

**AN INTERNAL AUDIT EXPECTATION GAP: SOUTH AFRICAN
REVENUE SERVICES PROJECT AUDIT ENGAGEMENTS**

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DECLARATION OF ORIGINALITY

I, Mmanapo Bella Sekhwela (s217861318), hereby declare that this treatise for MPhil in IT Governance is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another University or for another qualification.

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DATE: 20 April 2020

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Abstract

South African Revenue Services (SARS) was established as a quasi-government organisation with a mandate to efficiently and effectively collect revenue based on the export, import, movement, manufacture and storage of specific goods. Information Technology (IT) governance is strategically important to SARS in that its business processes are technology driven and that technology projects are implemented to support the SARS strategic objectives. In alignment to the King code for corporate governance and ethical business practices, an Internal Audit Function (IAF) as a regulatory requirement of all public sector entities in South Africa exists at SARS. The aim of the research was to evaluate the perspectives of SARS stakeholders regarding the organisation's IT project auditing process. The study focused on gathering data from various SARS stakeholders involved in the delivery of IT projects and IT projects auditing. Through a qualitative research approach, interviews were conducted with practitioners such as Internal Auditors, Internal Audit managers, and executives as well as project managers and owners so as to obtain a holistic understanding of stakeholder expectations of an IT project audit. An analysis of the data collected led to the deduction of recommendations meant to enhance stakeholder perceptions of the IT audit function within SARS. The study found that there is a perceived value derived from IA reviews of IT projects. The findings also revealed that rather than lack of resources and expertise, skill set deficiencies were the major setback in achieving IA goals. The findings further revealed that there are deficiencies in the quality of IA reports. Some of the main recommendations were to expand the scope of the Internal Audit roles, intensify engagements of Internal Audits by the Enterprise Project Management Office (EPMO), improve the quality of reports, and capacitate Internal Auditors with reporting skills. This study presents a modest contribution that is expected to enrich knowledge on how to audit IT projects. Moreover, the study contributes towards a methodological position of design science by producing results from a smaller sample augmented by interview results in an environment characterised by smaller populations so that inferences can be made.

Key words: IT Auditing, IT Consulting, Programme Governance, IT Project Auditing, Project Assurance

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LIST OF ABBREVIATIONS AND ACRONYMS

| | |
|---------|--|
| AGSA | Auditor General of Southern Africa |
| AICD | Australian Institute of Company Directors |
| AOs | Accounting Officers |
| CAEs | Chief Audit Executives |
| CIO | Chief Information Officer |
| EDM | Evaluate, Direct and Monitor |
| EPMO | Enterprise Project Management Office |
| ERP | Enterprise Resource Planning |
| IA | Internal Audit |
| IAF | Internal Audit Function |
| ICT | Information Communication Technology |
| IIA Inc | Institute of Internal Auditors Global |
| IPPF | International Professional Practices Framework |
| ISB | Independent Standards Board |
| ISO | International Standardization Organization |
| IT | Information Technology |
| ITIL | Information Technology Infrastructure Library |
| PFMA | Public Finance Management Act |
| SARS | South African Revenue Services |
| SDLC | System Development Lifecycle |

CHAPTER 1: INTRODUCTION TO THE STUDY

1.1 BACKGROUND

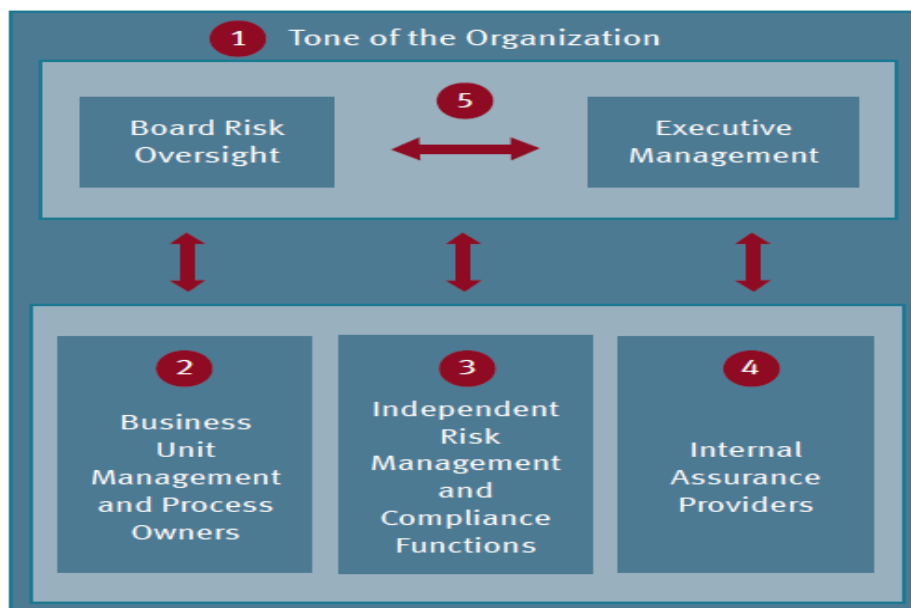
SARS is one of the key organs of the South African Government (SARS, 2018). The SARS is responsible for collecting tax and customs and was established in terms of the SARS Act 34 of 1997 as an independent agency (SARS, 2019). Good corporate governance is imperative if a company or an organisation such as SARS is to achieve its objectives and drive improvement, as well as maintain its legal and ethical standing in the eyes of shareholders, regulators and the wider community (Australian Institute of Company Directors (AICD), 2019). Technological advances and the risks faced by SARS, amongst which is the Fourth Industrial Revolution (also referred to as 4IR), necessitates organisations to reconsider their risk management strategies. Internal auditors need to be aware of the demands of their stakeholders, especially insofar as the assurance provided in respect of new projects driven by these emerging technologies (4IR) are concerned. With the changing landscape of SARS' operations and the technology requirements, the next section provides an introduction to the justification of the research problem and the associated research objectives.

1.2 INTRODUCTION

The previous section provided an overview of the challenges faced by SARS in respect of advances in IT. These challenges result in aspects that need clarification and discussion to contextualise and motivate the need for this study. Sound corporate governance is a strategic objective of the South African government (Institute of Directors in South Africa (IoDSA), 2016). Resulting from the SA government's standing in respect of sound corporate governance, the first King report on Corporate Governance was issued in 1994, shortly after the first democratic elections of South Africa. In addition to the King report, the Public Finance Management Act (PFMA), Act 1 of 1999, was promulgated. In combination with the King report, the PFMA has its objective promoting sound financial

management of all state organs in South Africa. According to the most recent edition of the King report, (the King Report on Corporate Governance for South Africa 2016 and herein referred to as King IV), the importance of sound governance practices, with reference to ethics, organisational culture, performance, legitimacy and internal control, and sound corporate governance was made paramount (IoDSA, 2016). King IV further recommends transparency and meaningful financial reporting by organisations and management (IoDSA, 2016). According to the IoDSA (2016), there should be a drive for assurance activities and functions which support or influence an effective control environment and enable the safeguarding of information for its integrity. In support of this assurance drive, the King IV report defines the governing body as the highest body in an organisation and recommends that it should establish a robust assurance model based on five lines of defence (assurance). These are illustrated in Figure 1.1.

Figure 1.1: LINES OF DEFENCE MODEL



(Source adapted from: IoDSA, 2016)

Defined lines of defence or assurance are essential for effective risk management as they provide assurance to the board of directors to oversee an organisation's operations and also ensure the safeguarding of information for its integrity for both internal and external

stakeholders (Protiviti, 2013). The following section provides a brief summary of each line of defence (Protiviti, 2013):

1. Line 1 - management sets the tone of the organisation: senior management should ensure everyone within the organisation is responsible so that each of the lines of defence function effectively
2. Line 2 - process owners and managers of business units must accept the responsibility to own and manage the opportunities that can be maximised within their units
3. Line 3 - compliance and risk management functions (Independent of operations): there must be an independent framework defined by the organisation to managing risks and opportunities.
4. Line 4 - the internal audit should deliver independent and objective assurance activities in line with organisational risks.
5. Line 5 - the Audit and Risk Committee (ARC) and the Board of Directors, being the Board Risk oversight and Executive management, respectively: they must ensure that there is alignment among the governance processes, risk management and internal controls.

Principle 15 of the King IV Report further stipulates the role of the IAF in enhancing the combined assurance model (IoDSA, 2016). The IAF is expected to provide assurance services on the organisation's IT control environment. As such, King IV's principle 12 provides that the governing body should remain accountable for governance of enterprise IT and ensure strategic alignment between IT and the organisation. According to Briseboise, Boyd and Shadid (2008), IT Governance involves the structures in place for IT supervision, monitoring, control and congruence to organisational goals. Having a significant impact on the attainment of the entity's vision, mission and goals, IT governance provides assurance to internal and external stakeholders on the value of IT investments and IT related challenges/risks (Briseboise *et al.*, 2008). The organisation has to implement a well-defined governance structure comprising well-articulated roles and responsibility for information integrity, infrastructure, applications and business processes (IoDSA, 2016). As one of the lines of defence in the combined assurance model,

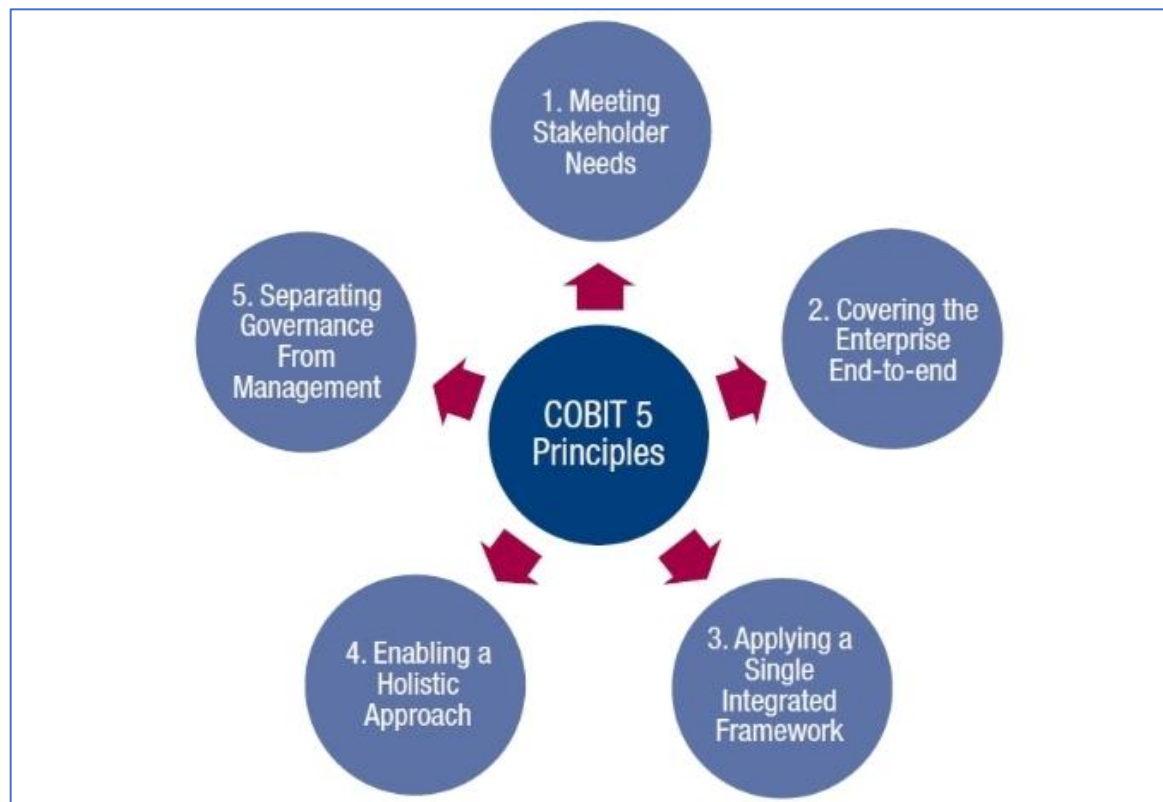
it is understandable that the users of the services provided by the IAF have certain desires or expectations in respect of assurance provided (Protiviti, 2013). In light of numerous new and continuous developments in the IT milieu of SARS, the IAF and the users of their services could have differing views on what the role of the IAF is and should be.

The typical role of the IAF, as a component of the combined assurance model of SARS, with regard to IT governance (and with specific reference to the audit engagements on new projects project audit engagements), is outlined in the next sections. First, IT Governance is contextualised and defined; second, the chapter provides a discussion of the stakeholders of the IAF and their typical role expectations, third, the research problem and associated research objectives are formulated and listed, and lastly the chapter provides justification of the research methodology adopted to address the research problem with a structure of the research concluding the chapter.

1.3 INFORMATION TECHNOLOGY GOVERNANCE

IT governance is defined as the responsibility of the board of directors and senior executive management of an organisation, it is a crucial part of corporate governance which ensures that IT supports the organisation reach its business objectives (ITGI, 2013). IT governance ensures that the results a software development projects meet and support the strategic requirements of the organization” (Chulani, Williams & Yaeli, 2008:3). COBIT 5 is a framework that recommends in a logical way a set of controls critical for IT processes as enablers for business functions (Haes & Grembergen, 2015). Figure 1.2 below depicts this framework in more detail.

Figure 1.2: COBIT 5 PRINCIPLES



(Source adapted from: ISACA,2012)

The COBIT 5 principles depicted above place stakeholders' needs as the first principle. Here the important stakeholders are identified, as well as their needs and how organisations can create value by addressing the needs of the stakeholders. The second principle entails the covering of all the processes and functions where there is processing of information in an enterprise. The third principle entails having a single integrated framework comprising various established standards and frameworks that are needed for governing and managing an enterprise's IT system. The fourth principle, enabling a holistic approach entails the use of a set of enablers that backs the IT governance. The fifth principle, separating governance from management, recommends that the management activities should be clear and well separated from governance activities (ISACA, 2012). After having explored the COBIT 5 principles, it is worth noting they seek to ensure that organisational needs can be supported through use of IT, within which IT projects support this analogy. This relates well with the main objective of this research, which is to explore

in detail the expectations of SARS stakeholders when it comes to IT project auditing. The following subsection outlines IT governance as it relates to SARS.

1.3.1 Contextualisation of SARS IT Governance

With a mandate to ensure effective and efficient revenue collection through tax, import and export control, SARS was established as an organ of state (SARS, 2018). IT governance is strategically important to SARS in that its business processes are technology driven. In pursuance of the SARS mandate and in line with the the South African government stipulation of an IAF department in all its public entities (subsequently the PFMA guides the institutionalisation of these Internal Audit departments (Act No. 1 of 1999)). SARS, as one of the public entities has established an IAF that provides independent and objective assurance on the effectiveness and adequacy of SARS'S governance, risk management and control processes (SARS, 2018). The IAF comprises different stakeholders as outlined in the next subsection.

1.4 THE ROLE OF AND EXPECTATIONS FROM SARS'S INFORMATION TECHNOLOGY AUDIT DIVISION STAKEHOLDERS

Internal audit stakeholders are identified based on their views on internal audit value add (Nalewaik & Mills, 2014), their own motivations of achievement, and their standards of risks across an organisation (Nalewaik, 2010). Essentially, it means the internal audit team should understand their target stakeholders and engage them accordingly. Luther (2019) classifies IA stakeholders as primary, secondary and tertiary. Primary stakeholders are involved directly in the business and operations activities of a company. Secondary stakeholders are those with influence towards success of an audit outcome. Tertiary stakeholders' interest stems from activities within an organisation which could cause loss of business benefits. The audit committee and senior managers form part of the main stakeholders of the IAF, therefore; achieving their expectations improve a business's view of the IAF in an organisation (D'Onza & Sarens, 2018). It is therefore imperative that the

traditional practices of IT governance be reviewed to retain the confidence of the stakeholder to ensure effective IT governance (Joshi, Bollen & Hassink, 2013).

1.4.1 South African Revenue Service's mandate to stakeholders

SARS stakeholder engagement is meant to extract any chances for linkages alliance with the external stakeholders to establish a better partnership between SARS and industry bearing the following in consideration: safeguarding South Africa's economy, fiscus and people, ensuring the efficient and effective regulation of Customs and Excise processes and improving South Africa's reputation as a reliable and trustworthy trade partner by promoting trade facilitation and traders' compliance with Customs and Excise legislation. Stakeholder engagement represents the collective interest of SARS stakeholders in interaction with organs of state and public entities. SARS performs this task by informing members of trade trends, requirements or developments that impact on business, giving advice on issues to enhance trade facilitation and compliance; as well as reviewing challenges experienced in SARS or by industry in order to suggest strategic business directions and best practice.

1.4.2 South African Revenue Services internal audit stakeholders

To accomplish their strategic objectives, it is crucial for SARS to attend to the desires of its stakeholders, some of which are key stakeholders. Some of the key stakeholders of SARS IAF, include the Enterprise Project Management Office (EPMO), Audit and Risk Committee (ARC), project sponsors, project owners, and the Auditor General of Southern Africa (AGSA). These stakeholders' expectations of the IAF are explored in this study as they play a key role in IT projects audit engagements.

The EPMO is an office that delivers the IT projects on behalf of SARS and requires internal audit independent assistance in the oversight of project risks. The project sponsors and owners are responsible for funding the project. They require internal audit services to provide them with an independent assurance that the project activities are carried out well. The ARC is the sub-committee of the board and is responsible for providing oversight on the internal audit and risk functions of SARS. Lastly, the AGSA provides the external

audit services for SARS and are more concerned with the financial statements and well-being of the internal control environment, they need to work together with the internal audit team in order to ensure that the projects are delivered successfully and within budget.

IT governance ensures alignment between business strategies and IT strategies in order to drive value delivery by IT to business (Lindros, 2017). According to Zupan(2018), some of the strategic roles the internal Audit team (IA) should be pursuing include assessments of key stakeholder expectations, identification of gaps, and implementation of a comprehensive strategy for improvement.

The subsection below reviews literature relating to the views of different stakeholder expectations of the IAF.

1.4.3 Views of different internal audit stakeholders

Limited literature was available on the role of internal auditing on IT project assurance, with the only exceptions being studies by Mkoba and Marnewick (2016) and Maher and Akers (2003). According to Mkoba and Marnewick (2016:2) "...the common understanding of IT project auditing is a systematic process of continuously examining the management of a project, collecting and evaluating evidence to measure project results against a project work plan, and determining whether the project management complies with best practice and standards to ensure IT project success...".

Maher and Akers (2003) reviewed the aspects of the role of internal auditing in IT project reviews. The study was performed in 2003, where the literature revealed different viewpoints regarding whether internal auditors should act as consultants during an IT system development review. The problem was on the impairment of internal auditor's independence if the consulting approach was chosen. Maher and Akers (2003) then conducted a survey of Chief Audit Executives (CAE) to determine their views on the role of internal auditing in IT projects, as well as the actual involvement of the IAF during IT projects. The findings revealed that the CAEs preferred that the internal auditors should act as consultants, and that the CAEs are less concerned about independence as their views were to rather provide value adding services to their organisations. The study also

suggested that internal auditors played a lesser role in the different phases of the System Development Life Cycle (SDLC) of these IT projects.

The research on the role of internal auditing on IT projects revealed that CAEs believe that internal auditors should be involved throughout the system development as consultants (Maher & Akers, 2003). The results of the study show that the chief audit executives do not see independence as a critical factor for IT projects audits (Maher & Akers, 2003). Such findings are in line with the IIA's standards regarding consulting services. However, they are not in line with the IIA's standards of the internal auditors being independent (Maher & Akers, 2003). Some of the internal audit consulting activities may include IT programme reviews, implementation of IT solutions, programme governance, risk management or internal controls (Soh & Martinov-Bennie, 2015).

After having explored the role of and expectations from SARS' by the South African nation, the corporate and IT governance requirements in South Africa, requirements for the IAF and its related stakeholders as well as literature relating to expectations of stakeholders on IT projects audit engagements, the research problem is now explored in the section that follow.

1.5 RESEARCH PROBLEM

The preceding sections briefly outlined the typical role of an internal audit in respect of IT projects auditing engagements. The literature substantiates that there could be an expectation gap between internal audit and its stakeholders when IT projects are being audited.

Therefore, the problem statement of this study is:

An internal audit expectation gap in respect of SARS' project audit engagements exists between what internal audit stakeholders expect compared with what the IAF actually provides.

The next section outlines the objectives of the research that needs to be achieved to address the research problem.

1.6 RESEARCH OBJECTIVES

To address the research problem of the study (see Section 1.5), the primary and secondary objectives of the study need to be addressed.

1.6.1 The primary research objective is to determine whether an internal audit expectation gap exists in respect of SARS project audits exists.

1.6.2 Secondary research objectives

To give effect to the primary research objective of the study, the following secondary research objectives are formulated:

- To define and explain the role of IAF stakeholders in IT projects audit engagements (refer to Chapter 2);
- To define and explain IT project audit engagements in the context of the research problem and associated research objectives (refer to Chapter 3);
- To collect, analyse and interpret data to conclude on the question whether an expectation gap (refer to research problem in Section 1.5) exists; and
- To conclude and recommend solutions in respect of the findings of the study (refer to Chapter 5).

To address the research problem and associated research objectives of the study, the research methodology used is explain and justified next.

1.7 RESEARCH METHODOLOGY

Research can be defined as “an activity that involves finding out, in a more or less systematic way, things you did not know” (Walliman & Walliman, 2011:7). A research methodology refers to a logical framework within which the research is carried out (Brown, 2006) and, as such, outlines the research methods, designs and approaches in detail, and defines those used in the study, as well as their advantages and disadvantages (Gumedze & Jackson, 2011). The two types of research methodologies commonly used by research students are qualitative research methodology and quantitative research methodology.

1.7.1 Adopted research methodology for this study

A qualitative research methodology was followed in this research. Qualitative research is concerned with textual, imagery, video, and participant observations in collecting rich insights into the research phenomenon (Bryman, 2012). Qualitative research is therefore a scientific method of observation to gather non-numerical data. It gives attention to definitions, concept definitions, characteristics, metaphors, symbols, and description of things and not their counts or measures (Zachariadis, Scott and Barret, 2010). This differentiates it from a quantitative research strategy that is largely focused on numerical quantifications of data (Mkansi & Acheampong, 2014). The drawback of a quantitative research methodology is in its inability to measure perceptions as they are difficult to quantify (Babbie, 2012). For instance, in determining and explaining the stakeholders’ expectations of the internal audit role, their perceptions will need to be established.

As in the context of this study, human behaviour towards the objectives and purpose of an IT projects’ audit of SARS information system requires an in-depth understanding of reasons that govern stakeholder perspectives towards its implementation. This includes the framework as terms of reference for organisational improvements to its core mandate using an effectual information system in the organisation. Perceptions are typically associated with the “how” and “why” and qualitative research is especially capacitated to

answer such enquiries of human experience towards a phenomenon that is studied in a research setting (Creswell, 2013).

1.7.2 Data collection method

A research instrument (interview guide) was developed to gather primary data from senior EPMO executives, project owners and sponsors, CAE, senior internal audit management, specialist internal auditors, and representative from the AGSA. The data was collected by means of interviews that were conducted at the SARS head office. This was done to obtain an understanding of the stakeholder's expectations of an IT project audit. The data collected was analysed and interpreted in order to suggest recommendations to enhance the stakeholders' perceptions of the IT Audit function within SARS.

1.8 DELINEATION

This research was conducted at SARS and data were gathered only from SARS employees and stakeholders involved in delivery of IT projects and IT projects auditing. Other SARS stakeholders who are not involved with IT projects and IT projects auditing were not included.

1.9 ETHICAL CONSIDERATIONS

No data was gathered from vulnerable groups. Ethical clearance was thus not required. However; the sensitivity around tax payer information was considered and no such information was reviewed/collected.

1.10 SUMMARY OF THIS CHAPTER

This chapter outlined what constitutes SARS and what role SARS plays in South Africa. It further notes the importance of corporate and IT governance in SARS, the relationship

between internal auditing and corporate governance and what role internal audit plays in SARS strategic delivery as well as some literature around the views of different stakeholders on IT project auditing, which examined whether or not there could be gaps in stakeholder understanding. A problem statement was then formulated, research objectives defined and methodologies mapped to support the collection of data to answer the research question.

1.11 STRUCTURE OF THE STUDY

This research study is structured in the following way:

- Chapter 2 defines and explains the role of internal audit function (IAF) stakeholders in respect of IT projects audit engagements;
- Chapter 3 discusses enhancing the role of internal auditing in information technology projects auditing;
- Chapter 4 analyses data and research findings; and
- Chapter 5 concludes the study.

CHAPTER 2: INFORMATION TECHNOLOGY PROJECT AUDIT ENGAGEMENT STAKEHOLDERS

2.1 INTRODUCTION

Chapter 1 introduced this study by outlining the importance of SARS in the general functioning of the South African economy, and more specifically how IAF requirements and IT governance in corporate and public sectors contribute. This study further scrutinises the IAF, SARS internal audit stakeholders in context of IT projects engagements.

The objective of this chapter is to explore literature around the roles that different stakeholders play in IT projects auditing. It begins by defining internal auditing, and continues to analyse internal auditing in South Africa. The chapter then evaluates the internal audit value add, compares public and private sector internal auditing, as well as providing a brief overview of information systems auditing; and lastly, maps out IT project auditing as a component of information systems auditing.

2.2 INTERNAL AUDITING DEFINED

The Institute of Internal Auditors (IIA) define internal auditing as "... 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" (IIA, 2003: 2). In short, an internal audit can be defined as an activity that provides independent and objective assurance and whose purpose is to provide value and improve the operations of an organisation (Ege, 2015). Internal auditing is not limited to consulting services, but also provides assurance services and should form an integral part of organisational governing structures in both public and private sectors (Van Rensburg & Coetzee, 2016). Independence by the IAF to management may not be an easily attainable goal as the internal auditors are employed by the organisations and are subordinate to top management, the same they provide

services to. However, without independence the IAF becomes part of the management team, defeating the purpose of the IAF (Yee, Sujan, James, & Leung, 2008). According to Yee et al. (2008), objectivity should be maintained by ensuring that the IAF is not involved in drafting processes or procedures or doing the actual business-related work on behalf of the business, because lack of objectivity compromises independence.

The IAF should report to the audit committee, which prefers assurance services, as too much consulting work may compromise independence and objectivity, leading to the IAF having to justify such activities (Everett & Tremblay, 2014). The study performed by Lenz and Hahn (2015) suggests that the IAF independence can be dependent on the IAF relationship with the audit committee. Previous research suggests that a lack of independence is a contributing factor to ineffective internal auditing. In countries such as Sudan, the lack of independence can be seen through the IAF reporting lines, while in countries like South Africa, the lack of independence was perceived to be caused by lines of communication and levels of reporting (Alzebana & Gwilliam, 2014).

Organisations can achieve their business objectives by placing reliance on the work performed by the internal auditors (IIA, 2015). The IAF can help improve processes like risk management, control, as well as governance as it provides useful information to the audit committee, external auditors, management and the board (Ege, 2015). The IAF also focusses on high risk areas within organisations and is responsible for testing controls and monitoring if organisations comply with the laws and regulations in the countries they operate in (Ege, 2015). The IIA issued the International Professional Practices Framework (IPPF) including standards to which all auditors must adhere (IIA, 2018). In respect of IT audit engagements, IAFs are guided by good practice frameworks such as COBIT, which the governing body of an organisation, IT management and internal auditors use to improve IT governance (Haes, Grembergen & Debreceny, 2013).

The internal audit discipline is multifaceted and spans all sectors of an organisation. The internal auditors are there to ensure the organisation achieves its strategic business objectives by challenging the current way of business and championing best business practices, among others. Internal auditors report to the audit committee and provide the board with assurance that the organisation will attain its business objectives through

reasonable governance, risks and controls (IIA, 2016; IoDSA, 2016). Internal auditors provide opinions into strategy, risk, compliance, the general control environment of the organisation and the use of information technology (IIA, 2016). Internal audit, unlike external audit, is not mainly a financial discipline, but is multifaceted and seeks to understand the organisation's strategy and operations and provide guidance (IIA, 2016). This section has provided an understanding of what an IAF is and what aspects encompass it. The next section explores internal auditing practices within South Africa.

2.3 ANALYSIS OF THE INTERNAL AUDIT FUNCTION IN SOUTH AFRICA

2.3.1 Role of the Internal Audit Function to its stakeholders

Organisations need regulations and there is a requirement to produce structures in order to ensure these regulations are complied with. Failing to comply with regulations may lead to financial penalties, possible incarceration of senior management, and damage to companies' reputations (Seago, 2016). Internal auditors bear a pivotal role in organisational compliance to the rules and regulatory codes of practice that apply throughout the organisation (IIA, 2016). Understanding the business objectives, and how the compliance department plans to assist the business in achieving them, helps internal auditors determine where, how, and how often to provide support (IIA, 2016). The IAF is a structure that helps provide added value to organisations through corporate governance of enterprise IT (Endaya & Hanefah, 2016). Internal auditors still maintain their traditional role but have expanded this role into other emerging areas such as IT. The traditional IAF is not sufficiently equipped to review the system implementations (Elbardan, Ali, & Ghoneim, 2015). Due to the real-time nature of IT systems, internal auditors may not easily adapt to technology requirements in order to meet the IAF objectives of assisting business objectives if they still focus on traditional internal auditing techniques (Endaya & Hanefah, 2016).

Senior management and audit committee in the IAF's are the primary stakeholders and meeting their expectations improves the business view of the IAF in organisations (D'Onza

& Sarens, 2018). To retain the confidence of stakeholders and to gain a good reputation with the public, there is need for transparency and accountability in IT governance within organisations. It is imperative that the traditional models of IT governance be reviewed to retain the confidence of the stakeholder to ensure effective IT governance (Joshi, Bollen & Hassink, 2013).

2.3.2 Organisational factors to internal audit practices

There is limited research on the impact that organisational factors have on IAF practices. Such factors include, among others: organisational politics, culture, environmental, as well as aspects of IAF independence (Lenz & Hahn, 2015). Mihret, James, and Mula (2010), as well as Everett and Tremblay's (2014) studies show that there is a dearth of research regarding IAF and emphasise the need for more research. Some of the recommendations made for future research is the examination of the differences between IAF practices in government and private sectors, the role of IAF in different countries and also a study to identify attributes that may help IAF to add value. The notion of IAF on organisational performance have been affirmed by studies performed on computer auditing without focus on how information systems auditing affect organisational performance and IAF performance (Wu, Huang, Huang & Yen, 2017).

2.3.3 Internal auditing in the South African public sector

In the South African public sector, internal auditing plays a critical role in organisational governance and is a critical resource to public sector institutions (Van Rensburg & Coetzee, 2016). It aids organisations in improving the effectiveness of risk management, control and governance processes. According to National Treasury online (2014), internal auditors may be failing to meet their stakeholders' expectations fully in the South African public sector. A study by Coetzee, Fourie and Burnaby (2015) suggests that the IAFs were seen to be effective in South Africa in that they consider risk management and engage more with management during annual planning processes. A study conducted in 2014 by Barac and Van Standen (2014) reported that the public sector IAF is perceived by

management as the most important management tool which could be used to improve service delivery in the public sector.

This section has explored IAF in South Africa by assessing the internal audit role to its stakeholders and organisational factors affecting internal audit practices, as well as the internal auditing activities within the South African public sector. The next section outlines the IAF value add.

2.4 THE VALUE ADDING ROLE OF THE INTERNAL AUDIT FUNCTION

2.4.1 Services offered by the Internal Audit Function

Internal auditing has evolved to become a value adding service to organisations (Akraa, Qadera & Billahb, 2016). The IIA's definition of internal auditing includes the value-adding role of the IAF by including the consulting activities as part of services provided by IAF (Akraa, Qadera & Billahb, 2016). This elevates the role of the IAF to be more strategic (Akraa, Qadera & Billahb, 2016). According to Roussy (2015), internal auditors play many roles. For instance, an internal auditor is both independent, but yet could be providing consulting services to the same management they have to be independent from, being a helper and protector of the management team and the organisation and providing comfort to the audit committee members. Lenz and Hahn (2015) argue that the concept of assurance is used in practice without shared understanding by the people impacted by the use of IAF in organisations. (The internal auditor should be both a watchdog and a consultant. Their study was based on interviews of six IAFs in New Zealand. The study regarded successful internal auditors to be those who define their role by adapting and tailoring to the changing environment (Lenz & Hahn, 2015).

2.4.2 Effectiveness of the Internal Audit Function

The notion of internal audit value add is realised when the IAF is effective, however, the IAF may not always be effective (Mihret, James, & Mula, 2010). Lenz and Hahn, (2015) suggests that an effective IAF is one that identifies and reviews main risks and contributes

to the achievement of organisational goals. SARS is an organ of state and its IAF is expected to be effective in order to support the revenue collection function of the country. According to literature, the IAF's effectiveness in the South African government is being questioned due to the elevated levels of corruption, mismanagement and fraudulent activities in the country (Erasmus & Coetzee, 2018). The comprehensive study by Erasmus and Coetzee (2018) suggests that an effective IAF supports business success in South Africa. The IAF Effectiveness is influenced by its engagement auditees, but the relationship between the IAF and its clients has been under researched (D'Onza & Sarens, 2018). This literature further states only a limited number of studies have made reference to the relationship between IAF and the people being audited, furthermore; none of these studies provided empirical evidence of this relationship.

2.4.3 Management's perception of the value of the Internal Audit Function

Lenz and Hahn (2015) reviewed the internal audit customer demand side and what they perceive to be the value of the IAF. They found that internal auditing is a service provided to an organisation and it is crucial for a business to define the kind of IAF it requires. They suggest that the quality of internal audit services is dependent on satisfaction perceived by management (Lenz & Hahn, 2015). The IAF should know its stakeholders and plan and execute its engagements in such a way that its stakeholders' needs are met without compromising independence and professionalism (Erasmus & Coetzee, 2018).

According to Erasmus and Coetzee (2018), senior management expect the IAF to provide proactive advisory services, in other words 'consultants', while the ARC expects the IAF to provide assurance services in order to hold management accountable. Endaya and Hanefah (2016) concur with this notion and add that external auditors also have a preference in IAF providing assurance services to give information on controls. Several prior studies reported that the IAF lean more towards giving preference to management rather than the ARC in this regard. Whilst understanding the value of internal auditing between different stakeholders is vital, there may be substantial difference between public and private sectors, the differences are explored in the following section.

2.5 INTERNAL AUDIT FUNCTION IN THE PUBLIC VERSUS PRIVATE SECTORS

A study by Erasmus and Coetzee (2018) made a suggestion concerning the similarity of internal auditing practices in the public and private sectors, although minor differences exist. The study further reviewed whether the IAF effectiveness was influenced by the environment within which the IAF operates, namely public or private sectors, to which the hypothesis was rejected (Erasmus & Coetzee, 2018). Barac and Van Standen (2014), reported that the public sector IAF is perceived by management as the most important management tool which could be used to improve service delivery in the public sector. In South Africa, IAFs were seen to be effective in that they consider risk management and engage more with management during annual planning processes (Coetzee, Fourie & Burnaby, 2015). A study performed by Coetzee et al. (2015) citing the internal audit demand in the South African listed companies shows that management believe that the IAF adds value. However, management in the South African public sector, is not happy with the IAF's value add.

In other countries such as Saudi Arabia, a study assessed the role of IAF in the Saudi public sector and established that the IAF role did not go beyond assurance due to lack of skills to provide consulting services in the public sectors (Akraa, Qadera & Billahb, 2016). Endaya and Hanefah's (2016) similar study in the Malaysian public sector reviewed the importance of internal auditing. The study results noted challenges such as understaffing, staff being under skilled and the lack of a training programme, all of which impacted on the quality of the IAF in the public sector and potentially led to management dissatisfaction with the IAFs. An IAF can consist of different divisions, for example, in the case of SARS, the IAF is divided into tax, customs, head office assurance services, and information systems auditing. Due to the nature of this study the focus of the study was on the auditing of IT projects engagements, which forms part of information systems auditing. The next section outlines literature consulted in respect of information systems auditing.

2.6 INFORMATION SYSTEMS AUDITING AND SARS' INTERNAL AUDIT FUNCTION

The SARS IAF includes an information technology auditing division which provides assurance on the information technology environment of SARS. This division also supports other IAF activities that rely on the wellbeing of the IT environment. As such, literature in support of this activity has been consulted. The IAF performs reviews of the IT systems to confirm whether internal controls and information security are effective. They further review the accuracy of the data in information systems and verify alignment with business processes (Wu, Huang, Huang, & Yen, 2017). The literature by Wu et al. (2017) further states that information systems auditing exists to facilitate internal auditing.

IT change management and project delivery are some of the aspects internal auditors carry out when they review an information technology control environment. Changes to the IT systems or introduction of new IT systems require a controlled process to ensure that the live environment is always protected from operational inefficiencies and reputational damage to an organisation (Sheldon, 2019). During an IT auditing activity, internal auditors should effectively identify root causes of current and emerging risks, and report them with an understanding of who is responsible and accountable for managing the risk (Tarek, Mohamed, Hussain & Basuony, 2017). Nowadays the IAFs are expected to evolve and keep up with the rapid growing nature of organisations and disruptive activities of the industries in which they operate (Goosen & Van Dyk, 2017). This analogy also applies to projects auditing as internal auditors are expected to be available to provide proactive assurance during the project lifecycle. Traditionally, the IAFs provided assurance on historic nature of controls rather than proactively adding value to emerging environment (Goosen & Van Dyk, 2017). System development is a component of information systems auditing and relates to the auditing of IT project engagements, the next section reviews some studies on IT project auditing.

2.7 INFORMATION TECHNOLOGY PROJECT AUDITING

A project is successful if it has been delivered within the constraints of time, quality and cost. However, most information technology projects fail to meet one or more of these constraints (Owens, Merhout & Khazanchi, 2018). In order to manage this inherent risk of

project failure, a project assurance process should be embedded to mitigate the project lifecycle constraints (Owens et al., 2018). This assurance process should look into risk assessment at each stage of a project. According to Owens et al. (2018), project auditing exists to assure project success through risk reduction, internal control assessment, and quality improvement while ensuring that the project is delivered within the right cost, quality and timelines. IT projects auditing encompass assessment of the controls around the project throughout its lifecycle, which promotes chances of project success as risks are timeously identified and mitigated (Owens & Khazanchi, 2017).

According to Mkoba and Marnewick (2016), the common objectives of IT projects auditing to proactively review project risks and advising management on emerging risk during the project lifecycle as opposed to doing that at the end of the project. Some of the IT projects auditing aspects may include IT programme reviews, implementation of IT solutions, programme governance, risk management or internal controls (Soh & Martinov-Bennie, 2015). Maher and Akers (2003) reviewed the aspects on the role of internal auditing in IT project auditing. The study was performed in 2003, where the literature revealed that there are different viewpoints in the internal auditing literature regarding whether internal auditors should act as consultants during an IT system development review. The problem highlighted was regarding the impairment of internal auditor's independence if the consulting approach was chosen. The study surveyed CAEs to determine their views on the role of internal auditing in IT projects, as well as the actual involvement of the IAF during IT projects. The findings revealed that the CAEs preferred that the internal auditors to act as consultants, and that the CAEs are less concerned about independence. However, the study also suggested that internal auditors had lesser involvement in the different phases of the SDLC of these IT projects. (Maher & Akers, 2003).

The research carried out by Maher and Akers (2003) on the role of internal auditing on IT projects revealed that CAEs believe that internal auditors should be involved throughout the system development as consultants. The results of the study show that the chief audit executives do not see independence as a critical factor for IT projects audits (Maher & Akers, 2003). Such findings are in line with the IIA's standards regarding consulting

services. However, they are not in line with the IIA's standards of the internal auditors being independent. (Maher & Akers, 2003).

2.8 CONCLUSION

IT governance has become an important part of corporate governance, as IT affects every organ of the organisation's functions. Organisations widely use IT in their business, and the board, executives and senior management make use of frameworks and guidelines and so are fully responsible for their IT governance systems and structures. The main role of the IAF has been emphasised and it is that of assisting the board and senior management to achieve their business objectives by monitoring risks, identifying internal control system weaknesses and they do this by partnering with executive management and the audit committee. The global research highlighting this vital relationship between IAF and its stakeholders has been detailed. Prior research on internal audit, understanding the role of internal auditing, the effectiveness of internal auditing, viewpoints of management, objectivity and independence of internal audit, the difference between public and private sector internal auditing and the evolution of internal auditing were explored in detail. The perceived gap in available research on the actual value add of the IAF, especially in South Africa, was also detailed. Chapter 3 focuses on IT projects and programmes and what role internal auditing can play in order to help organisations in IT project success. Furthermore, frameworks which enhance the role of internal auditing in IT programme assurance are explored further in Chapter 3.

CHAPTER 3: ENHANCING THE ROLE OF INTERNAL AUDITING IN INFORMATION TECHNOLOGY PROJECTS AUDITING

3.1 INTRODUCTION

Chapter 2 delivered an analysis of the IAF in South Africa by outlining the IAF role to stakeholders, organisational factors to internal auditing and internal auditing in the South African public sector. The value of the IAF and its effectiveness, as well as the different ways of carrying out internal auditing in the public versus private sector in South Africa was reviewed. Finally, the chapter summarised the relevant available literature on IT auditing and IT projects auditing.

This chapter is aimed at analysing the literature related to what IT projects are and how internal auditing can assist towards the success of an IT project. The chapter starts by defining and explaining what IT projects are followed by what determines success of these IT projects, as well as how the IAF facilitates project success. Lastly the chapter reviews some empirical evidence related to effectiveness of internal auditing in order to determine the reliability of the IAF.

3.2 DEFINING AND EXPLAINING INFORMATION TECHNOLOGY PROJECTS

Information technology projects are one of the vehicles for driving organisational strategy. In this day and age, organisations such as SARS are striving to digitize all their business processes, and therefore require the delivery of individual IT projects to achieve this goal. In this section IT projects are defined and explained starting from the traditional viewpoint to defining internal control systems and their implementation.

Organisations make use of projects as strategic weapons to achieve a competitive advantage. Measuring project success following the concepts of time, quality and cost is therefore a good practice to strategy achievements (Shenhar, Dvir, Levy & Maltz, 2001). Therefore, literature has received good traction on aspects relating to project success

(Handfield, Primo & de Oliveira, 2015). The IAF within SARS is responsible for reviewing internal controls for delivering IT projects throughout the project lifecycle and measuring stakeholder engagement. Haron, Daing, Jeyaraman and Ong (2010) support this analogy by suggesting that internal controls may promote better financial management and reduce waste and corruption.

Project activities are key in changing organisations (Jansson & Ljung, 2013) making it vital for organisations to promote better stakeholder engagements and strategic alignment (Eskerod & Huemann, 2013), with the ultimate aim of project success and quests for sustainability (Jansson & Ljung, 2013). Warren, Reeve and Phillip (2005) define internal controls as measures in place to protect organisational assets from misuse and that the organisation operates within acceptable laws and regulations.

The next section analyses the determinants of project success. This is important for internal stakeholders in order to be able to harness resources that enable the successful implementation of projects.

3.3 DETERMINANTS OF PROJECT SUCCESS

In this section critical success factors of projects success are discussed according to the literature available, as well as the role of the IAF in corporate governance and the integrity of financial reporting systems in determining internal audit effectiveness.

Traditionally, project success is reached when the results of the project align with the intended project objectives and compliance to time and cost has been reached (Owens, Merhout & Khazanchi, 2018). However, measures of project success don't seem to be agreed upon based on various literature. Emuzei and Smallwood (2011) suggest that quality remains a complex constraint in the construction industry and therefore success should be measured on quality. Project success was deemed to be multi-dimensional encompassing many factors (Mir & Pinnington, 2014) and since projects differ from case to case, their measuring criteria and standards should differ (Müller & Turner, 2007). Davis (2014) suggests that the concept of project success depends on stakeholder engagements

and buy in. Shenhar, Dvir and Maltz (2001) concurs with this analogy by adding that stakeholders should be adequately engaged as that project success may mean different things to different stakeholders. The next section analyses some empirical evidence relating to effectiveness of internal auditing.

3.4 EMPIRICAL EVIDENCE ON EFFECTIVENESS OF INTERNAL AUDITING

Internal auditing effectiveness is crucial to the study as internal auditing is one of the key players towards project success in SARS. Thus, if the IAF is to support project delivery, it has to be effective to provide comfort to management and the ARC for whom assurance is provided. This section analyses literature on effectiveness of the IAF.

Selim, Wood and Allegrini (2009) conducted a comparative study of the factors affecting internal audit consulting activities carried out by a sample of IIA members in the United Kingdom (UK), Ireland and Italy. The results of the study showed a noteworthy growth in IAF consulting activities carried out in Italian companies; however, internal auditors experienced benefits and drawbacks in those countries.

Arena and Azzon (2009) surveyed 153 Italian companies. Their study revealed that, many factors can influence IA effectiveness, including culture and geographic locations of an organisation. Dellai and Omri (2016) investigated the factors influencing internal audit effectiveness in the Tunisian context through surveying 148 Tunisian organizations. Their study showed that most of the factors that affected the effectiveness of internal auditing are: independence and objectivity of the internal auditor, support from management and the misuse of the IAF. Amoush (2017) examined the effectiveness of the internal auditing procedures in the Jordanian commercial banks. In their research "Factors that contribute to the effectiveness of internal audit in the public sector", Baharud-din, Shokiyah and Ibrahim (2014) included 330 respondents from the internal audit departments of ministries. The authors confirmed that a positive correlation exists between auditor's competence and effectiveness of the IAF. The next section concludes on this chapter.

3.5 CONCLUSION

This chapter has analysed the literature aimed at defining and explaining IT, determinants of IT projects success and how the IAF assists towards project success. Last the chapter reviewed some empirical research on the effectiveness of internal auditing as an effective IAF can add significant value to an audit of IT projects. Literature on chapter 2 and 3 have provided adequate analysis of what an internal audit is, what are internal audit stakeholders, what is IT auditing and how it links to IT projects auditing. Finally, a definition of IT projects and its success factors was explored as well as empirical evidence on the effectiveness of internal auditing. Based on the methodology in section 1.8, the next chapter collects, analyses and interprets data in order to conclude on the question whether an expectation gap exists between an internal audit and its stakeholders within SARS as per research problem in Section 1.5.

CHAPTER 4: ANALYSIS AND PRESENTATION OF RESEARCH FINDINGS

4.1 INTRODUCTION

Section 1.7 of this study provided a brief outline of the methodology for data collection. This research question necessitated a qualitative research approach which utilized the data collection tool of interviews which were conducted with the senior EPMO executives, project owners and sponsors, CAE, senior internal audit management, specialist internal auditors, and representatives from AGSA. The interview questions (see appendix A of this paper) were designed based on two groups of participants, group 1 is the IAF of SARS, while group 2 are the EPMO, AGSA, project sponsors, and owners, as well as the ARC. Interview guidelines for both groups were developed in line with the research objectives. Based on the outcomes, emerging themes were arrived at and are analysed in this chapter. From the study, five emerging themes were identified as follows:

- Engagements with Enterprise Project Management Office (EPMO);
- The role of Internal Audit (IA) in IT project management;
- Skills set deficiencies;
- The quality of internal audit reports; and
- Areas for Improvement.

The next section discusses these themes, each theme is reported by statements of the emerging theme, followed by the summary comparisons for that theme and then the conclusions emanating from the comparisons of the findings.

4.2 EMERGING THEME 1: ENGAGEMENT WITH EPMO

From the findings in group 1 summary, it was suggested that there is a perceived value derived from internal audits of IT projects. The group confirmed that this has been facilitated by IA engagements and more could be done to improve it.

Group 2 on the other hand was more direct in stating that EPMO does not feel engaged enough in the IT projects review. This actually implies that while there are engagements, these are not sufficient and need to be intensified in order to derive more value from the IA projects review.

The literature also confirms the engagement theme. Consulting services, are defined as “...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...” (Akraa, Qadera, & Billahb, 2016:20).

4.2.1 Comparison of the findings

Group 1 - Question 6 - In your opinion, do the EPMO, project sponsors and owners, AGSA and ARC derive value from internal audit review of IT projects?

- They do derive value from internal auditing, changes to the project delivery processes have been initiated as a result of internal audit engagements.
- Yes, they do derive value due to proactive nature, marketing is still required and they expect more.

Group 2 - Question 1 - What role do you contribute towards the planning of an IT Audit function within SARS?

- The EPMO does not feel engaged enough during this process
- The project owners, sponsors and AGSA understand the role they should play and they are engaged

4.2.2 Summary

The emerging theme regarding the issue of EPMO engagement is that there is a need to intensify the IA engagements in view of the perception that EPMO does not feel engaged enough during the planning of IT Audit functions.

It was also concluded in group 1 summaries that EPMO derives value from IA hence engagement is key to improving the value of the IA projects.

4.3 EMERGING THEME 2: THE ROLE OF INTERNAL AUDITING IN INFORMATION TECHNOLOGY PROJECT MANAGEMENT

The role of IA in IT project management was identified to be a combination of advisory and assurance by group 1, while group 2 stated that the role of IA in IT projects is to observe the proceedings and provide guidance throughout the course of the project. Consequently, the role of IT projects auditing was concluded to be both advisory and assurance in order to ensure compliance with required project management controls. From the literature, it was confirmed that Internal Audit has evolved to become a value adding service to organisations (Akraa, Qadera, & Billahb, 2016). Furthermore, Ege (2015) adds that the internal audit is a consulting activity that is independent and the purpose of which is to provide value and improve the operations of an organisation.

Question 10 – In your opinion, should the IAF focus on consulting rather than assurance, or vice versa during review of IT projects?

- Play in both role as some processes require consulting while some require assurance
- A combination of both

Regarding how group 1 understood the assurance versus consulting in the context of auditing IT projects, the respondents in group 1 explained that assurance relates to something that already exists where internal audit can provide opinion on adequacy and effectiveness. Consulting refers to giving advice and providing timely assurance on an ongoing process. Internal auditing was said to play a part in both consulting and assurance. Group 1 went on to state that the IAF focuses on both roles of consulting and assurance. Group 2 mentioned that across the board, consulting is understood to provide advisory services while assurance is providing internal audits against compliance to policies, processes and procedures. Group 2 went on to state that apart from the AGSA, the project sponsors/owners and EPMO require consulting services rather than assurance service. The IoDSA (2016) recommends that the governing body ensures the effectiveness of the assurance services and functions so as to facilitate the shaping of an effective

control environment and the integrity of information for internal decision-making and of the organization's external reports.

It was concluded in group 1 summaries that the IAF focuses on both roles of consulting and assurance, while group 2 (excluding the AGSA) understood the IAF as targeting assurance. Both these roles enhance the organization's operations, help an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.

4.3.1 Comparison of the findings

Group 1 - Question 8 - What is your view of the role of internal audit in IT project governance structures, such as steering committees?

- The key role is advisory, and not as an observer

Group 2 - Question 5 – What is your view of the role of internal audit in IT project governance structures, such as steering committees?

- AGSA: Observe the proceedings and ensure compliance to terms of reference, where required provide guidance
- EPMO, project owners and sponsors – strong views that internal auditors should have a say, their voice can be heard more than others, therefore they need to be actively involved and engage better

4.3.2 Summary

The advisory role of IA in IT project management was highlighted here. Group 1 confirmed the role as advisory and not as an observer in the project governance committees. On the other hand, group 2 stated that they provide guidance and are observers who ensure that there is compliance to the terms of reference and where required they provided guidance. Therefore, the common element between the two groups is the confirmation that IA play an advisory role and need to be actively involved and engaged better. This also resonates

with the comparison made in emerging theme 1 which upheld the importance of engagements with EPMO as crucial to the success of IT projects.

4.4 EMERGING THEME 3: SKILLS DEFICIENCIES

From the findings, it was also revealed that rather than lack of resources and expertise, skills set deficiencies were highlighted as the major setback in achieving IA goals. Group 1 participants went further to state the need for capacitating staff with research skills so that they may understand the agile nature of projects. Group 2 likewise confirmed that there was a need for minor improvements in skills sets, expertise and capacity. From the literature, it was confirmed that there is need for specialised skills and internal auditors who are highly competent. Moreover, in other countries such as Saudi Arabia, a study by found that the role of the IAF did not go beyond assurance and this was due to lack of skills to provide consulting services in the public sectors (Akraa, Qadera & Billahb, 2016).

4.4.1 Comparison of the findings

Group 1 - Question 14 - Please elaborate on any deficiency (if existing) of the skills set, resources and expertise of the IAF in the delivery of IT projects auditing?

- There are no deficiencies in resources, expertise and skills. But what should be improved is research capacity. Agile nature of projects need to be learned

Group 2 - Question 8 - How satisfied are you with the skill set, expertise, capacity and capabilities of the internal audit function in carrying out audits of IT projects?

- All participants in this group seem satisfied with minor improvement points

4.4.2 Summary

From the summaries it is evident that there are no apparent deficiencies in skillsets, resources and expertise in delivery of IT projects audits. However, the emerging theme

has been on the need for research capacity and to improve knowledge of the agile nature of the projects.

4.5 EMERGING THEME 4: THE QUALITY OF INTERNAL AUDIT REPORTS

The findings also revealed that there are deficiencies in the quality of IA reports and both groups 1 and 2 concurred. Group 2 identified that ARC expects the projects to be delivered within the right time, at the right cost and must be of the expected quality standards. According to Group 2 the quality standards are not being met due to the need to carry more value and focus not only on administrative nature of the project, but also technical aspects. From the literature, it was confirmed that quality in a product or service is not what the supplier puts in, it is what the customer gets out and is willing to pay for (Lenz & Hahn, 2015). Furthermore, project success can be attributed to be consistent with the delivery of an end-product at the right time, costed properly and with emphasis on quality (Patrick, 2004).

4.5.1 Comparison of the findings

Group 2 - Question 10 - Can you elaborate on your opinions regarding the quality of internal audit reports on IT projects in terms of impact?

The EPMO is not satisfied due to continual changes in the report, and that the findings are being reported at too low-level detail. They believe the findings can be escalated to carry more value and focus should not be on administrative aspects of the project only. Other parties were satisfied.

Group 1 - Question 4 - What is your view regarding the expectations of the ARC from an audit of IT projects? Does the internal audit function meet these expectations?

- No direct interaction with them. However, based on the internal feedback, they expect to be told whether the projects are within milestones, budget and quality.

- They expect IA to provide assurance that projects are delivered within the right time, cost and quality.

4.5.2 Summary

From the findings, it was concluded that group 2 perceives that the EPMO is not satisfied with the quality of the reports as they view them to be too low level in detail. This is consistent with the finding that the ARC expects the IAF to produce timely reports that are precise and conclude on whether the project is on time, cost and quality. Hence the importance of quality has been pronounced such that it is another important theme that emanated from the findings in both groups.

4.6 EMERGING THEME 5: AREAS OF IMPROVEMENT

The major area for improvement that was commonly identified by the two groups was engagement. There is need for engagement of IA with all relevant stakeholders such as EPMO, ARC and project sponsors and owners. This was particularly emphasised by group 2 which stated that in order to improve the quality of IA reporting, more should be done to improve the project auditing engagement model with special emphasis on reporting for emerging risks. This was also confirmed in literature by Mkoba and Marnewick (2016:2) who contend that the common understanding of IT project auditing is a “systematic process of continuously examining the management of a project, collecting and evaluating evidence to measure project results against a project work plan and determining whether the project management complies with best practice and standards to ensure IT project success.”

4.6.1 Comparison of the findings

Group 2 - Question 11 – Do you think the current way of auditing projects is satisfactory?

- All parties agree that improvements are required

Question 12 – What would you improve regarding the way in which IT projects are being audited?

- Parties believe that internal auditors should improve their project auditing engagement model, so that they can be equipped to report on emerging risks.

Group 1 Question 15 – In your opinion, how adequate are internal audit guiding methods (such as methodologies, best practice, standards, frameworks, etc.) in carrying out a review of IT projects?

- Not adequate. Room for improvement with the internal methodology
- No proper methodologies internally, everyone uses professional judgement. No adequate methods from ISACA and IIA.

4.6.2 Summary

The two groups were in agreement that there was need for improvements. The specific areas for improvement however, were mentioned in group 1 which related to the need for improvements in internal methodologies. There are no adequate methods from ISACA and IIA hence the need for improvements in this area. Furthermore, there was a need to improve their project auditing engagement model so that emerging risks can be detected and acted upon timeously.

4.7 CONCLUSION

Therefore, the overall issue concluded from both groups highlighted the need for more intense engagements between IA and EPMO, project owners and sponsors, as well as the need to capacitate IA staff with skills that can identify emerging risks and improve their reporting skills through more engagement with relevant stakeholders. These major themes conclude that an expectation gap does exist within SARS in the way IT projects auditing is carried out. The next chapter provides a research summary, limitations and contributions of the study.

CHAPTER 5: CONCLUSION

5.1 INTRODUCTION

The previous chapter presented the findings from the study which were conducted through interviews. This chapter presents the summary conclusions of the study and examines the research summary, discussion and critical reflection, research contribution, research limitations, recommendations, recommendations for further research, and epilogue.

5.2 RESEARCH SUMMARY

This study was aimed at identifying the internal audit expectation gap related to SARS IT projects audit engagements. The internal audit function within SARS provides independent and objective assurance on the effectiveness and adequacy of SARS' governance risk management and control processes (SARS, 2018). This study was aimed at evaluating the perspectives of stakeholders for SARS with regards to information technology project auditing. The research objectives were:

- To define and explain the role of Stakeholders in IT projects auditing;
- To define and explain IT projects in the context of the research problem and associated objectives;
- To collect, analyse and interpret data in order to conclude on best practices around the role in which internal auditors can play in IT programme assurance; and
- To make recommendations on how to bring about transformation of unclear stakeholders' expectations.

In pursuant of these objectives, the following research questions were investigated:

- What are the roles of stakeholders in IT projects auditing?

- What are IT projects in the context of the research problem and associated objectives?
- What are the stakeholders' expectations of the internal audit role?
- What measures can be taken to enhance stakeholders' expectations regarding information technology project auditing? and
- What recommendations can be made on how to bring about transformation of unclear stakeholders' perceptions to positive?

The research adopted a qualitative research where interviews were conducted with the CAE, senior internal audit management and specialists, senior EPMO representatives, project owners and sponsors and AGSA in order to elicit the perspectives of the stakeholder's expectations of an IT project audit. The data was collected, analysed and interpreted and recommendations drawn on how to enhance the stakeholders' perceptions of the IT Audit function within SARS.

The research design provided for a research process that illuminated the eventual framework for the study to ensure that there is transformation of negative perceptions to positive ones pertaining to SARS' IT project auditing for improved IT functions and governance in advancing the goals and strategy of the SARS organisation. The study adopted cognitive interviews that targeted IT projects experts and audit specialists within the organisation, which was ideal in testing both specific elements of the IT projects audit functions, such as titles, data displays, and stakeholders' perceptions of the purpose of the overall audit process and whether they actually understood the information or requirements correctly. The concept was applied to the general problem of internal audit expectation gap that can be generally applied to public institutions focussing on the role in which internal auditors can play in IT programme assurance and enhancing stakeholders' expectations regarding information technology project auditing. This enabled the researcher to evaluate measures that can be taken to enhance stakeholders' expectations regarding information technology project auditing within SARS.

Furthermore, the concept contributed to the body of knowledge in literature about what is known on the roles of stakeholders in IT projects auditing, the role which internal auditors can play in IT programme assurance, and how to bring about transformation of

unclear stakeholders' perceptions from negative to being positive. This was achieved through implementing the knowledge of design-oriented IS research, constituted by the scientific literature and produced to a large extent by the experiences and knowledge accumulated in IT knowledge involving stakeholders at SARS.

The next section discusses and reflects on critical outcomes of the study.

5.3 DISCUSSIONS AND CRITICAL REFLECTIONS

This section discusses critical reflections as per themes noted based on the data emerging from the interviews.

5.3.1 Summary of the findings

Group 1 - Question 6 - In your opinion, do the EPMO, project sponsors and owners, Auditor General of Southern Africa (AGSA) and Audit and Risk Committee (ARC) derive value from internal audit review of the IT projects?

Findings: The emerging theme regarding the issue of EPMO engagement is that there is a need to intensify the IA engagements in view of the perception that EPMO does not feel engaged enough during the planning of IT Audit functions.

It was also concluded in group 1 summaries that EPMO derives value from IA hence engagement is key to improving the value of the IA projects.

Group 2 - Question 1: What role do you contribute towards the planning of an IT Audit function within SARS?

Findings: The role of IA in IT project management was identified to be both advisory and assurance. Furthermore, consulting was concluded to imply giving advice and providing timely assurance. The critical role of the internal audit in both consulting and assurance was confirmed.

Conclusion: It was concluded in group 1 summaries that the IAF focuses on both roles of consulting and assurance, while group 2 excluding the AGSA consider the internal audit main focus as assurance. Both these roles improve the operations in the organisation, help an organization achieve its objectives through its systematic, objective and disciplined approach to the evaluation and improvement of risk management, control and governance processes.

Comparison of the findings:

Therefore, the common element between the two groups is the confirmation that IA play an advisory role and need to be actively involved and engaged better. This also resonates with the comparison made in emerging theme 1 which upheld the importance of engagements with EPMO as crucial to the success of IT projects.

Emerging theme 3: Skills set deficiencies

Findings: From the findings, skills set deficiencies were highlighted as the major setback in achieving IA goals. Group 1 participants further stated the need for capacitating staff with research skills so that they may understand the agile nature of projects. Group two likewise confirmed that there was need for improvements in skills sets, expertise and capacity.

Comparison of the findings:

Group 1 - Question 14 - Please elaborate on any deficiency (if existing) of the skills set, resources and expertise of the internal audit function in delivery of IT projects auditing?

Findings: All groups were satisfied that minor improvements were required in terms of skills required to capacitate staff with understanding the agile nature of projects.

Conclusion: The emerging theme was on the need for research capacity and to improve knowledge of the agile nature of the projects.

Emerging theme 4: The quality of internal audit reports

The findings revealed that there are deficiencies in the quality of IA reports according to both groups 1 and 2.

Comparison of the findings:

Group 2 - Question 10 - Can you elaborate on your opinions regarding the quality of internal audit reports on IT projects in terms of impact?

The EPMO was not satisfied with the quality of internal audit reports due to continual changes in the report, and that the findings are being reported at too low-level detail.

Other parties were generally satisfied with the quality of IA reports.

Group 1 - Question 4 - What is your view regarding the expectations of the ARC from an audit of IT projects? Does the internal audit function meet these expectations?

Group 1 - Question 4 - What is your view regarding the expectations of the ARC from an audit of IT projects? Does the internal audit function meet these expectations?

On comparison, the findings revealed that the respondents expected IA to provide assurance that projects are delivered within the right time, cost and quality.

Conclusion 4: From the findings it was concluded that group 2 perceives that the EPMO is not satisfied with the quality of the reports as they view them to be too low level in detail. This is consistent with the finding that the ARC expects the auditing of IT projects to be within the right time, cost and quality (Group 1).

Emerging Theme 5: Areas for Improvement

The major area for improvement that was commonly identified by the two groups was engagement as respondents expressed the need for engagement of IA with all relevant stakeholders such as EPMO, ARC, and project sponsors and owners.

Comparison of the findings: Group 2 - Question 11 – Do you think the current way of auditing projects is satisfactory?

All parties agree that improvements are required. It was revealed that there was room for improvement with the internal methodology as everyone uses professional judgement which can be subjective in the absence of adequate methods from ISACA and IIA.

Overall conclusion

Therefore, the overall issue concluded from both groups highlighted the need for more intense engagements between IA and EPMO, project owners and sponsors, as well as the need to capacitate IA staff with skills that can identify emerging risks and improve their reporting skills through more engagement with relevant stakeholders.

5.3.2 Critical reflections

Rupsys and Staciokas (2005), while highlighting the constant changes in the definition of internal audit over the years, highlights that presently the function not only looks at the traditional internal control effectiveness and compliance, fraud investigations or assistance to external auditors, but also organizational risks identification, consultancy services for senior management on risk management, process improvement or global operations. Members of the organisation therefore have to have the same understanding of the IAF and responsibilities in order to be receptive, as well as utilise this role for the benefit of the organisation, for example the management, the accountants, audit committee, among other stakeholders. Standards and implementation frameworks for the internal audit profession have been issued by the Institute of Internal Auditors (IIA) and the Information Systems Audit and Control Association (ISACA), and these provide guidance to auditors.

5.4 RESEARCH CONTRIBUTION

This study presented a modest contribution that is expected to enrich knowledge on how to audit IT projects. The IAF has to be of relevance by being an effective function that can contribute to the achievement of strategic goals of aiding the state to consider recovery of taxes, and financial institutions to take steps to recover their debt and ensure the

profitability of their investment. It could help all the actors of SARS in every level to make the institution improve themselves in the same way. Moreover, the study contributes towards a methodological position of scientific research by producing results from a small sample augmented by interview results in an environment characterized by small populations showing that inferences can be made.

5.5 RESEARCH LIMITATIONS

Although this research study was carefully prepared, there were some limitations faced during the research study:

Firstly, time constraints resulted in a study that was perhaps not as deep as would be ideal. Secondly, the sample size is relatively small and cannot be generalized to the larger population of internal auditors in the public sector without further collaborative research. Another limitation was the involvement of top management in that the Chair of the ARC could not participate in the research due to work commitments. Furthermore, this was a study of the public institution of SARS and did not include any private sector players.

5.6 RECOMMENDATIONS

From the study, this section advances the recommendations that were proposed in order to close the audit expectations gap at SARS.

5.6.1 Recommendation 1: Expanding the Role of Internal Auditing

A dominant recommendation emanating from the study was that internal auditors should be empowered to be independent, and equipped to concurrently provide advisory, consultancy and assurance services to management and also be helpers and protectors of the management team. Furthermore, they should be able to adapt quickly based on

business advent and advancements to provide the proactive assurance required by management.

5.6.2 Recommendation 2: Engagements of Internal Audits by EPMO

It was also recommended that EPMO needs to procure value for Internal Audits and that this is best accepted through engagements so as to improve the value of Internal Audits.

5.6.3 Recommendation 3: Improving the Quality of Reports

It was further recommended that the quality of reports should be revamped in order to probe attention by management and elevate issues in more detail. Moreover, the auditing of IT projects should always conclude on whether the project is within the right time, cost and quality.

5.6.4 Recommendation 4: Capacitating Internal Auditors with Skills

Lastly, it was recommended that intense engagements between IA and EPMO, project owners and sponsors needed to be put in place. Additionally, IA staff must be capacitated with skills that can identify emerging risks concomitantly with improving their reporting skills through supplementary engagements with relevant stakeholders.

Finally, these measures if adopted, are calculated to reduce the expectation gap within SARS in the way IT projects auditing is conducted.

5.7 RECOMMENDATIONS FOR FURTHER RESEARCH

Following the sample space limitation in this research, the first recommendation is for a wider study with a bigger sample size on the whole public sector and government linked organisations. Further research may also encompass the private sector in South Africa to gain a comparison on the nature of challenges experienced in those businesses against the public sector and how they are mitigated.

An extension recommended would be for the adoption of more independent variables to facilitate better understanding of factors that contribute to internal audit effectiveness such as management's perception and influence over the internal auditors, as well as sufficient funding and resources.

5.8 EPILOGUE

The research objectives of the study were:

- 1) To define and explain the role of stakeholders in IT projects auditing at SARS;
- 2) Examine the best practices around the role in which internal auditors can play in IT.

Four research questions relating to the perceived internal audit roles, internal auditor challenges and the potential impact of the challenges and roles'-performance were promulgated:

- What are the roles of stakeholders in IT projects auditing?
- What are IT projects in the context of the research problem and associated objectives?
- What are the stakeholders' expectations of the internal audit role?
- What measures can be taken to enhance stakeholders' expectations regarding information technology project auditing?

The findings revealed the following:

- There is a need to intensify the IA engagements in view of the perception that EPMO does not feel engaged enough during the planning of IT Audit functions
- Internal Audit was identified as playing a part in both consulting and assurance roles
- Improvements were required in terms of skills required to capacitate staff with understanding the agile nature of projects
- There is need for research capacity and to improve knowledge of the agile nature of the projects

- The EPMO is not satisfied with the quality of the reports as they view them to be too low level in detail
- Improvements were necessary with the internal methodology since everyone uses professional judgement in the absence of adequate methods from ISACA and IIA.

The research objectives of the study were thus achieved.

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APPENDIX A

Section 1: Group 1 summary

| DEFINING AND EXPLAINING THE ROLE OF STAKEHOLDERS IN IT PROJECTS AUDITING – GROUP 1 |
|---|
| <p>Question 1. In your opinion, what role does the internal audit function play in IT project auditing?</p> <ul style="list-style-type: none">• To ensure that project risks are managed• To provide assurance that projects are delivered within the right cost, time, quality and budget |
| <p>Question 2 – What is your view regarding the expectations of the EPMO from an audit of IT projects? Does the internal audit function meet these expectations?</p> <ul style="list-style-type: none">• Feedback on whether they are complying to the project management standards• IA does not meet the expectations due to the fact that IA still needs to focus on whether the project management standards are designed adequately as opposed to whether they are applied effectively• They expect IA to provide timeous assurance on non-adherence to project management standards and to be able to flag issues that could prevent the project from achieving its objectives |
| <p>Question 3 - What is your view regarding the expectations of the project sponsors and owners from an audit of IT projects? Does the internal audit function meet these expectations?</p> <ul style="list-style-type: none">• We do not meet their expectations because we do not provide timely assurance, but also, they expect IA to only report on critical issues• ARC expect IA to tell them if the projects are delivered within the right quality, cost and time |
| <p>Question 4 - What is your view regarding the expectations of the ARC from an audit of IT projects? Does the internal audit function meet these expectations?</p> |

- No direct interaction with them. However, based on the internal feedback, they expect to be told whether the projects are within milestones, budget and quality.
- They expect IA to provide assurance that projects are delivered within the right time, cost and quality
- IA meets expectations

Question 5 – What is your view regarding the expectations of the AGSA from an audit of IT projects? Does the internal audit function meet these expectations?

- AG focuses more on financials and expects internal audit to cover controls on financials. IA meets the expectations
- Does not think IA meets expectations of AGSA
- They are interested on the cost element of the project, are the funds used rightfully for the project

Question 6 - In your opinion, do the EPMO, project sponsors and owners, AGSA and ARC derive value from internal audit review of the IT projects?

- They do derive value from IA, changes have been initiated as a result of IA engagements
- Yes, they do derive value due to proactive nature, marketing is still required and they expect more

Question 7 - Do you think the EPMO, project sponsors and owners, AGSA and ARC understand the purpose of the internal audit function in IT projects auditing? If not, where do you think the gaps in understanding are based?

- They do understand the role, as they know its key to meet overall goals and objectives
- Yes, they do, however, it is IAF's duty to create further marketing and awareness
- No, they do not quite understand, they do not know how to measure work performed by IA. IA is not creating adequate awareness

Question 8 - What is your view of the role of internal audit in IT project governance structures such as steering committees?

- The key role is advisory, and not as an observer
- IAF's duty is to establish if there is a forum, if it is well constituted, has a TOR and follows the TOR
- IA should ensure sound decision making, but should not have voting rights

DEFINE AND EXPLAIN IT PROJECTS IN THE CONTEXT OF THE RESEARCH PROBLEM AND ASSOCIATED OBJECTIVES – GROUP 1

Question 9 - What is your understanding of assurance versus consulting in the context of auditing IT projects?

- Assurance – something already exists, then assurance is provided on adequacy and effectiveness
- Consulting – things are yet to happen
- IA plays in both processes
- Assurance – looking at things that have happened
- Consulting – part of the team where you give advice and provide assurance timely

Question 10 – In your opinion, should the internal audit function focus on consulting rather than assurance, or vice versa during review of IT projects?

- Play in both role as some processes require consulting while some require assurance
- A combination of both

Question 11 - What is your view regarding independence of internal auditors when auditing IT projects?

- IA remains independent as IA does not perform management role. Another important aspect is TORs; they help guard against loss of independence

- The risk of independence is inherent to the internal audit profession, independence means sitting as an outsider in a view and not forming part of management

Question 12 – What is your understanding of proactive assurance?

- When you see emerging risks, or risks that have not materialised. Reporting on these emerging risks is proactive assurance
- Getting involved in the infancy of the project.

Question 13 – In your view, are the EPMO, project sponsors and owners supportive of internal audit engagements of IT projects? If not, expand on the reasons.

- These stakeholders still require marketing so that they understand what to expect from IA. IA never sold its services in detail.
- Most of them are defensive and they are not supportive, they think IAF meddles a lot in their daily activities
- They are supportive, the challenges arise when the findings are being discussed

Question 14 – Please elaborate on any deficiency (if existing) of the skills set, resources and expertise of the internal audit function in delivery of IT projects auditing?

- There are no deficiencies in resources, expertise and skills. But what should be improved is research capacity. We need to learn to understand the agile nature of projects
- No there are no adequate skills and capacity, the division is short staffed and training is required

Question 15 – In your opinion, how adequate are internal audit guiding methods (such as methodologies, best practice, standards, frameworks, etc.) in carrying out a review of IT projects?

- Not adequate. Room for improvement with the internal methodology

- No proper methodologies internally, everyone uses professional judgement. No adequate methods from ISACA and IIA

Question 16 - Kindly elaborate on the kind of challenges that exist for internal auditors during IT projects auditing?

- Slower reporting process,
- IA sometimes only get involved because there is a challenge
- IA manages time poorly
- Delays in document retrieval
- Too many iterations to project planning, leading to Internal Auditors not keeping up
- Skill set
- Lack of support from sponsors, owners, EPMO and even IA management
- Reporting delays

Section 2: Group 2 summary

Question 1. What role do you contribute towards the planning of an IT Audit function within SARS?

The EPMO does not feel engaged enough during this process

The project owners, sponsors and AGSA understand the role they should play

Question 2 – In your opinion, how does your role in IT projects auditing influence its outcomes?

AGSA does not really play a role in this regard, the other groups understand that their corporation have a positive effect towards the success of an audit

Question 3 - What role (if any) do you play in addressing the outcomes of IT projects auditing reports when they are made available to management and the ARC?

AGSA does not really play a role in this regard, the other groups understand that their corporation have a positive effect towards the success of an audit

Question 4 - What is your expectation of an audit of IT projects? Outline the expectation following internal audit planning, execution and reporting activities.

In general, everyone understands that planning includes parties agreeing on risks, objectives and scope

Execution – continual engagement and reporting and not losing touch of the project activities

Reporting – reports to be on time and include all relevant levels of management for approval prior to finalisation

Question 5 – What is your view of the role of internal audit in IT project governance structures such as steering committees?

AGSA: Observe the proceedings and ensure compliance to terms of reference, where required provide guidance

EPMO, owners and sponsors – strong views that internal auditors should have a say, their voice can be heard more than others, therefore they need to be actively involved and engage better

DEFINE AND EXPLAIN IT PROJECTS IN THE CONTEXT OF THE RESEARCH PROBLEM AND ASSOCIATED OBJECTIVES – GROUP 2

Question 6 – In your opinion, what should internal auditors focus on during an audit of IT projects?

- It is everyone's understanding that focus should be on time, cost and quality, the EPMO feels very strong that internal auditors should focus on things that are not yet known (emerging risks). Internal auditors should not reiterate things already known by management. The EPMO believes that internal auditors should be the first to tell when something is going wrong

Question 7 – What value do you derive from internal audit during an audit of IT projects? Are you satisfied with outcomes of internal audit reviews of IT projects?

Though it is clear that the AGSA is mainly interested in financial wellbeing and satisfied with the outcome, the EPMO is not satisfied as it believes internal audit focuses on wrong things and always reiterate what would have already been reported. Also not engaging enough during reporting

Question 8 - How satisfied are you with the skill set, expertise, capacity and capabilities of the internal audit function in carrying out audits of IT projects?

- All groups seem satisfied with minor improvement points

Question 9 – Is internal audit function reporting on audit findings in a timely manner?

Expand on answer

The EPMO and the owners/sponsors are not satisfied, they feel that in many cases, aspects are reported on too late in the project lifecycle

Question 10 - Can you elaborate on your opinions regarding the quality of internal audit reports on IT projects in terms of impact.

The EPMO is not satisfied due to continual changes in the report, and that the findings are being reported at too low level detail. They believe the findings can be escalated to carry more value and focus should not be on administrative aspects of the project only.

Other parties are satisfied

Question 11 – Do you think the current way of auditing projects is satisfactory?

All parties agree that improvements are required

Question 12 – What would you improve regarding the way in which IT projects are being audited?

Parties believe that internal auditors should improve their project auditing engagement model, so that they can be equipped to report on emerging risks

Question 13 – What is your understanding of consulting versus assurance in the context of internal auditing?

Across board, consulting is understood as advisory services while assurance as providing internal audits against compliance to policies, processes and procedures

Question 14 – Do you prefer that the internal audit function follows assurance rather than consulting or vice versa during an audit of IT projects? Kindly expand on your answer.

Apart from the AGSA, the project sponsors/owners and EPMO require consulting services

Question 15 - What is your understanding of proactive assurance?

Across board, this is understood as equal to consulting

Question 16 - In your view, what challenges does internal audit function have in delivering reviews of IT projects?

- In general, common challenges are on culture, magnitude of the projects and programmes, projects always on planning mode and never ending,

Appendix B Questionnaire

An internal audit expectation gap: South African Revenue Services project audit engagements

Section A: Identified population groups

Please tick the most appropriate box in this section that fits your background.

| Group No. | Population Group | Rationale |
|-----------|---|---|
| 1 | Internal Audit staff | The people that deliver IT audit services to the organisation |
| 2 | 2a. Enterprise Project Management Office (EPMO), project sponsors and owners | The people against whom internal audit services are delivered |
| | 2b. Auditor General of Southern Africa (AGSA) and The Audit and Risk Committee (ARC) | The people for whom internal audit services are delivered |

Section B: Demographic Information

1. Position/Level of Employment with SARS (applicable to group 1 and 2a)

| Position or Level of Employment | Please choose/tick your position/level of employment an X |
|---------------------------------|---|
| Executive Management | |
| Senior Management/Top IT Senior | |
| IT Senior / IT expert | |
| Management | |
| Other (explain) | |

2. Length of Employment (applicable to group 1 and 2a)

| Length of employment | Please choose/tick your appropriate years in SARS employment an X |
|----------------------|---|
| Less than 2 years | |
| 2 to 5 years | |
| 6 to 10 years | |
| 11 years or more | |

3. Highest Educational Qualifications (applicable to group 1 and 2a)

| | |
|------------------------------------|--|
| Highest educational qualifications | Please select most appropriate highest level of educational qualifications with an X |
| Diploma | |
| Degree/Honours' degree | |
| Master's degree | |
| PhD/Doctorate | |

4. Understanding of IT projects (applicable to all groups)

| | |
|----------------------------------|--|
| Exposure to IT projects delivery | Please select most appropriate highest level of educational qualifications with an X |
| Less than 2 year exposure | |
| 2 to 5 year exposure | |
| 5 to 10 year exposure | |
| More than 10 years exposure | |

Section C: Interview Questionnaire Guide

Please respond to the questions in this section to the best of your ability. You are free to refrain from responding to any of the enquiries given in this section. However, it would be prudent to try as much as you can to respond to all the questions as they are subjected to you to ensure that the data gathered is more useful at the point of analysis in understanding better the research issue. All ethical considerations such as confidentiality and anonymity are addressed at the point of this interview.

Section C1: Group 2

1. What role do you contribute towards the planning of an IT Audit function within SARS?
2. How do you think your role into IT projects auditing influences its outcomes?
3. What role (if any) do you play in addressing the outcomes of IT projects auditing reports when they are made available to management and the ARC?
4. What is your expectation of an audit of IT projects?
5. What value do you derive from internal audit during an audit of IT projects?
6. What do you think internal auditors should focus on during an audit of IT projects?
7. Do you think internal audit has the right skills, expertise, capacity and capabilities to carry out audits of IT projects? If not, kindly expand on your answer.
8. Is internal audit reporting on audit findings in a timely manner?
9. Are internal audit reports on IT projects impactful and reaching the right audience?
10. Do you think the current way of auditing projects is satisfactory?
11. What could you change or make better in the way that projects are being audited?
12. Do you understand the difference between consulting and assurance in the context of internal auditing?
13. Do you prefer that internal auditing follow assurance rather than consulting or vice versa during an audit of IT projects? Kindly expand on your answer.
14. What is your understanding of proactive assurance?
15. In your view, what challenges does internal audit have in delivering reviews of IT projects?
16. What is your view of the role of internal audit in IT project governance structures such as steering committees?

Section C2: Group 1

1. What is your understanding of assurance versus consulting in the context of auditing IT projects?
2. What is your understanding of proactive assurance?
3. What role do you think internal audit plays in IT project auditing?

4. What is your view regarding independence of internal auditors when auditing IT projects?
5. Does internal audit have adequate skills, resources and expertise to deliver on IT projects auditing?
6. Does internal audit have sufficient guidance (such as methodologies, best practice, standards, frameworks, etc.) that can assist in carrying out internal audit engagements during IT projects?
7. What is your view regarding the expectations of the EPMO from an audit of IT projects?
8. What is your view regarding the expectations of the project sponsors and owners from an audit of IT projects?
9. What is your view regarding the expectations of the ARC from an audit of IT projects?
10. What is your view regarding the expectations of the AGSA from an audit of IT projects?
11. What challenges exist for internal auditors during IT projects auditing?
12. Do you think the EPMO, project sponsors and owners, AGSA and ARC understand the purpose of internal audit in IT projects auditing?
13. In your view, are the EPMO, project sponsors and owners supportive of internal audit engagements of IT projects?
14. What is your view of the role of internal audit in IT project governance structures such as steering committees?