhance the effectiveness of IA. One of the key findings that shows the influence of ingenuity in improving the effectiveness of IA activities, and overcoming constraints related to lack of resources, capabilities, structure and status, is through the use of the Risk-Based Internal Auditing (RBIA) approach.

The findings of this study (in Chapter 8, p. 182) show the relevance of ingenious solutions, such as the use of the RBIA approach and its implications for IA practitioners. Since its introduction, the RBIA approach can be considered as an invention of a novel and new idea that changes the image of IA and the way IA is operated, involving the whole process (starting from planning, fieldwork, and reporting of IA findings). As mentioned by the Technical Director of CIIA UK and Ireland in Chapter 8 (p. 203), RBIA is not reaching the level that the IIA wants at the moment, and the approach is still being developed and implemented. According to Popescu and

Omran (2011), and Waal (2003), the success of IA assignments depend very much on the initial stages of a sequential IA process, which is IA planning: if we fail to plan, we plan to fail.

Therefore, the planning process must be sound and be carried out appropriately, because at these early stages IA functions need to make crucial decisions in determining what to audit (select auditable units from organizations' huge audit universe). This is then followed by deciding on the audit scope, objectives, methodology, audit procedures, audit team and audit resources. Taking into consideration the issues of doing more with less, limited capacities and resources, an RBIA approach can be considered as an ingenious solution to overcome constraints faced by IA functions.

The use of RBIA for planning IA work can potentially help IA functions to improve auditing integration, quality and effectiveness. This integration process is crucial to: improving IA coverage; determining that appropriate and sufficient resources are allocated to the areas that matter most to the achievement of organizational objectives; providing appropriate audit reports and recommendations for helping management in making the best decision to address all the significant risks to the organization; and making better allocations and utilizations of valuable IA resources, time and capabilities. RBIA helps to improve IA status, raising the IA function to the boardroom and enabling the IA function to become a business adviser at the strategic level in the organization.

10.2.1.4 Multiple Areas and Structure

Unlike some studies on IA that focus on specific areas, such as IA activities (or effectiveness) and IA's relationship with audit committees, this study attempts to include multiple areas and structures of IA. In an effort to provide a deeper insight to IA activities and its relationship with IA ingenuity and constraints, this study contributes to the IA literature by examining IA practice at the societal level (Chapter 7), organizational level (Chapter 8), and the relationship between IA and other professions (Chapter 9). The findings in Chapter 9 are consistent with the suggestion made by Ungerer et al. (2011), that organizational ingenuity is considered to happen when social innovations (new interrelationships between people, organizations, institutions and communities), such as the collaboration between IA and RM functions that involve

institutions (the IIA, the RIMS, the IRM), functions (IA and RM functions) and people (internal auditors and risk professionals), take place in organizations.

This study also explores the ingenuity concept at multiple levels by examining both societal and organizational levels, including looking at the interaction between both. The 'Three Lines of Defence' model is an example of how organizational ingenuity interacts with, and influences, societal ingenuity. This model was established in 1990 by Dr Angela Smith, a former KPMG consultant (KPMG is a consulting firm that offers IA outsourcing and co-sourcing services). One of the reasons for the model's establishment was to reduce the overlapping of roles between risk professionals; after having been used for many years at the organizational level, it was finally adopted by the IIA in 2015 (refer to Chapter 9). The adoption of the practice of the 'Three Lines of Defence' model (initiated at the organizational level) by the IIA at the societal level shows that both levels can influence each other.

10.2.1.5 Exploring the Induced and Autonomous Concept

This study also contributes in terms of the application of the concept of the "induced" and "autonomous" strategy proposed by Burgelman (2002). In accordance with Burgelman's (2002) concept, an induced solution occurs when IA functions solve problems imposed by internal and external stakeholders (see Chapter 8, p. 202); while autonomous ingenuity solutions occur when IA functions and professionals solve problems identified by themselves within their own practices (see Chapter 8, p. 199; and Chapter 9, p. 224).

This concept (induced and autonomous) has not been widely explored in previous research. A study by Lombardo and Kvålshaugn (2014), for example, only explores how induced constraints were challenged by engineers, rather than accepting them and trying to overcome them through ingenious approaches. Coincidently, the data from this study (see Chapter 7and 8) shows that the ingenious strategies used by the IA profession and its practitioners to solve IA practice problems were influenced by both induced and autonomous perspectives, as introduced by Burgelman (2002).

Evidence for induced solutions can be seen in the way IA functions have taken action to extend their roles from being mainly assurance providers to becoming RM advisers (providing assurance and consultancy services) to boards and managements, in order

to fulfil the demands and expectations of stakeholders (see Chapters 2 and 7). On the other hand, the use of RBIA as discussed in Chapter 7 and 8 clearly show how IA functions apply autonomous ingenuity by identifying and solving problems by themselves. In addition, the use of technology (such as social media and CAAT) and improvised and targeted recruitment processes are evidence for the autonomous solutions implemented by the IA function in the BC group in order to resolve the resource problems that they faced (see Chapter 8).

10.2.1.6 Resource Acquisition versus Resource Allocation

A study by Narasinham (2014) looks at material and process ingenuity in large organizations. Narasinham uses a combination of institutional theory and the theory of managerial attention to discuss issues of resource acquisition in the generation of innovation. This study extends Narasinham's (2014) study on organizational ingenuity about how innovators acquire resources for innovation activities, by identifying ingenious solutions to overcome constraints faced by IA functions through effectively allocating scarce resources.

According to Narasinham (2014), acquiring resources for innovation activities refers to how innovators acquire scarce resources creatively and manage the legitimacy of their innovation. On the other hand, in this study, IA functions have exercised ingenious approaches, such as RBIA, to help resolve resource constraints. For example, by prioritising the audit work through RBIA, IA functions can channel their scarce resources (staff, time and money) to the areas of most importance in order to achieve organizational objectives.

10.2.1.7 Beyond Structural Constraint

Lampel et al. (2014, p. 467) define "organizational ingenuity" as "the ability to create innovative solutions within structural constraints using limited resources and imaginative problem-solving". In order to go beyond this definition of organizational ingenuity, this study employs a wider definition of constraints that goes beyond a focus on the structural.

The scope of constraints covered in this study includes multiple types of constraints, such as capability, resources, legal, process, methodology and interpersonal

constraints (such as the relationship and cooperation between the IA and RM functions). For example, the methodology and interpersonal (between functions) constraints have not previously been addressed in organizational ingenuity literature. Consequently, this study explores the ingenious solutions exercised by the IIA and IA functions to overcome constraints faced by them.

10.2.2 Implications for Practitioners and Regulators

The findings of the case study in Chapter 8 provide indications to organizations, regulators and professional bodies of IA regarding the importance of improving and continuously changing IA frameworks (including roles) and having in-house IA functions. Quality assurance and monitoring activities through internal and external quality assessment are important to help IA functions to deal effectively with constraints faced by them and to track their own performance and customers' satisfaction. Such quality assurance reviews are not possible if the IA function is fully outsourced.

10.3 LIMITATIONS OF THE RESEARCH AND SUGGESTIONS FOR FUTURE RESEARCH

In the previous section, the researcher has discussed how this study contributes to a number of theoretical, empirical and practical developments of IA at the societal and organizational level. The ingenuity lens has been used in this study to allow for a better understanding of the strategy exercised by IA in dealing with constraints and improving the quality and effectiveness of IA. That is important in order that IA survives and remains relevant in changing business and regulatory environments. However, in spite of the contributions, there are several limitations that need to be considered when interpreting the results of this research and these could be addressed in future research. This section briefly specifies the study's limitations and suggestions for future research.

10.3.1 Limitation: Participants Merely from Public or Big Companies

In this research, the invited participants for the case study at the organizational level were restricted to public-listed companies and companies that listed in Britain's "Most

Admired Companies" award. The participants, therefore, do not represent the entire sector or all various types of IA practices. Therefore, future research could look at extending the study by incorporating IA functions from non-listed companies (or private companies), non-profit organizations, small- and medium-size enterprises, universities, government entities and local authorities.

10.3.2 Limitation: Study Sensitivity

Owing to the confidentiality of information and data protection policy, especially in areas of strategic and risk management, the researcher was not permitted to carry out job observations to complement the data obtained from interviews and documentary evidence. This resulted in restrictions in terms of getting access to data and in publicly discussing all sensitive information, including IA findings and recommendations.

10.3.3 Limitation: Less Extensive Research Respondents

Most of the interview participants for the case study in this research were internal auditors. However, IA serves various stakeholders (i.e., IA serves more than one master), including key stakeholders, such as boards of directors, audit committees, senior executives and management teams. It would be interesting if future researchers could enrich the research data and obtain a more comprehensive view on IA practice and ingenuity by interviewing these key stakeholders. For example, future researchers could interview the Institute of Directors and regulators at the societal level, and interview audit committees, senior executives and various management groups at the organizational level. Their view and input would be useful to see whether the ingenious solutions exercised by IA have met, or not, their expectations' criteria and have eventually managed to assist IA to achieve higher quality and effectiveness, as required. In addition, the respondents might have certain improvements in mind as to what they want to see from IA in the future. Their opinion regarding the effectiveness of ingenious strategies exercised by IA functions would be useful for the betterment of the IA profession. On the other hand, in relation to the limited coverage of participants at the organizational level, the researcher believes that a clearer view of the implementation of the ingenious strategies could be shared by other internal parties, such as the chair of the audit committee and the executive management of the

organization. Thus, a wider view from a broader range of respondents could be an area to develop in future research.

10.3.4 Suggestion for Future Research

In this study the exploration of ingenuity practices in the IA context is focused at the societal and organizational levels. The study examines the IIA (the professional body) and IA functions (IA departments or units in the organization), but largely excluded IA professionals, the internal auditors themselves. Future research could expand this by examining ingenuity practices among individual internal auditors. It is expected, in fulfilling the demands of the IIA, IA functions and various key stakeholders, individual auditors may have taken some initiatives to overcome some of the constraints that prevent them from performing their role successfully and efficiently. Among other things, individual auditors might improve their skills and qualifications by attending courses or gaining certain related certifications and qualifications.

The success of the strategies implemented, especially at the organizational level, is much affected by the individual auditor. For example, in the collaboration between IA and RM functions requires individual auditors to have knowledge of their job specification and understand their work boundaries, as well as possessing appropriate communication and negotiation skills.

Additionally, there might be certain constraints and problems faced at the individual level which are different from the societal and organizational level and which require different types of strategies. The use of social media, for example, cannot be fully utilized if the individual internal auditor has no knowledge of how to use it. Therefore, future research could fill this gap by exploring the ingenuity initiatives and efforts taken by internal auditors at the individual level.

This study extend the application of the ingenuity and constraint concept in IA to explore the implications this concept offer in understanding IA quality and effectiveness. The literature in this area (IA effectiveness and quality) can be referred in the work of Lenz & Hahn (2015), Badara & Saidin (2013), Kasim et al. (2012), Burnaby & Hass (2011), Mihret et al. (2010), Cohen & Sayaq (2010), Arena & Azzone (2010), Sarens (2009), Carcello et al. (2005), Gramling et al. (2004), Dittenhofer (2001), and Bou-Raad (2000). For the measurement of characteristics of IA quality

and effectiveness, this study concentrates on an evaluation of the characteristics of the IA function in terms of (i) the use of IA methodology and techniques (i.e., the use of RBIA in IA planning, IA role, and quality assurance); (ii) the talent availability in the IA function or team (i.e., training, experience, competence and professional proficiency); (iii) the capability and resources (budget and people of the IA team); and (iv) the IA position in the organization (i.e., the IA position in relation to its status, autonomy and independence).

The study also looks into the characteristics of IA in relation to the organizational environment (i.e., auditee perception on IA and laws and regulations that shape IA activities). However, this study does not cover the characteristics of individual IA functions and organizational environments in relation to risk and control cultures in the organization. Future studies could extend this study by exploring other characteristics of IA quality and effectiveness, such as the influence of the individual internal auditor, behavioural skills and risk and the impact of organizational control systems and culture on IA ingenuity.

Last but not least, consistent with the methodological approach of this thesis, in future studies similar theories could be extended to different settings (outside the UK) or different professions, such as management accountants or risk professionals that might have different sets of constraints and ingenuity strategies to overcome them. By considering that this study focuses on the perceptions of internal auditors at the organizational level, further research could take into account the perceptions of other stakeholders, such as audit committees and managers at the senior and lower levels.

10.4 CONCLUSION: SUMMARY COMMENTS

This research seeks to provide better understanding of the role and influence of ingenuity in improving the effectiveness and development of IA at both the societal and organizational levels. In conjunction with the aim of this study as highlighted in Chapter 1 (p. 20), this research seeks to identify ingenious solutions exercised by the IA profession and practitioners in addressing the constraints that confront them. The quality, effectiveness and performance of IA can be considered to have been achieved when the IA profession and its practitioners are able to meet the expectations and demands of their key stakeholders effectively.

This research also examines whether IA practices have changed and evolved as a result of exercising ingenuity (innovation and creativity) in order to survive and remain relevant in providing services that are needed and expected by its key stakeholders. In the situation where IA functions and practitioners are forced to do more with less, and compete with other supportive functions within and outside the organization, the proverb “necessity is the mother of invention” becomes important (Honig et al., 2013). This requires IA functions and professional bodies to think “outside the box” and find new ways of creating value in constrained environments.

In this study, ingenuity theory is applied as a theoretical lens to help understand and explain the phenomenon studied as stated in the research aims. This theory (discussed in detail in Chapter 4) is based on the concept of human ideas (or sets of instructions) that are developed, or arise, and are applied to solve practical, social and technical problems in ways that help goals to be achieved (Lampel et al., 2011). In other words, it helps with understanding how ideas are created and provides a framework to identify them.

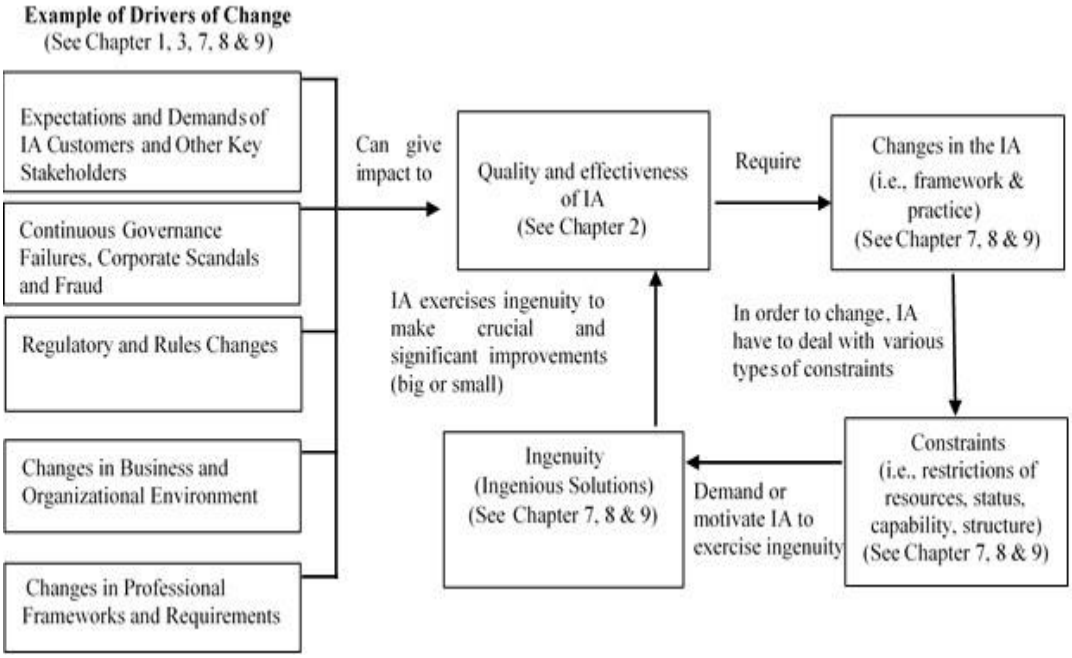

Figure 10.1: The Relationship between Changes, Constraints and Ingenuity in the IA Role

As an example, the IA profession and its practitioners need to understand how the changes in business and organizational environments, and changes in the International Professional Practice Framework (IPPF) influence both IA and businesses at large. Subsequently, IA functions need to consider the best ways to respond to the changes and to form effective audit practices. Figure 10.1 above depicts the relationship between the various factors at the macro (societal) and the micro (organizational) level that influence and drive the changing role of IA. However, as discussed in Chapter 7, 8 and 9, it is not easy for the IA profession (the IIA) and practitioners (IA functions) to improve IA effectiveness and fulfil the new role that they are supposed and expected to deliver because of constraints confronted by them (such as resources and capability constraints).

Ingenuity is one of the solutions that can be used by IA functions and professional bodies to deal with constraints. Besides, constraints can act as motivation and a driver for the creation of ingenious solutions. Exercising ingenious strategies is a way that can lead IA functions to provide services required by the board and management, to be in line with the new regulatory and business environments, and to meet key stakeholders' expectations. For example, failure of corporate governance practices triggered corporate scandals, financial crises and the collapse of giant corporations. These events changed stakeholders' expectations, especially in that regulators and investors wanted organizations to be more transparent and accountable and to develop sound RM and internal control practices. Changes in corporate governance motivated IA to change. For instance, the IA role in RM has evolved from educating and championing the development of RM processes to focusing on providing assurance and advisory roles through evaluating the adequacy of RM processes in organizations. IA functions should help their organizations in evaluating and improving the effectiveness of RM processes (including risk governance oversight, risk appetite, risk tolerance and risk culture). Therefore, IA functions need to re-examine their existing roles and quickly adjust to the current stakeholders' needs to remain relevant.

IA functions and organizations' managements are challenged by various types of constraints in seeking to change. The key constraints confronted by IA functions include: the difficulty in obtaining appropriate resources and lack of capabilities (as mentioned in Chapter 8, on how BC and UKC dealt with financial, time, human resource and competency constraints), organizational culture (in some organizations their culture is not really conducive to and supportive of the establishment of sound IA

practice), and inadequate authority and structural constraints in discharging their role effectively (issues pertaining to independence, authority and responsibility, access, reporting lines and serving more than one master at one time, as discussed in Chapter 9).

To help IA effectively discharging their roles, ingenuity theory provides a clear framework to conceptualize the role of ingenious solutions (strategies) in helping the IA profession and it practitioners in solving constraints faced by them. Besides resolving constraints, ingenuity also can help IA in improving its quality and shaping advanced practices. This perhaps can safeguard IA's relevance and lead IA functions to achieve an effective role.

In navigating the complex world we live in today, providing generous budgets and allocation of resources to development programmes is no longer a common way to pursue change. Instead, ingenious strategies, using creative and innovative ways of performing work and creating value, are the alternative solution to make better use of limited resources. Therefore, in order to overcome the constraints confronting the IA profession, the IIA and IA practitioners must develop appropriate capabilities and strategies, which probably can be achieved by practising ingenuity.

Ingenuity is an innovative and creative reaction to organizational constraints or problems, which are closely linked to organizational change. The empirical data and discussion on the exercise of ingenious solutions in dealing with the constraints faced by the IIA (at the societal level) and IA functions (at the organizational level) are shown in Chapter 7, 8 and 9. As stated earlier, the empirical analysis is divided into the societal level and the organizational level. The examples of ingenious solutions and constraints that have been found in this study are summarized in Table 10.1 above.

Being the first study to apply ingenuity theory in the IA context, this study can potentially make a contribution to the theoretical, academic and practical development of the IA profession. This research addresses the challenge made by Sarens (2009), to increase the theoretical research in IA, and start to examine the implication of IA practice towards IA quality and effectiveness. In addition, this research also seeks to tackle the suggestion made by Walker et al. (2014) to investigate how ingenuity solutions unfold over time, as well as to examine the relationship between different types of ingenuity over time.

At the societal level, the researcher collected the data by conducting interviews within the IIA and PwC. Data was also obtained through the analysis of documents concerning the IA profession and practices. At this level, the study examines how the IIA (or other parties) exercise ingenious solutions to develop and improve IA effectiveness in navigating the changing environment and complexities of business entities in the 21st century. On the other hand, at the organizational level, two case studies were conducted within the IA functions of BC and UKC to understand how ingenuity strategies are practised in IA's day-to-day activities. In addition, this study also investigates how the IA function implements and exercises ingenious solutions created by the IIA (or other parties) at the societal level.

Today, the IA profession wants to be seen by their key stakeholders as a strategic business partner and an independent assurance and consulting service provider that aims to help management and organizations to achieve their objectives (Pickett, 2003). Over a decade, the RBIA, IA role in RM, 'Three Lines of Defence' model, IA competency framework and the maturity of the IA model are among the latest approaches and techniques that have been created to try to support the IA profession.

In order to maintain its relevance, IA needs to change in line with the changes occurring in the business environment. According to Leech (2015), change in the governance landscape indicates the need for fundamental transformation in IA. As the employees, partners, assurance providers and advisers of the organization, the capacity of the IA function to apply a reasonable and objective mind-set is questionable (Paape, 2007). The corporate governance culture and the status of the IA function in the organizational structure may signal the level of IA independence. To be transparent and to obtain higher status in the organization, the IA function probably needs more authority and independence to allow it to determine its own agenda. The issuance of the IPPF and position papers such as the RBIA, the IA role in RM and The 'Three Lines of Defence' model are important in providing the appropriate guidelines and frameworks for IA to resolve such independence and objectivity issues.

10.5 REFLECTIONS ON THE RESEARCH PROCESS

The researcher went through a challenging and invaluable learning experience in handling the research process to complete this thesis. Engaging in the routine, and not so routine, activities of the research process provided the researcher with the

significant knowledge and skills required to proceed to the next stage of conducting the research. These activities included the intensive reading and identification of relevant literature, preparing the qualifying report, participating in a doctoral colloquium, presenting papers in three conferences, and dealing with ethical matters.

The researcher's immersion in the real-world research process of data collection began with experiences in the design and conducting of the preliminary questionnaire survey on IA. Suggestions and comments were obtained from field experts and academicians in constructing the questionnaire survey and carrying out pilot testing. In addition, it was very lucky to receive support and cooperation from the IIA and IRM in distributing the questionnaire survey (see Appendix 1). However, it proved very hard to get respondents for the survey. Eventually, after various efforts taken over a four-month period to prompt respondents, the survey just managed to elicit 65 responses (see Chapter 6). Subsequently, the researcher faced another challenge and hurdle in getting organizations to agree to take part in the case study. Now, the researcher realizes how difficult it is to find case study participants, especially in the absence of strong and established networks.

Engaging in the data collection process (such as interviews, observations and documents artefacts) at the societal and organizational level enabled the researcher to bridge the theoretical and practical aspects of the phenomena studied. The opportunity to explore aspects of the IA professional body, IA function in organizations and IA practitioners both in the organizations and through social networks enabled the collection of a significant amount of data. This proved invaluable in constructing the discussions in this thesis. It has also been impossible to incorporate all of this material.

The studies within the two case organizations in the same industry enabled the researcher to learn to identify phenomena relevant to the research objectives in a complex self-regulatory practice environment. In addition, the opportunity to explore other supporting functions in governance structure, in particular the RM function, one of the key players in The 'Three Lines of Defence' model, provided a more comprehensive picture of the phenomena under study. These experiences inspired the researcher to explore the collaboration between the IA and RM in Chapter 9. This also provided a means to further understand the role of ingenuity in IA development. It allowed the researcher to identify new types of ingenious solution (through collaboration and sharing) in solving the constraints faced by IA functions and

practitioners in order to stay relevant and survive in the changing business environment.

All in all, this PhD journey has become a crucial training ground and catalyst to become more active and involved in future research, publication, and research-informed teaching and consultation work as an academician in Universiti Utara Malaysia. A greater involvement in research and publication activities will increase self-knowledge and realize the importance of know-how in carrying out properly informed and designed research. As a result, the knowledge and experience that gained during this PhD journey can be further enhanced and, later, can be shared with others, especially this researcher's future PhD candidates.

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APPENDICES

Appendix 1: Survey Questionnaires

PART A: INTERNAL AUDIT FUNCTION

A.1 – Background Information on Internal Audit Function

1. Does your organisation have an in-house internal audit department/unit?
   - ☐ Yes, for how long_____ (years)
   - ☐ Yes, but not been carried out by an internal audit unit/department. Who provide it and for how long _____.
   - ☐ Yes, but partially outsourced, for how long_____ (years)
   - ☐ No, it is fully outsourced, for how long_____ (years)

2. Total number of staff in Internal Audit Function _____.

3. Total number of full-time auditors in Internal Audit Function _____.

4. On average, how many audit staff join _____ and leave_____ the Internal Audit Department over a year-on-year basis.

5. Please specify number of Internal Audit staff with professional and/or other related qualification:

	Number(s)
a. Internal Audit Qualification	
b. Other professional certification(s) or academic qualification	
c. Member of the Insitute of Internal Auditors	

6. Please specify number of internal audit staffs with audit experience:

	Number(s)
a. Less than 5 years	
b. From 5 to 10 years	
c. More than 10 years	

A.2 - Characteristic of Internal Audit Function (IAF)

7. In your organization, the Internal Audit Function:	Never (1)	Sometimes (2)	Usually (3)	Always (4)
a. Complies with the Professional Standards of the Institute of Internal Auditors	1	2	3	4
b. The Head of Internal Audit reports directly to the Audit Committee	1	2	3	4
c. Practices an unbiased attitude all the time in performing their duties	1	2	3	4
d. Discloses to appropriate parties any incidents that affect their independence	1	2	3	4
e. All internal auditors have the adequate opportunity to improve and update their knowledge and skills by continually attending certificated courses, training and conferences	1	2	3	4
f. External quality assurance assessment is conducted at least once every five years by a qualified, independent reviewer	1	2	3	4
g. Report non-compliance to the audit committee	1	2	3	4
h. Get approval from the audit committee for the audit plan and audit resources	1	2	3	4
i. Use a Risk-Based approach in audit planning	1	2	3	4
j. Appropriate audit methodology documented in staff manual	1	2	3	4
k. Use policies and procedures to guide all internal audit activities	1	2	3	4
l. Periodically report to the audit committee of any audit activities performance against the plan	1	2	3	4

8. In planning internal audit work the following items are considered:	Never (1)	Sometimes (2)	Usually (3)	Always (4)
a. Corporate objective	1	2	3	4
b. Organisational risk exposure	1	2	3	4
c. Adequacy and effectiveness of risk management	1	2	3	4
d. The opportunity to improve internal controls	1	2	3	4
e. Communicating of risk information within the organization	1	2	3	4

9. In your organization, the internal audit activities:

	Never (1)	Sometimes (2)	Usually (3)	Always (4)
a. Provides assurance services on risk management activities (core roles of internal audit)	1	2	3	4
b. Provides consulting services on risk management activities (legitimate internal audit roles with safeguards)	1	2	3	4
c. Gives assurance to the management, the audit committee and the board on the effectiveness of internal control system	1	2	3	4
d. Actively promoting risk management to assist management to improve its operation	1	2	3	4
e. Involvement in risk management is not jeopardising the internal audit activity's independence and objectivity	1	2	3	4
f. Involvement in risk management is likely to improve the organization's risk management, control, and governance processes	1	2	3	4

10. In your Internal Audit Function:

	Yes	No
a. The allocations of the necessary resources are critical to ensure the achievement of audit, assurance and consulting engagement objective	☐	☐
b. Accuracy, clarity, conciseness, completeness and timeliness are the characteristics of internal audit report	☐	☐
c. Reasons for, and the expected impact of any non-compliance with IIA standards by internal auditors are clearly disclosed	☐	☐
d. The Head of Internal Audit is responsible for communicating the final results of audit activity	☐	☐
e. Formal monitoring procedures are used to ensure all recommendations are implemented by the management/audit customers	☐	☐
f. If management decides to accept risks beyond the organisation's risk tolerance, the Head of Internal Audit will hold discussions with management to resolve the issue	☐	☐
g. The Head of Internal Audit consults with the audit committee to resolve the issue should the dispute continue	☐	☐
h. Audit software and IT equipment are adequate and widely used in performing audit activities	☐	☐

PART B: THE COLLABORATION BETWEEN INTERNAL AUDIT FUNCTION AND RISK MANAGEMENT FUNCTION

11. To what extent is your organisation's establishing an alliance between the Internal Audit Function and the Risk Management Functions :	Not at All ←					→ Very Significant
a. The audit plan is linked to the enterprise risk assessment, and functions share other work products	1	2	3	4	5	6
b. Internal audit function provides assurance that critical risks are being identified effectively	1	2	3	4	5	6
c. The functions share available resources wherever and whenever possible.	1	2	3	4	5	6
d. The function allies to assess, respond to, and monitor strategic risks, interrelated risks and the most significant risks	1	2	3	4	5	6
e. The separate roles of risk managers and internal auditors are clearly defined	1	2	3	4	5	6
f. The risk management and internal audit roles are complementary. An overarching common goal is to position the organizations for successful achievement of business objectives	1	2	3	4	5	6
g. Internal Audit Function and Risk Management Functions often share common goals and responsibilities in regards to enterprise risk management and other risk management activities	1	2	3	4	5	6

i. Other [please specify below]

_____

_____

PART C: THE MEASUREMENT OF ORGANIZATIONAL RISK MATURITY

12. Based on Appendix 1, assess the degree of your organisation's risk management maturity levels:

	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
a. Key characteristics	☐	☐	☐	☐	☐	☐
b. Control	☐	☐	☐	☐	☐	☐
c. Monitoring	☐	☐	☐	☐	☐	☐
d. Risk culture	☐	☐	☐	☐	☐	☐

PART D: ORGANIZATION AND PERSONAL INFORMATION

COMPANY INFORMATION:

Organisation name: _____

Industry sector: _____

Total number of employees in your organization: _____

Size of organisation (Turnover in £ million in the last financial year) _____

PARTICIPANT'S DETAIL:

Title: _____

Position: _____

Date Completed: _____

Phone Number: _____
(Optional)

Email: _____
(Optional – will be used to send a copy of research result)

APPENDIX 1: ASSESSING THE ORGANISATION'S RISK MATURITY LEVEL

	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5
Key Characteristics	Not practising RM at all	Informal recognition and no formal approach on RM	Silo-based approach and lack of rigorous process on RM	Risk methodology and strategy were in place only at the departmental level	Enterprise wide approach was developed but not fully embedded	Enterprise wide approach is fully embedded, with an effective board level discussion of risk
Controls	Poor control	Incomplete control and the existing controls are not linked to corporate objectives or risk appetites	Controls are not linked to risk appetite and used on an ad hoc basis to respond to new risks and a changing environment	Controls have been established to reflect objectives and risk appetites	The controls proactively addresses change and are developed to both prevent negative consequences as well as promote positive outcomes	The control anticipates change and promotes continuous improvement, and is linked to departmental objectives and risk appetites
Monitoring	Almost no monitoring	Very little, if any monitoring	Little monitoring	Some board and management oversight	Board and management monitor that the risk process and response are operating properly; as well as integrating its RM into performance measures	Full board and management monitoring of risk processes and all types of response are operating properly; as well as integrating its RM into performance measures
Risk Culture	People will ignore and abuse whatever system they have in place	People will NOT do the right things regardless of risk policies and controls	People will do the right things when risk policies and controls are in place	People will do the right things even when risk policies and controls are not in place	Every person will do something about the risks associated with his/her job on a daily basis	Every person is a risk manager and will evaluate, control and optimise risks to build sustainable competitive advantage for the organisation

*RM = Risk Management

Appendix 2: Invitation Letter

Name,
Address 1
Address 2

31st May 2013

Dear ……,

Thank you for recently completing my online survey about internal audit in your organisation. I hope you do not object to me contacting you, but your responses have been very helpful to my research, and I am hoping that you might further assist me in my research. The project builds on my extensive personal experience as an internal auditor, and is supported by both the Institute of Internal Auditors and the Institute of Risk Management.

I would like to ask if you would allow me to interview yourself and some senior members of your staff about the internal audit and risk management control structure within your organization. I am looking for three or four companies that would be willing to be profiled as case studies on how internal audit and risk management is currently organised within their organisation. All information will remain **strictly confidential. Participating organisations will not be expressly identified**, and will receive a summary of the research findings, which aims to provide helpful comparisons of practice across a number of major companies. I am particularly interested in looking at your organization because of your position as a global leader in industrial engineering solutions.

In view of the importance of the topic of internal audit and risk management to regulators, stakeholders and the general public, I hope that you will agree to the profiling of your organization as one of the case study companies. If you wish to discuss the project in more detail before reaching a decision, I am happy to come and discuss it with you at your convenience.

Yours sincerely,
Azharudin Ali, IIA, MIA
Researcher
Email: alia27@aston.ac.uk

Appendix 3: Information Leaflet

The Internal Audit Practice and the Management of Internal Audit Function in the Organization

INFORMATION LEAFLET

Purpose:

I am interested to understand the internal audit (IA) and risk management (RM) practice in your organization, as well as the management of both functions. The image of IA function and RM function has now reached the top priorities following the financial scandals, debt crisis and collapse of various leading corporations. It is interesting to understand how IA face the challenge in discharging their role and effectively managing the function in the organization to ensure its relevance. In addition, I would like to explore how IA function as a key internal mechanism of the corporate governance help management to effectively manage the risks and contribute to the achievement of organization's objective.

Data Collection and Confidentiality:

I would like to digitally record the interview with you in order to ensure the accuracy of the data being analysed and reported.

I will code the interview accordingly in which your identity will be kept separate from the data, and I will not use your name in the research output. If I wish to quote literally anything you have said, I will include the quote using pseudonym (e.g. Chief Internal Auditor 1, Director 2). In addition to that, your organization's name will also be anonymous.

As part of the requirements for the academic audit of research, I will store the anonymised data from the interview on secure computers for a period of 5 years. Your information i.e. original identity and the assigned code or pseudonym will be stored electronically in a separate password protected files that are only accessible by me and my two supervisors.

Output:

I seek to present the findings at conferences and in academic publications.

Your rights:

You may choose not to participate in this research, or refuse to answer any question, retract any comment or the whole of your interview up to the end of September 2013 (after which I may have made the research findings public).

You may ask me questions to clarify any further points about the study and I will be happy to send you a summary of the research findings if you are interested, and willingly to provide me with your email address.

The researcher can be contacted as follows:

Principal Researcher:

Research Supervisors:

Prof. Margaret Woods
Finance and Accounting Group
Aston Business School
Aston University
Birmingham B4 7ET
Email: m.woods@aston.ac.uk
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Prof. Alan Lowe
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Aston University
Birmingham B4 7ET
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Appendix 4: Consent Form

Consent Form

Participant's Statement

I have read and understand the researcher's explanation. I have had the opportunity to discuss it with the investigators, and to ask any questions. I have been fully informed, in writing, about the purpose of the study and exactly what is required in order to participate. I have read and fully understood the covering sheet to this consent form and agree to participate in a tape-recorded interview. I agree to the information being used for research purposes, some of which may be included in scientific materials for publication.

Date : .....
Signed : .....
Name of Participant : .....
Name of Institution : .....
Job Position : .....